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D2.1

Description of the candidates to form the “Family of Projects”

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Abstract:
 This deliverable describes the candidates projects composing the “Family of Projects”

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Executive Summary

The aim of S3C is to foster “smart” energy behavior of European households and SMEs via end users’ active participation and to contribute to successful, long-term end user engagement projects and programs. To reach this goal, S3C draws on existing knowledge and results from a large set of smart grid pilot projects where economic, technological and informational interaction schemes have been applied on end-users: WP2 is devoted to select the most interesting and promising projects with learning potentials from the point of view of end user interaction. The first part of the results of WP2 are shown in the Deliverable 2.1, which shortly describes the list of the candidate projects showing the most interesting potentials for learning from the point of view of end users interaction. Such selected projects form the so-called “Family of Projects, which has been divided into two groups: “potential passive pilots” and “potential active pilots”. The former ones are over or currently ongoing, but they are unable to modify their work plan in order to accommodate S3C guidelines and tools (ex. due to budget constraints); however, their data and obtained results, together with the details about end users engagement, are made available to be analyzed by S3C within WP3. The latter ones, instead, are currently ongoing and their time schedule overlaps with the time schedule of the WP5; they are also willing to adapt their own implementation in order to test and validate best practices proposed by WP4 and take into account S3C guidelines and they make all their data and results obtained so far for the analysis carried out in WP3. Some of the selected projects are the so-called “Priority Pilots”, which are closely linked to one of the S3C beneficiaries and is endorsed by the “Priority Pilot Partner” who has the responsibility to make the respective project available.

Project selection

The sources used in the selection process are European databases on smart grids projects (such as the JRC-Petten database) and other national and local databases of smart grid projects across Europe, often only know to the partner in that specific country; valid projects have also been picked up from other sectors, in order to learn from their end user interaction schemes. For instance, the telecommunication field includes a large number of user-interaction schemes that have already been implemented for a sufficiently long time-frame to assess their success, e.g. real time communication on the cost of a mobile phone call, or the combination of internet and telephone services.

The selection process is based on the theoretical framework developed in WP1 and is composed of two steps. The first step is important to discard those projects which are not centered upon end users and/or have serious limitations to the availability of their data. To such a purpose, the first list of selection criteria has been presented through direct questions which have been answered with yes/no based on the available information, in order to analyze as many projects as possible. These questions address the fundamental points upon which S3C is built and therefore they have to be all satisfied in order to proceed to the next step. The questions composing step 1 are the following:

- Are all data provided by the project available and enough?
- Is there any other possible obstacles to the availability of the project as a passive/active pilot?
- Does the project have the potential to involve end-users with a central role?
- Does the project have some practical (field) applications or is it developed only at a theoretical level?

The second step, instead, has the purpose to analyze the projects which have been selected through the previous step, in order to clarify how its potential for learning can be useful for S3C. The process is based on a second list of selection criteria, which are presented through a series of questions, which are grouped in different themes. The following themes are taken into account:

- Availability of information;
- End-user involvement;
- Potential for learning;
- Privacy and security;
- Scalability and repeatability;
- Dissemination;
- Active involvement.

The definition of a solid process of selection assured that only the most interesting and promising projects passed through it and allowed the constitution of a “Family of projects” which have shown a valuable potential for learning and which will represent the backbone of the following analysis carried out in S3C.

Conclusions

The large number of selected projects has let S3C partners gain quite a comprehensive view of the current situation of smart grid projects across Europe. The first message is that most of the projects involve end users from the residential and tertiary sector, while the number of case studies about SMEs is still low; moreover, the projects are not equally spread among all European countries, but the EU15 countries host the majority of them, while the remaining EU12 countries seem to suffer a delay. What came out is also the variety of themes tackled during the different projects, showing the necessity of a multidisciplinary approach and of a collaboration among different stakeholders. However, while DSOs, utilities and research organization are well represented, figures such as the aggregators are still quite scarce. The role of ICT is predominant but the preliminary analysis has shown that end users involvement and engagement is crucial for the success of the project and that the most successful ones are those involving end users starting from the early stages of the project and allowing to choose their degree of involvement, always ensuring the protection of their data, and making the benefits as clear as possible. The preliminary analysis has also showed some pitfalls which might endanger the positive outcome of the project, such as a lack of communication with the involved end users and the use of equipment which had not been previously tested, thus resulting in malfunctioning. All these aspects will be analysed more in detail during the next stages of S3C.

The deep knowledge of the best practices implemented in the current smart grid projects is fundamental to reach the goals of the European energy policy and ensure the integration and active participation of the different stakeholders, which will in turn increase the competitiveness and the energy efficiency of the energy market together with the security and the quality of the supply. Analysing all the selected projects in detail might be a first step towards the creation of a shared repository of the best practices to be adopted and the worst practices to be avoided in the implementation of smart grids projects on the national and European level: the toolkit and guidelines which will be developed during the next stages of S3C represent a tangible and concrete example of it.

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Introduction

The selection process developed in S3C is based on the “Selection criteria” defined in WP1: They aim to highlight those projects with a valuable potential for learning with respect to end user interaction.

The goal of WP2 is to form the so-called “Family of projects”, whose members will be engaged as “passive” or “active” pilots, in order to test the interaction schemes and the characterization structure developed in the next steps of S3C.

A “passive” pilot is a project which can make available its detailed results and data for the further analysis planned in WP3, while an “active pilot” indicates a project which is available to modify its own implementation plan in order to test and validate the best practices and recommendations developed in WP4. This deliverable describes the projects that will make up the “Family of projects”.

1. Description of the “Family of projects”

The format for the description of the projects composing the “Family of projects” is based on the Selection Criteria Scheme developed in WP1. It basically has the advantage of giving prominence to the innovative aspects of the projects and the level of end user engagement. The project are listed and described in the following paragraphs.

1.1 Potential Passive Pilots

1.1.1 3e-Houses

The main objective of 3e-HOUSES project is to provide innovative solutions on energy efficiency (real time monitoring consumption, renewable energy, smart metering among others) to help residents of social housing to reduce their energy costs. The starting point was to test if the use of ICT and smart metering technologies would produce behavioral changes towards energy use in the pilot target. From February 2010 to May 2013, the project ran two pilots in Barcelona, Spain and Leipzig, Germany as well as two replicators in Bristol, UK and Sofia, Bulgaria with the objective of applying lessons learned with initial pilots and improve them.

Overall, the pilots and replicators of the project had different impacts. On one hand, one pilot witnessed a small increase in energy consumption; on the other hand, the other pilots had outstanding reductions of over the initial 20% targets. These findings demonstrate how complex it is to change consumer behavior and how crucial it is to investigate the data and to understand consumers’ motivations more deeply. The project focused on explaining the idea to and winning over tenants in larger apartment/ social housing complexes. In fact, information and dissemination material to attract and inform these target group were devised, which can serve as valuable input for the S3C-analyses.

Web source:

- www.3eHouses.eu

1.1.2 AlpEnergy (Allgaeu trial site)

The AlpEnergy project, which was funded within the European Territorial Cooperation Programme “Alpine Space”, started in 2008 and was finished in late 2011. In several European countries belonging to the Alpine region (i.e. Italy, Slovenia, France and Germany), Smart Grid trials were developed and carried out in this time-span.

Among other goals, one important task of the AlpEnergy project was to test different Demand Side Management options. In fact, the field-test in the Allgaeu region in Germany, carried out by project leader Allgaeuer Ueberlandwerk, relied on a strong involvement of end-users testing two different tariff structures, several feedback options and manual as well as automatic control. The trial was supported by a regional campaign and regional incentives.

In 2007, a study shed light on the need to control and facilitate the integration of renewable energies, which are dominant in the region and due to become more and more decisive for the region’s energy supply in the coming years and decades. Since the region will become particularly influenced by

intermittent solar and wind sources, the approach was to adapt the demand for electricity to the production from these intermittent sources.

Smart Meters were deployed at 260 residential end-user sites. Apart from the Smart Meter deployment, End-user group one consisting of 90 households only received feedback information via the webportal and monthly informative billing letters to enhance the consumption transparency. A second end-user group received the same treatment, but was billed in a new, yet relatively easy static TOU-tariff that reflected the large availability of electricity due to photovoltaics-feed-in in lunch-hours within the region. A third group received additional energy management software and automatic control devices in form of “intelligent sockets” that are able to switch on/off appliances according to the settings of the energy management software. These end-users were billed in an innovative, dynamic tariff scheme that was able to reflect not only a general feed-in tendency, but also short-term prognoses, as the different tariff blocks change on a daily basis.

All new billing options were designed in a way that could not mean any financial disadvantages for the potential field test customers. However, the campaign to acquire a sufficient number of field test customers was time-consuming. A regional campaign supplemented by direct, personal contact management to over 800 customers of the local utility brought about the breakthrough.

Customer surveys carried out during the acquisition process revealed that 75% of all people polled by the AÜW in advance of the AlpEnergy field test declared to have no knowledge about the term smart grid and its implications. In fact, in order to raise awareness for the topic in the regional and supra-regional public, a large-scale campaign was initiated.

- Constant reports in the AÜW-customer-magazine „AllgäuStromMagazin“
- Information events on the further possibilities arising from the project for reference customers (topics: tariffs with saving zones, online customer gateway, smart home components)
- Articles in regional newspapers and magazines about the pending pilot field test
- Coverage on regional and Bavarian television
- Conference „Alp Energy meets E-Energy“ in May 2009 in Kempten
- Presentations during the course of fairs and series of lectures
- Coverage within the framework of VDE congress
- Amongst other measures, an interactive simulation and visualization was published on the internet (www.alpenergy-visualisierung.de) that helped to sensitise the end-users for the arising complexities and relations within a new energy system.

Furthermore, several small and medium-sized enterprises in the region were investigated for potentially larger load shifting potentials and asked for barriers and drivers of their involvement in smart energy structures.

The fact that different new involvement mechanisms and end-user interaction schemes were trialed as well as the fact that several customer surveys have been undertaken by the project managers and not only residential but also commercial end-users were involved in the model region, render this project particularly interesting.

Even though, the project’s activities ceased in 2011, the responsible project managers and personnel responsible for customer care are still available.

Web Source:

- www.alpenergy.net

1.1.3 AMI by Elektro Gorenjska

The Slovenian distribution company Elektro Gorenjska initiated a development project including the installation of advanced metering infrastructure (AMI) at residential consumer sites. The main purpose is the remote consumption data collection and monitoring of electricity, gas and water consumption with single equipment.

A focus issue of the project is interoperability. The equipment shall enable that all the functionalities of the metering equipment from one supplier will be compatible with the functionalities and components of

the metering equipment from other supplier regardless of the different combinations of particular metering parts and suppliers.

Web source:

- <http://www.smartgrids.si/index.php/sl/clani-platforme/10-clani/30-elektro-gorenjska-d-d>

1.1.4 Ashton Hayes Smart Village

The objectives of the project are on technical innovation and delivery of information to the community aimed at achieving a sustainable reduction in carbon emissions. The scope of the Smart Village Project is:

- To facilitate the connection of various micro generation technologies (wind, PV and CHP) and potentially electric vehicle (EV) charging point(s) on the low voltage network and its 11 kV feeders.
- To improve the accuracy and granularity of total electricity consumption measurement by installing additional metering on the network at secondary substation feeder level and at renewable energy source(s) providing measurement of the gross generation embedded within the community.
- To introduce innovative and new techniques to introduce DSM capabilities aimed at assisting change in energy use related behaviours within residential homes and public properties.
- Engagement with the village and community to assist in the reduction and optimisation of total energy consumption to reduce carbon footprint.

The final objective – to engage the consumers individually and as a community – is what renders the Ashton Hayes Smart Village project particularly interesting for S3C.

Web source:

- http://www.spenergynetworks.com/innovation/ashton_hayes.asp?NavID=3&SubNavID=1
- <http://www.goingcarbonneutral.co.uk/>

1.1.5 Cloud Power Texel

The concept of Cloud Power (“Harnessing energy from renewable sources for self-sufficient electricity communities”) is based on a community of consumers on the Dutch island of Texel, who share common ideas on their electricity supply. These ideas can be based on multiple drivers including: economic, environmental and social drivers that are reflected in, for instance, improved energy efficiency, reduced emissions and preference of locally generated electricity. A Cloud Power community resembles the concept of a cooperative in which members own and operate the organization to their mutual benefits. Local electricity solutions have been proposed as micro grids before. These solutions, however, assume that the grid is owned by the community that uses it. This offers the additional advantages outlined below:

- **Opt-in**
An important advantage of Cloud Power is the simple fact that consumers have the choice to ‘opt-in’. This freedom of choice has an important implication: participants in a Cloud Power community are motivated to participate. As a result the investments in Cloud Power can be expected to be utilized effectively whereas the effectiveness of investments in schemes that have a captive audience is typically found to be low.
- **Customized products and services**
Energy supply companies have struggled to provide new products and services to the market. The underlying reason for this is that it is difficult to develop a meaningful/actionable customer segmentation. The Cloud Power concept’s approach to segmentation is consumer led - consumers define their community themselves, and the community’s definition provides opportunities for energy supply companies to offer customized products and services.
- **Multiple drivers**
It is widely accepted that the financial benefits of energy efficiency will only motivate a small proportion of customers. There is, however, a group of consumers that is driven by environmental considerations. This group is willing to invest even in situations that have a negative financial return. The concept of Cloud Power enables participants to choose from both economic and environmental drivers. Furthermore, the concept supports and benefits from social drivers such as community building/cooperation/cohesion.
- **Flexibility**
The fact that most of the solutions involved in Cloud Power are situated ‘behind the meter’ provides consumers the opportunity to choose the solution that fits best and to determine when

these solutions are implemented. This approach is fundamentally different from circumstances where consumers have to adapt their behavior or individual situation to the solution that others provide.

Seeing the emphasis on the community of consumers 'taking charge', combined with different motivational aspects of this group as one of the central themes of this project, it is highly relevant for S3C. The advantages are highly relevant for the research of S3C, namely e.g., finding new customized products and services, and e.g., the diverse drivers consumers can have. The multiple roles the S3C project researches, will gain valuable insights when looking at the drivers and products of Cloud Power.

As the pilot on the island of Texel will end this year, results will likely be available in the near future. Preliminary findings might be available already. Especially the effects of the community based approach, the emphasis on different drivers and motives of consumers, and the developed products should have priority if we gain access to project information, and when we can conduct interviews with project members and/or participants.

Source:

- Capgemini

1.1.6 Consumer reactions to peak prices

This is a project testing the price sensitivity of households having electric heating systems as well as other heating options available. The trial was performed during two winters: During the winter 2003/2004, 45 households connected to the grid of Skånska Energi participated in the project. During 2004/2005, 53 households connected to the grid of Skånska Energi participated, and an additional 40 households connected to Vallentuna Energi were additionally involved. The customers were recruited by mail. The first year, 200 randomly picked households were sent an offer to participate in a trial with a new and special price list. A list of advice describing how to decrease electricity consumption during the extra expensive hours was appended to the offer. This was followed by a telemarketing approach in a second round to consumers who had received the offer.

The end-user sites involved were made up of single family houses having electric heating. However, the majority of the households also had other heating options, typically oil- or wood-burning-based. Further, the houses were equipped with a water borne heating systems, which can be heated with either electricity or using oil or wood.

The end-users were offered a supply contract using a critical peak pricing tariff structure, which enabled the supplier to charge an extra high price during 40 hours/ per year. The remaining part of the year, the end-users received a rebate on their usual electricity price. The price scheme was designed so it would be cost neutral in relation to the normal prices if the consumers failed to take any actions. If they reacted on the price signal, they could reduce their electricity bill.

The end-users were subjected to hourly metering and billing. However, they did not receive feedback information based on the metering data. The only feedback channel to the end-user was the energy bill. Furthermore, information about event hours with extra high prices was passed on to the end-users by text messages to their mobile phones the day before the actual hour. Thereby they had time to plan their reaction to the peak prices.

The households received advice on how to temporarily reduce their electricity consumption when they were given the offer to join the trial. This was performed by supplying the end-users with a short document. Hence, the information was provided by the power company. The document concerned general advice (e.g. avoid using dish washer) and advice depending on the heating system that the consumers were equipped with (e.g. switch to firing bio fuels for heating).

The results of the trials indicated an average decrease in electric power consumption by 50% during the hours when the end-users were subjected to extra high prices. In fact, the actual decrease could have been even greater since some households switched to oil or biofuels the night before they were subjected to the high prices.

At the end of the trial, a survey was performed including all participants, and in-depth interviews were performed with 20 households. The overall results from the survey and interviews show that the majority

of the households participated actively in the peak reductions and that the overall impression of the trial was positive.

The success of the project and the fact that relatively easy information in form of a leaflet, text messages and the energy bills were able to induce consumption drops of up to 50% render this project interesting to further analyses carried out in the S3C consortium.

Web Source:

- www.elforsk.se

1.1.7 Costumer Led Network Revolution

This project ambitions to increase flexibility for end-users by implementing trials based on smart grid solution at distribution and household level. These trials focus on smart meters and tariffs, EV charging, air source heat pumps, PV, and combined heat and power boilers. Data from 12.000 participants including 900 on flexibility trials (as for May 2013) is being gathered and will help to create knowledge on energy and carbon footprint reduction costs. The project started in 2011 and is set to end in 2013. Trials take place in Durham, Leeds, Newcastle and Sheffield, as well as more sparsely populated parts in the North-East and Yorkshire regions (UK).

So far, results from the smart metering trial led by British Gas show that end-users are not only shifting consumption (avg. 14% reduction during peak hours), but also reducing their overall energy bill (avg. 2.5%). It has been observed that 71% of consumers have experienced savings on the electricity bill. This trial implemented a TOU tariff with three blocks per day and one for the weekend.

Results from a trial testing Demand Side Response (DSR) in SMEs and households (smart washing machines and heat pumps with thermal storage) indicate that flat-rate PV users use more energy when their PV units are actually generating electricity. Additionally, PV customers with automated load to heat water reduced consumption in the early evening hours by spanning this consumption along the day.

Insights into customer experiences led to some extent to the adaptation of on-going trials. Preliminary findings for example suggest that the smart heat pump solution presented is currently unsuitable for UK households given its size and weight. Also, limited understanding of the hot water use in the UK hampered the trial on direct hot water control.

All in all, this UK-based project has shown that by empowering customers with the relevant tools and information, actions can be motivated, which makes it relevant for S3C. With 71% of consumers experiencing cost savings in their energy bill, it comes as no surprise that surveys results show a high engagement from consumers. Surveys giving an insight in end-user motivations, including gender issues, supplier-user relationships, and that end-users' actions are primary motivated by expected financial saving.

Web sources:

- <http://www.networkrevolution.co.uk/>
- Switch on the Customer-Led Network Revolution Presentation at the Regional Knowledge Sharing Event, 21st May 2013, Newcastle upon Tyne, UK.

1.1.8 co2 online

co2 online is a non-profit organisation partly funded by the German Federal Ministry for the Environment. They specialize in campaigning to reduce emissions of CO₂, particularly by incentivizing and instructing energy saving through dialogue. co2online focuses on residential, commercial as well as public end-users and teaches them to be a part of climate protection efforts while maximising their own financial interests by saving energy and thereby money as well.

The organization's main tool for end-user interaction is an online portal for end-users that established an energy saving community. In fact, the arising community is very interesting to analyse from the Smart Citizen angle of the S3C-research design. During the last years, more than 10.000 end-users signed up to become active members of the co2-online energy saving community. Furthermore, the organization

supports Smart Grid projects (such as the eTelligence project, see chapter 1.1.21) by setting up specific web-based communities and devising tailor-made information campaigns.

The online communities feature several interesting functionalities. They do not only focus on providing information about the end-users' specific energy consumption and its development. Instead, they also feature tips, which are steadily updated and apply to all energy-related areas of the end-users' daily routines – from efficiency checks of household appliances to nutrition tips to travel information. In fact, the information and the learning process of the end-users can continue and does not have to stop after they have found the energy-wasting appliances in their household or have adapted their consumption to a new pricing scheme.

However, co2online is not a Smart Grid project per se, in fact they can only serve as a passive partner helping the consortium to learn about end-user engagement strategies and community-building. The consortium is already in contact with the organisation's experts.

Web source:

- www.co2online.de

1.1.9 DESI

The project aims at introducing load-adaptive mode into Telco network operation. In utility lingo, this turns a Telco network into a large consumer with demand-response capabilities. Furthermore, the UPS systems integrated into the network contain considerable energy storage capacity which is rendered accessible to smart grid use cases. A unified control framework as it is developed within the project provides the communication infrastructure to impose complex optimisation algorithms onto load and storage management.

Web source:

- <http://www.desi-it2green.de/>

1.1.10 E3soho

The overall objective of this project has been to implement and demonstrate an integrated and replicable ICT-based solution in 3 Social Housing pilots. The ICT-based solution aims to bring about a significant energy consumption reduction of 25% in European social housing by providing tenants with feedback on consumption and offering personalised advice for improving their energy efficiency, reducing the energy consumption and increasing the share of RES (Renewable Energy Sources) by informing and supporting the user to decide for the most appropriate behaviour in terms of energy efficiency, cost, comfort and environmental impact, monitoring and transmitting consumption data to Energy Services. In fact, the project's goal will create Smart Consumers and Customers that are enabled to make informed decisions. The interaction schemes and methods developed to bring about this change are highly relevant for the analyses carried out within S3C.

The built up E3SoHo service consists of the following sub-services:

- Perform an audit in the building to identify the energy saving potential.
- Provide the owner with an ICT based blue-print to reduce the energy consumption.
- Implement the system according to the blue-print.
- Tuning of energy consumption by monitoring.
- Maintenance of the installed system.

Web source:

- <http://www.e3soho.eu/>

1.1.11 EBadge

EBadge project is focusing on developing a set of guidelines and to propose an optimal pan-European Intelligent balancing mechanism for implementation of future integrated electricity balancing market in Europe that will be able to integrate Virtual Power Plant Systems by means of an integrated communication infrastructure that can assist in the management of the electricity grids in an optimized, controlled and secure manner.

The project itself is in line with development of the Framework Guidelines on Electricity Balancing, started by ACER in 2011.

According to the ACER statements, Demand Response will play a significant role in the future integrated balancing market allowing Virtual Power Plants, including Demand Response and Distributed Generation resources, to compete on equal ground.

In order to achieve the above overall objective the eBadge project will have four main objectives:

- Development of the components (simulation tool, data exchange standard, VPP data optimisation and control, Home energy cloud pilot, business model to energy, ICT and residential sector)
- Integration of the components
- Validation of the components

Web source:

- www.ebadge-fp7.eu/

1.1.12 ECOFFICES - Energy Challenge within OFFICES

The goal of the project is to achieve an “Energy challenge within offices” by inciting employees to an intelligent use of energy in a fun and interactive way. Office buildings are equipped with metering devices and feedback channels for the employees and a competition based on real-time energy usage data of the employees within the offices follows. The project aims to change the mentality underlying energy consumption in the office and to induce an overall learning process by this serious game.

In a pilot, 400 metering devices have been installed in a building of the company CSTB. The metering data is sent to interfaces that serve as feedback channels for the employees. The employees cannot only follow their consumption histograms but also receive tips on how they can do better. The employees were grouped into three teams and together strive to reduce their consumption the most and to receive so-called bonus points (for e.g. always switching of the light before leaving a room) while avoiding minus points (for e.g. leaving on the air conditioning while away). The rules could be re-read on the challenges homepage again.

The winning team in the pilot could save up to 25% of energy compared to before the implementation of the scheme. The creators of the project are currently planning a follow-up trial.

The idea to transfer the learning process of changing energy behaviour from residential to commercial sites is interesting and the competition and therefore social pressure aspect of this scheme has to be highlighted as well. It is a good candidate for the S3C Family of Projects.

Web source:

- www.ecoffices.com

1.1.13 EcoGrid

The key idea of EcoGrid EU is to introduce market-based mechanisms close to the operation of the power system that will release balancing capacity, particularly from flexible consumption.

As the large group of participants is a challenge for any Smart Grid project, EcoGrid can be a valuable lesson in learning how to integrate Smart Grid techniques into larger communities/sectors. The approach of personal communication with the participants, together with the Real Time Pricing techniques, can offer valuable insights for S3C. Will the personal communication create a high customer satisfaction? Is it feasible for a utility to invest in such a personal and time consuming approach?

As there are close connections to the project, there is a good chance that the S3C researcher-team can have access to project information, and conduct interviews with project members.

In total, 2000 households on the Danish island Bornholm will by means of more flexible consumption show how Europe can manage an energy mix with a share of over 50 % wind power and other fluctuating and less predictable renewable sources. Of a total of 28 000 citizens on the island of Bornholm, 2,000 customers will participate in providing flexible demand response to real-time price signals. The participants will be equipped with demand response devices using gateways and ‘smart controllers’. Installation of the smart solutions will allow for offering real-time prices to consumers and enable (part of the participants) pre-programming of their automatic demand response preferences.

The project started in 2010, is now in the phase of participants using the Smart Grid devices (e.g., feedback by PC etc.) The project will end April 2015.

The project started in April 2012 and ends December 2013.

Web source:

- www.eu-ecogrid.net

1.1.14 E-DeMa (ADVANCED)

The E-DeMa project, which was funded within the German E-Energy programme, started in 2009 and finished its work in early 2013. It investigated intelligent consumption and generation management as well as several feedback types including real-time consumption information at 700 residential end-user sites in the urban areas of Mühlheim and Krefeld in Germany. The regional, yet ICT-based E-DeMa energy marketplace functioned as a central data hub both for consumption and contract data.

The E-DeMa-team helped their field-test customers to make informed decisions about their electricity consumption via several feedback channels. E-DeMa also facilitated the new option of supplier and tariff switching for end-users arising from the liberalization process. Whereas switching a supplier or the tariff end-users were billed in would take several weeks to months before, the E-DeMa structure enables a switch within two days. In fact, the field test customers taking part in the project could switch their tariff arrangement on a monthly basis with the help of the marketplace and their role as a true customer making informed decisions was heightened. The field-test customers could choose between several more or less complicated innovative tariffs, from a static time-of-use tariff to an ever changing real-time pricing tariffs to aggregator arrangements, in which they were directly contracted for specific flexibilities rendered by smart generation and consumption appliances such as micro-CHPs and washing machines. Furthermore, the field-test customers received several forms of feedback from different communication channels (monthly bills, in-house display, smartphone app, website portal) and quantitative as well as qualitative field user surveys were carried out along the course of the project. The innovative electricity products provided could demonstrate a strong potential for load shifts – based on manual as well as automatic action within the end-users' households.

Furthermore, as an incentive to become a field test customer, a new regional incentive was trialed: Depending on the success achieved by the field test customers, the organisers of the project promised to donate for regional social projects and institutions.

For S3C, it is particularly interesting to look at the success of the many different tariffs and feedback systems the end-users could choose from. How did they react to their enhanced choices? The detailed, qualitative surveys of customer opinions also enable researchers to learn about the customer's overall preferences. Are they rather opting for simple or elaborate tariffs and feedback options? It would be interesting to investigate the learning processes of the customers. The fact that this project shed light on the new role of the prosumer as a role within the energy system that consumes and produces electricity at the same time and also supported end-users in taking up their consumer rights, makes it very valuable for the S3C project as well.

Parts of the E-DeMa testbed now serve as a trial site for S3C's sister project ADVANCED that is also aiming to strengthen active demand of residential, commercial and industrial end-users. The knowledge sharing with ADVANCED is focus point of S3Cs interaction strategy.

Web sources:

- www.e-dema.de
- www.advancedfp7.eu

1.1.15 EDRP - Energy Demand Research Project

The project, which started in 2007 and finished in 2010, was a major and unique suite of trials carried out by four energy suppliers in Great Britain. The project team investigated over 60.000 households' responses (18.000 households were equipped with Smart Meters) to improved feedback on their energy use. It was a government initiative to test responses to feedback on energy use and smart metering. Most of the tested interaction-schemes focused on reduced the overall energy consumption of the end-users, whereas some also served to induce load shifts. Even though the trials focused on the individual household level, one supplier also tried to include the community level in the tests as well. In fact, this series of trials offered perspectives not only on the Smart Consumer and Smart Customer perspective of end-user involvement, but on the Smart Citizen perspective as well.

The following interaction schemes were trialed in the field tests:

- Energy efficiency advice/tips
- Historic energy consumption information (such as comparison of energy consumption with earlier periods)
- Social comparison (comparing consumption level to the one in comparable households)
- Target Consumption Commitments
- Real-time display (RTD) devices indicating current consumption level
- Audio alerts in times of very high consumption
- Control of heating and hot water integrated with RTD.
- Financial incentives (including variable tariffs) to either reduce consumption or shift consumption from peak periods
- Other digital media for delivering information (web, TV)
- Community prize: village receives £20,000 community project prize for achieving an average 10% reduction in electricity consumption over a three month period compared with the same three month period in the previous year

The field test revealed that depending on the technology and feedback-configuration between 0 and 11% of electricity could be saved in comparison to the same periods before the implementation of the scheme. The final report identified the most promising customer interaction tools based on the data obtained within the field tests and in fact has a strong intersection with the goals of S3C. The report as well as further insights – especially considering the vast data base that was collected during the years in which the trials were conducted - gained by the project are valuable input for the analyses of S3C.

Web source:

- <http://www.ofgem.gov.uk/Sustainability/EDRP/Pages/EDRP.aspx>

1.1.16 EFLex

The purpose of the eFlex project in Denmark was to investigate, what incentives could be applied to make private households participate in load shedding in the distribution grid. The project included 119 households located in the DONG Energy supply area in North Zealand and Copenhagen, Denmark. The majority of the participating customers have heat pumps. Heat pumps also bear a flexibility potential and could thus contribute to load shedding. The customers volunteered for the project and were found partly through an advertising campaign and partly through expression of interest in a public subsidy scheme for switching from oil-fired burners to heat pumps.

Furthermore, the customers were invited to share experiences and get support on a social media, Podio. The aim with the latter two features was to raise interest in energy consumption. The system also gave the customers an opportunity to monitor the consumption on other appliances and program these to switch on and off according to a timer.

During the project period an anthropological study of user behaviour was carried out. The project developed five different user profiles, each characterised by a set of (partly overlapping) motivations, drivers or incentives. These profiles showed, that although customers participated in the project on equal terms, they did so with different motives. The report presents the five different user profiles in further details under the following headlines:

- The Technician
- The Economist
- The Curious
- The Sympathetic
- The Comfortable

The user profiles show that even though the economy of a household attracts significant interest, customers can not just be seen as homo economicus, i.e. narrowly self-interested, rationally economic behaving individuals., The project has established a model for understanding the very complex social conditions determining flexibility potential in different households.

As the project created their own user profiles for their participants, they are aware of the different needs and motives of end users. This can provide valuable insights and information concerning the different

roles S3C want to have a close look at. As these profiles were created from an anthropological point of view, this gives insights from a different perspective compared to the 'average' customer segmentation approaches deployed in 'Smart Customer' pilot studies. As the customers were invited to share experiences and get support on social media, S3C might gain insights in the possible functions of social media within mass roll outs of Smart grid projects.

The project is finished and the full report is available, providing insight in the anthropological construction of the user profiles. In addition, it would be interesting to conduct interviews with representatives of the DONG energy company, and the consultancy firm who worked on the anthropological profiling.

The project is finished. The eFlex project had a duration from the summer of 2011 to the summer of 2012.

Web sources:

- www.dongenergy.com/en/innovation/developing/pages/eflex.aspx
- www.antropologerne.com/assets/eFlex_rapport.pdf (final report)

1.1.17 Emobility

Elektro Gorenjska is within the process of the installations of several electricity vehicle charging stations on its distribution area. The units will be controlled by advanced software, which will synchronously collect the measured data and analyse the influence of the transport routes.

The analyses of the results shall lead into the improvement of the system and further project extensions.

Web source:

- <http://www.smartgrids.si/index.php/sl/clani-platforme/10-clani/30-elektro-gorenjska-d-d>

1.1.18 Energy Sustainable Island for Real Life Community

The project's aim was to build an integrated renewable energy network on Ikaria Island in Greece, allowing renewables to become the backbone of public power supplies. The project's aim was to produce 90% of its electricity demand via local Distributed Energy Resources. It had a significant impact on the environment and on the socio-economic situation of the island, i.e. avoided pollutants emissions and increase of local employment. In addition, the project has started to produce a series of non-quantifiable socio-economic benefits such as:

- Ikaria will become an important candidate for "sustainable tourism" (slogans like: Ikaria, the "sustainable" or "renewable" island" will be used by local tourism operators).
- The project will introduce modern up-to-date technology on Ikaria Island (renewable power generation, power-electronics, inverters, batteries, automatic and remote controls etc.).
- Increased qualification level of local technicians, and improved training possibilities for islanders in sectors related to the project, and the local industries/enterprises will benefit from the availability of such qualified technicians.

It is interesting to analyse how end-user reacted to such a massive presence of renewable energies and if and how they modified their consumption habits. In fact, the project shows great potential to become a passive S3C partner.

Web source:

- ftp://ftp.cordis.europa.eu/pub/eesd/docs/ev260901_poster_iren.pdf

1.1.19 "Energy Village" Wilpoldsried

Wilpoldried is a small, rural community in Bavaria, Germany, which has been developing a new energy infrastructure for decades. In the 1990's, the community began to deploy renewable energy sources on a large scale driven by strong support of the regional citizens. In 1999, one of the first citizens' collectives started to invest in wind- and solar energy which lead the community to frame the challenge of switching to a renewable energy in social community context. In fact, in 2009, the community could already meet the targets for feed-in from renewables that are set for overall Germany for 2020. The community has received several awards for its contribution to new energy economies, such as the German and European Solar Prize or the European Energy Award. However, the community is not only interesting due to the

large-scale deployment of renewables, but also due to years of campaigning for citizens to accept their new energy environment and to adapt their energy behaviour.

Currently, several projects are running in the community. Some projects have a more technical focus, such as the Ministry for Economics-funded IRENE that tests the impact of the 2020-renewables-scenario on the local distribution grid and looks to find new solutions. However, the community together with the local utility Allgäuer Überlandwerke has been carrying out energy education activities within the so called “1. Wilpoldsried electricity-saving year” since May 2013 as well. Households in the region are incentivized to save as much as electricity as possible between May 2013 and May 2014. The three most successful households will be awarded with 500€, 300€ and 100€. To support the initiative, a new column in the local newspaper “Duranand” was founded that will feature energy saving tips and that will also feature households taking part in the programme with their personal ways. In fact, this project – as several other, older Wilpoldsried projects before – includes a bottom-up perspective. The citizens do not only receive advice, they can also share their own experiences and tips.

Generally, the community displays a strong tendency to educate their citizens about their energy behaviour. Energy education programmes are being implemented in kindergartens, schools, at the customers’ homes, in public buildings and local SMEs. To support the overall campaign, end-users can also lend smart grid technologies aiming to residential use (portable metering devices, intelligent sockets, feedback displays) at the community to learn about their specific consumption patterns and their appliances.

The community combines several approaches to customer engagement. On the one hand, national and European funding projects sensitize the customers for the new technologies and the changing energy environment. On the other side, several small-scale sensitize the end-users for the many, little changes they can make to their respective lifestyles. For S3C, it would be very interesting to investigate, how the different projects and measures add up and whether the measures are planned to complement each other.

Web Sources:

- www.wilpoldsried.de
- www.projekt-irene.de

1.1.20 ESB Smart metering Customer behaviour and technology trial

ESB Customer behaviour and technology trial is a series of trials that examine the impact of smart meters on customers’ behaviour as well as the appropriate level of smart meter communication technologies in the Irish environment. These trials involved both residential customers and SME’s.

- **Customer Behaviour Trial:** during 2009 and 2010, 6500 smart meters were installed in residential and commercial premises. The test included different interaction schemes such as time of use tariffs, detailed bills, in Home Display, financial reward incentives to consumers who could effectively reduce their energy consumption when compared with previous periods and a web portal with detailed information on energy consumption and costs. This trial has shown statistical evidence that time of use tariffs when combined with other demand side stimuli can change energy consumption habits in households reducing both the overall and peak consumption. However, in the small and medium enterprises trial, although electricity consumption decreased, the results were not statistically significant.
- **Technology Trial:** consisted of deep analysis into costs and performance levels related to specific means of communication, smart meter prepayment models and dual fuel smart metering solution.

The data collected during the trial indicates that the interactions schemes implemented during this project led to a reduction of consumption with respect to overall usage (-2.5%) and at times of peak usage (-8.8%). The data suggested that 82% of participants adapted their behaviour. The tests carried out in SME’s including Time of Use tariffs and Demand Side Management mechanisms resulted in a decrease of overall electricity consumption by 0.3% and peak usage by 2.2%. Surveys carried out revealed that residential and SME customers considered the IHD electricity monitor an effective instrument.

These surveys and the collected data offer valuable insights for the S3C consortium and would provide excellent input for the analyses to be carried out in WP3.

Source:

- Electricity Smart Metering Customer Behaviour Trials (CBT) Findings Report; Smart Metering Information Paper 4

1.1.21 eTelligence

In the Cuxhaven region, near the German North Sea shore, the project eTelligence, winner of the German technology competition »E-Energy« of the German Federal Ministry of Economics and Technology (BMWi), initiated its field tests in early 2009. The project succeeded in winning about 700 end-users for their field test, which put new smart metering solutions, new tariffs and feed-back options on trial until late 2012.

The overall project was to test a complex control system to balance out fluctuating windpower, which is decisive for the region's future energy supply that intelligently integrates electricity into the grids and a regional market. The core component of eTelligence is a regional electricity marketplace that brings together producers, consumers with shiftable loads, energy service providers and grid operators.

The residential end-users testing smart energy solutions were addressed and won over for the field test within a broad regional campaign. All customers were equipped with smart meters and were either billed in a consumption-oriented tariff with the aim to save electricity or an event tariff, a mixture between a static time-of-use-tariff and Critical Consumption Pricing events. This tariff was designed to signify the availability of renewable energies in the local grid to the end-users, thereby sensitizing them for the intermittent nature of the new energy resources. The Event Tariff did not only feature Critical Peak Pricing, but also offered the kWh for up to nothing for several hours in so-called bonus events. The results were impressive. Customers billed within the consumption-oriented tariff could save about 10% in a year-on-year comparison. Customers billed in the Event Tariff could sometimes shift more than 20% of their load in times of bonus- and malus-Events. Another customer group was billed in a normal standard load profile based tariff. Their meter data was used as reference against the consumption of other field test customers.

The eTelligence end-users also received innovative feedback information via different communication channels, such as a monthly bill, a smartphone app and a web portal. In fact, the customers were enabled to make informed decisions on the electricity consumption and in case of the Event tariff could learn to relate the price of electricity to the availability of renewable energy.

Furthermore, the project collaborated with co2online (see chapter 1.1.8) and devised a separate online-based "energy saving account" for interested field test customers that rendered extra information on energy saving in end-users' overall daily routines. Customer surveys were carried out through the project's lifecycle and the customer sample that made up the field test participants were compared against the average citizens in the region.

The broad range of feedback and tariffs as well as the good results of the interaction schemes trialed in this Smart Grid region make it a good candidate for the S3C family of projects.

Web sources:

- www.etelligence.de
- www.e-energy.de

1.1.22 EU-DEEP

The project, which is an in-depth economic analysis of DER, aims at identifying the current hosting capacity of the electrical power systems and the conditions that will enable this to be increased at an acceptable cost. Trials took place between 2006-2008 in Germany, Greece, UK and France.

Results from the single site field tests (i.e. Grenoble and Athens) showed that DER controllers are able to control simple and complex (trigeneration) systems.

Aggregation tests we performed in:

- United Kingdom with a customer portfolio of 8 small industrial and commercial sites from 20 to 1500 kW of flexible loads, 2 controllable generators (500 kW diesel engines) and 1 wind farm (30 MW)

- Germany with a portfolio of 10 residential customers being equipped with a micro-CHP (1 kWe) and a large heating water storage allowing to decouple the use of heat and electricity.
- Greece with a decentralized control architecture was tested in a university, a holiday camp and research centre (more technology oriented)

In all cases, the aggregator role was taken up by a project partner.

Results show that flexibility can be enabled by consumers, although limits exist. In the case of micro-CHP, flexibility is limited by the size of the heat storage. In addition, it was observed that in average micro-CHP had a time availability of 50%, if self-consumption is supported, only 23% of the produced electricity could be fed into the grid, and that when called to produce the compliance was 12%, meaning that in order to offer 1 kW on the power market 8 micro-CHP had to be called.

Among the lessons learned from the trials it can be highlighted that:

- considering the use of flexibility when adapting existing systems would represent a great reduction in installation costs since designed flexibility is cheaper than retro-fitting.
- selection of sites requires a deep market knowledge, in fact what allowed the selection of specific sites was the knowledge from customers and prospects.
- customers have poor knowledge concerning their flexibility levels. It was found that they usually underestimate the amount and frequency on which flexibility could be provided.
- in order to operate commercially several developments will need to be made, e.g. in the UK context, systems that provide prices and control signals.

From the sociological survey that assessed the acceptance consumers had to innovative “aggregation offers” it can be highlighted that issues dealt at contracting phase such as simplicity, transparency and the sharing of financial benefits with the aggregator are critical.

In summary, results showed that DER is mature and able to run in islanding or interconnected mode, flexibility can be enabled for consumers although with certain limits, and that customers underestimate their own flexibility potential.

Especially the limits of flexibility and the factors leading to these limitations are interesting for S3C to investigate and to analyse. In fact, EU-Deep and the insights it gained into the flexibility of end-users constitute a very relevant input for the project.

Web sources:

- <http://www.eu-deep.com/>
- EU-Deep deliverable 8. “Experimental data of 5 experiments - Single site tests: Grenoble & Athens - Aggregation tests: United Kingdom, Germany and Greece”.

1.1.23 EVANDER

The project partners of Electric Vehicles and Distributed Energy Resources (EVANDER) want to influence the energy use of companies. They want to stimulate this with a Smart Grid which uses sustainable locally generated energy and electric vehicles, situated in the municipality of Nieuwegein (NL). Locally produced energy will be stored in the batteries of the electric vehicles, and the project will set up a cooperation to stimulate the companies to actively manage and use their energy use. The term the project uses is the ‘prosumercooperation’: prosumers can be consumers or producers of energy, and this energy will not only be used by the companies, but can be sold to other companies within the cooperation, or to external organizations. The social aspect of energy use is highlighted as well in the project, as the project leader George Jansen of the Prestige cab company explains; ‘we noticed that the social behaviour of companies and prosumers really have to change, before they actually are willing to change their ways of working and consuming. In this project, we like to remove barriers for the use of EV, and stimulate the use of renewable energy. We educate suppliers and prosumers to “take their role”, work together and become active in controlling their own energy use and supply.’

Some research questions asked by the project:

- Can we stimulate market uptake of EV and sustainable energy by letting companies be actively involved in the production of renewable energy?
- How do we influence the behaviour of companies and consumers, as to let them adapt their energy use?

- Which commercial possibilities does a new energy trade system have for the project members?
- Can we develop a financial pay off method/system for which privacy and transparency are top priority?

Several aspects and topics of EVANDER are relevant for S3C: The emphasis on cooperation between commercial companies and prosumers can be interesting as one can observe what role utilities can play with, and what the roles are between them. The aspect of cooperation is vital for any project, and perhaps even more so with Smart Grid projects. The insights from this project can therefore be a good aspect of the S3C web tool. As S3C does not only look at the role of the present consumers, but also at companies and EV, this project is very relevant for gaining insights on the two latter topics.

Another very relevant topic is that the project addresses the question of how to influence behaviour, and let companies and prosumers use less energy, or more efficiently. The matter of how they will address this, and its effects and insights, will be important information for S3C. The aspect of letting companies generate their own renewable energy can be interesting for S3C as well, seeing that we can provide information on our web tool about how to stimulate companies to join utilities when starting a project. The commercial possibilities which are explored can be an interesting insight for the web tool as well.

Seeing the several important and interesting relevant aspects of this project, the S3C consortium should try to gain access to reports as much as possible, and conduct interviews with several participating companies, prosumers and the utility.

The project is planned to for 3 years, from the January 2012 until 2015.

Web source:

- <http://www.sp.sew.agentschapnl.nl/sites/default/files/Electric%20transport%20and%20decentralized%20energy%20generation.pdf>

1.1.24 FlexPower

FlexPower is a project that sets its emphasis on testing an entirely new market design. This new market design has to be seen against the increasing share of wind power impacting the energy mix of several European countries, particularly the Nordic countries. The increasing share of wind power results in a higher need for control energy on the one hand and can lead to a reduction of the capacity in the central power units traditionally supplying control energy on the other hand. The FlexPower idea is to utilize the potential for electricity demand as a sustainable and cost-effective source for control energy. In fact, a simple and efficient market to create demand and generation flexibility for control energy supply was be trialed. The incentive for the new providers of control energy – be they consumers or prosumers – are set via “one-way-price signals” that are to activate electricity demand and small-scale generation as control energy.

The project partners participating in Flex Power are Energinet.dk Actua, Enfor, Eurisco, EC Power, SEAS/NVE, Ea Energy Analyses and DTU (Risø, Informatics, CET). The project runs from June 2010 to June 2013.

The project also sheds light on the more systemic perspective of including end-users in a more active role within the energy system. For S3C, the field test offers interesting results in whether or not the “one-way-price-signal” succeeds in engaging the end-users as part of the energy control market. Furthermore, the new business model can be explained to potentially active partners in the S3C family of projects as an example of how flexibility on the demand side can create benefits.

Web sources:

- http://www.ea-energianalyse.dk/projects-english/1027_flexpower_market_design.html
- http://www.ea-energianalyse.dk/reports/1027_flexpower_project_description.pdf

1.1.25 Green eMotion

The integration of electric mobility is one of the cornerstones of Smart Grid development. An efficient and swift development is one of the prerequisites for the people’s acceptance for this new technology. The project Green eMotion will connect current regional and national electric mobility initiatives and projects to share the results and compare the different technology approaches to ensure their

interoperability for the European market. A virtual marketplace will be created to enable the different actors to interact and to allow for new high value transportation services as well as EV-user convenience in billing (EU Clearing House).

Furthermore, the project's approach is to initiate ongoing discussions within a broad, international stakeholder audience. This stakeholder participation process is what renders this project particularly relevant for the S3C consortium. Whether or not this and whether this leads to the inclusion of end-user integration topics into the process is highly relevant, and if so, how the initiators succeeded, is highly relevant information for S3C.

Web source:

- <http://www.greenemotion-project.eu/>

1.1.26 GREENLYS

The project will test new systems combining DER, the Linky smart meter infrastructure, active demand response, energy management, and distribution network management in 1000 households and 40 commercial sites in Lyon and Grenoble.

"The expected results of the project are:

- *DSO Operation & Maintenance cost reduction (k€)*
- *Peak load reduction (MW)*
- *Evaluation of social, environmental (CO2 reduction), economic benefits of Smart Grids*
- *Evaluation of consumer response to information devices and innovative tariffs*
- *Electricity consumption reduction (MWh)"*

Especially the latter two results are very important within the S3C context.

Web Source:

- <http://www.greenlys.fr/>

1.1.27 Grid4EU

Grid4EU is a large-scale demonstration project of advanced smart grids solutions with wide replication and scalability potential for Europe that has started work in November 2011 and will continue until January 2016.

Grid4EU (EU FP7) brings together a consortium of 6 European energy distributors (ERDF, Enel Distribuzione, Iberdrola, CEZ Distribuce, Vattenfall Eldistribution and RWE) and 21 other partners (Utilities, Energy Suppliers, Manufacturers, Research Institutes). With an indicative budget of €54 M overall, it is the biggest smart grid project to be funded by the European Union. It will test the potential of smart grids in areas such as renewable energy integration, electric vehicle development, grid automation, energy storage, energy efficiency and load reduction.

Grid4EU consists of six demonstrators, which will be tested over a period of four years in each of the European countries represented in the consortium.

- Demo 1 (Germany): Demonstrator in Reken focused on the improvement of surveillance and advanced control of the medium voltage grid based on autonomous acting Multi-Agent-System (MAS).
- Demo 2 (Sweden): Demonstrator in Uppsala focused on the development of monitoring system of LV distribution network based on AMI infrastructure and intelligent equipment in the secondary substation.
- Demo 3 (Spain): Demonstrator in Castellon focused on the enhancement of the MV and LV network automation and the awareness of the Customers about their consumption and network situation.
- Demo 4 (Italy): Demonstrator in the Forli-Cesena area (Emilia Romagna region), focused on implementing an advanced control system to increase the hosting capacity and maximize the integration of renewable energy sources and distributed generation in the MV network.
- Demo 5 (Czech Republic): Demonstrator in Vrchlabi focused on LV and MV grid automation including the management of EV and island operation.

- Demo 6 (France) : Demonstrator in Carros focused on the optimization of PV integration into the LV grids by using PV and load forecasts, flexible loads, electric storage and islanding. It will also encourage the participation of customers and assess their and the social impacts of smart grid technologies.

One demo addressing end-user engagement is demo 6 ‘NiceGrid’ (see also www.nicegrid.fr). Nice Grid will test programs of dynamic load management to:

- Reduce consumption levels during peak demands (~1500 customers)
- Ensure adequate integration of solar power generation into the existing distribution grid (~550 customers)
- Study the islanding of a neighbourhood based on solar generation and electrical storage (~12 customers)

To this end, it will engage a total of 1500 customers distributed over 3 experimental areas. This will involve developing and testing information solutions for customers (consumption and production display), as well as testing the consumers/producers behavioural response to shifting request, inverters control and information solutions. Customer recruitment - encouraging customers to be involved in the experimentation and installation of in-home devices – is of special focus.

The large-scale integration of end-users as well as the variety of interaction-schemes to be tested makes this project a very interesting case for S3C.

Web sources:

- <http://www.grid4eu.eu/>
- Grid4EU deliverable dD6.1 “Initiation of the demonstration”

1.1.28 GridTeams

The aim of this project is to assist end-users to handle their own consumption and deliberately influence their load curve. With home installation of a smart meter, provided and supported by the WIT inc., the Web platform empowered by Gridpocket uses both, an energy analysis carried out by scientists from Mines ParisTech and a behavioural overview by sociologists from Telecom ParisTech, to provide information on consumption from two angles. A starting point: the actual consumption. A target: the lowest consumption reachable for the respective end-user. The effort for a better behaviour is incentivized with a reward system.

The inclusion of know-how from sociology into this project makes it valuable for S3C. To see if the research and implementation is different from project designed from a technical/engineering perspective entirely could be an interesting part for the analyses to be carried out.

Web source:

- <http://gridteams.com/>

1.1.29 GridWise (Part 1)

The project aimed to indicate how peak loads on distribution feeders can be managed to avoid the need for local capacity expansion. The Olympic Peninsula Project involved 112 households under a market based control through price signals. These participants had to choose between fixed, TOU with CPP or RTP tariffs.¹ The location (i.e. Olympic Peninsula) of the project was chosen due to the capacity constrained radial transmission system. The project lasted one year (March 2006-March 2007) and was carried out in the U.S.-state Washington.

Lessons learned from the recruitment phase show that at the moment of enrolment some residents lacked very basic knowledge about their appliances and internet services.

Results concerning residential load shapes showed that contract choice affected load behaviour. TOU tariffs prove to effectively reduce peaks for the entire residential loads, although it was observed that

¹ Consumers with a Time of Use, Critical Peak Pricing contract or Real Time Pricing contract were able to select from multiple comfort settings. The response of the flexible loads was then automated through energy-management equipment.

abrupt load changes appeared at the start and end of peak periods. Additionally, it was observed that an improper assignment of peak periods can exacerbate rather than reduce the peak. The real time tariff results showed the smoothest profile, led to reduction of congestion peaks when most needed, and encouraged energy consumption in the early morning when daily prices are lowest.

Concerning the feeder capacity, it was observed that for most periods, the virtual feeder successfully managed to remain within capacity limits. Under severe weather conditions, the effectiveness of the real time pricing control tariff was reduced. In fact, a need for a substantial amount and diversity of loads that can follow real-time prices under extreme weather conditions became obvious.

Regarding load shifting, results show that the reduction of peak load ranged between 5-20%. Participants under the time of use tariff consumed, on average, less energy than the ones under real-time or fixed price tariffs.

The project encountered some issues that were left without an explanation. For instance, the 5% increase in peak load in some periods or the lower incentive² that appeared to receive participants under the fixed price tariff.

Overall, the project found no fundamental technological limitations that would prevent the application of these technologies at a larger scale.

Source:

- Hammerstrom, D.J. et al., "Pacific Northwest GridsWise™ Testbed Demonstration Projects – Part I ,Olympic Peninsula Project." PNNL report 17167. Richland, Washington, October 2007.

1.1.30 GridWise (Part 2)

The project aims at testing the capability from Grid Friendly appliance (GFA) controller³ to provide frequency protection on the electric power grid. Appliances under the control of GFA responded to the signals as designed by shedding portions of their loads. The collection of data from 150 to 200 appliances was performed between early 2006 and March 2007.

Three target populations in Washington and Oregon were made available to recruit residential participants by four collaborating project utilities. Participants were offered a new Whirlpool dryer as their principal participation incentive. Project staff had anticipated that this significant incentive would cause the project to become overwhelmed by applicants, but that was not the case. Various other methods were deployed, including town hall meetings, a radio advertisement, recruiting participants by phone, newspaper advertisements, further exposure on radio (interviews) and door-to-door invitations.

Selected participants (meeting specific qualifications) were provided with an initial project survey by mail, addressing amongst others owner practices. After installation, the project interacted with appliance owners to answer their questions, to keep their equipment functioning, and to handle special or unexpected conditions through a project call center hotline.

The final survey was implemented as an automated survey on a web site. Surveyed participant were satisfied and reported not to be particularly affected by the new functionality of their appliances. In addition, they showed interest in acquiring an appliance with this feature if the overprice is below USD \$20. As noted by the survey, automated energy responses are preferable for the end-user if they are allowed to overwrite them.

From collected data it was observed that the utilisation of water-heaters aligned closely with periods of load peaks. This was not the case for dryers which energy use was relatively flat during daytime. Concerning under frequency events no relevant pattern was observed.

Results showed that the GFA controller performed successfully when called upon to shed load (although this wasn't its primary functionality). In this respect, project collaborators were satisfied with the fact that a traditional demand response can be practiced on the same appliances that perform autonomous under-frequency responses if communications are provided to the appliances.

² When recruiting participants the incentive was guaranteed to be, in average, USD \$150.

³ small electronic controller board that autonomously detects under frequency events and requests to shed the load of the appliance that it serves.

All in all, the project showed that under-frequency triggered load controllers can be implemented on end-users appliances. These controllers, if provided with a communication link, proved able to respond to curtail requests.

However, the results of the customer surveys and the conclusions that can be drawn from the surveys and results about the end-user preferences are highly relevant as input for the S3C analyses.

Source:

- Hammerstrom, D.J. et al., “Pacific Northwest GridsWise™ Testbed Demonstration Projects – Part II. Grid Friendly™ Appliance Project”. PNNL report 17079. Richland, Washington, October 2007.

1.1.31 Heijplaat Energy-neutral

In close partnership with local residents, the Heijplaat neighbourhood in Rotterdam (NL) is working towards becoming “energy neutral” by 2020. To this end, the neighbourhood’s 700 houses are being technically renovated to increase their energy efficiency, the residents’ energy awareness is being raised, and investments are being made in sustainable energy generation units. The plan is an initiative of the WWF, Rotterdam City Council, the Woonbron housing corporation, the Port of Rotterdam Authority, Stedin and Eneco. The unique experiment was launched on 9 May 2013 with a WWF event in Heijplaat.

For the people behind the initiative, generating support among the Heijplaat residents is a key issue. Eneco emphasises that the entire project has to come about in consultation with the residents. “We try to involve the residents’ organisations in our programme, for example. We’ve also been to the children’s farm, to community events and the Christmas market. We listen carefully to the residents, because to make this a sustainable neighbourhood we need each other.”

Several sustainable solutions for Heijplaat are being planned at the moment, e.g. the 700 homes will be fitted with all possible energy-saving appliances. Partially sustainable new buildings will be constructed, but the biggest challenge lies with the existing homes. These will be adapted in close consultation with the residents. Smart Meters will be built into the homes and the local end-users will receive additional information on energy use, as well as Eneco’s Toon thermostat for the ‘front runners’.

Heijplaat will also become an energy producer. Because the roofs of the existing buildings only lend themselves to the placement of solar panels to a limited extent, the vast majority of the energy needed for Heijplaat will not be generated at the residential sites. Part of it can be produced by constructing solar panels on the roof of the shipbuilding shed on the RDM site. This will produce enough energy for forty homes. Most of the energy, however, will be generated by a wind turbine at Heijplaat. The regional generation of energy will reduce CO₂ emissions by as much as 135%.

The central role residents have, and the importance of engaging with them, is highly relevant for S3C, and possibly a very good example for other utilities. The combination of trying to influence residents’ behaviour, and engaging with them in several ways is very informative for S3C, as the research team can e.g., observe the level of commitment for the project, and the effects on energy use and enthusiasm with the residents. Is their role shifting from consumer to prosumer? Are they also changing in their other roles because of it? Or might they for example become more active citizens in their community because of the project?

Just as with the other projects, it would be valuable to conduct interviews with all parties involved, in particular the residents participating in the project. Seeing the details, events and ideas of this project, it would be great to find out what residents thought of it, and if it encouraged them in any way.

The project duration is 3 years, starting in 2012.

Web source:

- www.agentschapnl.nl/sites/default/files/Smart%20grid%20with%20the%20consumer.pdf

1.1.32 Hyllie

Hyllie is a part of the city of Malmö that will lead the way for its future development as a sustainable city, being at the forefront of innovation and linking supply to user behavior. Energy solutions should be based on a circular approach, and have a high degree of self-sufficiency. At times of excess energy in Hyllie, this energy could be useful in other parts of the region. Hyllie is Malmö’s largest area for development.

Fully developed, the planned area includes about 9000 households and almost as many workplaces. Hyllie provides an integrated approach to resource-efficient structures for transport, energy and land. The city should be mixed, denser and greener. Hyllie's scope and conditions mean that effective and sustainable system choices can be made.

The energy concept for Hyllie includes effective solutions for electricity, heating, cooling and transport. There are established resource and climate-friendly solutions across the value chain. It is characterized by a high degree of interaction between different types of infrastructure including waste, water and sewer. The energy used in Hyllie should be based on renewable sources. There should be conditions for local production in buildings, new renewable generation will be established, and the whole energy concept will make best use of the existing infrastructure and central production. Also, intelligent solutions for energy storage and energy management will be present.

A goal is that the energy supply in Hyllie shall be supplied with 100% renewable or recycled energy by 2020. Participating partners are the City of Malmö, VA SYD and E.ON. #

The locally integrated approach of the project is what renders it interesting for an analysis within the S3C research design. The end-users that will come to live in Hyllie will not only be equipped with the necessary technology to make informed decisions on their respective energy consumption, but they will also live and work in an environment that will enhance their energy education and respect their role as a citizen. It will be very interesting for the S3C research to observe the first steps made to form this sustainable community.

Web source:

- www.hyllie.com

1.1.33 ICT4EVEU

The ICT4EVEU project goal is the development of communication technologies for the EV services. Its goal is to integrate the existing charging controlling system of European countries and enabling their interoperability. It also contains inter-operability and roaming and billing systems. The pilots that will test the infrastructure developed in this project will take place in Bristol, UK, Vitoria and Pamplona, Spain and Ljubljana and Maribor, Slovenia.

The pilots will not only aim to include private owners of electric vehicles for their cause, the consortium will also address commercial and public owners of electric vehicle fleets. To gain insight into the process of addressing and integrating these different groups of potential electric mobility users and to learn about the different motivations, drivers and barriers for the inclusion of the different user groups, is highly relevant for the S3C analyses.

Web source:

- National Smart grid contest. Publication "Smart grids - from theory to practice", <http://www.ict4eveu.eu/>

1.1.34 Integrating households in the smart grid (IHSMAG)

The project studies the integration of households in a Smart Grid environment and develops design recommendations. Based on a number of case studies in the participating countries (Norway, Spain and Denmark), the project contributes with new knowledge on how to develop a comprehensive design of household smart grid solutions that integrates the specific characteristics of the three domains that intersect at the household level: 1) Technologies in households, 2) daily routines underlying everyday energy consumption of the household members and 3) the electrical system and the administrative and institutional rules that affect the implementation of new smart grid solutions (e.g. standards for home automation and economic incentives). IHSMAG combines different methods in relation to case studies. The smart grid solutions studied in the project include the integration of electric vehicles, smart metering and feedback to customers. Besides technical studies of challenges related to interoperability, the project consortium also carried out interviews with the end-users involved in the tests and contributed field observations about the .

These results are highly interesting as input for further analyses to be carried out within the S3C research design, as they offer lessons learned on the changes in behaviour and roles due to the elaborate Smart Grid infrastructure that was provided for the field test end-users.

Web source:

- <http://sbi.dk/ihsomag/>

1.1.35 INZET

In the municipality of Zeewolde, the so-called INZET aim is to balance all locally produced renewable generated energy from solar panels, wind and biomass and the residential and commercial consumption in the regional houses and offices. Next to that, the project asks the question of ‘what social aspects’ can be used to persuade and motivate consumers to use less energy. Several research questions are asked in this project:

- How are consumers persuaded to use renewable energy?
- How can Smart Grid technologies, especially software, be optimized so weather forecasts, usage and benefits are well balanced?
- Can an entire region be supplied with renewable energy even if no wind available, by using the buffer of biogas in combination with reinforcing less energy use?
- How do we create an ‘accounting system’/ register payments for users, producers, service providers, and utilities with diverse tariff structures?
- Which business models and executive plans are necessary for market introduction, realisation, and acceptance?

With the project INZET, 4.000 residencies and 500 companies will be connected to a Smart Grid. To get consumers involved in the project, it is possible to co-invest in renewable energy through Zeenet, a local energy supplier, which is a cooperation of citizens.

In particular, the social aspects of this project carry great potential and relevance for S3C because it observes the whole process of ‘forging’ a more sustainable society. The project seeks to explain, how citizens can be persuaded to switch to sustainable energy supply. For this topic, there is contact with the social services of Zeewolde. People who follow an integration program to find work have the opportunity to provide information to consumers, and in that way try to stimulate them to use renewable energy and try to adapt their energy demand to the supply side. The role of citizenship is particularly interesting with this Smart Meter project. Perhaps encouraging consumers in this way, the project also stimulates the role a person has as a citizen, which encourages responsibility and social wellbeing, together with the use of renewable energy.

Finding information on the motivations of participating is very important, as well as asking if the local energy producer from citizens that is involved influenced their choice of participating

Getting information on the interaction between the people who provide information to citizens, getting to know the attitudes and needs of the consumers, and looking at the interaction of the roles, multiple interviews would be interesting and extremely useful for S3C.

The project is scheduled to run from January 2012 to the end of 2016.

Web source:

- <http://www.agentschapnl.nl/content/inzet-intelligent-netwerk-zeewolde-en-energie-transitie>

1.1.36 iSmart Ittigen

In October 2009, the Swiss Smart Grid model region iSmart funded by the Federal Ministry for Energy and carried out by the utility BKW FMB Energie, the Swiss branch of IBM and Swisscom kicked off its proceedings. A total of 270 household in the community of Ittigen were equipped with Smart Meters and innovative energy management devices, feedback systems and time-of-use-tariffs. In the end, the project delivered important insights into the wishes and expectations of end-users to Smart Energy products. In fact, the results can be used to develop new products tailor-made to the customers’ wishes. The project finished in late 2012, however, the experts are still available and willing to share their learning experiences.

During the course of the project, three pilot products – VISU, SMART and FLEX - were developed and tested. Furthermore, the project team carried out customer surveys throughout the project’s lifecycle in addition to analysing meter and energy management data of customers.

VISU and SMART are both feedback systems, but SMART is tailor-made for households living in their own house, whereas VISU was tested in households renting their respective apartments.

The VISU feedback resulted in an average decrease of electricity consumption of 2% per test household. VISU customers were particularly interested in financial savings. Households equipped with the SMART feedback system were able to save about 8% on of their consumption on average. Furthermore, the SMART end-users were equipped with a time of use-tariff and succeeded in shifting up to 5% into the less expensive time zones. Very motivated customers even succeeded in saving up to 20% of their energy consumption.

Generally, the trial suggests that households living in their own home make more frequent and intensive use of their feedback system. Information on current consumption level and histograms indicating the development of consumption appear to have been of particular interest for the field test end-users. Generally, the usage of the feedback systems decreased over time in both test groups, which is in line with the results of several other Smart Grid projects. However, content updates and new functionalities added during the course of project could restore the interest of the end-users. Generally, the end-users are less flexible in their consumption and accordingly use the feedback systems less on weekends. Displays integrated in the households anyways (computers, laptops, smartphones etc.) are favoured over new, stand-alone displays. People react strongly to monthly, informative bills, they are particularly interested in their “price prognosis”, i.e. the prognosis on their eventual annual electricity bill, which they can impact during the course of the months. Tailor-made energy saving tips were included on the monthly bill and valued highly by the end-users.

The product FLEX was only used in few test households and aimed to replace the traditional ripple control installation for water boilers by a new software driven system. The software enables its moderator to distinctly control the individual boilers and bundle them to a virtual power plant. The project proved that boilers can be externally controlled to heat water at times of cheap possible energy supply or high levels of accessible renewable energy.

iSMart Ittigen shed light on many different aspect of end-user involvement in smart energy infrastructures and has delivered interesting, elaborate results that are highly relevant for the analyses to be carried out within S3C.

Web sources:

- www.inergie.ch/thematik/projekte-2/projekte
- www.energie-cluster.ch

1.1.37 Jouw Energiemoment

In early 2012, the Dutch network operator Enexis has launched the active demand pilot Jouw Energiemoment in two pilot locations: two neighbourhoods in the city of Breda, and one neighbourhood in the city of Zwolle. Residents produce their own energy using photovoltaic panels. Participants in the project receive a smart meter, an energy computer and a smart washing machine, which communicates with the energy computer. This allows participants to make rational decisions based on actual energy use, and increase efficiency. The objective is to ‘better understand how willing consumers are to use electricity more flexibly’.

Participants can use the washing machine or other appliances at times when the photovoltaic panels produce energy or energy costs are low. Participants will receive information about preferred moments for energy use, eventually saving costs. Each participant can choose between two options on a daily basis: a) to optimize sustainability (maximizing the use of own generation), or b) to reduce costs. The neighbourhood ‘Meulenspie’ in Breda consists of 49 semi-detached and row houses inhabited by young families and couples, of which 37 households are taking part in the pilot project. The neighbourhood ‘Easy Street’ consists of 246 apartments in a single building. Most residents are young singles or couples. 110 of the 200 apartments currently sold are participating in the pilot project. The neighbourhood ‘Muziekwijk’ in Zwolle includes purchased and rental properties (apartments and family homes). Enexis has started in 104 of the 110 properties in 2012.

The role of end users as smart consumers is the main focus of this project, which is highly relevant for the S3C project. The idea of recruiting people when they are entering their new home is a clever way of recruitment. As mentioned in the S3C literature review (D1.1), people are more likely to make rational changes in their behaviour when ‘single big events’ occur. So providing them such an opportunity, is

more likely to be accepted, because of the situation they are in, and the accompanied 'behavior' which is usually involved at these moments.

In the feedback information participants receive, 'the savings due to participation in 'Jouw Energie Moment' are compared to 'average' energy users on the monthly energy bill. According to literature findings, this should be an effective way of keeping people motivated. This project should provide information about how participants perceive this type of feedback information.

The project manager of 'Jouw Energiemoment' is enthusiastic about participation in S3C, so that the S3C research team expects to be able to access relevant information and to be able to conduct interviews with project representatives and participants. Learning from this project can be used to verify literature findings concerning recruitment and feedback mechanisms. Perhaps other, unexpected insights will be gained while conducting interviews.

The project will run for two years, and is currently on its way with participants using the appliances in this phase of the project.

Web source:

- www.jouwenergiemoment.nl

1.1.38 LINKY

The Linky project was initiated by French supplier ERDF. The project will result in the pre-deployment and testing of 300 000 smart meters in the regions of Indre-et-Loire in more rural areas and the urban areas surrounding the city of Lyon.

Linky is the name of the Advanced Metering Infrastructure (AMI) to be tested in the trial. The difference between the AMI and a normal Smart Meter is that the technology does not only meter and provide information, it is able to perform operations affecting consumption and generation.

The large rollout and high quantity of data that will be collected in this trial are very relevant as potential input for the S3C analyses. Furthermore, it will be interesting to see, what consequences this rollout will have on the end-users and how it may affect customer segments in a different way.

(Web) sources:

- http://www.erdfdistribution.fr/EN_Linky
- ERDF: "Le compteur communicant Linky d'ERDF : Une expérimentation réussie", 2011

1.1.39 Low Carbon London

The project Low Carbon London, which is funded by the Office for Gas and Electricity Market's Low Carbon Networks Fund, aims at developing a smarter electricity network that will deliver a safe and secure electricity supply in a low carbon economy, while keeping costs as low as possible for electricity end-users. Additionally, Low Carbon London ambitions to identify cost effective solutions that enable decentralised energy to connect to the distribution network. This project consists of 7 pilots (field tests) implemented in the ten low carbon zones in London, the RE:NEW and the Green Enterprise district. This project started in 2011 and it is expected to end in 2014.

Currently, results from post-installation surveys show that, in general, the recruitment and installation processes were well received by participants. Although it was pointed out that potential savings were not always reached.

Results from the recruiting and installation phases furthermore indicated that the lack of interest dominates (72%) the reasons given when customers were asked to enrol. During installation, EDF Energy found that about 10-12% of participants changed their mind and opted-out. Furthermore, the survey showed that among the reasons for not implementing the Dynamic TOU tariff was that consumers perceived it as too complex, too confusing or not fitting their lifestyle.

Current data suggest that participants with dynamic TOU tariffs are taking actions by cutting load on periods of high prices and either maintaining or increasing consumption when prices are low. In general, it is observed that participants under dynamic TOU tariffs tend to consume less than customers with without dynamic TOU tariffs.

All in all, so far results show that by implementing dynamic TOU tariffs, customer action can be motivated. More results are expected to be published when the trial is over.

However, not only the positive results that could be achieved by active field test participants being billed in the innovative tariff scheme are relevant for S3C. The reasons for opting out or not even considering to take part in the trial that were gathered in the aforementioned customer survey provide valuable input as well. Only if the S3C research team learns and understands about the reasons leading end-users to object to the use of Smart Grid technology, they can develop tools to increase the acceptance and perceived benefit of end-user engagement in Smart Grid trials.

(Web) sources:

- <http://lowcarbonlondon.ukpowernetworks.co.uk/>
- Presentation at the Low Carbon London Time of Use Learning Event. 15 April 2013, London.

1.1.40 MeRegio

The MeRegio field test was carried out by energy supplier EnBW, IBM, SAP and other partners within the E-Energy programme from 2009 to late 2012. About 1000 residential households in rural areas in South-Western Germany as well as several commercial end-user sites were included in this Smart Grid trial. The project shed light on several consumer-centric topic areas.

Field tests included manual as well as automatic load control and included smart-ready household appliances, electric vehicles, in-house storage facilities as well as generation units (micro-CHPs and PC-units). In fact, the end-users were not only considered passive consumers, but also as active producers of energy.

Several feedback options (web portal, smartphone app, in house displays) as well as a non-static TOU-tariff and a serious gaming component were tested. The impact of the tariff is particularly interesting to observe, as the different tariff zones and the corresponding prices were frequently changed. The project could prove that the consumption flexibility of end-users is impacted by many different factors, i.e. the weekdays and the connected routines and habits have a strong influence on whether the end-user can and want to adapt their consumption patterns. Customer surveys were carried out throughout the project's lifecycle.

Apart from the residential end-users, SMEs from different sectors (trade, manufacturing, service etc.) were approached and asked for participation. In fact, the project could also gather information on the interests, drivers and barriers of the involvement of commercial customers, which can differ a lot from residential customers particularly due to different processes that have to be respected. The potentials for load shifting and saving in SMEs are several times higher than at residential households.

Furthermore, the project appealed to the entire communities that took part in the field test. The consortium partner Karlsruhe Institute of Technology devised a methodology to evaluate the communities and created a certificate indicating the efforts of the communities to become a minimum emission region including the efforts to become smart.

In fact, the MeRegio project does not only address the Smart Consumer and Smart Customer perspective, but also sees the end-user as a Smart Citizen, which renders it highly relevant for an analysis within S3C.

Web sources:

- www.meregio.de
- www.e-energy.de

1.1.41 MILLENER

The project, which is being carried out by French supplier EDF and other partners since 2011, aims at reducing the CO₂ emissions resulting from the energy mix used to create electricity on islands by improving the integration of Distributed Energy Resources on the distribution networks via balancing demand and supply. The experimentation aims at increasing energy efficiency through the deployment of Smart Grid technology (energy storage systems, photovoltaics systems, active demand response systems) in 1000 households on Corsica, Guadeloupe and Réunion islands.

The project is interesting for S3C, as it aims to deploy DER units at the end-users premises, thereby sensitizing them for the local, renewable generation of energy. It would be interesting to observe, if the end-users' role changes from a mere consumer to a prosumer. Furthermore, the end-users involved in the

trial will be sensitized with respect to their own consumption as well. It will be interesting to observe of the information helps them to adopt their consumption to the visible, local generation from renewable sources.

Furthermore, the island perspective of the project is interesting. Will the energy autonomy resulting from the deployment of Smart Grid technology and DER units affect the community as a whole? In fact, results and end-user surveys from Millener would be a highly appreciated input for the S3C analyses.

Web source:

- http://www.capenergies.fr/fichiers/evenements/2011/DP_MILLENER.PDF

1.1.42 MobInCity

MobInCity is an electric mobility/ Smart Grid project funded within the European Seventh Framework Programme. Its main purpose is to contribute to the development of Smart Mobility within a Smart City. In fact, the project seeks to design and implement a controlling system for the electric vehicles that can be used for private transport as well as in public car fleets. The new controlling system can have influence on the vehicle's performance (traffic information, weather and road conditions and energy grid).

The focus of the project of integrating a new technology within a Smart City is always accompanied by acceptance issues. The people have to get used to the new technological options to optimize the process. To include public electric vehicles in their role-model function in the trial is highly relevant for S3C.

Web source:

- <http://www.mobincity.eu/>

1.1.43 moma (model city Mannheim)

The model city Mannheim project – moma in short – was funded within the E-Energy scheme. Proceedings were started in early 2009 and finalized in early 2013. The project could win more and especially dealt with the home automation/Smart Home aspect of the Smart Grid debate.

However, in order to make optimal use of the test-bed and continue the field tests in the households, the consortium partners are applying for new project funding this year and might carry out further tests.

After some pilot tests with manual control and relatedly static TOU-tariffs, the moma consortium deployed so called energy-butlers, innovative energy management devices that connect the end-user to the grid, in nearly 1000 Mannheim homes. In fact, the moma project focused on automatic energy management to realize saving and load shifting potentials. This aspect of end-user involvement is particularly interesting since it opposes the perceived lack of comfort resulting from a more active participation in the energy system and could lead to (economic) synergies between the Smart Home and Smart Grid sector. Instead of keeping up with price signals and control the load shifting and saving potentials manually, the end-users only have to configurate their energy management software once. The energy management in form of moma's Energy Butler will judge price signals indicating e.g. market prices at the EEX, grid conditions or the availability of renewable energies and control the electric appliances of the household accordingly.

The project carried out numerous end-user surveys during and after the field tests were finished to learn about the preferences of the field test customers and optimize the tested field products.

The project already signed an LOI to share its highly relevant finding with S3C in exchange for the findings of this project.

Web Sources:

- www.modellstadt-mannheim.de
- www.e-energy.de

1.1.44 NOBEL

The project is building an energy brokerage system with which individual energy prosumers can communicate their energy needs directly to both large-scale and small-scale energy producers, thereby making energy use more efficient.

The project is important to examine for S3C, as it transcends the established consumer role of end-users and treats them prosumers entirely. Surveys carried out to evaluate the changes in end-users behaviour and opinions would be highly appreciated input for S3C research.

Source:

- http://cordis.europa.eu/search/index.cfm?fuseaction=proj.document&PJ_RCN=11209123
- <http://web.ict-nobel.eu:91/>

1.1.45 Norra Djurgårdsstaden

Norra Djurgårdsstaden (Stockholm Royal Seaport) is a new district in Stockholm, with a special focus on environmental issues. The overall objectives of the Stockholm Royal Seaport are to meet the growing needs of housing and to be a model for sustainable urban development. The overall ecological goal is a climate-friendly and fossil free district in 2030 with carbon dioxide emissions below 1.5 tonnes per person and year by 2020.

The project comprises six work packages:

The active house

The goal is to increase energy efficiency and reduce peak loads by visualizing energy use and facilitate the residents to both become active consumers of electricity and electricity producers (prosumers). It also involves automation systems, which for example start the washing machine or charge the electric car at times of high electricity supply.

Examples of components:

- Electricity production with solar panels.
- Local energy storage.
- Control system for more efficient allocation of energy.
- Individual measurement and visualization of electricity use for control, monitoring and accounting.
- Charging stations for electric vehicles.

Smart Grid Laboratory

A complete operating environment will be created for full-scale tests of smart grid applications, control systems for load management and electricity market applications.

Development of the electrical grid

Research on new design of the electrical grid, which for example makes it possible to reduce losses and improve power quality.

Connecting ships to the local electrical grid

Development of a flexible and cost-effective solution that enables connection of ships in port to the local electrical grid.

Information management system

An information management system will be used to follow up the project objectives and to provide data for future research.

Market Concept

Business models and regulations, concerning both the end-user and the grid operator of the smart grid, will be created to facilitate and increase the end-user participation on the energy market. Test scenarios and test hypotheses will also be identified.

(Web) sources:

- Report: Stockholm Royal Seaport – Urban Smart Grid: Pre-Study
- www.abb.se/cawp/db0003db002698/a536536ace9337fbc12578fb00419430.aspx

1.1.46 OLDES

The project intends to offer new technological solutions to improve the quality of life of older people, through the development of a very low cost and easy to use entertainment and health care platform, designed to ease the life of the elderly in their homes.

The identification of the needs of elder people and their families and the health care and entertainment platform, designed to ease the life of elder people, and the way through which it is tested in different locations can be useful for the purposes of S3C.

The system has been tested at two different locations: In Italy (in Bologna) with the involvement of a group of 100 elderly people (including 10 senior citizens suffering from heart disease) and in the Czech Republic (in Prague) with the involvement of a group of 10 diabetic patients.

Web source:

- <http://www.oides.eu/>

1.1.47 Powermatching City II

The world's first trial with a smart energy network was launched in the village of Hoogkerk in Groningen (NL) in 2009: PowerMatching City I, with 22 households, HRe boilers, hybrid water pumps, solar PV systems, 'smart' devices and 2 electric vehicles (EVs). This project was completed successfully and is now getting a follow-up: PowerMatching City II, with an additional 20 to 50 households, some 20 electric vehicles (EVs) and 2 smart distribution transformers. Hoogkerk is thereby gaining practical experience with new tariff structures and the feeding in of renewable energy into the network, amongst other things. PowerMatching City II is aimed at the application on a larger scale of smart energy services at total concept level, by addressing the following challenges:

- How can we incorporate intelligent networks into the energy company's processes?
- How do we match energy services to the users' wishes and needs?
- How do we achieve optimum capacity management with an intelligent network?
- How do we validate business cases which were made feasible in the Power Matching I project?

"With PowerMatching City II we are looking at how intelligent networks can be incorporated into the energy company's processes, from reading the meter through to billing," says project leader Van den Noort. "For example, there are tariffs which can change every 5 minutes instead of a fixed tariff. That requires new sorts of bills. We are thereby devoting considerable attention to the end-user's requirements and wishes with regard to such services and systems. We want to gain an insight into these aspects."

Companies can also test new products in a test centre, for example a company will be building computer chips into electric scooters in order to be able to charge them smartly. The additional EV's can also be valuable to see what needs of the participants can be found, and analyzed.

When looking at the interests of the project, one in particular is highly relevant for S3C: How do we match energy services to the end users' wishes and needs? Energy company Essent developed two distinct market propositions: one community based approach focusing on sustainability and one individual approach focusing on reducing energy bills. The different roles described by S3C can be connected to the wishes and needs of the users, and valuable insights can be obtained by transforming literature findings and theory into the practice of this project. Do participants need a very different bill because of flexible tariffs, or do they prefer a social comparison, or perhaps both are optimal? Another relevant topic in this project is the additional services; e.g., chips for electric scooters; do participants use the scooter more often now that it is cheaper, more environmental friendly, etc.

We aim to obtain access into project information, and perhaps conduct interviews with project members and participants.

The project development started in September 2011, with the implementation of household services started in June 2013.

Web sources:

- www.powermatchingcity.nl
- <https://www.rwe.com/web/cms/de/453894/rwe/innovation/projekte-technologien/energieanwendung/powermatching-city/>

1.1.48 PREMIO

The Premio project goals deal with dynamic demand-response (at local network level), integration of DG and RES production technologies, reduction of greenhouse gases emissions, increase overall flexibility of the power system, and to encourage energy efficiency in the PACA region (South of France).

This small scale project that started in 2008 and finished in 2011 had a modelling and a demonstration phase in which about 100 customers participated.

As lessons learned, the project states that a modelling phase is necessary in order to extrapolate results of the demonstration phase. ICT showed to be crucial for the VPP implementation. Additionally, protocols were observed to be a key aspect during the development of the demonstration phase.

Results from the demonstration phase showed that customers are as important as technologies. Surveys indicated that during the demonstration phase, participants felt as “outsiders”. As the acceptance survey pointed out, participants do not wanted to be treated as “*grand public*”. For some of them there was a need for an interlocutor that represented the project. In addition, it was found that acceptance from non-directly involved inhabitants is also important to the project success.

The results of the acceptance survey render important input for the S3C analysis, as they add to the hypothesis that customer segmentation and a targeted approach to each customer segment are crucial for the acceptance of new technology. To gain more insight into the treatment and approach to the participants of this field trial and learn more about the grounds on which they criticized the approach would be very interesting.

(Web) sources:

- Presentation “PREMIO. The Smart Grid Demonstration Project supported by EDF.” Retrieved from http://www.smartgrid.epri.com/doc/10_Premio%20Project%20Progress.pdf
- Newsletter n°2 des participants au projet PREMIO à Lambesc, avril 2011

1.1.49 PRIME - Progetto di Ricarica Intelligente per la Mobilità Elettrica

The project will analyse the tools required for the growth of electric mobility, identifying the most appropriate incentives to promote the diffusion of electric vehicles in Italy. The research includes a study of the behaviour of customers who choose the electric car and the quantification of the benefits deriving from green mobility. The project analyses the impacts of charging stations for electric vehicles on the stability of the electric grid and contributes to the definition of the most appropriate regulatory measures in favour of the renewal of the car fleet in Italy. The project will support electric mobility pilot projects and study the regulatory measures necessary to promote the massive diffusion of electric vehicles in Italy.

Web source:

- http://www.enel.com/it-it/innovation/smart_grids/electric_vehicles/prime/

1.1.50 Sala-Heby Energi: Effekttariff

Sala-Heby Energi Elnät AB is a local distribution system operator in the county of Västmanland in Sweden. Since 2005, the company has carried out a phased installation of smart meters and as part of its effort to explore the added values, the utility has collaborated with Mälardalen University to investigate the possibility of reducing system peak loads by means of a demand charge in the residential sector.

Before March 2006, all households in the distribution area were charged according to a conventional distribution tariff. The components of this tariff were an annual fixed access charge depending on fuse size and a variable distribution charge. The access charge includes three different governmental charges which contribute to the financing of the Swedish Transmission System Operator Svenska Kraftnät, the Energy Markets Inspectorate and the National Electricity Safety Board. On April 1st, 2006, the access charge was abolished (except governmental charges) and replaced by a higher variable rate which entails a stronger correlation between customers’ electricity consumption and expenses. At this time, the distribution system operator Sala-Heby Energi Elnät AB introduced a demand-based time-of-use tariff to 500 households. This tariff consists of a fixed access charge depending on fuse size and a variable distribution charge calculated on the average of the five highest meter readings in peak hours. In off-peak

hours, distribution is free of charge. Peak hours are defined as hours in weekdays between 7 a.m. and 7 p.m. Remaining hours are off-peak hours. The rate of the tariff also varies between summer and winter seasons (April-October and November-March).

The learning process triggered by the introduction of the new tariff schemes is interesting to observe and evaluate from the S3C-angle of the Smart Consumer and the Smart Customer.

Web source:

- www.sheab.se

1.1.51 Salzburg SME DR study

Starting in late 2012, the utility Salzburg AG and B.A.U.M. Consult have carried out a series of surveys identifying potentials, drivers and barriers of ICT-based Demand Side Management in small and medium-sized enterprises in the Salzburg region. The project was funded by the Austrian climate funds and the ministry for transport, innovation and technology (bmvit). The study was finished in May 2013 and will be published in autumn 2013.

In a first step, the study reviewed existing studies and insides into Demand Side Management potentials at commercial, industrial and public end-user facilities. From this desk research, first conclusions and hypothesis on the overall potential for B2B-user inclusion, as well as drivers and barriers to their engagement could be drawn. In a third step, a survey from semi-structured interviews with decision makers within actual SMEs in the Salzburg region was conducted.

The survey included interview sessions in several companies from different sectors (gastronomy, tourism, trade - especially supermarkets, manufacturing, health, public companies) and shed light on the motivations and obstacles that need to be overcome to include not only residential end-users but commercial end users in a smart energy system as well. The results suggest that just as with residential customers, the motivations for B2B-customers differ strongly from sector to sector and from person to person. Some decision-makers suggested that only larger financial incentives could render an energy management offer interesting, whereas others could be persuaded by the green image resulting, several interview partners were not only interested in Demand Side Management options in their respective firms, but also in becoming prosumers, i.e. installing decentralized generation units.

The potentials of different appliance categories were investigated. Thermal storage facilities, i.e. cold storages, fridges etc., have the highest flexibility potentials. Accordingly, the flexibility in supermarkets and other trade companies turned out to be the highest by far.

Particularly super market chains revealed themselves to be interesting end-users to be included into smart energy infrastructures. The scale effects for these particular groups of businesses are very high, since the equipment and processes in the different branches are similar, which lowers the overall costs.

However, apart from looking at the most lucrative B2B-end-user groups, the study is particularly important for S3C, since it features interviews and highlighted the motivations of commercial SME decision-makers. It helps to understand the similarities as well as the differences between decision-makers in SMEs and households.

Furthermore, the experts that carried out the interviews are still in place available for the purposes of S3C.

Source:

- B.A.U.M. Consult GmbH, Salzburg AG (2013): Lastverschiebungspotenziale in kleinen und mittleren Unternehmen und Erfolgsfaktoren zur Hebung dieser Potenziale. München, Salzburg. (forthcoming)

1.1.52 Salt River Project

Salt River Project is a utility based in Phoenix that has received funding for Smart Grid activities via the American Reinvestment and Recovery Act. SRP is very well known for their energy efficiency programs aiming at customers' energy consumption reduction and costs reduction. These programs are designed both for residential and commercial customers, and include rebates and discount programs for the acquisition of efficient equipments and services, energy management tools such as prepaid and peak reduction tariffs, in home displays and personalized energy reports and advice, technical assistance in

construction solutions that minimize energy needs and specific lighting efficient solutions to commercial locations, just to name a few.

Example of one of SRP's programs:

M-Power is a prepaid electricity service that has been operated by SRP since 1993. It consists of a special type of meter that is charged with electricity by a smart card, which in turn has to be charged in payment kiosks. This system puts customers in control of their energy use and payment in a particular way, since customers charge their meters and pay for it as they consume it. The program has proved to reduce annual energy consumption by 12% on average. Key features in this reduction are: close electricity monitoring in real time due to the use of in Home Displays (provides instantaneous feedback).

Web source:

- <http://www.srpnet.com/> ; 2012 Energy Efficiency Report

1.1.53 SAVE ENERGY

The project has addressed the challenge of behaviour transformation through the use of ICT (serious game and real time information) as an enabler of energy efficiency in five Public building in five European cities (Helsinki, Leiden, Lisbon, Luleå and Manchester).

Five pilot buildings have been fitted with sensors, metering and control devices (energy efficiency management system) acting upon the electrical appliances (energy consumption). The gathered data have fed the technology platform, generating real time information and providing inputs for the serious game. The impact of both real time information and serious game on the users' energy consumption patterns has been analyzed, considering in particular end users' behaviour transformation and their energy savings. The results have suggested new indicators, metrics and best practices that can be further explored within the context of innovative buildings design and policy recommendations.

Web source:

- <http://www.ict4saveenergy.eu/>

1.1.54 SEC Smart Energy Collective

"The Smart Energy Collective is an industry-wide collective that is setting up 5 to 10 large-scale smart grids demonstration projects across the Netherlands with a total of around 5,000 private and small business end-users. This industry initiative is dedicated to the practical development of smart energy services and networks, integrating interoperable services, technologies, and infrastructures, i.e. electricity, gas, heat, and ICT. The participating bodies range from grid operators, energy companies, service and technology providers, companies in the building industry, telecom operators, consultancies, and financial institutions. These companies aim to anticipate future energy supply through open innovation, while consulting with end-users and other involved parties as we believe that smart energy concepts and intelligent networks enable consumers to have more control of their own energy management. The large-scale demonstration projects need to ensure the sustainability of our energy supply and advance the speed of commercial product innovation. The project is divided in three phases:

- 1) concept development and site selection;
- 2) design of 5 to 10 sets of smart grids, one set per demonstration site;
- 3) realisation of these large-scale demonstration sites."

Smart Energy Collective will adapt the Smart Grid concept on five different locations, with five different user groups, spread across the Netherlands. The five projects are:

- Existing neighbourhood with Gas & electricity (city of Heerhugowaard) This trial test site is focused on the potential of the existing residential buildings, where gas and electricity applications are brought into competition with each other. In addition, the project will investigate how to get the best out of these two worlds. This provides many opportunities for cost-efficient sustainable energy solutions with a high market potential.
- New district heating network (Goes) This demonstration project—in Goes—distinguishes itself from other demonstration projects, due to the fully integrated heat and electricity solution. Many possibilities will be investigated, including opportunities for introducing comfort-based services. The desired flexibility will be realized, as well as the smart electricity and heating market optimized on the basis of intelligent underground thermal energy storage systems.
- New district 'all electric' (Gorinchem) An entirely electric district provides a unique electricity market profile because the entire energy demand is electric, and local generation is effected

through means of solar panels. The charging of electric vehicles and space heating, through electric heat pumps, requires flexibility to reduce the peak load. Storage of electricity, potentially supplemented by local generation using biogas-fired CHP plants, supports this flexibility and the network required for this demonstration project.

- Industrial area (Haarlemmermeer) The Industry demonstration project will be implemented at Schiphol Airport (the GROUNDS) and is focused on small, medium, and large industries. The objective is to prevent local network congestion and to maintain a local energy balance through the use of local electricity generation with one or more combined heat and power (CHP) plants.
- Offices (several locations) The Offices demonstration project will primarily investigate how the flexibility in the energy demand of these offices can be exploited by energy management systems, and the introduction of commercial generating sets with a complete portfolio of offices. The trial test site will consist of a few offices of Siemens and ABB, and potentially other partners in the collective

The determination of 7 essential smart energy services was one of the results of phase 1 of Smart Energy Collective. These services with potential business value were identified for further detailed design and demonstration. The 7 essential services can be clustered into three types: Organizing Market Access, Providing Insight and 5 Smart Energy Flexibility Services. Once these essential services are provided almost infinite new propositions may be shaped by the various stakeholders in the energy system.

Considering the large amount of potential participants, these projects can give valuable insights for utilities in how to conduct large scale projects. The range of different user groups, 'confronted' with similar appliances, could give insights in possible different needs for different residential and commercial end users. The central idea of working with many stakeholders in these projects and gaining valuable insights on how to cooperate with that many stakeholders (26 partners), and in particular the role of utilities in this network, can be very valuable for S3C.

As the project has not yet started, but the locations are appointed, we should try to initiate contact as soon as possible, seeing the projects are in the starting phase and perhaps haven't even started yet. As the start and approach of all partners are still 'fresh' in everyone's mind, it would be good to focus on what the expectations are for the different projects, and how they are trying to achieve this. As the project evolves, we can even give advice or consult, together with following the progress of the projects. It can be a very valuable test case for S3C.

The project is still in the start-up phase. Not clear when projects actually start, or already have been started. Possibly SEC contains suitable active pilots for S3C.

Web sources:

- <http://www.dnvkema.com/innovations/smart-grids/smart-energy-collective/default.aspx>
- <http://www.nvnom.com/articles/47891/Smart-Energy-Collective-to-do-large-scale-tests-on-smart-grids->

1.1.55 Smart control of heat pumps

The project was about smart control systems for heat pumps and treated two different issues: The business models for electric utilities, and smart heating system technology. The business models were used as a motivation for why the smart heating system is interesting to actors on the energy market. The field tests focused on the innovative technology solutions.

The field tests were all performed in collaboration with the DSO Elverket El Vallentuna AB. The control system took into account the hourly prices to optimize the operation of the heat pump. The field test was performed during 2012 and involved a few households. The field trial focused on the technical feasibility of the system.

The project concludes that up to 10 kWh of heat load can be shifted within 24 hours without any negative consequences on comfort levels for a single household. The energy saving can be estimated to 10-15% as a result of a more constant indoor temperature, more efficient use of the heat pump, and change in behaviour. These results are promising and worth to be studied more extensively by the S3C-research team.

Web source:

- www.elforsk.se

1.1.56 Smart Grid Gotland

Smart Grid Gotland is a development project designed to show possible ways of modernizing an existing network to connect large amounts of renewable energy while maintaining or improving power quality. The project also aims to give the customer the opportunity to actively participate in the energy market. The project is has three parts and a common development platform that will supply subprojects with technical installations. The three subprojects are; wind power integration, power quality and market test and development platform. The project started in September 2012 and is expected to last until December 2015.

The project partners who will jointly lead the development of the new smart grid on Gotland are Vattenfall, ABB, Gotland Energy AB, Svenska Kraftnät, Schneider Electric and KTH, with the Swedish Energy Agency as a major funder and partner. Gotland Energi AB, GEAB, is the local utility company in the area where the project is implemented. The end users involved in the project will have GEAB as the main project contact.

The project offers the field test participants to a) gain more information on their own consumption and on the price for electricity (smart consumer perspective) and b) enables them to participate actively by e.g. selling the excess energy their decentralized generation units produce (smart customer perspective). It would be interesting to analyse in how far these new options contribute to new behaviour related to energy consumption.

Web source:

- www.smartgridgotland.com

1.1.57 Smart Grid: Benefits for all

The project is located in two Dutch cities; the city of Utrecht, and the city of Amersfoort. The project is co-financed by several governments (province, municipalities and cities), which are all involved in the process. The aim of the governments is to provide renewable energy options for their citizens, create economic initiatives and employment, and work towards a significant Co2 reduction.

The results the project aims to:

- Develop 8 'service concepts' which have to be 'upscale able' for the Smart Grid
- Deliver a contribution to societal cost/benefit analyses.

The demands for the service concepts are:

- They are tested in the pilots for chance of success and feasibility
- Business case and finance constructions are present and have to be included
- All concepts are suited for up scaling
- All concepts will cause a CO2 reduction
- The gained knowledge will be accessible and actively distributed

Currently, for 6 of the service concepts a description is available, of which 'Feedback and demand response' is most relevant for S3C. In the city of Utrecht the information and feedback will be provided by the project consortium, and for Amersfoort this will be a 'co-creation process' in cooperation with residents. Thus, we can investigate if the needs of average citizens are different from the feedback which is regularly provided. As energy is generated by public solar panels in contrast to the panels at homes of participants, this can also provide valuable information on the opinion and the behaviour of citizens confronted with their local generation of energy. Another relevant difference between these pilot locations is that a large amount of citizens of Amersfoort have solar panels for renewable energy on their own roofs, and in the local neighborhood within Utrecht the public Grid and/or solar panels located on schools provide the solar energy .

Also interesting for S3C is the fact that the three layers of government are strongly involved, which can offer important lessons for the cooperation between utilities and government institutions when working together on these roll outs; what are the roles and responsibilities of the various actors?

We will try to gain access to mid-way reports and full reports on certain project topics, and we will try to conduct interviews with both project members, and citizens of both cities.

The project runs from 2012 until 2014, so is well on its way.

Web source:

- <http://www.smartcityevent.com/smart-grid-rendement-voor-iedereen-return-for-everyone/>

1.1.58 Smart home on low voltage installations

Elektro Ljubljana is a Slovenian distribution system operator. Its customer services organizational unit and its advanced services department have been intensely exploring and developing additional advanced services for end users for a number of years. As part of advanced services development in the field of consumption management, the pilot project "Innovative solutions for smart home in existing low-voltage installations" involves 50 household users testing their smart home innovative solutions in real-life situations. The users interested in the projects got a chance to try the company's new technologies at home and really control their own energy consumption.

The project includes the installation of energy control (EC) modules or the so-called smart fuses as a new element in low-voltage installations, which come with functionalities of a fuse and an electricity meter, while enabling integration in standard IT environments.

The project makes use of cloud IT technology which enables to control and influence consumption patterns with different dynamic tariff systems or direct control.

Using EC modules as a tool for active management of a user's consumption (active demand side management) and enabling custom rates and control, users can monitor and adjust electricity consumption of their household appliances.

The project's most interesting results for the S3C project stem from the outcome of a field trial involving 50 households. The goal of the project was to estimate the quantitative benefits of active electricity consumption management for all stakeholders in the electricity market, focusing on the optimal business models.

Web sources:

- Smart grids - from theory to praxis, Energetika.net, 2012
- http://www.energetika.net/eu/novice/electricity/inovativne-resitve-s-podrocja-upravljanja-s-porabo-in-merjen_2

1.1.59 Smart Metering

The project Smart Meter was a German pilot study seeking to evaluate existing and future technology options in the field of smart metering and their respective potentials for energy saving and consumption shifting via feedback information and variable tariffs. The project started in early 2010 and was finished in 2011.

The project was carried out in Mannheim

After identifying suitable metering technology a metering field trial was performed. Key questions that the project sought to answer:

“Do customers save energy by using a feedback system?”

- *Does a feedback system lead to transparency of energy consumption?*
- *Are customers empowered to identify and open up saving capacities?*
- *Are there barriers and drivers affecting the outcomes?*

Do customers adjust their electricity consumption if they have a flexible tariff?

- *Are the customers able to adjust their consumption at all?*

- *Is a price range of six cent per kWh a proper incentive to trigger a change in behaviour?*
- *Which barriers restrain customers from choosing a flexible tariff”?*

The research questions are also treated within the S3C research design, which renders the final report of the project an important input for the analyses carried out in S3C. Furthermore, the results, e.g. the strong wish for guidance in terms of energy saving and shifting options that was voiced by the participants during the two customer survey carried out through the project’s lifecycle, give valuable input for the design of the S3C toolkit.

Web source:

- http://www.irees.de/irees-wAssets/docs/publications/spezifische/Praesentation_SMP-HC-review_en.pdf

1.1.60 Smart Wash

The ‘Smart Wash’ project of the Dutch network operator Enexis consists of a project focused on self-generated, renewable energy ‘wired’ to the washing machine in residents’ homes. The system consists of 10 m² solar panels (producing app. 1700 kWh/year), a digital electricity consumption meter, a smart washing machine (consuming app. 150 kWh/year) and an Energy Management System (EMS). The EMS collects realtime consumption data from the digital electricity consumption meter and production data from the solar panels. These data are displayed on real-time basis on a computer appliance to the user, but also in an historical overview. Feed-forward is given in the form of precise hourly solar radiation forecasts to an estimation of the upcoming solar electricity production over two days. Based on local weather conditions the ideal moment at which to utilise the yield from the solar panels most optimally is defined. The washing machine is then sent a signal to start the washing cycle. This only requires little effort from the users. After they place the wash in the machine, it is simply a question of indicating at what time the wash cycle must be completed at the latest using a touch screen interface. During the pilot project, 25 participants (all employees of Enexis) had a Smart Wash system installed in their homes. Especially the amount and type of information feedback the residents received can be valuable for S3C. The role as prosumer and customer is highlighted, and therefore practical to investigate for S3C.

As the project is already finished, research will be based on desk study of existing project reports, and possible additional interview(s) with project representatives.

In the first quarter of 2011 the equipment was installed. The results have been collected and documented in the 2nd quarter of 2011.

Web Source:

- <http://www.kooslooiijesteijn.net/smart-wash/>

1.1.61 Smart Watts

The SmartWatts project is located in the Aachen region in Germany and was funded via the E-Energy programme. It has been carried out metering supplier utilicount GmbH, the utility Stawag, the RWTH university in Aachen and other partners since early 2009 and will continue until late 2013.

Similar to the moma-project (see 1.1.43), the project focuses on in-house automation applications to implement financial tariff incentives. However, in a pilot test, tariff incentives in form of a simple TOU and load-oriented tariff were tested as well. These incentives were processed manually by the end-users. The final field test includes automated control features and smartphone/tablet app that can be used as feedback as well as a control mechanism for the smart appliances.

The project applied customer segmentation methods and succeeded in winning end users for their field test that make up a representative test sample. In fact, the results concerning the field test customers’ consumption flexibility can be scaled without losing their validity, which cannot be taken for granted, since many Smart Grid pilot’s test sample are made of early adopter end-users that are not representative for average households.

A large-scale campaign was designed including you-tube-videos that demonstrated the most important smart applications in an easy to understand manner within an average household. This and other dissemination material remains accessible. Furthermore, the project tries to attach new information to electricity products, thereby rendering the kilowatt hour smart. The field test customers can receive information on where their electricity has been produced from what sources.

SmartWatts provides end-users with the information and new control mechanisms they need to make informed decision on their electricity consumption and act on them. This and the fact that customer segmentation models have been applied during the course of the project, make it highly relevant for S3C.

Web Sources:

- www.smartwatts.de
- www.e-energy.de

1.1.62 SMART-A

The project intends to determine to what extent it is possible for smart appliances to adapt their operation to variations in the local and regional energy supply, operating with more flexibility but without compromising the quality of the service delivered by the appliances: the considered appliances have been dishwashers, refrigerators, electric water heaters and washing machines and the focus of the analysis has been on consumer acceptance, which represents the key to the success of Smart Appliances.

The project has investigated whether and under which conditions consumers would be ready to make use of the functionalities offered by Smart Appliances. One of the major research questions has been to which extent consumers want to keep control of the operation of their appliance and which (level of) flexibility they are ready to accept. These questions have been assessed in relation to the benefits which can be offered to consumers (e.g. lower electric tariffs).

Consumer acceptance activities have been predominantly carried out in EU Member States where case studies are performed. Nevertheless, a general analysis will address consumer acceptance in other European countries as well. The methodologies applied include analysis of existing studies in this field, and a combination of quantitative and qualitative research methods. A questionnaire-based survey has been performed in 5 countries with support from regional energy utilities and appliance manufacturers. Phone interviews, based on the results of the survey have also been conducted in order to refine the qualitative analysis. In addition, focus groups of 6 to 12 participants have been held in 4 selected Member States.

Both, the results of the survey and the focus groups, have shown under which conditions users might adopt smart appliances and are therefore highly relevant as input for S3C.

Web source:

- <http://www.smart-a.org/>

1.1.63 Smart-E

The project aims at making end users aware of their energy consumption and stimulate them to become more energy efficient. Within the project, the definition, demonstration and evaluation of ICT architectures and technologies for smart energy applications at home were addressed through the installation of a home energy management system. This system consisted of a smart meter, sub meters in the fuse box and an android app for tablet and smartphone. The trial tested the system with 20 households situated in Flanders (Belgium) from April 1, 2010 to March 31, 2012.

The project mainly focus in 1) gathering data of energy consumption patterns of end-users through the use of smart metering and 2) motivate end-users actions.

The project allowed participants, through the use of the android app, to receive detailed and real-time overviews of their energy consumption behaviour which could be compared over time. In addition, different pricing categories were introduced to end-users. There was no automated control over appliances. All actions, if any, were manually performed by the end-user.

All in all, the project showed that awareness on energy consumption motivates energy efficiency actions. Via online questionnaires and an interview their experiences with the system were observed. These observations show that the smart metering application is used differently in the beginning than at the end of the 6 month trial period. Just after installation, the application is used very intensively while towards the end of the trial the application is used less frequently but in a more structured way. Furthermore a study was done on the potential flexibility of a number of test users and the effect on their energy costs assuming dynamic tariffs.

Although the project puts the consumer in a central position by really focusing on user interactions and behavioural response to the developed systems, the innovativeness of the proposed solution is rather limited. Still, the

Web source(s):

- <http://www.iminds.be/nl/onderzoek/overzicht-projecten/p/detail/smart>

1.1.64 SmartHouse/SmartGrid project

The SmartHouse/SmartGrid project aims at testing how ICT-enabled collaborative aggregations of Smart Houses provide an essential step to achieve a higher level of energy. The project started in September 2008 and ended in February 2011. It had three field tests (Netherlands, Germany and Greece).

Results from field tests showed that, in general, there is a need for 1) standardisation towards the capabilities of the smart meters, smart services and energy management systems; 2) cross-partner organization for mediation on the implementation of smart grids under current market settings; 3) adaptation of the legal framework and the level of market deregulation.

In particular, the project showed that there is a low willingness to pay for the energy management system even if variable tariffs were perceived by participants as savings in energy costs. With only one third of the participants willing to pay a monthly fee which by no means would exceed €4. Concerning behaviour, it was reported that two thirds of participants adapted their energy consumption according to prices. Additionally, it was observed that “consumer’s contribution to climate protection” was one of the reasons that motivated lower consumption. Furthermore, according to the data available 6-8%⁴ of consumption was shifted to low price periods.

From the trials it was learned that under low electricity prices consumers do not pay much attention to their consumption and/or to save energy. In this respect, when evaluation ancillary services’ provision it was observed that the provision of these services from LV consumers is not cost effective.⁵

Another significant issue was that revealing the current costs and consumption to participants make them more receptive regarding solutions for saving energy.

In summary, the project proved, to some extent, the feasibility of smart houses to provide savings for the end-user. It was learned that the willingness to pay for an energy management system is quite low. Finally, it was also proved that system services (e.g. black start) can be provided by LV consumers, although it is still not cost effective under current framework.

(Web) sources:

- SmartHouse/SmartGrid deliverable D5.5 “Public Report on SmartHouse/SmartGrid”.
- <http://www.smarthouse-smartgrid.eu/>

1.1.65 SMARTV2G

The SMARTV2G is the project co-financed from the 7FP and contains the development and later the installation of the electric vehicle filling stations. The goal of the project is set up a network of smart filling stations with controlled charging and discharging, and enhanced by the information technology for the support of the end user with its consumption and filling time history data. Elektro Ljubljana is participating as a Slovenian representative in the project.

Web source:

- <http://www.smartv2g.eu/>

1.1.66 SPES

The project is the follow-up of the OLDES project and has the goal of transferring the approach and results achieved in the implementation of the OLDES platform into four new geographical contexts

⁴ Constraints in time, trial customers and seasonal influences limits the results of a statistical evaluation even if participants reported an absolute reduction in electricity consumption.

⁵ Under the legal framework that was applied at the time of the trial in Greece. Although, it was noted that future estimation about the cost of energy might prove interesting.

(Ferrara, Vienna, Brno and Kosice). The project is still ongoing and it will be interesting to test and evaluate the end users' acceptance of the whole system.

Web source:

- <http://www.spes-project.eu/>

1.1.67 Sustainable Lochem

The town of Lochem (NL) experiments with intelligent networks in an existing built environment. The project group, which is rooted in a bottom-up community initiative by citizens, is encouraging residents to consume less energy, to generate their own energy locally using solar panels, and to exchange that energy between themselves. This should then reveal what this means for the load, availability and manageability of the network. In order to prevent any problems, the project group will seek appropriate solutions so that the network remains fault-free, secure and efficient.

This pilot project is a part of the LochemEnergie citizens' initiative, consisting of over 1,000 households that actively want to contribute to a sustainable Lochem. One of the households' most important activities is that they are supporting solar panels on their own roofs and those of municipal buildings. There are also a large number of other initiatives taking place, such as the municipal council exploring the use of heat pumps and drawing up a policy with regard to wind turbines. Households can exchange energy between themselves, can sell surplus generation to the energy company, or can buy extra energy if demand exceeds on-site production. "The exchange between households and with the energy supplier requires communication between them," says project leader Mooijman. Network operator Alliander is installing an intelligent energy management system in participating households, providing them with up-to-date information about energy production, tariffs and consumption.

Project questions:

- How can decentralised energy production be incorporated into an existing network?
- How can residents be engaged and encouraged to use less energy and renewable energy, so that supply and demand are better matched?
- Are changes to laws and regulations needed in order to make an intelligent network a success?
- Explore possibilities for Open Platform Network Management and an open data system. Can we validate network models and simulations and use them to predict energy production and consumption?

The fact that this project is a community based initiative by citizens makes it immediately relevant for S3C, because it addresses the role of citizen in the currently changing energy landscape. The fact that several initiatives are taking place within the community of Lochem, in cooperation with the city council, makes it a valuable project. Another relevant aspect of the project questions concerning feedback information and encouraging residents to use less energy and make use of renewable energy. Seeing the initiative is started by enthusiastic citizens, it would be interesting to see what their motives and needs are, and how these relate to the feedback information. These findings can be interesting for utilities.

This project has not yet been approached for participation in S3C. We will try to gain access to reports and try to conduct interviews in possible, especially we aim to interview citizens who were actively involved in the start-up process of this project. What were their motives, what role did the utilities play, and how could this be improved? How were people recruited, or encouraged to join?

The running time of the project is 3 years, starting in January 2012.

Web source:

- http://www.utwente.nl/ctit/research/projects/national/Topsectoren/lochem_energie.doc/

1.1.68 To follow the electricity price: Direct and indirect control

The goal of this project was to see if consumers, in this case single family houses, reacted in a way that would make it meaningful for demand response programs to be extended to domestic electricity consumers. The field tests were performed during the winters 2007/2008 and 2008/2009.

The trial consisted of two parts: One concerning direct control, where households with waterborne electric heating were equipped with a control system allowing remote control of the heating system. The second trial consisted of indirect control, where the households were informed about the hourly electricity

price so that they could manually adjust their consumption levels accordingly. In both cases, consumers were given access to a web portal that provided information about current and (near) future prices as well as historical information about consumption and costs. When engaged, the customers got advice on how they could adapt their consumption according to the electricity price fluctuations. These advices were communicated through the web page and also by regular mail.

Both groups were subjected to a “fixed price with a right of return” tariff, having a predefined volume of energy at a fixed price, and variations around this volume are bought (and sold) by the end-user at spot prices. Hence, this tariff exposes consumers to a semi-dynamic electricity price. The grid was a capacity tariff.

The results of the field trials were promising. It was shown that it is possible to remotely control the heating system without reducing the comfort for residents. The indirectly controlled households showed a willingness to adjust their consumption levels. Directly controlled customers relied on the automated control system and were not as active. They did not use the web portal as much as the indirectly controlled customers knew much less about the fluctuations of the electricity price, and were much less inclined to manually adjust their electricity consumption. They were also much less knowledgeable about the structure of the tariffs used. These differentiated insights into end-user behaviour provide valuable input for the S3C analyses.

Source:

- <http://www.elforsk.se>

1.1.69 TotalFlex

It is a demonstration project that intelligently manages flexible consumption and production. This is done by flex-offers from a technical and commercial VPP, which are traded on a marketplace. Thereby the full flexibility is utilised in an optimum way, while power-balance-liability and network capacity is taken into account. The project will run from 2012-2015 and is based on the results of a number of earlier research projects within a.o. Smart Grid and Home Automation.

The aim of the project is to establish a flexible electricity grid that includes the entire food chain from production to end user - and which can give everyone involved financial and environmental benefits. This vision is to develop a cost-effective, market-based system that utilizes total flexibility in energy demand and production, taking balance and grid constraints into account. This entails the following elements:

- data collection on energy consumption and production
- flexibility in electricity distribution, allowing the producer with the cheapest electricity to deliver power when it is needed
- flexibility in electricity production, utilizing the increased production from e.g. wind and solar sources
- flexibility in supply, providing the consumer with the least flexible power demand (e.g. a machine needing to run at a specific time) with power at a specific time, rather than a flexible consumer who can e.g. wait until nighttime to charge an electric vehicle - thus avoiding bottlenecks in the distribution grid at times of peak demand.

Web source:

- <http://www.totalflex.dk/In%20English/>

1.1.70 ToU tariff in Italy

This project has the goal to evaluate the impact of the Time of Use (ToU) tariff on the Italian residential end users; to this aim, R.S.E. started a monitoring project which has involved a group of about 28,000 household users, statistically representative of the Italian population subject to the universal supply regime, and has been acquiring their electricity consumption data with a monthly frequency, starting from July 2009 (i.e. one year prior to the introduction of the ToU tariff). The data acquisition process was over in December 2012.

The results show that there has been an average shift of consumptions of about 1% in the period after the introduction of the mandatory ToU tariff; we can find two reasons which have prevented a larger shift to occur:

- consumption allocation during off-peak hours was high even before the introduction of the ToU tariff, thus reducing the amount of consumption which are shiftable in principle.
- the price signal conveyed to the customers was low due to the tiny price difference between peak and off-peak hours.

However, the change in the behaviour of the Italian users is not negligible because about 60% of the end users have moved their consumptions according to the price signal provided by the ToU tariff. This means that the ToU tariff has been capable of shaping the habits of Italian residential end users to a certain extent.

There are some aspects of the ToU tariff which may be improved, such as the allocation of the hours of the day to the peak and off-peak sets. In fact, due to the recent huge penetration of photovoltaic generation (about 17 GW in January 2013) in the Italian power system, electricity market prices during some of the hours belonging to the off-peak time slot are now higher with respect to the hours belonging to the peak time slots: the price signal provided to the customers by the tariff should be properly modified.

Some possible solutions might be either the introduction of an intermediate group of hours between peak and off-peak hours or a different composition of the two times periods of the current ToU tariff. The “Critical peak pricing” is another approach which can make the price signal more effective, allowing a more significant shift from peak to off-peak hours with respect to ToU tariff; substantial interventions on the measurement system would, however, be necessary.

Summarizing we can say that the ToU tariff has contributed to improve the efficiency of the whole Italian power system, moving a percentage of the residential consumptions from peak hours to off-peak hours; in particular, it has shown how Italian end users are capable to shape their energy consumptions in order to face time-dependent electricity costs.

Source:

- S. Maggiore, M. Gallanti, W. Grattieri, M. Benini, “*Impact of the enforcement of a Time-of-Use tariff to Residential customers in Italy*”, CIRED 22nd International Conference on Electricity Distribution, June 2013.

1.1.71 UppSol 2020

This project aims at boosting the development of solar power systems in the Uppsala region. The target group, i.e. private and public property owners in the Uppsala County, such as housing associations, SMEs, different areas within the municipality and the county council, should increase/improve their:

- awareness and procurement skills within solar power.
- understanding of their new role of electricity producer.
- knowledge on “return on investment” of solar power investments.
- awareness and possibilities to utilize solar power production as part of their energy efficiency efforts.

This should be achieved by disseminating information about solar power and by demonstrating not only the climate-smartness of solar power, but also that it is cost effective. This, in turn, is done through workshops as well as groups that follow the entire process from procurement to commissioning of the solar power plants.

One pilot plant is built by a housing association, and the intention is to install four additional facilities during 2013-2014. The idea is to create good examples and make others follow. Another purpose is to raise the energy awareness and initiate a process of looking over the energy use in general and thereby encourage other energy saving investments.

The project period is 2013-2014 and the project owner is the County Administrative Board in Uppsala County.

1.1.72 Velix

In April 2010, the Austrian public utility of Vorarlberg VKW initiated the VELIX programme together with ETH university in Zurich and the communication agency Ricquebourg. Until December 2011, the VELIX project designers succeeded in winning 10700 customers for the idea of the programme: To read their consumption data from the average Ferraris meter once a month or on a weekly basis and submit the data on a special website in order to receive tailor-made advice. By at least considering their consumption level once a month and receiving evaluations and tips on the website, the people gained an experience and insight into their consumption, which contributed to an overall energy learning process.

The idea was to enhance the consciousness for energy consumption by rendering people the opportunity to learn about their consumption patterns and rendered ideas on what they could change, how they could save etc. The programme was based on the launch of a website, innovative visualizations as well as general and personalized tips for energy saving behaviour and comparative evaluations of consumption profiles and incentives to change behaviour. The website as well as the project's mascot were called VELIX (mixture of name of region "Vorarlberg" and first name "Felix"). The mascot was personified via the comic visual of a meter. Felix was coined "a friend in your household" with the intention of the communication agency and the utility for their consumers to "build up a relationship with their meter" and thereby with their own energy consumption.

The website offered:

- individual evaluation of consumption levels
- comparisons to the behavior of peer households

To join the energy saving community, the people were offered the following incentives:

- "a small gift", once they entered the meter reading for the third time
- monthly lottery with all participants (prize: smart-ready fridge, flatscreen-TVs, laptops, e-bikes etc.)

The website featured specific, personalized tips for its users as well as a newsletter (called "clues from Velix") with general ideas on how to adapt your consumption best, each newsletter focused on a specific topic e.g. best energy behaviour during the winter, for single households, for families, energy saving in the kitchen etc.. The clues were not restricted to electricity consumption only. They used a broad approach, as different forms of energy usage in the household are usually interlinked and the best results can be achieved when people pay attention to electricity consumption, heating and other factors such as e.g. learning about the functioning of their household applications at the same time.

The project is finished, however, the project responsible partners are still available. Bits for Energy Lab at the ETH Zurich developed a similar end-user interaction scheme for a Swiss utility called "Oscar" (<https://oscar.bkw-fmb.ch/de/>).

The facts that more than 10000 households joined the VELIX community, at the end of the project, more than 320000 meter readings had been entered voluntarily in the website are impressive and the VELIX households could save 4% of their consumption in a year-on-year comparison, are impressive. The project received the Austrian Green Energy award for its outstanding performance. Furthermore the project idea, incorporated input from academic experts (ETH Zurich) and communication experts (Riquebourg) from early stages on. The ETH Bits for Energy Labs intended to experimentally assess which socio-psychological concepts (e.g., social norms) are best suited to promote residential energy conservation. It would be interesting to further investigate the success of the project and what was different here than in comparison with less successful programmes.

The idea is particularly relevant for a low-budget tool development, since a similar programme merely requires a minimum technology rollout and does not depend on a smart meter rollout at all.

Furthermore, the approach supports the secondary literature view that the end-users have to develop their own learning experience in their own time. The utility customers were not pressured to change to change their behaviours nor did they have to adjust to a new technology. They did not suffer from financial disadvantages from the project, they only received the option to win something as well as general and personalized feedback in form of tips on how to change their behaviour. However, they could decide on their own whether to use them or not.

Web sources:

- www.vol.at
- <https://oscar.bkw-fmb.ch/de/>

1.1.73 Web2energy

The project Web2Energy has the goal to implement and approve all three pillars of "Smart Distribution", which are listed below:

1. Smart Metering – the consumer participates in the energy market

A field test has been implemented: it has involved about 200 end users, who have been equipped with an advanced meter technology, coming from Landis + Gyr Austria, which enables many innovative functions: Remote reading of metered values in short term intervals,

- Reception and visualization of price signals (variable rates)
- Disturbance signals and management of failures
- Estimation of manipulations and stolen energy
- Permanent meter data storage and monitoring of load profiles
- Supervision and control of distributed power producer, storage and controllable loads

Furthermore, they provide gateways to monitor the current demand with the related costs and to further functions of building automation and in-house energy management (smart home). Are offered to the clients. The end user gets the opportunity to control his demand regarding non time critical loads in accordance with the offered variable (up to hourly) rates rates.

2. Smart Energy Management – Clustering of small power producers

A field test has been implemented: it involves a large number of small independent power producers, who are supervised and coordinated in such a way that at each moment a scheduled power feeds into the distribution network in accordance with the current demand or the request from the market. Consequently, the deviation of fluctuating wind or solar power from the predictions can be compensated in real-time through the aggregation with controllable generators, loads and storage in the framework of a virtual power plant (VPP).

Parallel with a number of volatile of wind power and photovoltaic plants a large number controllable hydro and thermo power plants with cogeneration of heat and power (CHP), storage and controllable industrial loads are in operation. They are able to contribute to the generation and load management.

The central operated VPP participates on the markets for energy and control power and optimizes the operations and the overall power in-feed. In this way all participants can achieve higher efficiency and higher compensation of their expenses in comparison with the single market access.

3. Smart Distribution Automation – higher reliability of supply

The project implements an automated sequence to execute the former manual processes in a selected area, cutting down to minutes the duration of the supply interruption and therefore reaching very high reliability of supply.

The most interesting parts of the projects are a bonus system and a special end users web portal was developed in order to increase end users active participation and a traffic light system is implemented, with the following code: Red, when energy saving should be done and Green when energy consumption is beneficial.

These user interaction schemes are innovative and interesting to analyse as tools for the Smart Consumer and Smart Customer.

Web source:

- <https://www.web2energy.com/>

1.1.74 Yokohama Smart City

Yokohama Smart City Project (YSCP) works towards households, buildings and local communities' energy efficiency management, development of transportation systems and introduction of renewable energy. It is located in the city of Yokohama, Japan. More precisely, the projects' initiatives are:

- Community Energy Management System (CEMS) – control of renewable energy using stationary batteries and integration of all batteries in order to manage energy more efficiently.
- Energy Management for Detached Houses (HEMS) – Energy demand response system that integrates power generators with electric domestic appliances.
- Energy Management for Commercial Buildings (BEMS) – automated demand response system to optimize energy supply by integration of storage devices, cogenerators and EV infrastructure.
- Energy Management for Factories (FEMS) – energy optimal control for factories cutting peak operations and scheduling demand accordingly (through the integration of redox flow batteries, photovoltaic generators, among others)
- Chargeable and Dischargeable EVs

YSCP has already started with demonstration experiments in April 2013. Insights into the first results would be highly relevant for the S3C consortium, as this project is clearly geared not only to the individual end-users, but to Yokohama as a Smart City with a Smart Community. In fact, the Citizen dimension of the S3C is clearly represented.

Web source:

- <http://www.city.yokohama.lg.jp/ondan/english/yscp/>

1.2 Potential Active Pilots

1.2.1 BeAware

BeAware is an interactive project which uses ICT-based solutions to involve end users in energy efficiency efforts. The project has run two trials. The first trial started in May 2010 and finished in September 2010. It involved 4 families in Italy and 4 families in Finland. The second trial started in January 2011 and there is still no information on the end date. It involved 5 families in Italy, 5 families in Sweden and 2 families in Finland. The main goal of BeAware is to be able to reduce power consumption within households by 15% through the use of the following technologies:

- **Energy Life** – a mobile phone game like application. End users play a game in their smartphones which challenges them to save energy, gives them energy efficiency tips, provides feedback on energy consumption, and connects players between households, among others.
- **Watt-lite Twist** – a flashlight which projects images on the walls showing pie charts that describe kWh consumption of end users. It is connected to home appliances allowing receiving real time information on energy consumption.

These two practical applications provide real time information because they are connected to platforms that enable the whole process of collecting information from home appliances consumption and give feedback.

BeAware offers a deep insight into end-user behaviour and about awareness raising through education about electricity usage. Especially the design of different interfaces and their simple – but intelligent and effective – design offers many insights into the learning mechanisms of end-users and thus make BeAware a good candidate for become an active pilot within the S3C project.

Web source:

- <http://www.energyawareness.eu/beaware/>

1.2.2 BIDELEK – BIZKAYA

Bidelek Sareak is a smart grid project developed by Iberdrola Distribución, located in Bilbao and Portugalete (Spain) aiming at new meter installation, configuration of transformer stations, and further integration with electric vehicles and distributed generation.

The project's initiatives are:

- **Smart meters** – replacement of old meters by 200.000 smart meters in Bilbao and 27.000 in Portugalete.
- **Smart transformer stations** – configuration of 1.100 transformer stations using remote management, supervision and automation.
- **Distributed generation integration** – integration of cogeneration plants and generation plants.
- **Development and integration of the following applications** – smart meter portal, algorithms for automatic grid reconfiguration, cable monitoring, among others

BIDELEK-BIZKAYA deals with many aspects of Smart Grids in a very large scale. Further it will have a special support for the costumers. Information on how the Distribution system operator seeks to communicate this vast Smart Meter rollout to the residential and commercial customers within this supply region constitutes highly relevant input for S3C. It is interesting to see how this can be done at such a large scale and thus its worth for S3C to integrate this project a as an active pilot

Web sources:

- <https://www.iberdrola.es/webibd/corporativa/iberdrola?IDPAG=ESWEBREDDISREDINTBZK>
- <http://www.eve.es/Noticias/Implantados-140-000-contadores-electricos-intelige.aspx>

1.2.3 Bristol Smart City

Smart City Bristol is a collaborative regional development programme built on a public-private partnership with particular emphasis on the inclusion of smart technologies in the Bristol region in order to meet the environmental, social and economic goals of the region. The programme was launched in 2011 and includes several Smart Grid-related programmes that are either funded via European programmes (e.g. FP7) or British Innovation Programmes, especially the Low Carbon Networks fund. The programme focuses on three key innovation areas - Smart Energy, Smart Transport and Smart Data.

The efforts of the community are already paying out: Bristol has adopted a Climate Change and Energy Security Framework to meet its 40% carbon reduction target by 2020. Since 2005, a 15% reduction in CO₂ emissions from 2005 or a 20% per capita reduction due to the 6% rise in population were achieved making Bristol the major city in England with the lowest per capita emissions.

As a foundation, for the Smart Grid solutions to be developed in Bristol, the City Council invested strongly in the digital infrastructure of the region. It now owns and maintains a £9 million (ca. €10,4 million) city fibre network. The City Council's goal is to provide for broadband and a 100% coverage open access Wi-Fi network for its citizens.

The project Buildings, Renewables, Integrated Storage with Tariffs to Overcome network Limitations (B.R.I.S.T.O.L.) or SoLa City Bristol was awarded funding via the English Office for Gas and Electricity Market's Low Carbon Networks Fund in November 2011. The project will continue until early 2015. The project's focus areas are Battery Storage with Demand Response, Direct Current Networks to connect PV panels and DC appliances together and Smart Tariffs. The Smart Grid solutions to be tested will be deployed in ten schools, one office building and 30 homes and serve to integrate the generation the large-scale deployment of photovoltaic (PV) generation. In fact, the consumers involved in the field test will not only be part of the technical solution to integrate the generation from intermittent solar sources, they will also learn about the availability of renewable energy and will be sensitized for their arising more active new role in the energy system.

The B.R.I.S.T.O.L. project as a Smart Grid project is interesting for the S3C-team to investigate as the project responsible parties have taken great care of devising several customer engagement strategies. Customer surveys will be carried out all through the project, so that a strong database on customer preferences will be established throughout the project's lifecycle. Furthermore, the project does not only include residential end-users, but also public buildings, such as schools. Electricity consumption in public situations is of particular importance, as public spaces serve a role model function for entire communities.

Apart from the singular Smart Grid project B.R.I.S.T.O.L., the overall Bristol Smart City approach is particularly relevant for the S3C consortium as it features a broad stakeholder integration in the entire region and aims to meet the challenges of smart technology deployment and reducing CO₂ emissions as a community. Therefore, the B.R.I.S.T.O.L. project and the Bristol Smart City Programme both clearly address not only a consumer and customer, but also a citizen dimension of S3C.

The S3C-consortium is already in contact with the Bristol City Council in order to define and elaborate involvement of the Smart City programme and B.R.I.S.T.O.L. in S3C. Passive and active involvement of the region are both options. Furthermore, the project can offer the S3C consortium insights into the learning of the overall Low Carbon Network projects. These are funded with an overall £500 million (ca. €580 million) by the Office for Gas and Electricity Markets and serve to demonstrate a broad range of smart grid technologies while setting a strong emphasis on the engagement of end-users. The lessons learned within the project – also regarding customer involvement - are collected and disseminated by UK Distribution Network Operators. Bristol City Council will be S3C's link to the Low Carbon Networks community in the UK and make the learning accessible for the consortium.

Web sources:

- www.bristol.gov.uk/climatechange
- www.westernpowerinnovation.co.uk/So-La-Bristol.aspx
- www.lowcarbonuk.com

1.2.4 Energy@home

The Energy@home project started in 2009 and there are four partners involved: Electrolux, Enel, Indesit Company and Telecom Italia. The objective is to develop a communication platform to help end users monitoring their domestic appliances in the households and using them efficiently. The architecture of the platform is composed of four main parts:

- The Home Gateway: it enables always-on connectivity of home devices.
- Enel smart info: it provides end users with the certified information on electricity consumptions managed by the electronic smart meter. It can be plugged in every domestic socket to collect data from the smart meter through powerline.

- Smart Appliances: they have an active role in the energy management systems being able to completely control the processes as they are fully responsible for the final result and offering, thanks to an active dialog with the end user and the energy sources, a valuable flexibility in terms of time and energy profile (best tariff).
- Smart plugs: actively participate in home monitoring and control activities. They are able to collect metering data and implement on/off control on simple plugged energy loads, other than Smart Appliances.

This platform lets end users have easy access to and make them more aware of their energy consumption: this is useful to help them modify their behaviour; the platform offers also the possibility to develop innovative services which will lower the environmental impact of every day energy use.

A non-profit association called Energy@home, was created in order to increase use of the developed platform and test new technology and services that could increase household energy efficiency.

An important part is the running trial of the Energy@home platform: it involves 50 private premises in two Italian cities and 20 friendly end users in Italy; the expected duration is from October 2012 to December 2013. The goals are to validate the proposed technical solution based on the developed platform and test their capability to actively control domestic appliances and simplify the use of time of use and dynamic tariffs.

For the aims of the S3C project Energy@Home is of special interest, because it is interesting to assess the reaction of end users and if and how they managed to modify their behaviour according to the signals provided by the technology.

Web Source:

- www.energy-home.it

1.2.5 Hus 14: energy visualisation in offices

This project aims to develop and test how new technology, visualization and social context can motivate energy efficiency in office premises. Few studies have so far focused on the workplace in terms of energy visualization. In this project, the concepts are implemented in new premises with metrological well-equipped offices at the department of Energy Technology at SP Technical Research Institute of Sweden, where the users contribute to the concept development through their expertise.

The goal of the project is to develop a set of tools for energy visualization that enable control and understanding of energy use in the workplace and motivate the target group to save energy, but also to support the organisation in communicating its energy use. It will also increase the understanding of how energy efficiency measures like those could be addressed and how different types of energy technology are preferably introduced in environments like this.

Within the project, three different prototypes for energy visualization have been developed, which are adapted to the workplace. A computer application shows the individual electricity use at each office worker's desktop while a (technical) screen and an (designed) ambient interface complement each other in showing the joint electricity use in the lunch room. The screen will also show the solar electricity production from the local solar power system in comparison to the joint electricity use to further encourage energy savings. All prototypes were developed from scratch and the design phase was made in collaboration and communication with the end-users.

Onwards, all prototypes will be evaluated and further developed. Longitudinal behavioral studies will also be performed. The plan is to further develop metrological systems to enable concept implementation in offices without the advanced in-built metrological system now being used. The plan is also to extend the project to other types of offices and workplaces, where the focus on and interest in energy technology is less pronounced.

Due to its high level of end-user integration, this project is worth to have a closer look at within the S3C project. The developed energy visualization technologies appear to be a very smart way to communicate with the end-user and to raise awareness about energy consumption. An analysis about their impact to the users' behaviour just as their further development can be very prolific. Furthermore, the project is located at the working space, which will enhance the focus of S3C.

Web source:

- www.sp.se

1.2.6 InovCity (InovGrid)

InovCity is a smart grid project developed by EDP in the city of Évora, Portugal. The installation of the smart grid infrastructure began in 2010 and the pilot test of new energy services based in smart grid technologies took place from January 2011 to December 2012.

The main objectives were to determine the effect of the installation of smart meters on energy consumption (small consumers) and to measure the added impact of using services with different levels of sophistication based on smart grid information (eg. energy monitors, alternative tariff schemes and energy alerts) in combination with the smart meters effect.

End-users were segmented in different groups according with technical and socio-demographic characteristics and were offered a certain kind of solution to test during the pilot. Through the different energy management systems clients could access their current and historic energy use (in kWh, € and CO₂), compare different time periods (days, weeks, months), know how much energy a certain equipment use (with the smart plugs) and get information via e-mail or SMS when his consumption exceeded the previous month, for example. Several communication campaigns took place in order to inform consumers about the benefits of smart meters (letters, leaflets, local press, local schools, public institutions), provide energy efficiency information and specific efficiency tips for home consumption (mailing) and provide information on how to take the best use of the energy management system installed (leaflets, e-mail, showroom). Regular telephone interviews were conducted (once every three months) to gather information from the end users (only for the users of energy management systems, tariffs and energy alerts). The consumer insights gathered during the project are important to determine the impact of different energy management tools in energy consumption, consumer preferences regarding some technologies vs. others and what tools are best used/understood by the costumers. The InovCity project at Évora is finished but the InovGrid Project (EDP's Smart Grid project) is still ongoing and expanding to new sites that can be used in the future.

This project is highly interesting for S3C, because of its comparison of different sociodemographic groups and their differentiated impact on end-users behavior. Further the communication and feedback strategy can be analyzed and improved. And the project offers insights into the different use of different Smart Grid technologies.

Web source:

- <http://www.inovcity.pt>

1.2.7 KIBERnet

The Smart Grid project KIBERnet was co-funded by the Slovenian Ministry for Economics and the European Regional Development Fund within the call "Strategic Research Development projects within private companies".

The ICT-system developed within KIBERnet includes a demand side management solution serving to connect a pool of consumers and distributed energy sources into the virtual power plant, which monitors and automatically controls electricity consumption to the benefit of the user. The system is monitoring the end-users' consumption/production patterns and receives the end-users' offers concerning their availability for the adaptation of their consumption/production of electric power. The KIBERnet system architecture consists of a control center (designed for KIBERnet system users) and a control and measurement system (designed for end users).

The KIBERnet demo site includes four different large industrial end-user sites with a combined total 30 MW peak power. The smart technology trialed within KIBERnet enables the adaption of the end-users' own consumption/production of electric power in order to decrease and increase the power flow.

Industrial and commercial end-users are often considered the »low hanging fruits«, when it comes to the design of business cases for Demand Side Management and Smart Grid technologies strengthening the role of end-users. In fact, it is very important for S3C to observe and evaluate the potentials of industrial and commercial end-users that have been equipped with smart technologies and to analyse in how far the already trialed interaction schemes can be of help for other project or enhanced and upgraded. The facts

that up that the industrial end-users integrated into the KIBERnet project could save up to 25% of energy bill due to the implementation of the schemes and that a substantial reduction of CO2 emissions could be realized sounds particularly promising.

Due its monitoring of the end-users' consumption and production patterns and the resulting offers to them, the project can have a high impact on the end-users' behavior. Besides, it integrates industrial, commercial and private end-users. Further the project is located in one of the new EU-member states. Based on these facts, the project will become a very usefull active pilot for S3C.

Source:

- <http://www.kiber-net.com/>
- <http://www.smartgrids.si/index.php/sl/projekti>

1.2.8 Linear

The Linear (Local Intelligent Network and Energy Active Regions) project - a large-scale research and demonstration project on innovative smart grid technologies in Flanders - focuses on the activation of domestic demand to facilitate the integration of distributed (renewable) energy resources in the low voltage and medium voltage network. Within Linear, Active Demand (AD) stands for the participation of residential consumers in the provision of services to different power system participants in the form of an injection/off take decrease/increase. The objective of the Linear project is twofold. The project not only aims at developing the needed technical solutions to realize a technological breakthrough of domestic AD, but also alludes to proving the developed concepts by setting up a residential pilot. The project involves all types of flexible energy resources installed at consumers' premises: electrical appliances, distributed generation and thermal and electric energy storage systems.

The project also looks at possible future energy market structures and potential business cases to validate the flexibility available at the consumers' premises. Four business cases for domestic AD are explored during the project. Two of these cases are to the interest of the retailer / BRP, i.e. "portfolio management" (optimization of electricity purchases and sales by means of AD) and "wind balancing" (reducing the deviations between predicted and measured wind power generation by means of AD). The DSO (Distribution System Operator) is the party concerned in the other two cases, i.e. "LV transformer load" (avoiding peak loads on low voltage transformers by means of AD) and "LV feeder voltage profile" (managing the voltage profile of low voltage feeders by means of AD).

Both the technical solutions as well as the business cases will finally be implemented in a pilot engaging about 200 Flemish households. The participants of the field trial are split in two groups. For each group a different reward system will be tested during a period of 12 months: Time of Use tariffs and Flexibility (remote start within user defined constraints). Following equipment will be available as part of the active demand system: smart meter, Home Energy Management System, submetering plugs, display/webservice, PV installation (only if already installed) and for the participants offering automated active demand, smart appliances (dishwasher, washing machine, tumble dryer, domestic hot water buffer, electric vehicles).

The field trial is currently ongoing, so there would be a chance for S3C to really engage with the Linear field trial participants and get access to the field trail results. Linear would even be demanding party to get advice from S3C for surveying the consumers participating in the field trial, so they can be a potential active partner. The end of the field trial is foreseen for end of June 2014 whereas the project ends at the end of 2014.

Sources:

- Peeters, C. Develder, J. Das, J. Driesen, and R. Belmans, "Linear: towards a breakthrough of smart grids in flanders," in Proc. i-SUP 2010.
- Kessels, D. Six, M. Mekonnen, B. Dupont, B., "Feasibility Of Employing Domestic Active Demand For Balancing Wind Power Generation," in Proc. EEM 2013

1.2.9 Network design and management in a Smart City with large deployment of DER

This project is currently being carried out in Brussels, Belgium by the Distribution System Operator Ores (<http://www.ores.net/>). It aims to implement Demand Side Management at a relatively large scale (~

10.000 end users). By rolling out smart meters, it aims to instruct load shifts from night to day time tariffs, to optimize the regional usage of the generation from local photovoltaics systems.

A first project phase was carried out, but put its emphasis on technical analyses instead of end-user involvement. A second phase (starting in autumn 2013) will focus on end-user involvement. Topic areas to be covered by the upcoming analyses include the financial uncertainty for customers regarding the profitability on their investment as a result of uncertainty in obtained energy savings.

The S3C consortium is already in contact with this Smart City project. The partners within the Smart City project would appreciate advice and input regarding end-user engagement from the S3C consortium, which renders this project a potentially active partner.

Web source:

- <https://portal.smartgridprojects.eu/projects/Pages/proj012.aspx>

1.2.10 Price

Price is a smart grid project located in the Henares Corridor, Madrid, developed by Gas Natural Fenosa and Iberdrola. It entails the installation of 200.000 smart meters (100.000 by each company). The project has as its main objectives the improvement of the network, integration of renewable energies, increase the usage of electric vehicle and provide customers with new energy services. More specifically the project develops around 4 vectors:

- **PRICE-RED** – monitoring and automation of transformation centres by developing an interoperable platform with the objective of creating synergies between electric utilities.
- **PRICE-GEN** – development and optimization of the network architecture as well as new smart metering equipment.
- **PRICE-GDI** - Distributed Generation, it has the intent of looking for new solutions for integration into the electricity network.
- **PRICE-GDE** - Demand Management, it is centred on consumption monitoring systems to be used by customers.

The first pilot will begin in 2014. It is yet to be determined whether end users will have an active role on the project, but GN Fenosa and Iberdrola are likely to test new interaction schemes. However, this pilot will definitely permit for the engagement with end users since it has already been decided that the trial site will involve 50 houses in which families will test smart appliances, e-boxes and smart meters.

In fact, the project has the potential to serve as an active partner for the further development of the S3C toolkit.

Source:

- <http://www.priceproject.es/en>
- <http://www.europapress.es/sociedad/noticia-innova-ite-desarrolla-proyecto-permitira-ahorrar-costes-instalaciones-electricas-20120618112749.html>
- <http://www.energias-renovables.com/articulo/el-proyecto-price-gde-quiere-trasladar-el>
- <http://www.priceproject.es/es/content/iberdrola-y-gas-natural-fenosa-lideran-un-gran-proyecto-de-redes-el%C3%A9ctricas-inteligentes-en>

1.2.11 Promoting energy efficiency in households using smart technology

This is a smart metering installation project in Latvia. As part of the project, smart electricity meters have been purchased and are installed in 500 households. A data readout system will be introduced, and each household will be able to view detailed information regarding its electricity consumption using the www.e-latvenergo.lv customer self-service portal, which constitutes an innovative feedback communication channel, as well as to receive advice on the necessary energy efficiency measures.

Funding for the project was granted in mid-2012 and the work has commenced in 2013. The goal of the smart meter deployment and establishment of feedback in form of the online portal and the energy efficiency advice is to evaluate whether these tools actually have an impact on the consumption patterns of residential end-users. The project's hypothesis expects that the provision of information on actual electricity consumption, consumption times and the resulting carbon footprint combined with the promotion of a more active role for the end-user will result in an overall 10% reduction in CO2 emissions during the project's lifecycle.

This project has strong active partner potential. On the one hand, it deals with genuine S3C topics and involves end-users, uses innovative feedback mechanisms and provides detailed information for the end-users, which could raise awareness, reduce energy consumption and increase energy efficiency. On the other hand, it is a project which is located in a new EU-member state that are particularly interesting to look at in terms of modernisation of the energy system.

Web source:

- http://www.latvenergo.lv/portal/page/portal/english/latvenergo/main/about_latvenergo/smart_technology/about

1.2.12 REloadIT

The core of Zaanstad's (NL) showcase 'REloadIT' is innovative technology for clean mobility. This showcase aims to optimise the exploitation of renewable energy and electric mobility. Since March 2013 the municipality Zaanstad tests her own smart grid. What does this entail? It means that the energy demand to charge the batteries of the electric cars matches -as smart as possible- the variable electricity production of the solar energy systems. The smart grid is based on forecasts of the weather and the use of the cars.

In addition, energy tariffs play a role in the decision to charge a battery or to sell renewable electricity to the grid. The energy tariff is dependent on the energy demand and supply. Everyone is familiar with the differences in day and night tariff. Zaanstad investigates how energy costs can be limited. For instance, to charge own electric cars or tune on water pumps when there is a high renewable energy production.

The REloadIT Smart Grid is introduced at small but scalable size, to see how innovative technology operates in daily practice of a municipality. A business case is analysed for large scale implementation. The smart technology is developed in a public-private partnership (PPP scheme).

The application is used by:

- Car users and manager of the electric car fleet
Tailor made reservation system: taking into account charging period of batteries and action radius of specific electric cars.
- Environmental policy maker of the municipality Zaanstad Direct insight: renewable electricity production and the share that is used to charge the batteries of the electric cars.

The REloadIT Smart Grid is introduced at small but scalable size, to see how innovative technology operates in the daily routines of a municipality. A business case is analysed for large scale implementation. The smart technology is developed in a public-private partnership (PPP scheme).

As the project focusses on electric vehicles, it can be an opportunity to analyse the changing role of citizens/consumers transportation methods and additional communication with Smart energy systems (IHD systems, etc). How does it influence daily life for working citizens? What is the role of the provided information and feedback of the Smart systems? As the project description already states: “ how does innovative technology operates in daily practice of a municipality?”

As REloadIT has already been contacted by S3C consortium members and is willing to cooperate. In fact, the S3C research team expects to gain insights into certain data (which are partly already available online: <http://www.reloadit.nl/en/over/resultaten>), and conduct interviews with project managers, and perhaps members of the community. Additionally, the S3C team expects to gain insights about the impact on the daily practice of a municipality; what changes, how does it change, and what other effects might occur? What were the biggest pitfalls or objections in the beginning?

The project started in 2010. Since March 2013, the municipality Zaanstad tests their own smart grid.

The following numbers render some background information on the already achieved results:

- Renewable electricity production, since 2013: 6710 kWh
- Renewable electricity production, today: 55 kWh
- Driven kilometers with electric cars, since 2013: 1371 km
- Avoided CO2 emissions, since 2013: 203 kg

Web source:

- www.reloait.nl

1.2.13 Model region Salzburg

The city of Salzburg features one of the most integrated Smart Grid concepts. Several areas – from simple metering pilots to automated factories to the smart integration of electric mobility – are being covered by several projects which are funded by the Austrian climate fund and industry and energy players, such as Siemens or the Salzburg utility and grid operator.

Several of the model regions projects have a strong focus on customer involvement.

Building2Grid: Building2Grid was a field test that just finished (final report will be available in August 2013). 10 real buildings in the Salzburg region were equipped with automation technologies to connect them to the grid and enable their optimal inclusion into a smart energy context. The flexibilities within these smart objects could be used to shift loads, optimize purchasing processes for the retailer and thereby create new financial incentives for customers. The automation concept applied led to a situation in which the maximum load could be shifted for up to 30 minutes without the customers noticing or being interrupted in their daily routines. In fact, this automation concept is interesting for S3C to investigate, as it can create extra benefit for the end-user by calculating the best financial option on the one hand and does not upset their daily routines on the other hand.

Consumer2Grid: This project investigated the question, whether it is possible to motivate residential end-users to reduce their energy consumption based on Smart Metering data and energy feedback. 288 households in Salzburg equipped with Smart Meter and feedback devices (monthly bill, web portal, several different home display) and were able to reduce their electricity consumption by 6,7% on average compared to their former habits. Highly motivated end-users even reduced their consumption by over 10%. The field test customers were surveyed by the project partners in advance and after the trial. Several end-users explained that the energy feedback and enhanced consumption transparency resulted in a learning process and that they now felt more aware and conscious of their consumption. Nevertheless, the customers used the feedback systems less after a few months. It appears that due to the learning process, the feedback instruments were unable to contribute interesting services after while anymore.

The investigation of this particular learning process and access to the anonymised customer surveys would be very interesting for the S3C project.

Persuasive End-User Energy Management: This project is of particular interest for the S3C project, since it covers one of the research topics that our projects aims to analyse as well: Which new strategies and tools can help to incentivize residential end-users to shift their energy consumption to the needs of the energy system without losing comfort? The project was carried out by the Salzburg AG, as well the Austrian Institute for Technology and The focus was set on optimizing already promising ambient-display solutions, which were developed in workshops using the insights and opinions of end-users. The development resulted in the so-called FORE-watch, an ambient display shaped like a clock, indicating the the times during which the customers should use their energy best without receiving monetary incentives. The FORE-watch was tested in 24 homes. However, the results suggest that the customers had troubles to adapt their consumption to the times indicated by the FORE-watch. Customers surveys revealed that the end users were of the opinion that monetary incentives coupled with the feedback display might result in a stronger effort from their side.

The final report which also includes research and development backgrounds for the projects is a valuable input for the S3C-research as would be interviews with the partners involved in this project to render further information on the creation, implementation and evaluation of the scheme.

HiT: HiT is a strongly integrated Smart Grid projects that seeks to deploy and investigate a broad range of Smart Grid technologies within a building complex until May 2015. The projects seeks to find the optimal interaction between a smart home/smart complex and its inhabitants thereby forming a smart community.

The project is of particular interest since it covers various dimensions of the S3C-approach – from the smart consumer to the smart citizen. Furthermore, the lead partner Salzburg AG already signed an LOI to become an active partner during the proposal phase and has already been contacted by the S3C-consortium to learn more about the project's background and progress so far as well as discuss the potential engagement in S3C.

Web Sources:

- www.smartgridssalzburg.at
- <http://www.energiesystemederzukunft.at/>

1.2.14 Tweewaters

Tweewaters is a real development project of a new district and is also one of the demonstration sites of the FP7 project E-hub.

The energy concept of the Tweewaters district is based on local production and consumption of heat and electricity. Smart control will be applied to the flexible energy sources to match energy supply and demand to decrease the disturbance to the grid and to enhance the opportunity for green energy production. The energy concept of Tweewaters thus starts from local decentralized production, local distribution, local supply and rational use of energy - at district level - of green energy and green heat.

Important impact parameters for the energy concept of the Tweewaters district are:

- 70% savings in primary energy use compared to a traditional district (BAU).
- 50 % reduction in CO2 emissions.

In a first trial, 10 apartments will be equipped with three smart appliances (washing machines, dish washer, dryer). Moreover all (about 100) residents of the first building will receive My James – a butler service offering energy related and other service (e.g. information on energy consumption). The field trial will start in September 2013 and ends in November 2014. Potentially this could be an active partner, since surveying of the field trial participants is foreseen in the E-hub project and potentially there could be collaboration between the research partners within S3C and E-hub to collaborate on this issue. The results aren't yet available since the field trial still has to start.

Web sources:

- www.e-hub.org/tweewaters-demonstration.html
- www.tweewaters.be/#index

1.3 Table of projects

The following table indicates the dimensions addressed by each project: consumers - customers – citizens.

Table 1: projects classification according to the addressed dimensions (potential passive pilots)

PROJECT	CONSUMERS	CUSTOMERS	CITIZENS
3e Houses	x	x	
AlpEnergy	x	x	
AMI by Elektro Gorenjska	x	x	
Ashton Hayes Smart Village	x	x	x
Cloud Power Texel		x	x
Consumer reactions to peak prices	x		
Customer Led Network Revolution		x	
co2online	x	x	
DESI	x	x	
E3soho	x	x	
eBadge		x	x
Ecoffices		x	
EcoGrid	x		
E-DeMa	x	x	x
EDRP - Energy Demand Research Project	x		
eFLex	x		

E-mobility		x	x
Energy Sustainable Island for Real Life Community		x	x
"Energy Village" Wilpoldsried	x	x	x
ESB Smart metering Customer Behavior and Technology Trial	x		
eTelligence	x	x	
EU-DEEP		x	
EVANDER		x	x
FlexPower	x		
Green eMotion		x	x
GREENLYS	x	x	x
Grid4EU	x	x	
GridTeams	x	x	
GridWise (Part 1)		x	
GridWise (Part 2)	x		
Heijplaat Energy-neutral	x	x	x
Hyllie	x		
ICT4EVEU		x	
IHSMAG	x	x	
INZET		x	x
iSmart Ittigen	x	x	
Jouw Energiemoment		x	
LINKY	x	x	
Low Carbon London		x	x
MeRegio	x	x	x
MILLENER	x	x	
MobInCity		x	x
moma (model city Mannheim)	x	x	
NOBEL	x	x	
Norra djurgårdstaden	x	x	
OLDES		x	x
Powermatching City II		x	
PREMIO	x		
PRIME		x	x
Sala-Heby Energi: Effekttariff	x		
Salt River Project	x	x	x
Salzburger SME DR study	x	x	x
SAVE ENERGY		x	x
SEC Smart Energy Collective	x	x	x
Smart control of heat pumps	x		
Smart Grid Gotland	x		
Smart Grid: Benefits for all	x	x	x
Smart Home on low voltage installation	x	x	
Smart Metering		x	
Smart Wash		x	
Smart Watts	x	x	
SMART-A	x	x	
Smart-E	x		
SmartHouse/SmartGrid project	x		
SMARTV2G	x	x	
SPES		x	x
Sustainable Lochem		x	x
To follow the electricity price: Direct and Indirect control	x		
TotalFlex	x	x	
ToU tariff in Italy	x		

UppSol 2020			x
Velix	x	x	
Web2energy	x	x	
Yokohama Smart City	x	x	x

Table 2: projects classification according to the addressed dimensions (potential active pilots)

PROJECT	CONSUMERS	CUSTOMERS	CITIZENS
BeAware	x		x
BIDELEK - BIZKAYA	x	x	x
Bristol Smart City (B.R.I.S.T.O.L.)	x	x	x
Energy @ home	x	x	
Hus 14: energy visualisation in offices	x		x
InovCity	x		
KIBERnet	x	x	
Linear		x	
Network design and management in a Smart City with large deployment of DER	x		
Price	x		x
Promoting energy efficiency in households using smart technology		x	
REloadIT	x	x	
Salzburg Model Region (HiT)	x	x	x
Tweewaters		x	

2. Appendix

This appendix contains the tables which have been filled out during the selection process: such table contains all the selection criteria already shown in the IR1.1 and provides a common framework for the comparison of different projects.

2.1 Potentially passive pilots

Name of the project:		Cloud Power					
Source from which it is extracted:							
Leading organization:		Texel Energie & Capgemini					
Country involved:		Netherlands					
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes				
	2	Does the project have the potential to involve end-user with a central role?	yes				
	3	Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	-	no	if yes, you can specify the begin and end dates	
		2	Is the project still ongoing?	yes		if yes, you can specify the begin date and the expected end date.	2012-2013
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	Texel, Netherlands
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	the emphasis on the community of consumers 'taking charge' & customized services and products
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes		if yes, it is important to point out the possible innovative elements.	central role for the community, and specific services and products development
		7	Is it possible to directly engage with the projects' end-users?		no	if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	end-users participate, consumption reduction awareness, DM R measures
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	households & SME's
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	IHD's, Smart Meters
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C2 & C3
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?		no	if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?		no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:	EcoGrid			
		Source from which it is extracted:				
		Leading organization:	Siemens			
		Country involved:	Denmark			
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes			
	2	Does the project have the potential to involve end-user with a central role?	yes			
	3	Does the project have some practical (field) applications?	yes			
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	
	General information	1	Is the project finished?		no	if yes, you can specify the begin and end dates.
		2	Is the project still ongoing?	yes		if yes, you can specify the begin date and the expected end date. 2011-2014
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project Bornholm, Denmark
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project RTP field testing
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis. All classes are covered
		6	Does the project contain some unique and innovative elements of involvement of end users?		no	if yes, it is important to point out the possible innovative elements.
		7	Is it possible to directly engage with the projects' end-users?	yes		if yes, this will allow us to gain insight in the end users' perspective on the project
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives. communication plan for participants available, Demand response measures, interviews, meetings are organized
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs households & SME'S
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?		no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example smart meters, energy monitoring systems and consumption displays. smart meters, energy monitoring systems and consumption displays.
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen. C1
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.
	Privacy and security	15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		if yes, are they an important part of the project?
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out.
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of S3C	

		Name of the project:		eFlex			
		Source from which it is extracted:					
		Leading organization:		DONG energy			
		Country involved:		Denmark			
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes				
	2	Does the project have the potential to involve end-user with a central role?	yes				
	3	Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes		if yes, you can specify the begin and end dates.	2011-2012
		2	Is the project still ongoing?		no	if yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	Copenhagen, Denmark
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	what incentives could be applied to make private households participate in load shedding in the distribution grid
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes		if yes, it is important to point out the possible innovative elements.	use of social media, anthropological segmentation model
		7	Is it possible to directly engage with the projects' end-users?		no	if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	households
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?		no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	IHD's , social media
	Potential for learning	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C1
		13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
	Privacy and security	14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
		15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?		no	if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?		no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:		Jouw Energiemoment (2 pilots: Breda & Zwolle, NL)					
		Source from which it is extracted:							
		Leading organization:		Enexis					
		Country involved:		Netherlands					
STEP 1		QUESTION		ANSWER		ADDITIONAL DETAILS		NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?		yes					
	2	Does the project have the potential to involve end-user with a central role?		yes					
3	Does the project have some practical (field) applications?		yes						
STEP 2		QUESTION		ANSWER		ADDITIONAL DETAILS		NOTES/COMMENTS	
	General information	1	Is the project finished?	no		if yes, you can specify the begin and end dates.			
		2	Is the project still ongoing?	yes		if yes, you can specify the begin date and the expected end date.			
		3	At which geographical location is the project situated?	-		you can specify the name of the countries involved in the project		Breda & Zwolle, The Netherlands	
	Availability of information	4	What is the overall project objective and underlying rationale?	-		you can add more details about the goal of the project		to obtain better understand how willing consumers are to use electricity more flexibly	
		5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.			
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes		if yes, it is important to point out the possible innovative elements.		automated appliances and feedback information devices	
	Customer involvement	7	Is it possible to directly engage with the projects' end-users?	yes		if yes, this will allow us to gain insight in the end users' perspective on the project			
		8	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.		demand response	
		9	Are the end-users which are involved in the project households and/or SMEs?	-		you can specify if the involved end user are households and/or SMEs		households	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	no		The presence of such actors may be useful to test their mutual interactions, especially with the customers.			
		11	What kind of tools and technologies are used in the project?	-		Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.		smart meters, automated washing machines, solar panels, energy monitoring systems and in house displays.	
	12	How to characterize the typical role of the project's end-users?	-		The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.		C2		
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.		monitoring in progress	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.			
	Privacy and security	15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.			
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.			
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.			
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		if yes, are they an important part of the project?			
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out.			
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no		if yes, actions should be immediately taken to bring it on board of S3C				

Name of the project:		Powermatching City II					
Source from which it is extracted:							
Leading organization:		DNV-KEMA					
Country involved:		Netherlands					
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes				
	2	Does the project have the potential to involve end-user with a central role?	yes				
	3	Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	no	if yes, you can specify the begin and end dates.		
		2	Is the project still ongoing?	yes	if yes, you can specify the begin date and the expected end date.		
	Availability of information	3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	Hoogkerk, The Netherlands
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	application on a larger scale of smart energy services and real time pricing scheme
		5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
	Customer involvement	6	Does the project contain some unique and innovative elements of involvement of end users?	yes		if yes, it is important to point out the possible innovative elements.	automated appliances; two distinct customer propositions
		7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight in the end users' perspective on the project	maybe
	Potential for learning	8	Are specific strategies planned to put the end-user in a central position?		no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	households
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	DSO, TSO, research organisations, etc
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	smart meters, automated appliances, energy monitoring system (powermatcher)
	Privacy and security	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C2
		13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	monitoring in progress
	Scalability and replicability	14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
		15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Dissemination	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Active participation	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out.	
	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:		Smart Wash			
		Source from which it is extracted:					
		Leading organization:		Enexis			
		Country involved:		Netherlands			
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes				
	2	Does the project have the potential to involve end-user with a central role?	yes				
	3	Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes		if yes, you can specify the begin and end dates.	2010-2011
		2	Is the project still ongoing?		no	if yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	The Netherlands
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	piloting an EMS with self-generated, renewable energy 'wired' to the washing machine in residents' homes
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes		if yes, it is important to point out the possible innovative elements.	EMS, automated appliances
		7	Is it possible to directly engage with the projects' end-users?		no	if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?		no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	households
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?		no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	EMS, automated washing machines, in house display
	Potential for learning	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C2
		13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
	Privacy and security	14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
		15	Does the project deal with privacy and security issues?		no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?		no	if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?		no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:		Duurzaam Lochem			
		Source from which it is extracted:					
		Leading organization:		IN4Energy			
		Country involved:		Netherlands			
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes				
	2	Does the project have the potential to involve end-user with a central role?	yes				
	3	Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?		no	<small>if yes, you can specify the begin and end dates.</small>	
		2	Is the project still ongoing?	yes		<small>if yes, you can specify the begin date and the expected end date.</small>	
		3	At which geographical location is the project situated?	-	-	<small>you can specify the name of the countries involved in the project</small>	Lochem, The Netherlands
		4	What is the overall project objective and underlying rationale?	-	-	<small>you can add more details about the goal of the project</small>	smart technology to balance supply and demand through EMS
	Availability of information	5	Is there a clear link with the characterization structure?	yes		<small>if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.</small>	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes		<small>if yes, it is important to point out the possible innovative elements.</small>	EMS and in house display, real time pricing
		7	Is it possible to directly engage with the projects' end-users?	yes	no	<small>if yes, this will allow us to gain insight in the end users' perspective on the project</small>	unknown
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?		no	<small>if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.</small>	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	<small>you can specify if the involved end user are households and/or SMEs</small>	households
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		<small>The presence of such actors may be useful to test their mutual interactions, especially with the customers.</small>	
		11	What kind of tools and technologies are used in the project?	-	-	<small>Some possible technologies might be, for example smart meters, energy monitoring systems and consumption displays.</small>	smart meters, EMS, in house display
		12	How to characterize the typical role of the project's end-users?	-	-	<small>The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.</small>	C2 and C3
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		<small>This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.</small>	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		<small>if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.</small>	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes		<small>if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.</small>	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	no	<small>This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.</small>	unknown
		17	Is the project replicable in different contexts?	yes	no	<small>The answer to this question can be derived using the information on how many countries and which kind of customers are involved.</small>	unknown
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	<small>if yes, are they an important part of the project?</small>	unknown
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	<small>Some best practices can be derived and pointed out.</small>	unknown
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	<small>if yes, actions should be immediately taken to bring it on board of S3C</small>		

		Name of the project:		Smart Grid: Benefits for all ('Rendement voor iedereen')			
		Source from which it is extracted:					
		Leading organization:		Taskforce Innovatie Regio Utrecht			
		Country involved:		Netherlands			
STEP 1		QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?		yes			
	2	Does the project have the potential to involve end-user with a central role?		yes			
3	Does the project have some practical (field) applications?		yes				
STEP 2		QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	no	if yes, you can specify the begin and end dates.		
		2	Is the project still ongoing?	yes	if yes, you can specify the begin date and the expected end date.		
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	Utrecht & Amersfoort, The Netherlands
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	Develop 8 service concepts, upscalable for smart grids, that aim to provide renewable energy options for their citizens, create economic initiatives and employment, and work towards a significant Co2 reduction.
	Availability of information	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.		
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	if yes, it is important to point out the possible innovative elements.	Feedback on demand and response differs for 2 pilot locations. In the city of Utrecht the information will be provided by the project consortium, as for Amersfoort this will be a 'co-creation process' in cooperation with residents.	
		7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight in the end users' perspective on the project	unknown
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	The pilot in Amersfoort puts the residents community central.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	households
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	Consortium with over 10 partner organisations (DSO, TSO, government, university, engineering and consultancy firms etc)
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	8 service concepts, smart meters, and societal cost/benefit analyses
	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1- Consumer; C2- Customer; C3- Citizen.	C1, C2 and C3	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	unknown
		17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	unknown
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:		INZET			
		Source from which it is extracted:					
		Leading organization:		Zeenergie			
		Country involved:		Netherlands			
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes				
	2	Does the project have the potential to involve end-user with a central role?	yes				
	3	Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?		no	if yes, you can specify the begin and end dates.	
		2	Is the project still ongoing?	yes		if yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	Zeewolde, The Netherlands
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	To use all local renewable generated energy from solar, wind and biomass, and connect it to residential houses and offices
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes		if yes, it is important to point out the possible innovative elements.	focus on citizenship with regard to energy use and role for social services to provide information to citizens
		7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight in the end users' perspective on the project	unknown
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	role for social services and people in integration programs to follow work will provide information to end users
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	household and SMEs
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	municipality, social services, SME with biogas installation, DSO, TSO
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C1 and C2
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	unknown
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	unknown
		17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	unknown
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	if yes, are they an important part of the project?	unknown
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	unknown
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:		EVANDER			
		Source from which it is extracted:					
		Leading organization:		Prestige Taxicentrale			
		Country involved:		Netherlands			
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes				
	2	Does the project have the potential to involve end-user with a central role?	yes				
	3	Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?		no	if yes, you can specify the begin and end dates.	
		2	Is the project still ongoing?	yes		if yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	Nieuwegein, The Netherlands
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	Stimulate this with a Smart Grid which uses sustainable locally generated energy and electric vehicles, situated in the municipality of Nieuwegein
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes		if yes, it is important to point out the possible innovative elements.	cooperation between commercial companies and prosumers
		7	Is it possible to directly engage with the projects' end-users?		no	if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?		no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	SMEs and prosumers
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	DSO Greenchoice, Engineers, Erasmus University Rotterdam, TU Delft, VITO
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	EV
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C1 and C2
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?		no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	if yes, are they an important part of the project?	unknown
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	unknown
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of S3C		

Name of the project:	Heijplaat Energy-neutral
Source from which it is extracted:	
Leading organization:	ENECO
Country involved:	Netherlands

		QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS		
STEP 1	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes				
	2	Does the project have the potential to involve end-user with a central role?	yes				
	3	Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS		
	General information	1	Is the project finished?	no	if yes, you can specify the begin and end dates.		
		2	Is the project still ongoing?	yes	if yes, you can specify the begin date and the expected end date.		
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	Heijplaat, Rotterdam, The Netherlands
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	
	Availability of information	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.		
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	if yes, it is important to point out the possible innovative elements.	the entire project has to come about in consultation with the residents	
		7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight in the end users' perspective on the project	unknown
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	the entire project has to come about in consultation with the residents	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	households and SMEs
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	DSO, TSO, municipality, civil society organisations, housing association, WWF	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example smart meters, energy monitoring systems and consumption displays.	smart meters, solar panels (PV)
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C1, C2 and C3
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.		
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.		
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	unknown
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.		
		17	Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.		
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	if yes, are they an important part of the project?	unknown
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	unknown
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:		Smart Energy Collective			
		Source from which it is extracted:					
		Leading organization:					
		Country involved:		Netherlands			
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes				
	2	Does the project have the potential to involve end-user with a central role?	yes				
	3	Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes		if yes, you can specify the begin and end dates.	
		2	Is the project still ongoing?		no	if yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	
	Availability of information	5	Is there a clear link with the characterization structure?	yes	no	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	no	if yes, it is important to point out the possible innovative elements.	
		7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example smart meters, energy monitoring systems and consumption displays.	
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	yes	no	if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project: 3e Houses			
		Source from which it is extracted: www.3ehouses.eu			
		Leading organization: Gas Natural Fenosa			
		Country involved: SPAIN, UK, Germany and Bulgaria			
STEP 1	QUESTION	ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS
	1 Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	Yes there is available data and project outputs. The project is open to the ideas of participating as a Passive Partner		
	2 Does the project have the potential to involve end-user with a central role?	yes	In the first phase, this was done by testing in various public housing buildings the interaction between smart devices and users in order to initially increase awareness about energy consumption and then to change their energy usage habits. The project includes a second phase to implement measures for action / regulation / control that are also based on IT in order to obtain consumption savings. One of the project's overall objectives is to technological transfer through replication as well as the distribution of results.		
3 Does the project have some practical (field) applications?	yes	The idea of the project is to perform pilots with end users using interactive technology via smart meters and replicate it in other environments so that the global solution is scalable and cost effective to every household			
STEP 2	QUESTION	ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS
	1 Is the project finished?	YES	It finished in May 2015		The project had an estimated duration of 3 years and 4 months. It started in Feb 2010
	2 Is the project still ongoing?	no			
	3 At which geographical location is the project situated?	-	At 4 locations: Spain (Sant Cugat), Germany (Leipzig), UK (Bristol) and Bulgaria (Sofia). Bristol was substituted by an additional location in Germany - Langenfeld		
	4 What is the overall project objective and underlying rationale?	-	The overall objective is to build the customers into the energy system through ICTs, allowing them to develop or enhance their relationship with the environment by piloting in several social housing buildings the interaction between smart devices and the users.		
	5 Is there a clear link with the characterization structure?	yes	1) Technology: In the Spanish project a wireless Zigbee network was settled to communicate with the Electricity, Gas and Water meters and also with the thermostat and solar panels. In the German pilot was based on the communication of the meters with a smartbox. OCR Gas meter readers were installed. 2) Feedback: Monitoring equipment was installed in each household, and participants' energy data was collected in a central database for analysis and then presented back to participants through an ICT interface. 3) Information: Spanish pilot used as communication: informative letter, acceptance letter, poster, leaflets. As attendance actions: lock off meeting, energy audit made in depth to participants, energy audits for all the participants, knocking on door visits. German pilot: visits, letters, meetings with tenants.		
	6 Does the project contain some unique and innovative elements of involvement of end users?	yes	Financial Pilot - Residential: Different approaches to Engagement campaigns depending on the characteristics of the households - for instance in Spain they offered free Wi-Fi and tables to have them engaged. In Bristol the local partner was interested to have them engaged because they were used to working with them in the context of initiatives. The group of end users studied end user skills off-line - the pilot and replication in Germany were done in areas very different in energy consumption - the lowest and the highest in Germany. Additionally the use of the building owners in Sant Cugat, Spain, case studies the process and help us achieve greater participation.		
	7 Is it possible to directly engage with the projects' end-users?	yes	The project is already finished but they are open to facilitate access to end-users, probably via one of the project partners		
	8 Are specific strategies planned to put the end-user in a central position?	yes	Yes - the first measure was to develop a tool to measure the electricity, heating and water consumptions which provided real time consumptions and time tabled graphs. Secondly other solutions were applied, such as the elimination of stand by in the domestic equipments and the installation of programmable thermostats to control the house heating. In Spain they opted to facilitate wi-fi in the participating buildings/houses and gave away tablets to pass on consumption alerts and advices. In the German pilot they opted to go for a		
	9 Are the end-users which are involved in the project households and/or SMEs?	-	Only households: Pilot 1: Spain. Three social houses in Sant Cugat del Vallès, Spain, divided into two constructions containing 64 and 56 flats respectively. The maximum number of houses is expected to be 80. Pilot 2: Germany. Social house in Leipzig (Germany) containing 33 flats. Replication 1: Bristol. 100 Social Housing Units in Bristol, made up of approximately 60 flats within a housing block and 40 houses dispersed through an area of social housing. Replication 2: Bulgaria. Social house promoted by BHA in Sofia (Bulgaria) containing 44 flats.		
10 Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	Project Lead was Gas Natural Fenosa - an integrated energy company that participate in the generation, distribution and retail of natural gas and electricity in INDRA - a smart infrastructure Technology company in Spain and a leading IT multinational in Europe and Latin America. PROMUSA - SPH Promociones Municipales de Sant Cugat del Vallès SA (PROMUSA) is a public municipal company - a highly specialized public limited company - and its social capital consists of non-transferable non-voting shares owned by the town council of Sant Cugat del Vallès, a PL24 residential city in the metropolitan area of Barcelona (Spain). Ennovatis is a CIBER - Ennovatis (CIBER Ennovatis) was founded in the year 2010 as a spin-off of the University of Stuttgart. It is a CIBER ennovatis had a turnover of about 4 000 000€ and about 65 people working in the company. The primary goal of the company is the development of cost effective tools to increase Energy Efficiency and comfort in buildings. It holds patents in intelligent metering and model based monitoring. Bulgarian Housing Association - The Bulgarian Housing Association (BHA) is an independent, non-profit legal entity. The BHA serves to be a result of renewed and energy related necessary for new type of housing organizations that are independent from the Central Government and capable to identify and deal with the real housing issues monitoring and integrating all public and private resources. BHA and City Councils - used recently authorized among seven other top environmental cities to become Europe's first Green Capital. Bristol also has leading reputation in Europe for its energy efficiency and smart city initiatives. Knowledge Media Center - is engaged in developing the creative, educational and social potential of people within the local community, the city and other - lead using media and communication projects to achieve this. KWMC is a registered charity and company limited by guarantee. KWMC performs a wide social, cultural and educational role in the community. A core element of this function is the location of the organization in South Bristol. IP-Partnership - IP-Partnership (IP-Partnership) LTD, IP-Partnership provides network infrastructure solutions to enterprises, service providers, universities and the public sector. Toshiba Research Europe - is one of the four globalised corporate level R&D organisations founded by Toshiba Corporation.			
11 What kind of tools and technologies are used in the project?	-	In the Spanish project a wireless Zigbee network was settled to communicate with the Electricity, Gas and Water meters and also with the thermostat and solar panels. In the German pilot was based on the communication of the meters with a smartbox - OCR Gas meter readers were installed			
12 How to characterize the typical role of the project's end-users?	-	The end users roles are both as Clients (of Gas Natural Fenosa for instance) and Consumers			
13 Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	The project is very interesting in this topic because they took the lessons learned in the Spanish and German Pilots and included them in the Replication pilots done in the UK and German replication pilots			
14 Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	Further analysis could be done if the project finds it interesting			
15 Does the project deal with privacy and security issues?	yes	The project asked information from the end users within the project timeframe and previous to the project. A privacy statement was signed from every part involved. Aggregated information might be accessed. Each project and each replication will be over data.			
16 Is the project scalable on different dimensions?	yes	The replication projects in other countries are intended to improve the technology and the engagement tactics used with the end consumer but also to develop a scalable solution that might be used in several countries and which should be affordable by the mass market households			
17 Is the project replicable in different contexts?	yes	The replication projects in other countries are intended to improve the technology and the engagement tactics used with the end consumer but also to develop a scalable solution that might be used in several countries and which should be affordable by the mass market households			
18 Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	The did a lot of dissemination action throughout the project - in academic papers, participating in lectures and events - TV and radio interviews, use of the media by Gas Natural Fenosa and other stakeholders, etc.			
19 Can we learn from the dissemination actions carried out during the projects, if any?	yes	Some best practices can be derived and pointed out.			
20 Has the project shown a concrete willingness for an active partnership?	no	The project is finished but they can participate as a Passive partner			

Name of the project:		ESB Smart metering Customer Behavior and Technology Trial			
Source from which it is extracted:		Electricity Smart Metering Customer Behaviour Trials (CBT) Findings Report: Smart Metering Information Paper 4			
Leading organization:		ESB Networks			
Country involved:		Ireland			
QUESTION		ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS
STEP 1	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes		Results for customer behaviour and technology trial are available (however results of the technology trial for the gas meters have not yet been published). The project is already concluded and apparently it can be considered a passive one. Need to contact manager to make sure.
	2	Does the project have the potential to involve end-user with a central role?	yes		During the customer behavior trial, 6500 customers had their homes and commercial premises installed with smart meters and some interactions were tested: time of use tariffs (the test groups were asked to trial different time of use tariffs) and demand management stimuli (a sample group of customers received IHD (in Home Display) technology to help them manage their own demand).
	3	Does the project have some practical (field) applications?	yes		The energy management tools tested are important to understand their impact on consumer efficient energy management, understand what technologies produce more effect, among others. Since it tests different tariffs and prepayment meters that can have potential commercial ends.
QUESTION		ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS
General information	1	Is the project finished?	yes	if yes, you can specify the begin and end dates.	The Smart Metering Electricity Customer Behaviour Trials (CBT) took place during 2009 and 2010 with over 5,000 Irish homes and businesses participating
	2	Is the project still ongoing?	no	if yes, you can specify the beginning and the expected end date.	took place during 2009 and 2010 with over 5,000 Irish homes and businesses participating
	3	At which geographical location is the project situated?	-	you can specify the name of the countries involved in the project	At the outset of the Smart Metering Project the CER emphasized the importance of a robust trial of how the introduction of smart metering in Ireland could impact energy consumers.
	4	What is the overall project objective and underlying rationale?	yes	you can add more details about the goal of the project	At the outset of the Smart Metering Project the CER emphasized the importance of a robust trial of how the introduction of smart metering in Ireland could impact energy consumers. Customer behaviour trials for residential consumers and SMEs (small-to-medium enterprises) were thus placed at the centre of the Smart Metering Project Phase 1. The focus was on trialing a number of different smart metering enabled energy efficiency measures with a view to measuring their impact on customer consumption.
Availability of information	5	Is there a clear link with the characterization structure?	yes	if yes, for many classes can be covered? All the provided details will be used in the next stages of the reports.	The measures tested were time of use tariffs (TOU) in conjunction with a number of demand side management (DSM) informational stimuli i.e. detailed billing on a bi-monthly and monthly frequency, in-home displays, an overall load reduction (OLR) incentive and Web access. Time of Use Pricing (TOU): improved pricing signals in the form of a number of time of use tariffs, where different prices are charged at different times of the day in order to more accurately reflect the real variable price of electricity on the wholesale Single Electricity Market (SEM) in Ireland. Bi-monthly detailed billing: Enhanced information for customers on their electricity consumption and costs via an electricity usage statement included with bi-monthly bills which used the accurate consumption information from the smart meters to give customers more detailed information on how much electricity they used during the billing period and associated costs (e.g. graph of average usage costs by TOU, appliance TOU cost table, text based messages that were personalised and motivational with some historic and peer comparisons). Monthly detailed billing: Same as bi-monthly but with billing and provision of enhanced information on a monthly frequency. In-home displays (IHDs): Electronic devices linked to the smart meters that give near real-time information to consumers on their electricity consumption and associated costs. They also provide historical information in the form of day-on-day, week-on-week and month-on-month comparisons, as well as a daily budget setting function. IHDs were referred to as 'electricity monitors' for the purposes of the customer behaviour trials. Overall load reduction (OLR) incentive: A financial reward is available to customers who can reduce their electricity usage by a certain percentage target when compared to the same period in the previous year. Web access: Detailed electricity consumption and cost information was made available to customers via a Web account. The Web account was targeted specifically at SMEs but was also available to residential consumers on request.
	6	Does the project contain some unique and innovative elements of involvement of end users?	yes	if yes, it is important to point out the possible innovative elements.	It Tariffs; Mainly focusing on design of Tariffs (Time of Use) and development of a Prepayment Market Model. Billing Data: Mainly focusing on data flows from the Smart Metering infra structure to Suppliers for customer behaviour trial billing options.
	7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight on the end user perspective on the project
STEP 2 Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out technologies such as meter response measures, consumption interaction awareness initiatives.	The measures tested were time of use tariffs (TOU) in conjunction with a number: Time of Use Pricing (TOU); Bi-monthly detailed billing; Monthly detailed billing; In-home displays (IHDs); Overall load reduction (OLR) incentive; Web access. of demand side management (DSM) informational stimuli i.e. detailed billing on a bi-monthly and monthly frequency, in-home displays, an overall load reduction (OLR) incentive and Web access.
	9	Are the end-users which are involved in the project households and/or SMEs?	Yes		Yes. Households and SMEs.
	10	Are any other actors involved besides end users (DSOs, TSOs, industries...)?	yes		
	11	What kind of tools and technologies are used in the project?	-	-	in-home displays (IHDs): Electronic devices linked to the smart meters that give near real-time information to consumers on their electricity consumption and associated costs. They also provide historical information in the form of day-on-day, week-on-week and month-on-month comparisons, as well as a daily budget setting function. IHDs were referred to as 'electricity monitors' for the purposes of the customer behaviour trials.
	12	How to characterize the typical role of the project's end-users?	-	-	Majorly consumer
	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the best practices which should be avoided.
Potential for learning	14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	if, for example, something went wrong but there is a suspect that things might have gone differently probably it is the worth to investigate.
	15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently mentioned and treated? These issues cover technological and organisational measures should be taken to face them in every project. It is essential that all data collected and processed via the smart metering infra structure be handled securely and that customer privacy is safeguarded at all times. The security associated with the solutions used in the trials were deemed fit for purpose. The trial included encryption of data and full compliance with data Protection Legislation. As a general rule for a full rollout there will have to be an increased focus on areas such as: - standards based security solutions leveraging security protocols deployed in other sensitive industries such as internet banking, telecom's and defence; - robust mechanisms for protecting the integrity of the smart metering network; - secure hardware manufacturing processes and software development lifecycles; - a robust, secure and speedy
Scalability and replicability	16	Is the project scalable on different dimensions?	yes		The real sample must be adjusted according to the characteristics of each market if we want to keep the results statistically robust and relevant.
	17	Is the project replicable in different contexts?	yes		
Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	if yes, are they an important part of the project?	The CER intends to publish in due course the source data used to derive the electricity customer behaviour trial findings (in an anonymised format that complies with data protection regulations). This will enable academia, industry and other interested parties to benefit from the wealth of useful data which has been collated as part of the smart metering customer behaviour trials. It is intended that this data will be made available via the Irish Social Science Data Archive www.ucd.ie/issda/. The CER will publish a notice on its Website when this data is made available.
	19	Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out. The CER will now focus on using the findings contained in the reports published with this information paper to develop a consultation on the proposed high level design and implementation approach for a national smart metering rollout.
Active participation	20	Has the project shown a concrete willingness for an active partnership?	yes	no	

Name of the project:		Impact of a mandatory ToU tariff on Italian residential customers					
Source from which it is extracted:		RSE research project					
Leading organization:		RSE					
Country involved:		Italy					
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes		All the data and analysis are possessed by RSE		
	2	Does the project have the potential to involve end-user with a central role?	yes		The main goal of the project is to assess end users' response to the introduction of the ToU tariff in Italy		
	3	Does the project have some practical (field) applications?	yes		Smart meters represent a fundamental part of the project and also the tools developed to analyze end users' response are practical applications		
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes		if yes, you can specify the begin and end dates.	The project began in July 2009 and was over in December 2012
		2	Is the project still ongoing?	no		if yes, you can specify the begin date and the expected end date.	-
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	The project took place entirely in Italy
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	The goal of the project was to assess the impact of the ToU tariff on residential customers' behaviour in Italy
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	The key indicator is the shift of consumption from peak to off-peak hours
		6	Does the project contain some unique and innovative elements of involvement of end users?	no		if yes, it is important to point out the possible innovative elements.	The impact of ToU tariff has never been assessed before in Italy, but it has been done in other countries
		7	Is it possible to directly engage with the projects' end-users?	no		if yes, this will allow us to gain insight in the end users' perspective on the project	-
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	End user' active behavior is required in order to take the benefits of ToU tariffs
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	The proect involves only household users
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	no		The presence of such actors may be useful to feel their mutual interactions, especially with the customers.	All the customers are subject to the universal supply regime in Italy and therefore their respective DSOs have to comply with the rules established by the Italian Authority for Electricity and Gas (AEEG);
		11	What kind of tools and technologies are used in the project?	yes		Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	Smart meters were exclusively used to collect customers' monthly consumptions during both peak and off-peak hours.
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	The end user can be considered as Consumers (C1) in this project
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	All the results are presented in an aggregated form, in order to protect customers' privacy.
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	The impact of ToU tariff can be assessed over both larger and smaller groups of end users
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	ToU tariff can be implemented in different contexts (domestic, industrial,...)
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	no		if yes, are they an important part of the project?	The only dissemination actions are the presentation of the results of the project during both national and international conferences
		19	Can we learn from the dissemination actions carried out during the projects, if any?	no		Some best practices can be derived and pointed out.	-
Active participation	20	Has the project shown a concrete willingness for an active partnership?			if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:		web2energy			
		Source from which it is extracted:		European project			
		Leading organization:		HSE AG			
		Country involved:		11 partners from 5 different European countries			
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes		All the information contained in the public websites but no replies have been received from the responsables of the project so far		
	2	Does the project have the potential to involve end-user with a central role?	yes		Some aspects of the project involve end users directly and requires their active participation (see below for more details)		
	3	Does the project have some practical (field) applications?	yes		The developed consumerweb portal is a powerful tool to directly engage with the end users		
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes		if yes, you can specify the begin and end dates.	The project was over in December 2012 https://www.web2energy.com
		2	Is the project still ongoing?	no		if yes, you can specify the begin date and the expected end date.	-
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	The involved countries are Germany, Austria, Netherlands, Switzerland and Poland
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	The project is directed to implement and approve all three pillars of "Smart Distribution": Smart Metering, Smart Energy Management and Smart Distribution Automation
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	This aspects should be analyzed more in detail because the available documentation is not enough to provide an adequate answer
		6	Does the project contain some unique and innovative elements of involvement of end users?	no		if yes, it is important to point out the possible innovative elements.	-
		7	Is it possible to directly engage with the projects' end-users?	no		if yes, this will allow us to gain insight in the end users' perspective on the project	-
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	The developed consumerweb portal is a powerful tool to directly engage with the end users
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Household users represent some of the actors involved in the project
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	Some DSOs and TSOs are involved in the project
		11	What kind of tools and technologies are used in the project?	yes		Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	The developed consumerweb portal is a practical tool
	Potential for learning	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	End users can be characterized ad C1 (consumers) and C2 (customers)
		13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	A bonus system and a special consumer web portal was developed in order to increase customers' active participation. In addition, a traffic light system is implemented, with the following code: Red, when energy saving should be done and Green when energy consumption is beneficial.
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?			if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	All the available results are displayed in an aggregate form
		Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.
	17		Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	The trials can be performed in other contexts
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		if yes, are they an important part of the project?	Dissemination actions constitute an important part of the project
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out.	A permanent information of the public is an important goal of the project; this is carried out through a series of activities
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no		if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:		SMART-A			
		Source from which it is extracted:		Intelligent Energy Europe			
		Leading organization:		Öko-Institut e.V.			
		Country involved:		Several European and non European countries			
STEP 1		QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?		yes	All the information contained in the public websites but no replies have been received from the responsables of the project so far		
	2	Does the project have the potential to involve end-user with a central role?		yes	The project has the aim to assess the potential of smart appliances as a resource for Demand Response		
3	Does the project have some practical (field) applications?		yes	One of the outputs of the projects are some recommendations about how end users can be motivated to actively participate			
STEP 2		QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes	if yes, you can specify the begin and end dates.	The project was over in December 2012	http://www.smart-a.org/
		2	Is the project still ongoing?	no	if yes, you can specify the begin date and the expected end date.	-	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	Several European and non European countries
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	The main objective of the project is to identify and evaluate the potential synergies that arise from coordinating energy demand of domestic appliances with local sustainable energy generation but also with the requirements of regional load management in electricity networks.
	Availability of information	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	The project has the aim to assess the potential of smart appliances as a resource for Demand Response	
		6	Does the project contain some unique and innovative elements of involvement of end users?	no	if yes, it is important to point out the possible innovative elements.	-	
		7	Is it possible to directly engage with the projects' end-users?	no	if yes, this will allow us to gain insight in the end users' perspective on the project	-	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	see question 15	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	-
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	-	
		11	What kind of tools and technologies are used in the project?	yes	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	Smart meters and smart appliances represent the core of the project	
	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C1 (consumers) and C2 (customers) are the typical roles of the end users involved in the project	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	The output of the project has consisted of the following elements: - assessment of consumer preferences and objections with regard to their active participation - recommendations how they can be motivated to actively participate	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	The recommendations can be analyzed more in detail	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	All the graphs and tables are shown in an aggregated form.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	The results of the project have a general validity and therefore can be applied to several dimensions and contexts	
		17	Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.		
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	no	if yes, are they an important part of the project?	Webinar, workshops and presentation are the most used dissemination actions carried on during the project	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	no	Some best practices can be derived and pointed out.	-	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no	if yes, actions should be immediately taken to bring it on board of S3C			

Name of the project:		SAVE ENERGY					
Source from which it is extracted:		European project					
Leading organization		Alfamicro IT consulting					
Country involved							
STEP 1	QUESTION	ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes		All the information contained in the public websites but no replies have been received from the responsables of the project so far		
	2	Does the project have the potential to involve end-user with a central role?	yes		The main focus of the project is to foster behavior transformation regarding energy efficiency.		
3	Does the project have some practical (field) applications?	yes		The best practices have been identified by the project constitute some practical applications			
STEP 2	QUESTION	ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS		
	General information	1	Is the project finished?	yes	if yes, you can specify the begin and end dates.	The project was over in February 2012 http://www.ict4saveenergy.eu/	
		2	Is the project still ongoing?	no	if yes, you can specify the begin date and the expected end date.	-	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	The involved countries are Finland, Sweden, Netherlands, United Kingdom and Portugal
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	The main focus of the project is to foster behavior transformation regarding energy efficiency.
	Availability of information	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	This aspects should be analyzed more in detail because the available documentation is not enough to provide an adequate answer	
		6	Does the project contain some unique and innovative elements of involvement of end users?	no	if yes, it is important to point out the possible innovative elements.	-	
		7	Is it possible to directly engage with the projects' end-users?	no	if yes, this will allow us to gain insight in the end users' perspective on the project	-	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	The project will address the challenge of behaviour transformation through the use of ICT (serious game and real time information) as an enabler of energy efficiency in five Public building in five European cities (Helsinki, Leiden, Lisbon, Luleå and Manchester).	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	no		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	yes		Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	This aspects should be analyzed more in detail because the available documentation is not enough to provide an adequate answer
	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1- Consumer; C2 - Customer; C3 - Citizen.	The end users can be characterized ad C2 (customers) and C3 (citizens)	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	Some best practices have been identified
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	In particular all the aspects related to the use of technology can be analyzed more in detail
	Privacy and security	15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	-
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		if yes, are they an important part of the project?	A proactive dissemination strategy has a key role in the project
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out.	The project has implemented a web portal which will be dynamically updated by both the communities involved and the consortium
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no		if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:		E3soho			
		Source from which it is extracted:		European project			
		Leading organization					
		Country involved		11 partners from 7 different European countries			
STEP 1	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	All the information contained in the public websites but no replies have been received from the responsables of the project so far			
	2	Does the project have the potential to involve end-user with a central role?	yes	The overall objective of project is to implement and demonstrate an integrated and replicable ICT-based solutions which requires end users' active participation			
	3	Does the project have some practical (field) applications?	yes	The developed ICT solutions represent some practical applications			
STEP 2	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS		
	General information	1	Is the project finished?	yes	If yes, you can specify the begin and end dates.	The project was over in February 2013 http://www.e3soho.eu/	
		2	Is the project still ongoing?	-	no	If yes, you can specify the begin date and the expected end date.	-
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	The involved countries are Spain, Poland, Italy, Belgium, France, Portugal and Norway
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	The overall objective of project is to implement and demonstrate in 3 Social Housing pilot an integrated and replicable ICT-based solution which almost bring about a significant reduction of 25% of energy consumption in European social housing by providing tenants with feedback on consumption and offering personalised advice for improving their energy efficiency, reducing the energy consumption and increasing the share of RES (Renewable Energy Sources) by informing and supporting the user to decide for the most appropriate behaviour in terms of energy efficiency, cost, comfort and environmental impact, monitoring and transmitting consumption data to Energy Services.
	Availability of information	5	Is there a clear link with the characterization structure?	yes	If yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	-	
		6	Does the project contain some unique and innovative elements of involvement of end users?	-	no	If yes, it is important to point out the possible innovative elements.	-
		7	Is it possible to directly engage with the projects' end-users?	-	no	If yes, this will allow us to gain insight in the end users' perspective on the project	-
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	If yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	The demonstration projects requires users' participation in order to be effective	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Household users are involved, but there are also local authorities, social housing owners, Universities,
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	A construction company and a supplier of ICT solution are involved in the project	
		11	What kind of tools and technologies are used in the project?	yes	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	The E3SoHo service is built up; it consists of the following sub-services: - Perform an audit in the building to identify the energy saving potential. - Provide the owner with an ICT based blueprint to reduce the energy consumption. - Implement the system according to the blueprint - Tuning of energy consumption by monitoring - Maintenance of the installed system.	
	Potential for learning	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	The role of the end users can be characterized as C1 (consumers) and C2 (customers)
		13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	Non-technical aspects have resulted to be important parts in the process of design of energy efficiency solutions	
	Privacy and security	14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	-	
		15	Does the project deal with privacy and security issues?	yes	If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	These issues are not specifically addressed in the website (although some deliverables are still not available in the website). But, as the pilots directly involve some social housing buildings and the relative occupants, such issues have necessarily been taken into account	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	The E3SoHo service can be provided to housing of different dimensions	
		17	Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	The E3SoHo service can be applied in different contexts	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	If yes, are they an important part of the project?	Dissemination actions represent a key area of the project	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	Some best practices can be derived and pointed out.	The project implements a branding strategy and various assessment indicators	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	-	no	If yes, actions should be immediately taken to bring it onboard of S3C		

Name of the project:		OLDES					
Source from which it is extracted:		European project					
Leading organization:		ENEA					
Country involved:		11 partners from 5 different European and non European countries					
STEP 1	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	The responsables of the project have declared their availability to share some results with S3C			
	2	Does the project have the potential to involve end-user with a central role?	yes	The project intends to offer new technological solutions to improve the quality of life of older people			
3	Does the project have some practical (field) applications?	yes	The developed technological solutions constitute soem practical applications				
STEP 2	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS		
	General information	1	Is the project finished?	yes	if yes, you can specify the begin and end dates.	The project was over in December 2010 http://www.eldes.eu/	
		2	Is the project still ongoing?	no	if yes, you can specify the begin date and the expected end date.	-	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	The country involved in the project are Italy, Austria, Slovakia, Czech Republic, Belgium.
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	The project intends to offer new technological solutions to improve the quality of life of older people, through the development of a very low cost and easy to use entertainment and health care platform, designed to ease the life of the elderly in their homes.
	Availability of information	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	This question is hard to answer based on the information available on the website	
		6	Does the project contain some unique and innovative elements of involvement of end users?	no	if yes, it is important to point out the possible innovative elements.	-	
		7	Is it possible to directly engage with the projects' end-users?	no	if yes, this will allow us to gain insight in the end users' perspective on the project	-	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	The technological platform is specifically designed to meet the needs of older people and stimulate their active participation	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Only household users are involved in this project
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	-	
		11	What kind of tools and technologies are used in the project?	yes	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	The developed technological platform represents a practical tool	
	Potential for learning	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	The end users in this project can be labeled as C2 (customers) and C3 (citizens)
		13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	The identification of the needs of elder people and their families can be useful for the purposes of S3C. The health care and entertainment platform, designed to ease the life of elder people, and the way through which it is tested in different locations can offer many ideas too.	
	14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?			if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	-	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	All the available results are displayed in an aggregate form	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	The pilots can be implemented in other cities and municipalities	
		17	Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	The project is replicable in other contexts, keeping its target on older people	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	no	if yes, are they an important part of the project?	There are no specific dissemination actions rather than publishing articles, giving press releases,...	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	no	Some best practices can be derived and pointed out.	The advertising of the pilots projects offer some ideas S3C can draw upon	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no	if yes, actions should be immediately taken to bring it on board of S3C			

Name of the project:		SPES					
Source from which it is extracted:		European project (http://www.spes-project.eu/)					
Leading organization:		ENEA					
Country involved:		11 partners from 5 different European and non European countries					
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes		The responsables of the project have declared their availability to share some results with S3C		
	2	Does the project have the potential to involve end-user with a central role?	yes		The project is the follow-up of the OLDES project		
	3	Does the project have some practical (field) applications?	yes		The developed technological solutions constitute soem practical applications		
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?		no	if yes, you can specify the begin and end dates.	-
		2	Is the project still ongoing?	yes		if yes, you can specify the begin date and the expected end date.	The begin date is April 2011 and the expected end date is March 2014
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	The country involved in the project are Italy, Austria, Slovakia, Czech Republic, Belgium.
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	the project is the follow-up of the OLDES project and has the goal of transferring the approach and results achieved in the implementation of the OLDES platform into 4 new geographical contexts (Ferrara, Vienna, Brno and Kosice).
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?		no	if yes, it is important to point out the possible innovative elements.	This aspects should be analyzed more in detail because the available documentation is not enough to provide an adequate answer
		7	Is it possible to directly engage with the projects' end-users?		no	if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	The technological platform is specifically designed to fulfill the needs of older people and stimulate their active participation
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	The only end-users involved are households users
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?		no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	-
		11	What kind of tools and technologies are used in the project?	yes		Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	The developed entertainment and health care platform represents a good example of practical tool
	Potential for learning	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	The end users in this project can be labeled as C2 (customers) and C3 (citizens)
		13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	There are no results available as the project is still ongoing; some interesting lessons will be presumably derived near the end of the project
	Privacy and security	14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
		15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	All tables and charts are presented in an aggregated form, to protect end users' privacy
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	The pilots can be implemented in other cities and municipalities
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	The project is replicable in other contexts, keeping its target on older people
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?		no	if yes, are they an important part of the project?	The results of the project are disseminated through the usual methods (articles, press news, brochures...)
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out.	The project is still ongoing, therefore we could learn from the dissemination actions carried out before its conclusion
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:		Energy Sustainable Island for Real Life Community				
		Source from which it is extracted:		European project				
		Leading organization:		CEZ Distribuce a.s				
		Country involved:		Greece				
STEP 1		QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?		yes	The responsables of the project have been contacted but no replies have been received fromso far. The only availible source of information is the website			
	2	Does the project have the potential to involve end-user with a central role?		yes	It is interesting to analyse how end-user reacted to such a massive presence of renewable energies and if and how they modified their consumption habits.			
3	Does the project have some practical (field) applications?		yes	The practical applicaions are the technology introduced on the island				
STEP 2		QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS		
	General information	1	Is the project finished?	yes	if yes, you can specify the begin and end dates.	The project lasted from January 2007 to January 2012		
		2	Is the project still ongoing?	no	if yes, you can specify the begin date and the expected end date.			
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	The country involved is Greece	
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	The project aim was to build an integrated renewable energy network on Ikaria Island in Greece, allowing renewables to become the backbone of public power supplies	
	Availability of information	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.			
		6	Does the project contain some unique and innovative elements of involvement of end users?	no	if yes, it is important to point out the possible innovative elements.	It is not possible to analyze in details these aspects based on the available documentation		
		7	Is it possible to directly engage with the projects' end-users?	no	if yes, this will allow us to gain insight in the end users' perspective on the project			
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	The technology introduced on the island requires end user control		
		9	Are the end-users which are involved in the project households and/or SMEs?	yes	you can specify if the involved end user are households and/or SMEs			
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	DSOs are involved		
		11	What kind of tools and technologies are used in the project?	yes	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	The practical applicaions are the technology introduced on the island		
	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	The end users in this project can be labeled as C2 (customers) and C3 (citizens)		
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.			
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	This questions requires further analysis		
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.			
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	The pilots can be implemented in other islands		
		17	Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	The project is replicable in other islands of different sizes		
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	no	if yes, are they an important part of the project?			
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	Some best practices can be derived and pointed out.			
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no	if yes, actions should be immediately taken to bring it on board of S3C				

Name of the project:	GridTeams
Source from which it is extracted:	European project
Leading organization:	Gridpocket, France
Country involved:	France

STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes		All the information contained in the public websites are not enough but no replies have been received from the responsables of the project so far	
	2	Does the project have the potential to involve end-user with a central role?	yes		Each end user is provided with a scope of consumption which requires his/her active participation	
	3	Does the project have some practical (field) applications?	yes		The installed smart meter and web platform represent a practical application of the project	

STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes		if yes, you can specify the begin and end dates.	The project lasted from January 2007 to January 2012
		2	Is the project still ongoing?		no	if yes, you can specify the begin date and the expected end date.	-
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	The involved country is France
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	The aim of this project is to help people to handle their own load curve.
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?		no	if yes, it is important to point out the possible innovative elements.	
		7	Is it possible to directly engage with the projects' end-users?		no	if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	End user are expected to modify their consumption habits in order to reach the goal
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Household users are involved
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	Industrial and research partners are involved in the project
		11	What kind of tools and technologies are used in the project?	yes		Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	The installed smart meter and web platform represent a practical application of the project
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	The role of the end users can be characterized as C1(consumers) and C2 (customers)
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	These issues are not specifically addressed in the website
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?		no	if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:		Ecoffices				
		Source from which it is extracted:		European project				
		Leading organization:		CSTB — Centre Scientifique et Technique du Bâtiment				
		Country involved:		France				
STEP 1		QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?		yes	The responsables of the project have been contacted but no replies have been received from them so far. The only available source of information is the website but it is in French			
	2	Does the project have the potential to involve end-user with a central role?		yes	The competition among employees is required in order to obtain the objectives of the project			
3	Does the project have some practical (field) applications?		yes	The tools used in the project are some practical applications				
STEP 2		QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS		
	General information	1	Is the project finished?	yes	if yes, you can specify the begin and end dates.	The project was over in January 2011	www.ecoffices.com	
		2	Is the project still ongoing?	no	if yes, you can specify the begin date and the expected end date.	-		
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	The involved country is France	
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	The goal of the project is to achieve an "Energy challenge within offices" by inciting employees to an intelligent use of energy in a fun and interactive way.	
	Availability of information	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	The available documentation does not provide enough information to fully answer the question		
		6	Does the project contain some unique and innovative elements of involvement of end users?	no	if yes, it is important to point out the possible innovative elements.	-		
		7	Is it possible to directly engage with the projects' end-users?	no	if yes, this will allow us to gain insight in the end users' perspective on the project	-		
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	The competition among end users is an interesting strategy		
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Office employees are the end users involved in the project	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	The presence of such actors may be useful to test their mutual interactions, especially with the customers.			
		11	What kind of tools and technologies are used in the project?	yes	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.			
	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	End users can be characterized as C2 (customers)		
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	The results of the competition among employees are worth to be analyzed more in detail		
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	-		
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.			
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	The validity of the obtained results can be extended to offices of different dimensions and located in different contexts		
		17	Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.			
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	if yes, are they an important part of the project?			
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	Some best practices can be derived and pointed out.			
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no	if yes, actions should be immediately taken to bring it on board of S3C				

		Name of the project:		DESI			
		Source from which it is extracted:		European project (http://www.desi-it2green.de/)			
		Leading organization:		Deutsche Telekom AG			
		Country involved:		Germany			
STEP 1		QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?		yes	The website is in German and no contacts have been found so far		
	2	Does the project have the potential to involve end-user with a central role?		yes	In order to fully exploit the demand-response capabilities of the Telco network, end users' active participation is required.		
3	Does the project have some practical (field) applications?		yes	The unified control framework developed by DESI constitutes a practical application			
STEP 2		QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes	if yes, you can specify the begin and end dates.	The project was over in January 2013	
		2	Is the project still ongoing?	no	if yes, you can specify the begin date and the expected end date.	-	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	The involved country is Germany
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	DESI aims at introducing load-adaptive mode into Telco network operation.
	Availability of information	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	To provide an adequate answer to the question, it is necessary to directly contact the responsables of the project	
		6	Does the project contain some unique and innovative elements of involvement of end users?	no	if yes, it is important to point out the possible innovative elements.	-	
		7	Is it possible to directly engage with the projects' end-users?	no	if yes, this will allow us to gain insight in the end users' perspective on the project	-	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	The demonstration projects requires users' participation in order to be effective	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SM Es	Telco companies and their cliens are involved
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	The presence of such actors may be useful to test their mutual interactions, especially with the customers.		
		11	What kind of tools and technologies are used in the project?	yes	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	The unified control framework developed by DESI constitutes a practical application	
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	The role of the end users can be characterized as C1(consumers) and C2 (customers)
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	To provide an adequate answer to the question, it is necessary to directly contact the responsables of the project	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.		
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	Telco companies are used to deal with privacy and security issues	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	The project is replicable for Telco companies of different dimensions and located in different contexts	
		17	Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.		
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	if yes, are they an important part of the project?		
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	Some best practices can be derived and pointed out.		
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no	if yes, actions should be immediately taken to bring it on board of S3C			

Name of the project:		TotalFlex					
Source from which it is extracted:		European project (http://www.totalflex.dk/In%20English/)					
Leading organization:		Neogrid Technologies, Denmark					
Country involved:		Denmark					
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes		The responsables of the project have been contacted but no replies have been received from them so far. The only available source of information is the website but it is in Danish		
	2	Does the project have the potential to involve end-user with a central role?	yes		The aim of the project is to establish a flexible electricity grid that includes the entire food chain from production to end user and therefore the active participation of the latters is required		
	3	Does the project have some practical (field) applications?	yes		This aspects should be analyzed more in detail		
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes		if yes, you can specify the begin and end dates.	
		2	Is the project still ongoing?		no	if yes, you can specify the begin date and the expected end date.	The project started in January 2012 and i is expected to last until January 2015
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	Denmark is the only country involved
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	TotalFlex is a demonstration project that intelligently manages flexible consumption and production. This is done by flex-offers from a technical and commercial VPP, which are traded on a marketplace. Thereby the full flexibility is utilised in an optimum way, while power-balance-ability and network capacity is taken into account.
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	This question is not easy to answer based on the information available on the website
		6	Does the project contain some unique and innovative elements of involvement of end users?		no	if yes, it is important to point out the possible innovative elements.	-
		7	Is it possible to directly engage with the projects' end-users?		no	if yes, this will allow us to gain insight in the end users' perspective on the project.	-
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	End users participation is required in order to achieve flexibility in the energy demand
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Household users are involved in this project, as well as industrial and research partners
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?		no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	yes		Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	The end users in this project can be labeled as C1 (consumers) and C2 (customers)
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	The retrieved documentation shows that there are some aspects which requires further in-depth analysis
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?			if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
		Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.
	17		Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?		no	if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?		no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of S3C		

Name of the project:		IHSMAG				
Source from which it is extracted:		European project				
Leading organization:		Danish Building Research Institute, Aalborg University				
Country involved:		Denmark				
STEP 1	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?		yes	The responsible of the project have been contacted but no replies have been received from them so far.	
	2	Does the project have the potential to involve end-user with a central role?		yes	The integration of households in the smart grid is a goal of the project and it requires active participation of the end users	
3	Does the project have some practical (field) applications?		yes	The design criteria for household smart grid solutions and policy recommendations (which will be developed as one of the output of the project) represent some practical applications		
STEP 2	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?		no	If yes, you can specify the begin and end dates.
		2	Is the project still ongoing?		yes	If yes, you can specify the begin date and the expected end date.
		3	At which geographical location is the project situated?		-	you can specify the name of the countries involved in the project
		4	What is the overall project objective and underlying rationale?		-	you can add more details about the goal of the project
	Availability of information	5	Is there a clear link with the characterization structure?		yes	If yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.
		6	Does the project contain some unique and innovative elements of involvement of end users?		no	If yes, it is important to point out the possible innovative elements.
		7	Is it possible to directly engage with the projects' end-users?		no	If yes, this will allow us to gain insight in the end users' perspective on the project
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?		yes	If yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.
		9	Are the end-users which are involved in the project households and/or SMEs?		yes	you can specify if the involved end user are households and/or SMEs
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?		yes	The presence of such actors may be useful to test their mutual interactions, especially with the customers.
		11	What kind of tools and technologies are used in the project?		yes	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.
		12	How to characterize the typical role of the project's end-users?		-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?		yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?		yes	If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.
	Privacy and security	15	Does the project deal with privacy and security issues?		yes	If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.
	Scalability and replicability	16	Is the project scalable on different dimensions?		yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.
		17	Is the project replicable in different contexts?		yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?		yes	If yes, are they an important part of the project?
		19	Can we learn from the dissemination actions carried out during the projects, if any?		yes	Some best practices can be derived and pointed out.
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	If yes, actions should be immediately taken to bring it on board of S3C	

		Name of the project:		Green eMotion			
		Source from which it is extracted:		European project (http://www.greenemotion-project.eu/)			
		Leading organization:		Siemens AG			
		Country involved:		43 partners from different countries in Europe			
STEP 1	QUESTION	ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	RSE is one of the partners of the Green eMotion project			
	2	Does the project have the potential to involve end-user with a central role?	yes	Some of the goals of the projects involve end users			
	3	Does the project have some practical (field) applications?	yes	Some interesting lessons may come out in the following stages of the project			
STEP 2	QUESTION	ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS		
	General information	1	Is the project finished?	no	if yes, you can specify the begin and end dates.		
		2	Is the project still ongoing?	yes	if yes, you can specify the begin date and the expected end date.	The begin date is January 2012 and the expected end date is January 2015	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	The country involved 43 European countries
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	One of the aims of the projects is to create a virtual marketplace to enable the different actors to interact and to allow for new high value transportation services as well as EV-user convenience in billing
	Availability of information	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.		
		6	Does the project contain some unique and innovative elements of involvement of end users?	no	if yes, it is important to point out the possible innovative elements.	The projects is still ongoing and the results obtained so far are not oriented to end-users	
		7	Is it possible to directly engage with the projects' end-users?	no	if yes, this will allow us to gain insight in the end users' perspective on the project		
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.		
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Industries, utilities, EV manufacturers, municipalities, University and research institutions are involved in the project
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.		
		11	What kind of tools and technologies are used in the project?	yes	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.		
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	The end users in this project can be labeled as C2 (customers) and C3 (citizens)
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	There are no results available as the project is still ongoing; some interesting lessons may come out in the following stages of the project	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.		
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.		
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.		
		17	Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.		
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	if yes, are they an important part of the project?		
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	Some best practices can be derived and pointed out.		
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no	if yes, actions should be immediately taken to bring it on board of S3C			

Name of the project:		PRIME				
Source from which it is extracted:		European project (http://www.enel.com/it-it/innovation/smart_grids/electric_vehicles/prime/)				
Leading organization:		Enel Ingegneria Innovazione S.p.A				
Country involved:		Italy				
STEP 1	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?		yes	All the information contained in the public websites are not enough but no replies have been received from the responsables of the project so far	
	2	Does the project have the potential to involve end-user with a central role?		yes	Among the many activities of the project, it is included a study of the behaviour of customers who choose the electric car and the quantification of the benefits deriving from green mobility	
3	Does the project have some practical (field) applications?		yes	Some best practices may be identified by the study of customers' behaviour		
STEP 2	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?		no	If yes, you can specify the begin and end dates.
		2	Is the project still ongoing?		yes	If yes, you can specify the begin date and the expected end date.
		3	At which geographical location is the project situated?		-	you can specify the name of the countries involved in the project
		4	What is the overall project objective and underlying rationale?		-	you can add more details about the goal of the project
	Availability of information	5	Is there a clear link with the characterization structure?		yes	If yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.
		6	Does the project contain some unique and innovative elements of involvement of end users?		no	If yes, it is important to point out the possible innovative elements.
		7	Is it possible to directly engage with the projects' end-users?		no	If yes, this will allow us to gain insight in the end users' perspective on the project
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?			If yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.
		9	Are the end-users which are involved in the project households and/or SMEs?		-	you can specify if the involved end user are households and/or SMEs
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?		no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.
		11	What kind of tools and technologies are used in the project?		yes	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.
		12	How to characterize the typical role of the project's end-users?		-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?		yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?		yes	If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.
	Privacy and security	15	Does the project deal with privacy and security issues?		yes	If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.
	Scalability and replicability	16	Is the project scalable on different dimensions?		yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.
		17	Is the project replicable in different contexts?		yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?		yes	If yes, are they an important part of the project?
		19	Can we learn from the dissemination actions carried out during the projects, if any?		yes	Some best practices can be derived and pointed out.
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	If yes, actions should be immediately taken to bring it on board of S3C	

		Name of the project:		MODELEC				
		Source from which it is extracted:		European project				
		Leading organization:		Direct Energie				
		Country involved:						
STEP 1		QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?		yes	The responsible of the project (Antonin Coliche Antonin.Coliche@direct-energie.com) has been contacted but no reply has been received so far			
	2	Does the project have the potential to involve end-user with a central role?		yes	The project will test the economic model and the social acceptance of active demand response and energy management systems in 1000 households			
3	Does the project have some practical (field) applications?		yes	Some interesting lessons may come out in the following stages of the project				
STEP 2		QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS		
	General information	1	Is the project finished?	yes	If yes, you can specify the begin and end dates.	The project was over in summer 2013		
		2	Is the project still ongoing?	no	If yes, you can specify the begin date and the expected end date.	-		
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	-	
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	-	
	Availability of information	5	Is there a clear link with the characterization structure?	yes	If yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	-		
		6	Does the project contain some unique and innovative elements of involvement of end users?	no	If yes, it is important to point out the possible innovative elements.	-		
		7	Is it possible to directly engage with the projects' end-users?	no	If yes, this will allow us to gain insight in the end users' perspective on the project	-		
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	If yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.			
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs		
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.			
		11	What kind of tools and technologies are used in the project?	yes	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.			
	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen	C1 and C2		
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	Some best practices may be identified from the point of view of end users interaction in the following stages of the project		
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?		If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.			
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.			
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	The trial can be replicated in different cities of different dimensions		
		17	Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.			
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	no	If yes, are they an important part of the project?			
		19	Can we learn from the dissemination actions carried out during the projects, if any?	no	Some best practices can be derived and pointed out.			
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no	If yes, actions should be immediately taken to bring it on board of S3C				

Name of the project:		GREENLYS					
Source from which it is extracted:		European project					
Leading organization:		ERDF					
Country involved:		France					
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes		The responsible of the project (Matthieu Terenti matthieu.terenti@erdf-grdf.fr) has been contacted but no reply has been received so far		
	2	Does the project have the potential to involve end-user with a central role?	yes		The project will test active demand response, energy management, and distribution network management in 1000 households and 40 commercial sites in two different cities		
	3	Does the project have some practical (field) applications?	yes		Some lessons may be interesting for the purposes of S3C		
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	no	if yes, you can specify the begin and end dates.	-	
		2	Is the project still ongoing?	yes		If yes, you can specify the begin date and the expected end date.	The project will be over in 2014
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	France is the only country involved
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	GreenLys will test new systems combining DER, the Linky smart meter infrastructure, active demand response, energy management, and distribution network management in 1000 households and 40 commercial sites in Lyon and Grenoble.
	Availability of information	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.		The expected results of the project are: - DSO Operation & Maintenance cost reduction (k€) - Peak load reduction (MW) - Evaluation of social, environmental (CO2 reduction), economical benefits of Smart Grids - Evaluation of consumer response to information devices and innovative tariffs - Electricity consumption reduction (M Wh)
		6	Does the project contain some unique and innovative elements of involvement of end users?	no	if yes, it is important to point out the possible innovative elements.		
		7	Is it possible to directly engage with the projects' end-users?	no	if yes, this will allow us to gain insight in the end users' perspective on the project		
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.		
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	no		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	yes		Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C1, C2 and C3
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	no		if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no		if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:		MILLENER		
		Source from which it is extracted:		European project		
		Leading organization:		EDF SEI		
		Country involved:		France		
STEP 1		QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	The responsible of the project (Jean-Christian Marcel jc.marcel@tenesol.com) has been contacted but no reply has been received so far		
	2	Does the project have the potential to involve end-user with a central role?	yes	The project deploys energy storage systems linked to photovoltaic and active demand response systems in 1000 households		
3	Does the project have some practical (field) applications?	yes	The end users' response is interesting for S3C, as well as the best and bad practices			
STEP 2		QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	no	if yes, you can specify the begin and end dates.	-
		2	Is the project still ongoing?	yes	if yes, you can specify the begin date and the expected end date.	The project will be over in 2015
		3	At which geographical location is the project situated?	-	you can specify the name of the countries involved in the project	Corsica, Guadeloupe and Réunion islands are the territories involved in the project
		4	What is the overall project objective and underlying rationale?	-	you can add more details about the goal of the project	The project aims at reducing the CO2 emissions of the electricity mix of islands by improving the insertion of intermittent DER on the distribution networks and the balance of demand and supply. The experimentation aims at increasing energy efficiency through the deployment in 1000 households of energy storage systems linked to photovoltaic and active demand response systems.
	Availability of information	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	no	if yes, it is important to point out the possible innovative elements.	
		7	Is it possible to directly engage with the projects' end-users?	no	if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	you can specify if the involved end user are households and/or SMEs	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	yes	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	
		12	How to characterize the typical role of the project's end-users?	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	no	if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no	if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:	LINKY - Smart metering technology and potentials of advanced metering infrastructures regarding energy savings and energy efficiency			
		Source from which it is extracted:	Project description: http://www.erdfdistribution.fr/EN_Linky			
		Leading organization:	ERDF -Electricité Réseau Distribution France			
		Country involved:	France			
STEP 1	QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	To be better checked, but a quite a lot of data look to be available		
	2	Does the project have the potential to involve end-user with a central role?	yes	The project deals with a field test in view of the installation of 35 millions automatic electricity meters all over France		
	3	Does the project have some practical (field) applications?	yes	The results of the field tests showed the technical and economical feasibility of the forecast bulk diffusion of the automatic meters		
STEP 2	QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	no	If yes, you can specify the begin and end dates. 20 to 2011	
		2	Is the project still ongoing?	yes	If yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	you can specify the name of the countries involved in the project	The project considers field tests in France (Lyon and Indre-et-Loire)
		4	What is the overall project objective and underlying rationale?	-	you can add more details about the goal of the project	Final programme for the installation of about 250.000 communication meters (termed LINKY) in an urban area (Lyon) and a rural area (Indre-et-Loire). The objective of the program was: - to verify the process of a massive installation of the meters (35 millions forecast) - to build and to put into operation the related information system in view of its extension to France. - to endorse the economic assumptions for the project
	Availability of information	5	Is there a clear link with the characterization structure?	yes	If yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	The objective is very pragmatic: assessment of real costs and benefits against the assumed ones. First prodromal step in view of a bulk diffusion. ERDF expects a return on the investments over 20 years
		6	Does the project contain some unique and innovative elements of involvement of end users?	no	If yes, it is important to point out the possible innovative elements.	To be checked: the project is closed, but some more definite information directly gathered from the customers are very likely to be owned by the project leaders
		7	Is it possible to directly engage with the projects' end-users?	no	If yes, this will allow us to gain insight in the end users' perspective on the project	The project seems to focus first of all producers and suppliers, but obvious consequences have to be forecast for the end-users
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	If yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	producers, DSO, TSO and suppliers
		9	Are the end-users which are involved in the project households and/or SMEs?	-	you can specify if the involved end user are households and/or SMEs	Communicating meters
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	C1
		11	What kind of tools and technologies are used in the project?	yes	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	The tests brought a sufficient amount of information to ERDF to convince them that the installation of communicating meters over 35 millions user is feasible, useful and economically advantageous, provided that an endorsement is given by the competent public Authorities: some issues must be clarified: - Financing: Cost/benefit effectiveness of the whole project - - Price for the consumer – will the consumer have to pay more with a Linky? The forecast cost of the new meter for the consumer is about 12 € per month - Robustness and confidentiality issues of the meter
		12	How to characterize the typical role of the project's end-users?	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen	C1 and C2
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	Information of the electricity consumes on the single end-user are normally tied to privacy requirements and this may prevent for more focused analyses
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	The project is based on the results of two specific field tests, but its primary goal is just to end it to the whole French context
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	Similar field tests could be organised in zones with greater intensity of industries
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	A wide dissemination action was undertaken by ERDF once the project was accomplished.
		17	Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	The project really showed successful stories. These information can be usefully exploited in SSC studies, though the end-user category is not focused.
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	no	If yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no	If yes, actions should be immediately taken to bring it onboard of SSC		

Name of the project:	Smart Metering - Smart metering technology and potentials of advanced metering infrastructures regarding energy savings and energy efficiency
Source from which it is extracted:	- Project description: C. Schäfer: "Smart Metering aus F&E-Sicht: Die energiepolitischen Ziele im Praxistest", Documet Control sheet - C. Schäfer et al.: "Smart metering pilot study with 345 customers of German municipal utility group MW Energy", Intl. Conf. Sustainable Consumption Towards Action and Impact - 2011 - Hamburg
Leading organization	Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V., München
Country involved	Germany

		QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS
STEP 1	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	To be better checked, but a quite a lot of data look to be available	
	2	Does the project have the potential to involve end-user with a central role?	yes	The project deals with the impact of smart meters on the users' behaviour	
	3	Does the project have some practical (field) applications?	yes	Two scientifically supported field tests were performed and the results can be used as "memento" on success and failure aspects involved by this technology	

		QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS		
STEP 2	General information	1	Is the project finished?	no	if yes, you can specify the begin and end dates.	2007/2011	
		2	Is the project still ongoing?	yes	if yes, you can specify the begin date and the expected end date.		
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	The project considers field tests in Germany (among the other, Mannheim, Offenbach and Kiel)
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	Research of existing and future technology options and potential of intelligent counting, measuring and communication systems for energy saving and efficiency improvement. - After identifying suitable metering technology, development of two metering field trials and comparisons with international studies. - Analysis of customer feedback in order to identify the acceptance and the benefit of smart metering devices.
	Availability of information	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	The not enthusiastic final results on the two field tests showed some weakness aspects of the approach	
		6	Does the project contain some unique and innovative elements of involvement of end users?	no	if yes, it is important to point out the possible innovative elements.	To be checked: the project is closed, but some more detailed information directly gathered from the customers is very likely to be owned by the project leaders	
		7	Is it possible to directly engage with the projects' end-users?	no	if yes, this will allow us to gain insight in the end users' perspective on the project	In a first phase, a web portal was set up providing information about household consumption of electricity, water, gas and district heating. In a second phase, six months later, the customers (very likely by means of the web portal) were enabled to gather the market information in order to choose the more suitable tariff!	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.		
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Smart meters, energy monitoring systems
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	no	no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	C2
		11	What kind of tools and technologies are used in the project?	yes	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	The test persons were not satisfied with the amount of energy savings potentials. The analysis of the barriers led to two important reasons for a low perception of energy saving capabilities. First, the customers stated that they had already implemented energy saving behavioral patterns and there was not much left to do. The second reason for refraining from additional energy saving efforts is that these would be too expensive.	
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	The irrational and emotional aspects of the consumer's behaviour may deserve to be better analysed
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	Information of the electricity consumer on the single end-user are normally tied to privacy requirements and this may prevent for more focused analyses
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	yes	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	The project is based on the results of two specific field tests, which depend on the particular social and economical framework of the considered context. Scalability should then be tested carefully
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	yes	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	See the above remark
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	The contract was supported by the German Federal Ministry of Economy and Technology, who of course is interested in the results in the more general context of energy governance. Diffusion of the results was undertaken both locally and internationally. Reactions and feedbacks need still to be examined
		17	Is the project replicable in different contexts?	yes	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	The project really showed unsuccessful stories. Nevertheless, the reasons behind failure were focused and these information can be usefully exploited in SSC studies
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	no	no	if yes, are they an important part of the project?	The project reference person looked very keen to exchange information. An external involvement can benefit all parties.
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	yes	Some best practices can be derived and pointed out.	
	Active participation	20	Has the project shown a concrete willingness for an active partnership?	no	no	if yes, actions should be immediately taken to bring it on board of SSC	

Name of the project:		NOBEL				
Source from which it is extracted:		http://cordis.europa.eu/search/index.cfm?fuseaction=proj.document&PJ_RCN=11209123				
Leading organization:		ETRA INVESTIGACION Y DESARROLLO SA				
Country involved:		Spain, Sweden, Germany, Greece				
STEP 1	QUESTION	ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	Yes	The project deliverables are available for download at http://web.ict-nobel.eu:91/download/deliverables (not accessible at the moment) and at http://cordis.europa.eu/search/index.cfm?fuseaction=proj.document&PJ_RCN=11209123 . So it can be considered at least as a passive candidate based on this criteria. As the project is already concluded it may not be possible to engage as active pilot but further contacts should be made.		
	2	Does the project have the potential to involve end-user with a central role?	Yes	Although it is quite a technical project, some of the main goals are: Neighborhood Oriented Energy Monitoring and Control platform; A Neighborhood Oriented Public Lighting Monitoring and Control platform; A citizen platform to obtain real-time information and participate in the brokerage of electricity. NOBEL aims to build an energy brokerage system with which individual energy consumers can communicate their energy needs directly with both large-scale and small-scale energy producers, thereby making energy use more efficient.		
3	Does the project have some practical (field) applications?	Yes	NOBEL has a field test to validate the technical solutions in real world and gather information from the end users.			
STEP 2	QUESTION	ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS	
	General information	1	Is the project finished?	YES	if yes, you can specify the begin and end dates.	Start date: 2010.02.01 End date: 2012-12-31
		2	Is the project still ongoing?	no	if yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?		you can specify the name of the countries involved in the project	Pilots in Alginet (Spain)
		4	What is the overall project objective and underlying rationale?		you can add more details about the goal of the project	To demonstrate the effectiveness and energy efficiency outcomes of a proposed brokerage system involving end users (prosumers)
	Availability of information	5	Is there a clear link with the characterization structure?		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	if yes, it is important to point out the possible innovative elements.	Access to a communication platform connecting prosumers and DSO to a brokerage software for neighborhood monitoring and control system to improve the EE of users and public applications
		7	Is it possible to directly engage with the projects' end-users?	no	if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	Direct participation to the efficiency brokerage system using the communication system and local monitoring devices
		9	Are the end-users which are involved in the project households and/or SMEs?	yes	you can specify if the involved end user are households and/or SMEs	Both
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	Local DSO
		11	What kind of tools and technologies are used in the project?		Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays	Communication platforms based on IPv6 technology and brokerage software
	12	How to characterize the typical role of the project's end-users?		The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C1 and C3	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	Detailed evaluation of success indicators available
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	Yes	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	Related to the gathering of data and evaluation of indicators
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	Although it has been designed for neighborhood applications
		17	Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	if yes, are they an important part of the project?	Regional Workshop during the project
		19	Can we learn from the dissemination actions carried out during the projects, if any?	no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no	if yes, actions should be immediately taken to bring it on board of SSC	not applicable as already completed	

Name of the project:		Energy Demand Research Project					
Source from which it is extracted:		http://www.ofgem.gov.uk/Sustainability/EDRP/Pages/EDRP.aspx					
Leading organization:		AECOM					
Country involved:		UK					
STEP 1	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes		Results of all trials and reports are available at the website above. The project is already concluded. Need to contact manager in order to know about possibilities to re-activate a pilot/trial.		
	2	Does the project have the potential to involve end-user with a central role?	yes		The Energy Demand Research Project (EDRP) was a major and unique suite of trials carried out in Great Britain. They investigated over 60 000 households' responses to improved feedback on their energy use. It was a government initiative test responses to feedback on energy use and smart metering.		
	3	Does the project have some practical (field) applications?	yes		The consumer insights gathered during the project are important to determine the impact of different energy management tools in energy consumption, consumer preferences regarding some technologies vs others, what tools are best used/understood by the costumers.		
STEP 2	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS		
	General information	1	Is the project finished?	yes	If yes, you can specify the begin and end dates.	July 2007 - Dec 2010	
		2	Is the project still ongoing?	no	If yes, you can specify the begin date and the expected end date.		
		3	At which geographical location is the project situated?	-	-	You can specify the name of the countries involved in the project.	Different regions of Great Britain
		4	What is the overall project objective and underlying rationale?	-	-	You can add more details about the goal of the project.	The project was designed to help understand better how domestic consumers react to improved information about their energy consumption over the long term. This included investigating the impact of measures to reduce energy consumption and, in some cases, to shift energy demand from periods of peak demand.
	Availability of information	5	Is there a clear link with the characterization structure?			If yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes		If yes, it is important to point out the possible innovative elements.	The involvement of the end users was based on a methodological approach separately concerning different (technological and non technological) wide spectrum aspects: Energy efficiency advice; Historic energy consumption information; Benchmarking of the customer's consumption against the consumption of comparable households; Customer engagement using targets (commitment to reduce consumption); Smart electricity and gas meters; Real-time display (RTD) devices that show energy use (including audible usage reduction alarms); Control of heating and hot water integrated with RTD; Financial incentives (including variable tariffs) to either reduce consumption or shift energy demand from periods of peak demand; Other digital media for delivering information (web, TV).
		7	Is it possible to directly engage with the projects' end-users?		no	If yes, this will allow us to gain insight in the end users' perspective on the project.	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		If yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	Wide spectrum strategies (technological and non technological) were implemented and assessed
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	You can specify if the involved end user are households and/or SMEs.	Households
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	DSOs managed the trials
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	Smart meters, Real-Time Display devices, heating control
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C1
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	Very detailed, systematic and explicit assessments and reasons are available. Also interesting the constant reference to Literature findings.
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?			If, for example, something went wrong but there is a suspicion that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?		no	If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	Not really
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?			If yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?			Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	If yes, actions should be immediately taken to bring it on board of S3C.		

Name of the project:		Ashton Hayes Smart Village				
Source from which it is extracted:		http://www.spenergynetworks.com/innovation/ashton_hayes.asp?NavID=3&SubNavID=1				
Leading organization:		SP Energy Networks				
Country involved:		UK				
STEP 1	QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	All information can be found on the project's website and Scottish Power distribution's website. Project is already concluded. Need to contact manager in order to know about possibility to re-activate.		
	2	Does the project have the potential to involve end-user with a central role?	yes	The projects aims at creating a neutral carbon village involving the community of Ashton Hayes. Three surveys have been carried out since the launch in 2006 and these reveal that the community has managed to cut its carbon emissions by 23% through behavioural changes such as switching off appliances and changing to low energy light light bulbs. Some people have cut the costs of their energy bills 50% by focusing on improved insulation and careful energy.		
3	Does the project have some practical (field) applications?	yes	Photo-Voltaic generation, Heat Pumps and Electric Vehicles.			
STEP 2	QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS		
	General information	1	Is the project finished?	no <small>if yes, you can specify the begin and end dates.</small>	2011-2013	
		2	Is the project still ongoing?	yes <small>if yes, you can specify the begin date and the expected end date.</small>		
		3	At which geographical location is the project situated?	-	<small>you can specify the name of the countries involved in the project</small>	Ashton Hayes is an award winning village in rural Cheshire with ambition to become the UK's first carbon neutral village.
		4	What is the overall project objective and underlying rationale?	-	<small>you can add more details about the goal of the project</small>	install advanced monitoring equipment on the low voltage electrical network that supports Ashton Hayes; providing the village community with accurate measurements of their total electrical consumption in close to real time, provision of information and
	Availability of information	5	Is there a clear link with the characterization structure?		<small>if yes, how many cases can be covered? All the provided details will be useful in the next stages of the analysis.</small>	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	<small>if yes, it is important to point out the possible innovation elements.</small>	to trial emerging technologies and innovative customer arrangements helping the village becoming carbon neutral
		7	Is it possible to directly engage with the projects' end-users?	yes	<small>if yes, it will allow us to gain insight in the end users' perspective on the project</small>	presumably the Community could be in principle favourable to implementation of innovative low carbon strategies
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	no	<small>if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.</small>	Asht on Hayes is a Community of about 1000 people already motivated to carbon saving strategies
		9	Are the end-users which are involved in the project households and/or SMEs?	-	<small>you can specify if the involved end user are households and/or SMEs</small>	Both households and SMEs
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	<small>The presence of such actors may be useful to test their mutual interactions, especially with the customers.</small>	Scottish Power distribution
		11	What kind of tools and technologies are used in the project?	-	<small>Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.</small>	photo-voltaic generation schemes and community electric vehicle
		12	How to characterize the typical role of the project's end-users?	-	<small>The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.</small>	C1, C2 and C3
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	<small>This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.</small>	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	<small>if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.</small>	
	Privacy and security	15	Does the project deal with privacy and security issues?	no	<small>if yes, are they sufficiently examined and tested? These issues cannot be neglected and adequate measures should be taken to face them in every project.</small>	
	Scalability and replicability	16	Is the project scalable on different dimensions?	no	<small>This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.</small>	
		17	Is the project replicable in different contexts?	yes	<small>The answer to this question can be derived using the information on how many countries and which kind of customers are involved.</small>	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?		<small>if yes, are they an important part of the project?</small>	
		19	Can we learn from the dissemination actions carried out during the projects, if any?		<small>Some best practices can be derived and pointed out.</small>	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no	<small>if yes, actions should be immediately taken to bring it onboard of S3C</small>	not yet. The Scottish Power project ends on Dec 2013, but the village will remain	

		Name of the project:		Sala-Heby Energi: Effekttariff				
		Source from which it is extracted:		www.sheab.se				
		Leading organization		Sala-Heby Energi				
		Country involved		Sweden				
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS		NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	no				
	2	Does the project have the potential to involve end-user with a central role?	yes	no				
	3	Does the project have some practical (field) applications?	yes	no				
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS		NOTES/COMMENTS	
	General information	1	Is the project finished?		no	if yes, you can specify the begin and end dates.		
		2	Is the project still ongoing?	yes		if yes, you can specify the begin date and the expected end date.		
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	Sweden	
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	To cut the peaks in power demand.	
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.		
		6	Does the project contain some unique and innovative elements of involvement of end users?		no	if yes, it is important to point out the possible innovative elements.		
		7	Is it possible to directly engage with the projects' end-users?		no	if yes, this will allow us to gain insight in the end users' perspective on the project	Probably not	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.		
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	households	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	DSO/TSO	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	Power based tariff	
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1- Consumer; C2- Customer; C3- Citizen.	C1- consumer	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.		
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.		
	Privacy and security	15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	They should, according to Swedish legislation	
	Scalability and	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.		
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.		
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?		no	if yes, are they an important part of the project?	Only very short information to the customers about the new tariff	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out.		
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of SSC			

		Name of the project: Smart elnät i stadsmiljö i Norra djurgårdstaden					
		Source from which it is extracted: Report: Stockholm Royal Seaport – Urban Smart Grid: Pre-Study (http://www.energimyndigheten.se/Global/Forskning/Kraft/NDS%20f%20public.pdf) www.abb.se/cawp/db0003db002698/a536536ace9337fbc12578fb00419430.aspx					
		Leading organization: Fortum, ABB, KTH					
		Country involved: Sweden					
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes				
	2	Does the project have the potential to involve end-user with a central role?	yes				
	3	Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?		no	If yes, you can specify the begin and end dates.	
		2	Is the project still ongoing?	yes		If yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	-	You can specify the name of the countries involved in the project	Stockholm, Sweden
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	Create a sustainable city district, 30 % locally produced renewable electricity
	Availability of information	5	Is there a clear link with the characterization structure?	yes		If yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes		If yes, it is important to point out the possible innovative elements.	
		7	Is it possible to directly engage with the projects' end-users?		no	If yes, this will allow us to gain insight in the end users' perspective on the project	Probably not
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		If yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	initiatives to
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	households
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	DSO, TSO, industry, academia
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	Visualisation of energy use etc.
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C1- consumer and C2- customer
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?		no	If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	Not explicitly
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		If yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	If yes, actions should be immediately taken to bring it on board of SSC		

Name of the project:		Consumer reactions to peak prices					
Source from which it is extracted:		Demonstrationsprojekt: Effektstyrning på användarsidan vid effektbristsituationer					
Leading organization							
Country involved		Sweden					
STEP 1		QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?		yes			
	2	Does the project have the potential to involve end-user with a central role?		yes			
	3	Does the project have some practical (field) applications?		yes			
STEP 2		QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes	if yes, you can specify the begin and end dates.	Winter 2003/2004 and 2004/2005	
		2	Is the project still ongoing?		no	if yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	Sweden
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	To test the price sensitivity of customers having electric heating.
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	A few
		6	Does the project contain some unique and innovative elements of involvement of end users?		no	if yes, it is important to point out the possible innovative elements.	
		7	Is it possible to directly engage with the projects' end-users?		no	if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Households
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1- Consumer; C2- Customer; C3- Citizen.	C1- Consumer
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?		no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?		no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?		no	if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?		no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of S3C		

Name of the project:		To follow the electricity price: Indirect control					
Source from which it is extracted:		Att följa elpriset bättre: Prismodeller och styrteknik i fältförsök. Elforsk rapport 09:70, Jul					
Leading organization							
Country involved		Sweden					
STEP 1	QUESTION	ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes				
	2	Does the project have the potential to involve end-user with a central role?	yes				
3	Does the project have some practical (field) applications?	yes					
STEP 2	QUESTION	ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS		
	General information	1	Is the project finished?	yes	if yes, you can specify the begin and end dates.	2007-2009	
		2	Is the project still ongoing?	no	if yes, you can specify the begin date and the expected end date.		
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project.	Sweden. Gothenburg
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	To investigate the possibilities of indirect control, i.e. the customer themselves change their consumption according to a price signal.
	Availability of information	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.		
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	if yes, it is important to point out the possible innovative elements.	The usage of an innovative tariff, "Fixed price with a right of return": A predefined volume of energy at a fixed price, and where the variations around this volume are bought (and sold) by the end user at spot prices.	
		7	Is it possible to directly engage with the projects' end-users?	no	if yes, this will allow us to gain insight in the end users' perspective on the project		
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.		
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Households
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	The presence of such actors may be useful to test their mutual interactions, especially with the customers.		
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	Web based feedback system
	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C1- Consumer	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.		
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.		
	Privacy and security	15	Does the project deal with privacy and security issues?	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.		
	Scalability and	16	Is the project scalable on different dimensions?	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.		
		17	Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.		
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	no	if yes, are they an important part of the project?		
		19	Can we learn from the dissemination actions carried out during the projects, if any?	no	Some best practices can be derived and pointed out.		
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no	if yes, actions should be immediately taken to bring it on board of S3C			

Name of the project:		Smart control of heat pumps				
Source from which it is extracted:		Pilotstudie i Vallentuna - Reflektioner rörande affärsmodeller för förbrukarflexibilitet och				
Leading organization:		Ngenic				
Country involved:		Sweden				
STEP 1	QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes			
	2	Does the project have the potential to involve end-user with a central role?	yes			
	3	Does the project have some practical (field) applications?	yes			
STEP 2	QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes	if yes, you can specify the begin and end dates.	2012-2013
		2	Is the project still ongoing?	no	if yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	you can specify the name of the countries involved in the project	sweden
		4	What is the overall project objective and underlying rationale?	-	you can add more details about the goal of the project	Develop innovative business models for energy services for heat pumps. To test new algorithms for controlling heat pump operation.
	Availability of information	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	no	if yes, it is important to point out the possible innovative elements.	
		7	Is it possible to directly engage with the projects' end-users?	no	if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	you can specify if the involved end user are households and/or SMEs	Households
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	Automatic control systems, feedback systems.
	12	How to characterize the typical role of the project's end-users?	-	The answer can be chosen among the following options: C1- Consumer; C2 - Customer; C3 - Citizen.	C1- Consumer	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and	16	Is the project scalable on different dimensions?	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	no	if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no	if yes, actions should be immediately taken to bring it on board of SSC		

		Name of the project:		Smarta nät för ett hållbart energisystem i Hyllie				
		Source from which it is extracted:		www.hyllie.com				
		Leading organization:		E.On, Siemens, Malmö stad, VA syd				
		Country involved:		Sweden				
STEP 1	QUESTION		ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes					
	2	Does the project have the potential to involve end-user with a central role?	yes					
	3	Does the project have some practical (field) applications?	yes			There are at least 5 pilots, of which one is called "Thinking Energy". Universities connected to these field trials are Chalmers and LTH.		
STEP 2	QUESTION		ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS		
	General information	1	Is the project finished?	no	if yes, you can specify the begin and end dates.			
		2	Is the project still ongoing?	yes	if yes, you can specify the begin date and the expected end date.		2011-2014	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project		A part of the city of Malmö, Sweden
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project		Target: 100 % renewable energy (or "recycled" energy) by 2020. The first phase of the project focuses on the role of consumers, property and infrastructure in the future energy system. Another work package develops future market models.
	Availability of information	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.			
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	if yes, it is important to point out the possible innovative elements.		Large test arena for the future smart city.	
		7	Is it possible to directly engage with the projects' end-users?	no	if yes, this will allow us to gain insight in the end users' perspective on the project			
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out such strategies such as demand response measures, co-creation, reduction awareness initiatives.			
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs		Both
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	The presence of such actors may be useful to test their mutual interactions, especially with the customers.			
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.		HEM-system, visualizations for web/app/display, small-scale production in the household
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.		C1 - consumer
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.			
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.			
	Privacy and security	15	Does the project deal with privacy and security issues?	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.			
		16	Is the project scalable on different dimensions?	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.			
	Scalability and	17	Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.			
		18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	if yes, are they an important part of the project?			
	Dissemination	19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	Some best practices can be derived and pointed out.			
20		Has the project shown a concrete willingness for an active partnership?	no	if yes, actions should be immediately taken to bring it onboard of S3C				

		Name of the project:		Smart Grid Gotland						
		Source from which it is extracted:		www.smartgridgotland.com						
		Leading organization								
		Country involved		Sweden						
STEP 1		QUESTION		ANSWER		ADDITIONAL DETAILS		NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?		yes						
	2	Does the project have the potential to involve end-user with a central role?		yes						
	3	Does the project have some practical (field) applications?		yes						
STEP 2		QUESTION		ANSWER		ADDITIONAL DETAILS		NOTES/COMMENTS		
	General information	1	Is the project finished?		no		if yes, you can specify the begin and end dates.			
		2	Is the project still ongoing?		yes		if yes, you can specify the begin date and the expected end date.		September 2012 - December 2015	
		3	At which geographical location is the project situated?		-		you can specify the name of the countries involved in the project		The island of Gotland, Sweden	
		4	What is the overall project objective and underlying rationale?		-		you can add more details about the goal of the project		The main task for the project is to develop the grid to enable a larger share of wind power in the system	
	Availability of information	5	Is there a clear link with the characterization structure?		yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.			
		6	Does the project contain some unique and innovative elements of involvement of end users?		yes		if yes, it is important to point out the possible innovative elements.		The project will include a field trial with electricity prices depending on the current wind power production (autumn 2013)	
		7	Is it possible to directly engage with the projects' end-users?		no		if yes, this will allow us to gain insight in the end users' perspective on the project		Maybe? Have to get in contact with the right person to know this	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?		yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.		Parts of the project will be directly aimed at end users and DSM	
		9	Are the end-users which are involved in the project households and/or SMEs?		-		you can specify if the involved end user are households and/or SMEs		Both: 2000 households and 20-30 companies	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?		yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.		DSO: GEAB	
		11	What kind of tools and technologies are used in the project?		-		Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.		Feedback systems, energy management systems, automatic control systems (SCADA)	
		12	How to characterize the typical role of the project's end-users?		-		The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.		C1 - consumer	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?		no		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.		There won't be any results from this project before S3C ends...	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?		no		If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.			
	Privacy and security	15	Does the project deal with privacy and security issues?		no		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.			
	Scalability and	16	Is the project scalable on different dimensions?		yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.			
		17	Is the project replicable in different contexts?		yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.			
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?		no		if yes, are they an important part of the project?			
		19	Can we learn from the dissemination actions carried out during the projects, if any?		yes		Some best practices can be derived and pointed out.			
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no		if yes, actions should be immediately taken to bring it onboard of S3C				

Name of the project:		FlexPower					
Source from which it is extracted:		FlexPower project description					
Leading organization:							
Country involved:		Denmark					
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes				
	2	Does the project have the potential to involve end-user with a central role?	yes				
	3	Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes		If yes, you can specify the begin and end dates.	June 2010- June 2013
		2	Is the project still ongoing?		no	If yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project.	Denmark
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	Challenge: Increasing share of wind power in the energy system. This project designs and tests a market using price signals to activate electricity demand and small-scale generation as regulating power. The principle idea is to expose end-users to five-minute prices and that it is voluntary for them to react.
	Availability of information	5	Is there a clear link with the characterization structure?	yes		If yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?		no	If yes, it is important to point out the possible innovative elements.	
		7	Is it possible to directly engage with the projects' end-users?		no	If yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		If yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs.	Not clear
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	?
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1- Consumer; C2 - Customer; C3 - Citizen.	C1- consumer
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?		no	If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		If yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	If yes, actions should be immediately taken to bring it on board of SSC		

		Name of the project:	UppSol 2020				
		Source from which it is extracted:	Private communication				
		Leading organization:	County Administrative Board in Uppsala County				
		Country involved:	Sweden (Uppsala region)				
STEP 1		QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes				
	2	Does the project have the potential to involve end-user with a central role?	yes				
	3	Does the project have some practical (field) applications?	yes				
STEP 2		QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?		no	<small>if yes, you can specify the begin and end dates.</small>	
		2	Is the project still ongoing?	yes		<small>if yes, you can specify the begin date and the expected end date.</small>	
		3	At which geographical location is the project situated?	-	-	<small>you can specify the name of the countries involved in the project</small>	Sweden (Uppsala region)
		4	What is the overall project objective and underlying rationale?	-	-	<small>you can add more details about the goal of the project</small>	To boost the development of solar power systems in the Uppsala region and to raise the energy awareness within the target group (property owners).
	Availability of information	5	Is there a clear link with the characterization structure?	yes		<small>if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.</small>	Information
		6	Does the project contain some unique and innovative elements of involvement of end users?		no	<small>if yes, it is important to point out the possible innovative elements.</small>	
		7	Is it possible to directly engage with the projects' end-users?	yes		<small>if yes, this will allow us to gain insight in the end users' perspective on the project</small>	Likely, but not sure. Will get in closer contact with the project managers in August.
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		<small>if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.</small>	awareness initiatives such as workshops, groups
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	<small>you can specify if the involved end user are households and/or SMEs</small>	property owners, which means households in form of housing associations, but also SMEs
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?		no	<small>The presence of such actors may be useful to test their mutual interactions, especially with the customers.</small>	
		11	What kind of tools and technologies are used in the project?	-	-	<small>Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.</small>	
		12	How to characterize the typical role of the project's end-users?	-	-	<small>The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.</small>	C3 - Citizen
	Potential for learnig	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		<small>This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.</small>	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		<small>If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.</small>	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	no	<small>if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.</small>	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		<small>This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.</small>	
		17	Is the project replicable in different contexts?	yes		<small>The answer to this question can be derived using the information on how many countries and which kind of customers are involved.</small>	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		<small>if yes, are they an important part of the project?</small>	yes
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes		<small>Some best practices can be derived and pointed out.</small>	
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	<small>if yes, actions should be immediately taken to bring it on board of S3C</small>	Contacts with the project management will be intensified in August.	

		Name of the project: Customer Led Network Revolution				
		Source from which it is extracted: http://www.networkrevolution.co.uk/ ; http://www.networkrevolution.co.uk/industryzone/projectlibrary				
		Leading organization: Northern Powergrid				
		Country involved: UK				
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	no	to be checked	
	2	Does the project have the potential to involve end-user with a central role?	yes		yes, the project will create smart-enabled homes to give customers more flexibility over the way they use and generate electricity	
	3	Does the project have some practical (field) applications?	yes		There will be a field trial engaging 14.000 customers in the North East and Yorkshire with smart meters	
				2.500 will be installing solar PV panels, heat pumps or provision for charging EV Up to May 2013: - 12.000 enroled (900 flexibility trials) - 400 heat pumps (18 innovative thermal store technology) - extra 150 EV charging points - begin of electrical energy storage - DSR trials (underway)		
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	
	General information	1	Is the project finished?		no	<small>If yes, you can specify the begin and end dates.</small>
		2	Is the project still ongoing?	yes		<small>If yes, you can specify the begin date and the expected end date.</small> Begin date: 2011 End date: till the end of 2013
		3	At which geographical location is the project situated?	-	-	<small>you can specify the name of the countries involved in the project</small> UK, mostly in the North East and Yorkshire
		4	What is the overall project objective and underlying rationale?	-	-	<small>you can add more details about the goal of the project</small> - trialing smart grid solutions on the distribution network as well as creating smart-enabled homes to give customers more flexibility over the way they use and generate electricity - generate knowledge on energy cost and carbon footprint reduction for consumers
	Availability of information	5	Is there a clear link with the characterization structure?	yes		<small>If yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.</small> Methods used: time dependent tariff (3 blocks/day + weekends), metering, control and local generation, EV charging, control system and smart appliances, storage (thermal & electrical), different kinds of feedback and information and the project involves residential consumers and other stakeholders.
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	no	<small>If yes, it is important to point out the possible innovative elements.</small> to be checked
		7	Is it possible to directly engage with the projects' end-users?	yes	no	<small>If yes, this will allow us to gain insight in the end users' perspective on the project</small> to be checked
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	no	<small>If yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.</small> to be checked
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	<small>you can specify if the involved end user are households and/or SMEs</small> Households and SMEs
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		<small>The presence of such actors may be useful to test their mutual interactions, especially with the customers.</small> - DSO (Northern Powergrid) - Gas & Electricity supplier (British Gas) - EA Technology - Research Institute (Durham Energy Institute)
		11	What kind of tools and technologies are used in the project?	-	-	<small>Some possible technologies might be, for example: smart meters, energy monitoring systems and consumption displays.</small> Smart meter + Home Energy Management System + Smart appliances (washing machine + Heat-pumps + EV) + PV production + electrical and thermal storage
		12	How to characterize the typical role of the project's end-users?	-	-	<small>The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.</small> C2 - Smart Customer
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	<small>This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.</small> to be checked
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	<small>If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.</small> to be checked
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	no	<small>If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.</small> to be checked
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	no	<small>This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.</small> to be checked
		17	Is the project replicable in different contexts?	yes	no	<small>The answer to this question can be derived using the information on how many countries and which kind of customers are involved.</small> to be checked
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	<small>If yes, are they an important part of the project?</small> to be checked
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	<small>Some best practices can be derived and pointed out.</small> to be checked
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	<small>If yes, actions should be immediately taken to bring it on board of SSC</small> No, project finalized early 2014	

Name of the project:		EU-DEEP						
Source from which it is extracted:		http://www.eu-deep.com/						
Leading organization:		GDF-Suez, Research & Innovation						
Country involved:		Greece, Germany, France and UK						
STEP 1	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS			
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	no	To be checked			
	2	Does the project have the potential to involve end-user with a central role?	yes					
3	Does the project have some practical (field) applications?	yes		the project has 5 technical tests.	1)integration of a composite CHP system for market interaction 2)integration of composite tri-generation system for market interaction 3)technical feasibility of aggregating 10 kW to 1.5 MW scale DER in the UK commercial market segments 4)technical feasibility of aggregating Micro-CHPs in the German residential sector 5)technical feasibility of a decentralized control architecture for aggregation of load and generation			
STEP 2	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS			
	General information	1	Is the project finished?	yes	if yes, you can specify the begin and end dates.	2006-2008	Field test timing: 1)2006-2008 2)2008 3)2007-2008 4)Feb 2008- Jan 2009 5)Feb 2008 - Dec 2008	
		2	Is the project still ongoing?		no	if yes, you can specify the begin date and the expected end date.		
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project.	Single site tests: 1)Grenoble, France 2)Athens, Greece Aggregation tests: 3)UK 4)Berlin, Germany 5)Greece	
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project.	Identify the current hosting capacity of the electrical power systems and the conditions that will enable this to be increased at an acceptable cost. An in-depth economic analyses of DER	
	Availability of information	5	Is there a clear link with the characterization structure?	yes	no	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	Methods used: Local generation (CHP, wind), aggregator, control systems. Different kinds of information and the project involved households, SMEs and other stakeholders (see question 10)	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	no	if yes, it is important to point out the possible innovative elements.	To be checked	
		7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight in the end users' perspectives on the project.	To be checked	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction/awareness initiatives.	To be checked	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Households and SMEs	Schools, Shopping malls, hospitals, etc.
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	Utilities: GASAG, RWE Energy, Tractebel, GDF Suez, Iberdrola, EPA Attiki, Electricity Authority of Cyprus, Latvenergo Manufacturers: MTU CFC, Siemens, Bowman Power Systems, SAFT, Anco, Helel, TEDOM Research centers: Imperial College, KULeuven, Laborelec, SEAS, CENTER, Labelin, IIE-UPV, AUTH, CRES, ICCS/NTUA, FIT, Tubitak, VEIKI, RTU, VTT, Enearesearch, Lund University, STRI Professionals: Axiom, EMPROM, Technofi, Transenergie, EnergoProjekt National Agencies: RAE, KAPE	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	-DG (CHP, Microturbine, Li-Ion batteries, Wind, Micro-CHP, Heat-pump, PV, chiller, diesel engines) -Controller(DER, local & remote, multi-agent) -centralized control software (Siemens DEMS) -Communications (GPRS)	
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer C2 - Customer C3 - Citizen	C2 - Smart Customer	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	To be checked	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	To be checked	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	To be checked	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because it let us check, for example, the replicability of the best practices stemming out from the project.	To be checked	
		17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	To be checked	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	if yes, are they an important part of the project?	To be checked	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	To be checked	
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of SSC	Finished project		

		Name of the project:		Grid4EU			
		Source from which it is extracted:		http://www.grid4eu.eu/			
		Leading organization		CEZ Distribuce (Czech Republic), Enel Distribuzione (Italy), ERDF (France), Iberdrola Distribucion (Spain), RWE (Germany) and Vattenfall Eldistribution (Sweden)			
		Country involved		Germany, Sweden, Spain, Italy, Czech Republic, France			
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	no		Not yet responded to emails	
	2	Does the project have the potential to involve end-user with a central role?	yes		Primarily under demonstrators in Spain (on MV and LV network automation and customer awareness about their consumption and network situation) and France (smart solar district)		
	3	Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?		no	If yes, you can specify the begin and end dates. NA	
		2	Is the project still ongoing?	yes		If yes, you can specify the begin date and the expected end date. Begin date: 01/11/2011 End date: 31/01/2016	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	Germany, Sweden, Spain, Italy, Czech Republic, France
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	A Large-scale demonstration of advanced smart grids solutions with wide replication and scalability potential for Europe
	Availability of information	5	Is there a clear link with the characterization structure?	yes		If yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis. Methods used: smart metering (SPAIN); Customer recruitment and management of demand response (FRANCE).	Overlap appears mostly on the technology sub-class.
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes		If yes, it is important to point out the possible innovative elements.	Overall, innovation potential appears to be on scalability and replication. French demonstrator appears most innovative on the end-user side: www.nicegrid.fr
		7	Is it possible to directly engage with the projects' end-users?	yes	no	If yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		If yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	Yes, see question 6
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Households
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	The project is lead by six leading European DSOs. Other partners include manufacturers, system integrators, research centers and universities.
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	See Q5
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C1 - Consumer (SPAIN) & C2 - Smart Customer (France)
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	Relevant evaluation reports scheduled for fall 2015 To what extent are preliminary results available?
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	Probably yes.
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	no	If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	Not mentioned on web-site, but probably yes.
		Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.
	17		Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	See previous question
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		If yes, are they an important part of the project?	Workshops and reporting. Explicit links with ISGAN & EEGI
		19	Can we learn from the dissemination actions carried out during the projects, if any?	no		Some best practices can be derived and pointed out.	Dissemination appears rather standard.
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	If yes, actions should be immediately taken to bring it on board of S3C	Not yet responded to emails	

Name of the project:	GridWise (Part 1) - Olympic peninsula project
Source from which it is extracted:	http://www.pnl.gov/main/publications/external/technical_reports/PNNL-17167.pdf
Leading organization:	Pacific Northwest National Laboratory (PNNL)
Country involved:	US

		QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
STEP 1	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes no	to be checked	Project probably too old	
	2	Does the project have the potential to involve end-user with a central role?	yes			
	3	Does the project have some practical (field) applications?	yes	The field test included 112 households	recruited residential participants in and near Sequim and Port Angeles, Washington, on the Olympic Peninsula. These regions were located in the two utility service territories operated by PUD #1 of Clallam County and the City of Port Angeles. Later in the recruitment effort, several homes were also recruited in the service territory of Portland General Electric in Gresham, Oregon.	
STEP 2	General information					
	1	Is the project finished?	yes	if yes, you can specify the begin and end dates.	Begin date: March 2006 End date: March 2007	
	2	Is the project still ongoing?	no	if yes, you can specify the begin date and the expected end date.		
	3	At which geographical location is the project situated?	-	you can specify the name of the countries involved in the project	Olympic Peninsula (Washington, US)	
	4	What is the overall project objective and underlying rationale?	-	you can add more details about the goal of the project	indicate how peak loads on distribution feeders can be managed to avoid the need for local capacity expansion	
	Availability of information					
	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	Methods used: different types of tariffs (TOU, CPP, RTP, fixed), metering, control system and smart appliances (HVAC systems, water heaters, dryers), different kinds of feedback and information and the project involves residential consumers and other stakeholders.	
	6	Does the project contain some unique and innovative elements of involvement of end users?	yes	if yes, it is important to point out the possible innovative elements.	-market participation of residential loads? -Direct load control based on comfort settings	
	7	Is it possible to directly engage with the projects' end-users?	yes	if yes, this will allow us to gain insight in the end users' perspective on the project	to be checked	
	Customer involvement					
	8	Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	to be checked	
	9	Are the end-users which are involved in the project households and/or SMEs?	-	you can specify if the involved end user are households and/or SMEs	households and SME (commercial buildings)	
	10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	- Pacific Northwest National Laboratory (PNNL) -Three electric power providers, Bonneville Power Administration (BPA), Public Utility District (PUD), City of Port Angeles, IBM's Watson Research Laboratory, Invensys Controls, -Consultance: Preston Michie & Associates, LLC and Dr. Lynne Kiesling.	
	11	What kind of tools and technologies are used in the project?	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	- DG (water pumps, diesel generators, microturbine, HVAC, water heaters) - Virtual Distributed Generation Resources - Network (Invensys GoodWatts)	
	12	How to characterize the typical role of the project's end-users?	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C2 - Smart Customer	
	Potential for learning					
	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	to be checked
	14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	to be checked
	Privacy and security					
	15	Does the project deal with privacy and security issues?	yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	to be checked
Scalability and replicability						
16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	to be checked	
17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	to be checked	
Dissemination						
18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	if yes, are they an important part of the project?	to be checked	
19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	to be checked	
Active participation						
20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it onboard of SSC	Finished project	

		Name of the project: GridWise (Part 2) - Grid Friendly Appliance Project					
		Source from which it is extracted: http://www.pnl.gov/main/publications/external/technical_reports/PNNL-17079.pdf					
		Leading organization: Pacific Northwest National Laboratory (PNNL)					
		Country involved: US					
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project? A	yes	no		Project probably too old	
	2	Does the project have the potential to involve end-user with a central role?	yes				
	3	Does the project have some practical (field) applications?	yes		The field test included 200 GFAs (GridFriendly Appliance Controller). This accounts for 150-200 consumers.	an underfrequency load-shed controller applied to 50 water heaters and 150 clothes dryers in the Pacific Northwest.	
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes		If yes, you can specify the begin and end dates. Begin date: 2006 End date: March 2007	
		2	Is the project still ongoing?		no	If yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project. Pacific Northwest—Gresham, Oregon; and Yakima, Port Angeles and Sequim, Washington.	
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project. to achieve close integration of the GFA controller with appliances	
	Availability of information	5	Is there a clear link with the characterization structure?	yes	no	If yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis. Methods used: control system and smart appliances (dryers and water heaters), different kinds of feedback and information and the project involves residential consumers.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	no	If yes, it is important to point out the possible innovative elements. to be checked	
		7	Is it possible to directly engage with the projects' end-users?	yes	no	If yes, this will allow us to gain insight in the end users' perspective on the project. to be checked	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	no	If yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives. to be checked	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs. households	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers. - Pacific Northwest National Laboratory (PNNL) - Bonneville Power Administration - Invensys - PacificCorp and Portland General Electric Company - Port Angeles and PUD - The U.S. Department of Energy - Whirlpool Corporation - Autonomous controller (GFA)	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays. - Invensys Controls GoodWatts energy management system (some components) - residential clothe dryers and water heaters	
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen. C1 - Consumer	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided. to be checked	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate. to be checked	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	no	If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project. to be checked	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project. to be checked	
		17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved. to be checked	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	If yes, are they an important part of the project? to be checked	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out. to be checked	
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	If yes, actions should be immediately taken to bring it on board of SSC. Finished project		

Name of the project:	Low Carbon London
Source from which it is extracted:	http://lowcarbonlondon.ukpowernetworks.co.uk/
Leading organization:	UK Power Networks
Country involved:	UK (London)

		QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
STEP 1	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes no	To be checked		
	2	Does the project have the potential to involve end-user with a central role?	yes			
	3	Does the project have some practical (field) applications?	yes	The project has 7 field test.	1) Smart meters (EDF Energy) 2) Smart meters (British Gas) 3) EV 4) Decentralized Energy 5) Heat pumps 6) Energy efficiency - Wind Tweening? 7) Demand response	
STEP 2	General information					
	1	Is the project finished?	no	if yes, you can specify the begin and end dates.		
	2	Is the project still ongoing?	yes	if yes, you can specify the begin date and the expected end date.	Begin date : 2011 End date (expected): 2014	
	3	At which geographical location is the project situated?	-	you can specify the name of the countries involved in the project	London (UK) a reas - the 10 Low carbon zones, RE:NEW, Green Enterprise District	
	4	What is the overall project objective and underlying rationale?	-	you can add more details about the goal of the project	Develop a smarter electricity network that will deliver a safe and secure electricity supply in a low carbon economy, while keeping costs as low as possible for electricity customers	Secondary objectives: - identify cost effective solutions to enable decentralised energy to connect to the distribution network.
	Availability of information					
	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	Methods used: ToU tariff, metering, control and local generation, EV charging, control system and smart appliances, different kinds of feedback and information and the project involves residential consumers and other stakeholders.	
	6	Does the project contain some unique and innovative elements of involvement of end users?	yes	if yes, it is important to point out the possible innovative elements.	- Pioneering demonstration project and learning program, trialling new low carbon technologies, commercial innovation and design, operation and network management strategies - New Active Network Management (ANM) automation and control	
	7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight in the end users' perspective on the project	to be checked
	Customer involvement					
	8	Are specific strategies planned to put the end-user in a central position?	yes	no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	to be checked
	9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Households and SMEs
	10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	- Energy Supplier (EDF Energy) - Aggregator (EnerNOC) - Technology (Flextricity, Logica, Siemens, Smarter Grid Solutions) - Mayor of London - Research Institute (Imperial College, Institute for Sustainability) - National Grid - UK Power Networks - Transport for London
	11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	Smart meter + Home Energy Management System + Smart appliances + Heat-pumps + EV + PV production? + Wind
	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C2 - Smart Customer C3 - Citizen?
	Potential for learning					
	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	to be checked
	14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	to be checked
	Privacy and security					
	15	Does the project deal with privacy and security issues?	yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	to be checked
Scalability and replicability						
16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	to be checked	
17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	to be checked	
Dissemination						
18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	if yes, are they an important part of the project?	to be checked	
19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	to be checked	
Active participation						
20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of SSC	Project finished early 2014	

		Name of the project:		PREMIO (Production Répartie, Enr et MDE, Intégrées et Optimisées)	
		Source from which it is extracted:		http://www.projetpremio.fr/	
		Leading organization:		CAPENERGIES	
		Country involved:		FR - PACA region (South of France)	

STEP		QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
1	1	Are all data available and enough and there are no any possible restraints to the availability of the project?		yes	no	to be checked		
	2	Does the project have the potential to involve end-user with a central role?		yes		The project is primarily a technical assessment created to address specific goals in the PACA region.	goals dealt with dynamic demand-response (at local network level), integration of DG and RES technologies, reduction of greenhouse gases emissions, increase overall flexibility of the power system, and to encourage energy efficiency	
	3	Does the project have some practical (field) applications?		yes		yes, the field demonstration involves about 100 consumers		
2	General information	1	Is the project finished?	yes		if yes, you can specify the begin and end dates.	2008-2011	
		2	Is the project still ongoing?		no	if yes, you can specify the begin date and the expected end date.	-	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	PACA region (Provence-Alpes-Côte d'Azur) (South of France)	
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	demonstrate an innovative and replicable architecture aimed at reducing the burden on the local grid and CO2 emissions in the PACA region (South of France).	secondary objectives: - managing locally and dynamically the electric generation and consumption, - optimizing the integration of distributed generation and storage, - facilitating the development of renewable energy sources and energy efficiency measures, - reacting to Demand Side Management (DSM) signals and solving local grid constraints, - preparing new business models for power system players.
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	Methods used: metering, control and local generation, control system and smart appliances, different kinds of feedback and information and the project involves residential consumers and other stakeholders.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes		if yes, it is important to point out the possible innovative elements.	- First smart grid demonstration project in France. - innovative and replicable architecture - Implementation of a VPP	
		7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight in the end users' perspective on the project	to be checked	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	to be checked	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Households (residential and apartments) and SMEs (Industrial & commercial) + Public lighting	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	Besides the research partners (ARMINES, Ademe, CERFISE), following industrial partners were involved: - DSO (ERDF) - TSO (RTE) - Equipment manufacturers (Giordano, SAED, SmartFuture, Cristopia, CyXplus, Transenergie, Watteco) - Municipalities	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	Load shedding modules, P.V. storage (heat-pump, cold, solar-thermal), dimmers (led public lighting)	
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C1- Smart Consumer	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	to be checked	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate	to be checked	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	to be checked	
		16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because it let us assess, for example, the replicability of the best practices stemming out from the project.	to be checked	
	Scalability and replicability	17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	to be checked	
		18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	if yes, are they an important part of the project?	to be checked	
	Dissemination	19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out	to be checked	
		20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it onboard of S3C	Finished project	

Name of the project:		Smart-E: Smart Energy – ICT for Energy Efficiency			
Source from which it is extracted:		VITO participates in this project http://www.iminds.be/en/research/overview-projects/p/detail/smart-e-2			
Leading organization:		IMinds			
Country involved:		Belgium			

STEP		QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS
		1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes		
1	2	Does the project have the potential to involve end-user with a central role?	yes			
1	3	Does the project have some practical (field) applications?	yes		The project used 21 households to develop an energy system's user interface	

STEP		QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS
		General information	1	Is the project finished?	yes	
2	Is the project still on-going?			no	if yes, you can specify the begin date and the expected end date.	
3	At which geographical location is the project situated?		-	-	you can specify the name of the countries involved in the project	Flanders (Belgium)
4	What is the overall project objective and underlying rationale?		-	-	you can add more details about the goal of the project	Multidisciplinary research on smart energy management technology in households, making end users aware of their energy consumption and stimulating them to become more energy efficient. The SmartE project addresses the definition, demonstration and evaluation of ICT architectures and technologies for smart energy applications at home. In addition, socio-technical studies will evaluate the user interactions and behavioural response to the developed systems (in terms of energy consumption), and business modelling studies will investigate the market models enabled and driven by smart energy ICT.
Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	Methods used: different pricing methods, smart metering (consumption). Feedback: Disaggregated consumption levels and consumption aggregated over time, the project involves residential consumers and other stakeholders (see question 10)
	6	Does the project contain some unique and innovative elements of involvement of end users?		no	if yes, it is important to point out the possible innovative elements.	The project mainly focuses on feedback system for energy consumption and dynamic pricing so the innovativeness is limited.
	7	Is it possible to directly engage with the projects' end-users?		no	if yes, this will allow us to gain insight in the end users' perspective on the project	The project is already finished
Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	Yes, the designed architecture and applications were installed in 21 households. Furthermore a study was done on the potential flexibility of a number of test users and the effect on their energy costs assuming dynamic tariffs.
	9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved user are households and/or SMEs	households
	10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	NIKO, Alcatel-Lucent, EDF-Luminus, Xemex, Ferranti, Telenet, IMinds, VITO, KUL - Electa
	11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	The home energy management system consisted of a smart meter, submeters in the fuse box and an android app for tablet and smartphones
Potential for learning	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C1 - Smart consumer
	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	Via online questionnaires and an interview with field trial participants, their experiences with the system were observed. Furthermore the economic feasibility for a number of field test users was calculated
Privacy and security	14	Would it be interesting to analyse the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	15	Does the project deal with privacy and security issues?		no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	Results should be representative for Belgium and also other countries with similar consumption profiles/practices.
	17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	See previous question
Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		if yes, are they an important part of the project?	Yes, but the final workshop has already been organised so we could only refer to existing output of the project.
	19	Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of S3C	No, since the project is already finished, an active partnership probably won't be possible

Name of the project:	SmartHouse/SmartGrid project
Source from which it is extracted:	http://www.smarthouse-smartgrid.eu/index.php?id=43; http://www.smarthouse-smartgrid.eu/index.php?id=14
Leading organization:	SAP
Country involved:	Netherlands, Germany and Greece

		QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS
STEP 1	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	no	to be checked	
	2	Does the project have the potential to involve end-user with a central role?	yes		yes, the project will role-out and test smart energy devices located in customer premises.	devices will be test on energy management, communication & negotiation and on the provision of system services to the grid
	3	Does the project have some practical (field) applications?	yes		3 field tests: -Netherlands (large-scale communication) - Approx. 1 Million smart houses (partly real, partly simulated), 25 interconnected houses -Germany (optimal home energy management) - 100 smart houses -Greece (system services to the grid) - Camping site serving as a micro-grid (between 10 and 30 customers)	
STEP 2	General information					
	1	Is the project finished?	yes		if yes, you can specify the begin and end dates.	Sept/2008 - Feb/2011
	2	Is the project still ongoing?		no	if yes, you can specify the begin date and the expected end date.	-
	3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	-Hoogkerk, The Netherlands -Mannheim, Wallstadt, Germany -Meltimi, Greece
	4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	Validate and test how ICT-enabled collaborative technical-commercial aggregations of Smart Houses provide an essential step to achieve the needed radically higher levels of energy efficiency in Europe. 3 goals: -Improving energy efficiency -Increasing the penetration of renewable energies -Diversifying and decentralizing Europe's energy mix
	Availability of information					
	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	Methods used: time varying tariff, metering, control and local generation, EV charging, control system and smart appliances, different kinds of feedback and information and the project involves residential consumers and other stakeholders.
	6	Does the project contain some unique and innovative elements of involvement of end users?	yes	no	if yes, it is important to point out the possible innovative elements.	to be checked
	7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight in the end users' perspective on the project	to be checked
	Customer involvement					
	8	Are specific strategies planned to put the end-user in a central position?	yes	no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	to be checked
	9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Households
	10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	-SAP (Project coordinator, enterprise integration, business processes, web services at device level integrated with higher level web services) -JMES (Bi-directional Energy Management Interface (BEM II)) -M VV (Co concept of the "Energybutler") - Institute of Communication and Computer Systems (ICCS) (Agentbased control in power systems) - Public power corporation (PPC) (Renewable and diesel island power grid) -ECN (Multi-agent system architecture, analysis of scalability to 1 million customers)
	11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	Smart meter + Smart appliances (washing machine + dishwasher + EV) +PV production + Bidirectional Energy Management Interface + Concentrator +multi-agent system
	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen	C1- Smart Customer
	Potential for learning					
	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	to be checked
	14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	to be checked
	Privacy and security					
	15	Does the project deal with privacy and security issues?	yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	to be checked
Scalability and replicability						
16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	to be checked	
17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	to be checked	
Dissemination						
18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	if yes, are they an important part of the project?	to be checked	
19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	to be checked	
Active participation						
20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of S3C	Finished project	

		Name of the project:		Smart Home on low voltage installation			
		Source from which it is extracted:		National Smart grid contest. Publication "Smart grids - from theory to practice"			
		Leading organization:		Elektro Ljubljana			
		Country involved:		Slovenia			
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	no		Direct contact necessary to check	
	2	Does the project have the potential to involve end-user with a central role?	yes		home appliance control based on controlling-monitoring installation modules installed at 50 – residential users		
	3	Does the project have some practical (field) applications?	yes		home appliance control based on controlling-monitoring installation modules installed at 50 – residential users		
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes	no	if yes, you can specify the begin and end dates.	
		2	Is the project still ongoing?	yes	no	if yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	
	Availability of information	5	Is there a clear link with the characterization structure?	yes	no	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	no	if yes, it is important to point out the possible innovative elements.	
		7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example smart meters, energy monitoring systems and consumption displays.	
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	yes	no	if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:		SMARTV2G			
		Source from which it is extracted:		National Smart grid contest. Publication "Smart grids - from theory to practice", http://www.sma			
		Leading organization:		ITE Spain			
		Country involved:		Elektro Ljubljana/Slovenia, ITE Spain, Fraunhofer Germany, EtreI Slovenia, CIT Spain, Sapienza Ita			
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	no		Direct contact necessary to check	
	2	Does the project have the potential to involve end-user with a central role?	yes		The goal of the project is set up a network of smart filling stations with controlled charging and discharging, and enhanced by the information		
	3	Does the project have some practical (field) applications?	yes		The goal of the project is set up a network of smart filling stations with controlled charging and discharging, and enhanced by the information		
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes	no	if yes, you can specify the begin and end dates.	
		2	Is the project still ongoing?	yes	no	if yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	
	Availability of information	5	Is there a clear link with the characterization structure?	yes	no	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	no	if yes, it is important to point out the possible innovative elements.	
		7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example smart meters, energy monitoring systems and consumption displays.	
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	yes	no	if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:		ICT4EVEU						
		Source from which it is extracted:		National Smart grid contest. Publication "Smart grids - from theory to practice", http://www.ict4e.eu						
		Leading organization:		Navarra Spain						
		Country involved:		Spain, Slovenia, UK, Austria						
STEP 1		QUESTION		ANSWER		ADDITIONAL DETAILS		NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?		yes	no			Direct contact necessary to check		
	2	Does the project have the potential to involve end-user with a central role?		yes		Its goal is to integrate the existing charging controlling system over the European countries and enabling their interoperability. It contains also the				
	3	Does the project have some practical (field) applications?		yes	no			Direct contact necessary to check		
STEP 2		QUESTION		ANSWER		ADDITIONAL DETAILS		NOTES/COMMENTS		
	General information	1	Is the project finished?		yes	no	if yes, you can specify the begin and end dates.			
		2	Is the project still ongoing?		yes	no	if yes, you can specify the begin date and the expected end date.			
		3	At which geographical location is the project situated?		-	-	you can specify the name of the countries involved in the project			
		4	What is the overall project objective and underlying rationale?		-	-	you can add more details about the goal of the project			
	Availability of information	5	Is there a clear link with the characterization structure?		yes	no	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.			
		6	Does the project contain some unique and innovative elements of involvement of end users?		yes	no	if yes, it is important to point out the possible innovative elements.			
		7	Is it possible to directly engage with the projects' end-users?		yes	no	if yes, this will allow us to gain insight in the end users' perspective on the project			
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?		yes	no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.			
		9	Are the end-users which are involved in the project households and/or SMEs?		-	-	you can specify if the involved end user are households and/or SMEs			
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?		yes	no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.			
		11	What kind of tools and technologies are used in the project?		-	-	Some possible technologies might be, for example smart meters, energy monitoring systems and consumption displays.			
		12	How to characterize the typical role of the project's end-users?		-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.			
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?		yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.			
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?		yes	no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.			
	Privacy and security	15	Does the project deal with privacy and security issues?		yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.			
	Scalability and replicability	16	Is the project scalable on different dimensions?		yes	no	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.			
		17	Is the project replicable in different contexts?		yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.			
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?		yes	no	if yes, are they an important part of the project?			
		19	Can we learn from the dissemination actions carried out during the projects, if any?		yes	no	Some best practices can be derived and pointed out.			
Active participation	20	Has the project shown a concrete willingness for an active partnership?		yes	no	if yes, actions should be immediately taken to bring it on board of S3C				

Name of the project:		MobinCity					
Source from which it is extracted:		National Smart grid contest. Publication "Smart grids - from theory to practice", http://www.mobin-city.com					
Leading organization:		ITE Spain					
Country involved:		Elektro Ljubljana Slovenia, ITE Spain, Fraunhofer Germany, Grupo Etra Spain, EIHP Croatia, Enel I					
STEP 1	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	no		Direct contact necessary to check	
	2	Does the project have the potential to involve end-user with a central role?	yes	no	main purpose is to develop the controlling system for the fully electric (public and private) vehicles which can have influence in the vehicle performance (traffic information, weather and road conditions and energy grid)	Direct contact necessary to check	
3	Does the project have some practical (field) applications?	yes	no		Direct contact necessary to check		
STEP 2	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS		
	General information	1	Is the project finished?	yes	no	if yes, you can specify the begin and end dates.	
		2	Is the project still ongoing?	yes	no	if yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	
	Availability of information	5	Is there a clear link with the characterization structure?	yes	no	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	no	if yes, it is important to point out the possible innovative elements.	
		7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	no	The presence of such actors may be useful to feel their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	
	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.		
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	yes	no	if yes, actions should be immediately taken to bring it on board of S3C		

Name of the project:		eBadge					
Source from which it is extracted:		http://www.ebadge-fp7.eu/					
Leading organization:		Telekom Slovenia					
Country involved:		Slovenia, Austria, Italy, Germany, Finland					
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	no		Direct contact necessary to check	
	2	Does the project have the potential to involve end-user with a central role?	yes	no	The overall objective of the eBadge project is to propose an optimal pan-European Intelligent Balancing mechanism also able to integrate Virtual Power Plant Systems by means of an integrated communication infrastructure that can assist in the management of the electricity Transmission and Distribution grids in an optimized, controlled and secure manner	Direct contact necessary to check	
	3	Does the project have some practical (field) applications?	yes			Direct contact necessary to check	
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes	no	if yes, you can specify the begin and end dates.	
		2	Is the project still ongoing?	yes	no	if yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	
	Availability of information	5	Is there a clear link with the characterization structure?	yes	no	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	no	if yes, it is important to point out the possible innovative elements.	
		7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	if, for example, something went wrong but there is a suspect that thing might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	yes	no	if yes, actions should be immediately taken to bring it on board of S3C		

Name of the project:		AMI					
Source from which it is extracted:		http://www.smartgrids.si/index.php/sl/clani-platorme/10-clani/30-elektro-gorenjska-d-d					
Leading organization:		Elektro Gorenjska					
Country involved:		Slovenia					
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	no			
	2	Does the project have the potential to involve end-user with a central role?	yes			Remote consumption data collection independant from the supplier	
	3	Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes	no	if yes, you can specify the begin and end dates.	
		2	Is the project still ongoing?	yes	no	if yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project.	
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project.	
	Availability of information	5	Is there a clear link with the characterization structure?	yes	no	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	no	if yes, it is important to point out the possible innovative elements.	
		7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight in the end users' perspective on the project.	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs.	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	
	Potential for learning	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	
		13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
		15	Does the project deal with privacy and security issues?	yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	yes	no	if yes, actions should be immediately taken to bring it on board of S3C.		

		Name of the project:		E-mobilnost (E-mobility)			
		Source from which it is extracted:		http://www.smartgrids.si/index.php/sl/clani-platfome/10-clani/30-elektro-gorenjska-d-d			
		Leading organization:		Elektro Gorenjska			
		Country involved:		Slovenia			
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	no			
	2	Does the project have the potential to involve end-user with a central role?	yes				
	3	Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes	no	if yes, you can specify the begin and end dates.	
		2	Is the project still ongoing?	yes	no	if yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	
	Availability of information	5	Is there a clear link with the characterization structure?	yes	no	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	no	if yes, it is important to point out the possible innovative elements.	
		7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	yes	no	if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:		Velix				
		Source from which it is extracted:		Austrian report (print)				
		Leading organization		Vorarlberg Public Utility, ETH Zurich,				
		Country involved		Austria, Vorarlberg region				
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS		NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	no				
	2	Does the project have the potential to involve end-user with a central role?	yes	no				
	3	Does the project have some practical (field) applications?	yes	no				
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS		NOTES/COMMENTS	
	General information	1	Is the project finished?	yes		if yes, you can specify the begin and end dates.	started early 2010	
		2	Is the project still ongoing?		no	if yes, you can specify the begin date and the expected end date.	finished late 2011	
		3	At which geographical location is the project situated?	rural area in Austria	-	you can specify the name of the countries involved in the project		
		4	What is the overall project objective and underlying rationale?	educate and involve formerly passive end-users	-	you can add more details about the goal of the project		
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.		
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes		if yes, it is important to point out the possible innovative elements.		
		7	Is it possible to directly engage with the projects' end-users?		no	if yes, this will allow us to gain insight in the end users' perspective on the project		
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	Educating the end-users in the Vorarlberg region about their energy consumption was the purpose, in fact they have been the focus point of this project	
		9	Are the end-users which are involved in the project households and/or SMEs?	residential end-users only	-	you can specify if the involved end user are households and/or SMEs	more than 10000 end users participated in the project	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?		no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.		
		11	What kind of tools and technologies are used in the project?	website, informative billing, competitions	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.		
		12	How to characterize the typical role of the project's end-users?	C2	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.		
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.		
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.		
	Privacy and security	15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	all data were submitted by the end-users personally, they could always control, what the utility "saw"	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.		
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.		
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		if yes, are they an important part of the project?		
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out.		
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of S3C			

		Name of the project:		AlpEnergy - Allgäu trial site		
		Source from which it is extracted:		www.alpenergy.net		
		Leading organization:		Allgäuer Überlandwerk, B.A.U.M. Consult & many more		
		Country involved:		Germany (France, Switzerland, Slovenia, Italy)		
STEP 1	QUESTION	ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	Even though the project finished last year, B.A.U.M. is still in contact with all partners responsible for the customer field test in the Allgäu and Aosta region through the follow-up project AlpStore		
	2	Does the project have the potential to involve end-user with a central role?	yes			
	3	Does the project have some practical (field) applications?	yes	Apps, several smart tariffs, informative billing, regional campaigns		
STEP 2	QUESTION	ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS	
	General information	1	Is the project finished?	yes	If yes, you can specify the begin and end dates.	
		2	Is the project still ongoing?	no	If yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	Kempton, Germany (rural region in Bavaria)	If you can specify the name of the countries involved in the project.	
		4	What is the overall project objective and underlying rationale?	create a Virtual Power System including active end-users	If you can add more details about the goal of the project.	
	Availability of information	5	Is there a clear link with the characterization structure?	yes	If yes, how many issues can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	If yes, it is important to point out the possible innovative elements. Furthermore, the project also dealt with regional SMEs as end-users.	
		7	Is it possible to directly engage with the projects' end-users?	maybe	If yes, this will allow us to gain insight in the end users' perspective on the project.	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	If yes, it is important to point out such strategies such as demand response measures, non-rupture reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	residential end-users and SMEs (survey)	If yes, you can specify if the involved end user are households and/or SMEs. 258 residential end-users, several SMEs surveyed for load shifting potentials as well as drivers and barriers to involvement	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	
		12	How to characterize the typical role of the project's end-users?	C2, C3	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	This is an important aspect because it let us assess, for example, the replicability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	Yes, there was a regional awareness campaign and an online simulation explaining the impact of a smart energy system on the Alpine space. The efforts are well documented in the guideline.	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	no	If yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:		"Energy Village" Wilpoldsried			
		Source from which it is extracted:		www.wilpoldsried.de; www.projekt-irene.de			
		Leading organization		community of Wilpoldsried, different participants in every projects			
		Country involved		Germany, Bavaria			
STEP 1	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?		yes	Several reports, good contacts		
	2	Does the project have the potential to involve end-user with a central role?		yes			
	3	Does the project have some practical (field) applications?		yes	several field tests carried out in Wilpoldsried look at the consumer from different perspectives. However, most interesting thing: How did an entire community become eager to support and be part of an energy transition?		
STEP 2	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS		
	General information	Is the project finished?		no	if yes, you can specify the begin and end date.	some projects are already finished, but most of them are still ongoing	
		Is the project still ongoing?		yes	if yes, you can specify the begin date and the expected end date.		
		At which geographical location is the project situated?		mountainous, rural area in Bavaria	-	you can specify the name of the countries involved in the project	
		What is the overall project objective and underlying rationale?		-	-	you can add more details about the goal of the project	
	Availability of information	Is there a clear link with the characterization structure?		yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.		
		Does the project contain some unique and innovative elements of involvement of end users?		yes	if yes, it is important to point out the possible innovative elements.	regional campaigning, bottom-up process rather than top-down	
		Is it possible to directly engage with the projects' end-users?		yes	if yes, this will allow us to gain insight in the end users' perspective on the project	might be easier than in many other projects	
	Customer involvement	Are specific strategies planned to put the end-user in a central position?		yes	no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		Are the end-users which are involved in the project households and/or SMEs?		yes	-	you can specify if the involved end user are households and/or SMEs	Both, residential and commercial end-users lay a role in the projects
		Are any other actors involved besides end users (DSOs, TSOs, industries,...)?		yes	-	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	particularly regional representatives play an important role, they kick-started the development and help to sustain it with support from the entire community
		What kind of tools and technologies are used in the project?		-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	
	How to characterize the typical role of the project's end-users?		C3	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	Projects include several citizens' energy parks (wind, P.V, biomass), electric mobility projects and an overarching smart grid projects linking all developments together (RENE), the overarching idea is to have a smart community	
	Potential for learning	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?		yes	-	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?		yes	-	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	Does the project deal with privacy and security issues?		yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	Is the project scalable on different dimensions?		yes	-	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		Is the project replicable in different contexts?		yes	-	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?		yes	-	if yes, are they an important part of the project?	
		Can we learn from the dissemination actions carried out during the projects, if any?		yes	no	Some best practices can be derived and pointed out.	
Active participation	Has the project shown a concrete willingness for an active partnership?		maybe	no	if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project: iSmart Ittigen							
		Source from which it is extracted: http://energie.ch/wie-funktioniert-es/ergebnisse-ismart/							
		Leading organization: BKW utility,							
		Country involved: Switzerland							
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS		NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes		Good contacts via D-A-CH collaboration				
	2	Does the project have the potential to involve end-user with a central role?	yes		carried out customer survey to learn about their customers' needs				
	3	Does the project have some practical (field) applications?	yes		Apps, several smart tariffs, informative billing, manual vs. Automatic control solutions				
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS		NOTES/COMMENTS		
	General information	1	Is the project finished?	yes		if yes, you can specify the begin and end date.			
		2	Is the project still ongoing?		no	if yes, you can specify the begin date and the expected end date.			
		3	At which geographical location is the project situated?	suburban region in Switzerland	-	you can specify the name of the countries involved in the project			
		4	What is the overall project objective and underlying rationale?	test several end user involvement schemes (tariffs + feedback) and learn about end-users' motivation	-	you can add more details about the goal of the project			This section should contain all the aspects and doubts about it
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.			
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes		if yes, it is important to point out the possible innovative elements.			
		7	Is it possible to directly engage with the projects' end-users?		no	if yes, this will allow us to gain insight in the end users' perspective on the project		However, extensive customer survey gives a hint of customers' motivations	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.			
		9	Are the end-users which are involved in the project households and/or SMEs?	residential end-users	-	you can specify if the involved user are households and/or SMEs		270 residential end-users	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?		no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.			
		11	What kind of tools and technologies are used in the project?	energy management (automation control) vs. Feedback only vs. Manual control with smart meters and TOU tariffs	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.			
		12	How to characterize the typical role of the project's end-users?	C2	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.			
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.			
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.			
	Privacy and security	15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.			
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the replicability of the best practices stemming out from the project.			
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.			
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		if yes, are they important part of the project?			
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out.			
Active participation	20	Has the project shown a concrete willingness for an active partnership?		no	if yes, actions should be immediately taken to bring it on board of SSC				

Name of the project:	Study of load shifting potentials in SMEs in the Salzburg area
Source from which it is extracted:	report
Leading organization:	B.A.U.M., Salzburg AG
Country involved:	Austria

STEP 1	QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes		entire report, interviews accessible, as well as researchers in charge of conducting the interviews	
	2	Does the project have the potential to involve end-user with a central role?	yes		it looks at the motivations and possible incentives for SME decision makers	
	3	Does the project have some practical (field) applications?	to be checked		interview schemes may be interesting, however no applications in a technical sense were deployed since it was a study preparing a possible field test only	
STEP 2	QUESTION		ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	Is the project finished?	yes		if yes, you can specify the begin and end dates.	there might be a follow up next year focusing on DR in SMEs (potential for active partnership)
		Is the project still ongoing?		no	if yes, you can specify the begin date and the expected end date.	
		At which geographical location is the project situated?	rural area around Salzburg (Austria)	-	you can specify the name of the countries involved in the project	
		What is the overall project objective and underlying rationale?	to learn about the motivation of decision-makers in SMEs and how to incentivize them to shift loads	-	you can add more details about the goal of the project	
	Availability of information	Is there a clear link with the characterization structure?		no	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	It is only a study on potentials. No clear incentives were implemented. Possible incentives and business models were deduced from the results of the interviews and the calculated load shifting potentials
		Does the project contain some unique and innovative elements of involvement of end users?	yes		if yes, it is important to point out the possible innovative elements.	
		Is it possible to directly engage with the projects' end-users?	yes		if yes, this will allow us to gain insight in the end users' perspective on the project.	contact to the SMEs as well as the interviewers persists
	Customer involvement	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		Are the end-users which are involved in the project households and/or SMEs?	only SMEs	-	you can specify if the involved end user are households and/or SMEs	
		Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		What kind of tools and technologies are used in the project?	not any at this point	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	
		How to characterize the typical role of the project's end-users?	C2, C3	-	The answer can be chosen among the following options: C1- Consumer; C2- Customer; C3- Citizen.	depending on the way the people answered the interviews, some of them saw themselves as consumers only, others were given by a community-thought, others wanted to get the best possible financial option
	Potential for learning	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?		no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	only study
		Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?		no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	only study
	Privacy and security	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	part of interview relates to potential privacy and security concerns. The survey aimed to see if privacy and security concerns were a major barrier for DSM in SMEs.
	Scalability and replicability	Is the project scalable on different dimensions?	yes		Yes is an important aspect because it let us assess, for example, the replicability of the best practices stemming out from the project.	
		Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?		no	if yes, are they an important part of the project?	
		Can we learn from the dissemination actions carried out during the projects, if any?		no	Some best practices can be derived and pointed out.	
Active participation	Has the project shown a concrete willingness for an active partnership?	to be checked		if yes, actions should be immediately taken to bring it on board of S3C	depending on whether there will be a follow up project	

Name of the project:		Smart Watts				
Source from which it is extracted:		www.e-energy.de; www.smartwatts.de; work in E-Energy accompanying research				
Leading organization:		utilicount GmbH				
Country involved:		Germany (Aachen)				
STEP 1	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes			
	2	Does the project have the potential to involve end-user with a central role?	yes			
3	Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	Is the project finished?	yes		If yes, you can specify the begin and end dates. 01/01/2009 - late 2013	
		Is the project still ongoing?	yes		If yes, you can specify the begin date and the expected end date.	
		At which geographical location is the project situated?	urban region in Western Germany	-	you can specify the name of the countries involved in the project	
		What is the overall project objective and underlying rationale?	the idea is to sell an intelligent kilowatt hour to the people that is a local, green product informing the customer where his electricity was produced using what resource. Also: ICT is supposed to perform an end-to-end-optimization from generation to consumption.	-	you can add more details about the goal of the project	
	Availability of information	Is there a clear link with the characterization structure?	yes		If yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		Does the project contain some unique and innovative elements of involvement of end users?	yes		If yes, it is important to point out the possible innovative elements.	cell-concept empowers the consumers and helps to optimize the energy consumption
		Is it possible to directly engage with the projects' end-users?	maybe		If yes, this will allow us to gain insight in the end users' perspective on the project	depends on MVV and their partners
	Customer involvement	Are specific strategies planned to put the end-user in a central position?	yes		If yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiative.	
		Are the end-users which are involved in the project households and/or SMEs?	residential end-users	-	you can specify if the involved end user are households and/or SMEs	400
		Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		What kind of tools and technologies are used in the project?	Working with several feedback options (in house display, website with customer portal, iPhone App), very large regional campaign to get customers involved. Step-by-step approach. The home field test was conducted in several steps to slowly accustom the consumers to the new technology in their home. They started of with Smart Meters and easy TOU-tariffs and then used increasingly complex applications and products.		Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	
	How to characterize the typical role of the project's end-users?	C2, C3	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.		
	Potential for learning	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	Does the project deal with privacy and security issues?	yes		If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the replicability of the best practices stemming out from the project.	
		Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		If yes, are they an important part of the project?	
		Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out.	
Active participation	Has the project shown a concrete willingness for an active partnership?		no	If yes, actions should be immediately taken to bring it on board of SSC		

Name of the project:		moma (modelcity Mannheim)				
Source from which it is extracted:		www.e-energy.de ; www.modellstadt-mannheim.de ; work in E-Energy accompanying research				
Leading organization:		MVV AG				
Country involved:		Germany (Mannheim)				
STEP 1	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	Final evaluation in ongoing. link through accompanying research. Signed LOI to be a passive partner at least		
	2	Does the project have the potential to involve end-user with a central role?	yes			
	3	Does the project have some practical (field) applications?	yes			
STEP 2	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	Is the project finished?	no	if yes, you can specify the begin and end dates.	01/02/2009 - 01/02/2010	
		Is the project still ongoing?	yes	if yes, you can specify the begin date and the expected end date.		
		At which geographical location is the project situated?	urban region in South Western Germany	-	you can specify the name of the countries involved in the project.	
		What is the overall project objective and underlying rationale?	the idea was to create a new network of (if necessary) autonomous cells in the grid. Within these cells demand and supply of electricity could be equalized by ICT-measures at least for a certain time frame. Strong focus on smart home, automatic features. Creation of an Energy Butler as an easy to use, comfortable energy management system.	-	you can add more details about the goal of the project	
	Availability of information	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.		
		Does the project contain some unique and innovative elements of involvement of end users?	yes	if yes, it is important to point out the possible innovative elements.	call-concept empowers the consumers and helps to optimize the energy consumption	
		Is it possible to directly engage with the projects' end-users?	maybe	if yes, this will allow us to gain insight in the end user's perspective on the project.	depends on MVV and their partners	
		Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.		
	Customer involvement	Are the end-users which are involved in the project households and/or SMEs?	residential end-users	-	you can specify if the involved and use see households and/or SMEs	
		Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	700	
		What kind of tools and technologies are used in the project?	Working with several feedback options (in house display, website with customer portal, iPhone App), very large regional campaign to get customers involved. Step-by-step approach. The moma field test was conducted in several steps to slowly accustom the consumers to the new technology in their home. They started with Smart Meters and easy TOU tariffs and then used increasingly complex applications and products.	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.		
		How to characterize the typical role of the project's end-users?	C2, C3	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	depending on the way the people answered the interview, some of them saw themselves as consumers only, others were given by a community thought, others wanted to get the best possible financial option
	Potential for learning	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find out the best practices which should be taken into account and the bad practices which should be avoided.		
		Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	if, for example, something went wrong but there is a suspect that things might have gone differently, obviously it is the case to investigate.		
	Privacy and security	Does the project deal with privacy and security issues?	yes	if yes, are they sufficiently identified and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.		
	Scalability and replicability	Is the project scalable on different dimensions?	yes	This is an important aspect because it is a basis, for example, for the exportability of the best practice stemming out from the project.		
		Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.		
	Dissemination	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	if yes, are they an important part of the project?		
		Can we learn from the dissemination actions carried out during the projects, if any?	yes	Some best practices can be derived and pointed out.		
Active participation	Has the project shown a concrete willingness for an active partnership?	maybe	if yes, actions should be immediately taken to bring it on board of S3C	MVV has not decided on the testbed in Mannheim yet, if they will launch new projects in the existing infrastructure, they are interested in becoming an active partner		

Name of the project:		MeRegio				
Source from which it is extracted:		www.e-energy.de; www.meregio.de; work in E-Energy accompanying research				
Leading organization:		EnBW AG				
Country involved:		Germany (Freiamt und Göppingen)				
STEP 1	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1 Are all data available and enough and there are no any possible restraints to the availability of the project?	yes		Final evaluation in ongoing contact via accompanying research		
	2 Does the project have the potential to involve end-user with a central role?	yes				
	3 Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	Is the project finished?	yes		if yes, you can specify the begin and end date	01/01/2009 - 11/01/2012
		Is the project still ongoing?	no		if yes, you can specify the begin date and the expected end date.	
		At which geographical location is the project situated?	rural areas in South-West of Germany		you can specify the name of the counties involved in the project	
		What is the overall project objective and underlying rationale?	creating a minimum emission region with active demand in smart homes, find demand side management solutions to grid bottlenecks in rural regions with high renewables penetration (particularly PV)		you can add more details about the goal of the project	
	Availability of information	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		Does the project contain some unique and innovative elements of involvement of end users?	yes		if yes, it is important to point out the possible innovative elements.	had the same overall tariff structure all through the projects, but the price spreads changed constantly. interestingly, people reacted more to their feedback (especially the electricity traffic light indicating green, yellow or red phases), whereas they ignored very high price spreads. Had a quantitative and qualitative customer survey.
		Is it possible to directly engage with the projects' end-users?	no		if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives	
		Are the end-users which are involved in the project households and/or SMEs?	residential customers as well as SMEs		you can specify if the involved end user are households and/or SMEs	1000
		Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		What kind of tools and technologies are used in the project?	smart meters, website, feedback devices (in-house, ambient), energy management systems, several tariffs, serious gaming, prosumer solutions		Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	
	How to characterize the typical role of the project's end-users?	C2		The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	depending on the way the people answered the interview, some of them saw themselves as co-owners only, others were driven by a community thought, others wanted to get the best possible financial option	
	Potential for learning	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the replicability of the best practices stemming out from the project.	
		Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		if yes, are they an important part of the project?	
		Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out.	
	Active participation	Has the project shown a concrete willingness for an active partnership?	no		if yes, actions should be immediately taken to bring it on board of S3C	

Name of the project:	E-Dema
Source from which it is extracted:	www.e-energy.de ; www.edema.de ; work in E-Energy accompanying research
Leading organization:	RWE AG
Country involved:	Germany (Mühlheim and Krefeld)

STEP	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	maybe			Final evaluation in ongoing, contact via accompanying research however: tested in Mühlheim is also tested for ADVANCED-project. Difficult to obtain data.
2	Does the project have the potential to involve end-user with a central role?	yes				
3	Does the project have some practical (field) applications?	yes				
STEP	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS
	General information	Is the project finished?	yes			if yes, you can specify the begin and end date. 01/01/2009 - 02/01/2010
Is the project still ongoing?			no		if yes, you can specify the begin date and the expected end date.	
At which geographical location is the project situated?		city areas in Western Germany	-		you can specify the name of the countries involved in the project	
What is the overall project objective and underlying rationale?		to include active prosumer in a n ICT-marketplace	-		you can add more details about the goal of the project	
Availability of information	Is there a clear link with the characterization structure?	yes			if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
	Does the project contain some unique and innovative elements of involvement of end users?	yes			if yes, it is important to point out the possible innovative elements.	most innovative are the direct contracting incentives as opposed to smart tariffs for consumers, also regional competition element
	Is it possible to directly engage with the projects' end-users?		no		if yes, this will allow us to gain insight in the end user's perspective on the project.	
Customer involvement	Are specific strategies planned to put the end-user in a central position?	yes			if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
	Are the end-users which are involved in the project households and/or SMEs?	residential customers as well as SMEs and public companies	-		you can specify if the involved end user are households and/or SMEs	700
	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes			The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
	What kind of tools and technologies are used in the project?	smart meters, website, feedback devices (in house, informative billing, iPod app), prosumer solution particularly for households with micro-CHPs			Some possible technologies might be, for example, smart meters, energy monitoring systems, and consumption displays.	
Potential for learning	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes			This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes			if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
Privacy and security	Does the project deal with privacy and security issues?	yes			if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
Scalability and replicability	Is the project scalable on different dimensions?	yes			This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
	Is the project replicable in different contexts?	yes			The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
Dissemination	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes			if yes, are they an important part of the project?	
	Can we learn from the dissemination actions carried out during the projects, if any?	yes			Some best practices can be derived and pointed out.	
Active participation	Has the project shown a concrete willingness for an active partnership?		no		if yes, actions should be immediately taken to bring it on board of S3C	

		Name of the project: eTelligence				
		Source from which it is extracted: www.e-energy.de ; www.etelligence.de ; work in E-Energy accompanying research				
		Leading organization: RWE AG				
		Country involved: Germany (Krefeld and Mülheim)				
STEP 1		QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	Final evaluation finished, public report accessible in German, contact via accompanying research		
	2	Does the project have the potential to involve end-user with a central role?	yes			
	3	Does the project have some practical (field) applications?	yes			
STEP 2	General information	Is the project finished?	yes	If yes, you can specify the begin and end dates.	01/01/2009 - 31/12/2012	
		Is the project still ongoing?	no	If yes, you can specify the begin date and the expected end date.		
		At which geographical location is the project situated?	North Sea coast of Germany, city area	-	you can specify the name of the countries involved in the project.	
		What is the overall project objective and underlying rationale?	overarching goal: better integration of renewable energy by creating a virtual power plant in Cuxhaven, including residential and commercial customers in the energy system and sending them price incentives based on the availability of renewable energy in the system	-	you can add more details about the goal of the project	
	Availability of information	Is there a clear link with the characterization structure?	yes	If yes, how many issues can be covered? All the provided details will be useful in the next stages of the analysis.		
		Does the project contain some unique and innovative elements of involvement of end users?	yes	If yes, it is important to point out the possible innovative elements.	Event-Tariff, mixture between TOU and CCP (it's not only about consumption but only about generation peaks)	
		Is it possible to directly engage with the projects' end-users?	no	If yes, this will allow us to gain insight in the end users' perspectives on the project.	However, anonymous data on the field test customer, SINUS segmentation is accessible via accompanying research	
	Customer involvement	Are specific strategies planned to put the end-user in a central position?	yes	If yes, it is important to point out such strategies such as demand response requires, consumption reduction, awareness initiatives.		
		Are the end-users which are involved in the project households and/or SMEs?	only residential customers	-	you can specify if the involved end user are households and/or SMEs.	POO
		Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	community idea	
		What kind of tools and technologies are used in the project?	from smart meters to energy management, aggregation contracting software, 6 different tariff schemes	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	
		How to characterize the typical role of the project's end-users?	C2, C3	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	depending on the way the people answered the interview, some of them saw themselves as consumers only, others were given by a community-thought, others wanted to get the best possible financial option
	Potential for learning	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.		
		Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	If for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.		
	Privacy and security	Does the project deal with privacy and security issues?	yes	If yes, are they sufficiently examined and reported? These issues cannot be neglected and adequate measures should be taken to face them in every project.		
	Scalability and replicability	Is the project scalable on different dimensions?	yes	This is an important aspect because it lets us assess, for example, the exportability of the best practices stemming out from the project.		
		Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.		
	Dissemination	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	If yes, are they an important part of the project?		
		Can we learn from the dissemination actions carried out during the projects, if any?	yes	Some best practices can be derived and pointed out.		
	Active participation	Has the project shown a concrete willingness for an active partnership?	no	If yes, actions should be immediately taken to bring it onboard of SOC		

2.2 Potentially active pilots

Name of the project:		REloadIT						
Source from which it is extracted:								
Leading organization		Municipality Zaanstad						
Country involved		The Netherlands						
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes					
	2	Does the project have the potential to involve end-user with a central role?	yes					
	3	Does the project have some practical (field) applications?	yes					
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS		
	General information	1	Is the project finished?	no	if yes, you can specify the begin and end dates.			
		2	Is the project still ongoing?	yes	if yes, you can specify the begin date and the expected end date.	2010-2013		
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project.	Zaanstad, Netherlands	
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project.	how innovative EV technology operates in daily practice of a municipality	
	Availability of information	5	Is there a clear link with the characterization structure?	yes	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	several classes		
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	if yes, it is important to point out the possible innovative elements.	central role for the community, central role for scalability		
		7	Is it possible to directly engage with the projects' end-users?	yes	if yes, this will allow us to gain insight in the end users' perspective on the project.			
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	demand response measures & consumption reduction awareness initiatives		
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs.	Car users and managers of the electric car fleet, companies, Environmental policy makers of the municipality Zaanstad	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.		
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	EMS, EV charging & feedback systems	
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C1&C3	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.		
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?		no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.		
	Privacy and security	15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.		
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.		
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.		
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		if yes, are they an important part of the project?		
		19	Can we learn from the dissemination actions carried out during the projects, if any?		no	Some best practices can be derived and pointed out.		
Active participation	20	Has the project shown a concrete willingness for an active partnership?	yes		if yes, actions should be immediately taken to bring it on board of S3C			

		Name of the project:		InovCity			
		Source from which it is extracted:		EDP			
		Leading organization:		EDP			
		Country involved:		Portugal			
STEP 1		QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	As a passive pilot there will be no restraints (except perhaps privacy issues). However as an active pilot, as the project site is no longer active (in terms of the new services such as energy monitors or energy alerts), there may be some budget restraints	As EDP Distribuição has other project sites there may be new opportunities to explore outside Évora.		
	2	Does the project have the potential to involve end-user with a central role?	yes	All the interactions schemes described in point 5 were thought to involve the consumers and understand their reaction to different stimuli.			
	3	Does the project have some practical (field) applications?	yes	The consumer insights gathered during the project are important to determine the impact of different energy management tools in energy consumption, consumer preferences regarding some technologies vs others, what tools are best used/understood by the consumers. It is also important to understand the importance of a customer care system and assistance and careful information campaign previous to the installation of the technology.			
STEP 2		QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS		
	General information	1	Is the project finished?	yes	01/02/2011 - 31/02/2012	The Évora site project is finished but the site can still be used as a test bed for future tests.	
		2	Is the project still ongoing?	no		The InovCity project at Évora is finished but the InovGrid Project (EDP's smartgrid project) is still ongoing and expanding to new sites that can be used in the future.	
		3	At which geographical location is the project situated?	-	-	City of Évora, Portugal	
		4	What is the overall project objective and underlying rationale?	-	-	1) To determine the effect of the installation of smart meters on energy efficiency (small consumers) and 2) To determine the impact of the use of energy monitors, tariffs and energy alerts in combination with the smart meters	
	Availability of information	5	Is there a clear link with the characterization structure?	yes	Classes covered: 1) Economic: 3 different tariffs were tested in simulation: 3 time period tariff, with higher price at peak times and lower price in no-peak times; 2) breaking point scheme tariffs, one of them with only one breaking point and another with two; 3) Technology: installation of smart meters (consumption); energy monitors; 4 different types of energy monitors and web portals where consumers could observe their present and historic consumption. Some of this systems also allowed to remotely control electric equipments by connecting them to smart plugs; 2) Feedback: Through the different energy management systems clients could access their current and historic energy use (in kWh and CO ₂), compare different time periods (days, weeks, months), know how much energy a certain equipment use (with the smart plugs) and get information via e-mail or SMS when his consumption exceeded the previous month, for example; 3) Information: Several communication campaigns took place in order to inform consumers about the benefits of smart meters (letters, leaflets, local press, local schools, public institutions), provide energy efficiency information and specific efficiency tips for home consumption (mailing), provide information on how to take the best use of the energy management system installed (leaflets, e-mail, showroom), get information from the end users (only for the user of energy management systems, tariffs and energy alerts) by regular telephone interviews.		
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	1) Test of several interaction schemes with different complexity levels: tariffs, monitors, messages, management consumption systems, among others; 2) because the study included a significant sample of end users; 3) because the study results were overseen and certified by a recognized institute		
		7	Is it possible to directly engage with the projects' end-users?	yes	Because of privacy issues it may not be possible to provide end users data. All interaction must be through EDP.		
		8	Are specific strategies planned to put the end-user in a central position?	yes	Answered in question 2 (step 1)		
	Customer involvement	9	Are the end-users which are involved in the project households and/or SMEs?	-	-	The main focus of the study was on households but there was also a more qualitative study involving a small group of SMEs.	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	The project was promoted by the DSO but all the interaction schemes were intended to end users. The National Regulator was informed of the project and its results but did not interfere. Some communication actions were intended to local public organisms.		
		11	What kind of tools and technologies are used in the project?	-	-	1) Technology: installation of smart meters (consumption); energy monitors; 4 different types of energy monitors and web portals where consumers could observe their present and historic consumption. Some of this systems also allowed to remotely control electric equipments by connecting them to smart plugs; 2) Feedback: Through the different energy management systems clients could access their current and historic energy use (in kWh, € and CO ₂), compare different time periods (days, weeks, months), know how much energy a certain equipment use (with the smart plugs) and get information via e-mail or SMS when his consumption exceeded the previous month, for example.	
		12	How to characterize the typical role of the project's end-users?	-	-	The typical role of the end users is C1 - Consumer because of the nature of the interaction schemes used, which were all intended to influence consumption awareness and action.	However there was also some part of C2 - Consumer, because the smart grid meter is based on the communication of benefits in the service provided for the average consumer and some part of C3 - Citizen, as some information was provided on how energy efficiency benefits the environment
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	There is an extensive report on the results of the project, namely the evolution of consumption data with and without interaction scheme and information on technology usage.	The characteristics of the equipments/services in test limit the number of clients with conditions to participate (which increases dropout rate). The dimension of the sample inhibits the possibility of making a closer followup of all the participants (in terms of usability of the interaction schemes).	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	Yes	There is an extensive report on the results of the project, namely the evolution of consumption data with and without interaction scheme and information on technology usage.	The characteristics of the equipments/services in test limit the number of clients with conditions to participate (which increases dropout rate). The dimension of the sample inhibits the possibility of making a closer followup of all the participants (in terms of usability of the interaction schemes).	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	Personal information on the clients cannot be shared		
		16	Is the project scalable on different dimensions?	yes	The test sample must be adjusted according to the characteristics of each market if we want to keep the results statistically robust and relevant. The use of technology makes it necessary to ensure a customer assistance structure.		
	Scalability and replicability	17	Is the project replicable in different contexts?	yes	We must keep in mind that the project costs may inhibit its replication.		
		18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	There have been specific communication actions for the clients during the project and dissemination of the project results outside the context of the test field.		
	Dissemination	19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	There are no specific measurements of the success of the communication actions for the clients. However we do know that when it comes to technology, a more personal contact is more effective to engage people.		
20		Has the project shown a concrete willingness for an active partnership?	yes	Taking into account budget restrictions, timing and coordination with the projects' schedule and if the proposition would add on what was already tested on the InovCity Évora's site.			

Name of the project		BeAware		
Source from which it is extracted		http://www.energysawareness.eu/beaware/		
Leading organization		Aalto University		
Country involved		Finland, Italy and Sweden		
STEP 1	QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS
	1 Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	For the 1st trial all data is available. Second trial's results are not yet available.	
	2 Does the project have the potential to involve end-user with a central role?	yes	The end user is constantly being tested in terms of its consumption habits under the use of the projects' devices, therefore, the end user is the wheel of the project. More on end-user involvement can be seen on point 5.	
3 Does the project have some practical (field) applications?	yes	The project tests communication devices, platforms, plug in devices and upon results, these can eventually generate commercial proposals.	The project intends to test if technological devices can significantly reduce energy consumption. As the first trial confirmed, the analysis of the data collected during the trial has shown a real decrease in the energy consumption over the trial period; this has been especially evident for the appliances monitored by the system, showing the importance of the feedbacks received from the application in the users' behaviour. This was further confirmed by the users' spontaneous observations, which declared their interest in the device/quiz concept. Hence, such devices could in the near future have practical application at a global level	
General information	QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS
	1 Is the project finished?	no	1st Trial started in May 2010, has been concluded in September 2010 for a total duration of more than 4 months. 4 families in Italy, and 4 in Finland, participated in the first BeAware Trial. The total number of participants was 24 people (13 in Finland and 11 in Italy).	
	2 Is the project still ongoing?	yes	Second trial began on January 2011	How is the second trial going? End dates? Outcomes?
	3 At which geographical location is the project situated?	-	Finland, Sweden & Italy.	
4 What is the overall project objective and underlying rationale?	-	The overall project objective is to reduce household's power consumption by 15%, through the use of devices. BeAware aims at creating solutions that make citizens active, efficient, responsible and aware energy consumers who closely monitor their appliances' consumption in real time.	<p>The Results of BeAware First Trial deliverable (D6.2) describes the preparatory activities for starting the BeAware First Trial in real households in Italy and Finland, as well as the results of the validation of the BeAware prototype before being installed at end users, and the results of the validation and evaluation of the system after the end of the First Trial. Specifically, the document refers to the first two phases of the deployment plan defined by the consortium and reported in the BeAware metrics for trials and validation deliverable (D6.1):</p> <ul style="list-style-type: none"> • Pre-First Trial (Phase 0): System installed in, at least, one controlled environment per country (Italy and Finland) • First Trial (Phase 1): System installed in 4 households per country (Italy and Finland) and reports the results of the verification (Phase 0) and validation (Phase 1) according to the metrics defined in the same deliverable. <p>The second phase includes also Sweden as trial site. Specifically, 5 families in Italy, 5 in Sweden and 2 in Finland will be participating to the second BeAware trial, together with the controlled environments (2 in Italy, 2 in Sweden and 2 in Finland).</p> <p>Devices: 1) Energy Life 2) Watt-lite Twist. Energy life is a mobile app game-like and Watt-lite Twist an instrument similar to a flashlight which projects graphs on the walls with real-time consumption of appliances at home. 3) The Sensing Platform is the lowest level of BeAware solution, containing sensor network installed in users' homes and data storage for storing and handling massive amounts of data. The sensing network installed to household consists of:</p> <ul style="list-style-type: none"> * Low power base station for gathering sensor data and handling communication to platform * plug-in wireless sensors collecting high resolution information on energy consumption and power quality. * wireless sensors for reading house main meter for overall consumption. Compared to normal solutions this allows the system to analyze the status and types of devices connection. <p>3) Service Layer: It is the business engine vitalizing the BeAware Game. It dances to game rules' tune. Consumption data are gathered by the sensors, afterwards data are sent to the service. Such data coming from the sensor layer, before to be shown by the EnergyLife, are analysed and held by Service Layer in order to profile the BeAware users sending the advice tips and the smart Advice tips as well as submitting the quizzes. These advice and quizzes are customized for each single device and they aim at educating the people to the virtuous usage of the appliances. Above all that, the service layer, using the game metaphor, aims to engage the user through a social network. Within the Social Network the BeAware user of the Household can hire the competition with other users of several households, the winner will be the household that will be known to use better its appliances. Finally, the service layer holds a key role within BeAware System. It manages all game logic, the community and the Smart Advice aiming to suggest the right usage of each single appliance.</p>	
Availability of information	5 Is there a clear link with the characterization structure?	yes	1) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested.2) Publication of the advertisement. 3) Publication of the advertisement. 4) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested. 5) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested. 6) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested. 7) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested. 8) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested. 9) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested. 10) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested. 11) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested. 12) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested. 13) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested. 14) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested. 15) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested. 16) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested. 17) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested. 18) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested. 19) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested. 20) Definition of the structure of the BeAware trial, and design of the Web submission form (on the BeAware web site), with the information requested.	
	6 Does the project contain some unique and innovative elements of involvement of end users?	yes	Energy life app game, watt lite twist	
	7 Is it possible to directly engage with the projects' end-users?	no	no	
	8 Are specific strategies planned to put the end-user in a central position?	yes	Since the game app challenges frequently the end users to achieve a certain energy saving. Additional consumers can compare their savings with other households, which is an incentive to perform better.	
	9 Are the end-users which are involved in the project households and/or SMEs?	-	Households	
	10 Are any other actors involved besides end users (DSOs, TSOs, industries...)?	yes	Universities, researchers, Engineering and Informal firms, SMEs, etc. (research, professional associations)	
	11 What kind of tools and technologies are used in the project?	-	Energy life app, watt lite twist, sensing platform and service layer	
12 How to characterize the typical role of the project's end-users?	-	End users are citizens who that practice an energy saving in the community and interact with the system through the app. Secondly end users act as consumers since they are frequently challenged to change their energy consumption habits in order to become more efficient and reduce their electricity bills.		
Potential for learning	13 Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	First trial highlighted many areas of improvement such as: interface control should be improved in following aspects: 1) access to individual advice tips 2) advice frequency 3) time to get a response to comments 4) completeness of the information with respect to: - energy calculation - differences between individual and household scores - time intervals of consumption saving calculation meaning of "winning" habits of the energy "other" devices - time intervals of consumption saving calculation meaning of "winning" habits of the energy "other" devices Also the delivery of advice tips and quizzes should become more regular and advice should be more specific and personalized. Strategies with new specifications of the functionalities available on each level, and an enhanced community feature with the introduction of the working concept.	
	14 Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	The second trial will try to find out some of the difficulties found during the first trial as well as the new things, e.g. watt lite twist.	
Privacy and security	15 Does the project deal with privacy and security issues?	yes	Security is a core issue and data collected remained with data, consumer and researchers. Aggregated data is disseminated.	
	16 Is the project scalable on different dimensions?	yes	A service platform and web approach will ensure scalable, electricity services in the consumer power market enabling a combined service to: 1) Monitor the consumption and understand the effects of different choices. 2) Control with more precision power consuming appliances and systems (lights, heating, etc.) with advanced personalization. 3) Share consumption practices in groups and communities. This can create opportunities for learning before practices or reactions for adopting virtuous behaviours.	
Scalability and replicability	17 Is the project replicable in different contexts?	yes	As the project has already been tested in 2 different countries, different types of consumer it may not be interesting to test the technology of this project.	
	18 Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	The dissemination in BeAware is multidisciplinary and it regards in three directions: 1) Notification of project's results in international scientific communities and forums. 2) Public dissemination that aims to inform and engage consumers and public bodies on strategies and tools for energy conservation, and 3) Commercial and industrial dissemination to enhance the commercial potential of the BeAware approach and system.	
Dissemination	19 Can we learn from the dissemination actions carried out during the projects, if any?	yes	The project counts with the participation of universities, scientific communities, summer schools where results are shared, knowledge transmitted, etc. Eventually the final results can be demonstrated to potential buyers (utilities, others) for commercial ends.	
	20 Has the project shown a concrete willingness for an active partnership?	yes	no	Need to contact project managers.

		Name of the project: Price				
		Source from which it is extracted: http://www.priceproject.es/en ; http://www.europapress.es/sociedad/noticia-innova-ite-desarrolla-proyecto-permitira-ahorrar-costes-instalacion				
		Leading organization: Gas Natural Fenosa and Iberdrola				
		Country involved: Spain				
STEP 1	QUESTION		ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	no	First pilot will begin only in 2014 (no data available). We don't know if there are any restrictions, however, we consider it shouldn't be EDP establishing contact with this project, since Iberdrola and Gas Natural Fenosa are our competitors in Spain and Portugal.		There is not data available because the pilot is yet to be released. However it can be a potential active partner. We will keep in touch with them.
	2	Does the project have the potential to involve end-user with a central role?	yes	This is a big and holistic project on smartgrids, which involves 200.000 households. We share the belief that GN Fenosa and Iberdrola, (being leading utilities) will test new interactions.		
	3	Does the project have some practical (field) applications?	yes	Interaction platforms, smart appliances, electrical vehicle charging stations and smartphone app will be tested in the first pilot. Regarding economics (tariffs) there is no indication of any test.		
STEP 2	QUESTION		ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS
	1	Is the project finished?	no	Started 2011		
	2	Is the project still ongoing?	yes	Until 2014		
	3	At which geographical location is the project situated?	-	Henares Corridor, Madrid		
	4	What is the overall project objective and underlying rationale?	-	<p>The PRICE initiative aims to deploy smart grids throughout the Henares Corridor. IBERDROLA and GAS NATURAL FENOSA have launched a joint initiative to complete initial deployment of smart grids in the Autonomous Community of Madrid and the province of Guadalupe, specifically within the Henares Corridor. The project will entail the installation of roughly 200,000 smart meters -100,000 by each company- coupled with modification work on 1,600 transformer stations to bring them in line with this new approach to distributing electricity. The initiative will not only help to improve grid operations and maintenance, but will also optimise the gradual integration of renewable energies and distributed generation, encourage the use of electric vehicles and enable electricity suppliers to offer their customers a host of new services.</p> <p>PRICE-RED: Monitoring and Automation, aims to create an international reference in the development of a unique solution for monitoring and automation of transformation centers since there are related systems only at the substation level but not in medium voltage. PRICE-RED will develop an interoperable platform to promote synergies between electric utilities and manufacturers so as to be easily exportable and adaptable to international energy networks.</p> <p>PRICE-GEN: Energy Management, will focus on topics related to smart grid energy management through the development of an optimal and interoperable network architecture, taking into account the changing needs of the intelligent network and the implementation of the architecture by developing new smart metering equipment to provide accurate information of the consumption and generation of customers, as well as information of the energy grid.</p> <p>PRICE-GD: Distributed Generation, will focus on finding solutions that enable successful integration into the electricity network of distributed energy resources. Distributed generation is increasingly present in the distribution network. Moreover, the distributed renewable generation is growing because of the initiatives for combating climate change and sustainability promoted by the actual energy policies. Due to the design of the actual power grids, the system is not ready for an electric scenario with an large presence of renewable generation due to the characteristics of this kind of electric generation that would not allow a proper operation of the network.</p> <p>PRICE-GDE: Demand Management, aims to develop a consumption monitoring system for customer use to enable the implementation of the intelligent management of the electric demand. The main objective is to obtain a more responsible and efficient use by end users. Therefore, proper communication between the system operator, distributors and retailers for intelligent action on end consumer demand is one of the main challenges of this project.</p>		
	5	Is there a clear link with the characterization structure?	yes	<p>3 classes covered: Technology: smart meters installation (200.000 households and 1.500 substations), smart grids, remote management of consumption, installation of recharging stations for electrical vehicle (on the pilot of 2014, a smartphone app will support electrical vehicle charging as it will allow end users to interact with the charging systems, monitor the charging process, locate charging points, etc), smart appliances (Fagor). Feedback: smart and eco-efficient appliances will give instantaneous consumption information through interfaces. Information: website contains information about the project's characterization and objectives, the segmentation of end users (to be tested on the 2014 pilot) obeys to the following: households with less than 65 years old as they represent the highest per capita expenses in this kind of services, couple households with or without children, as they are the predominant and have a propensity towards these services.</p>		We expect Gas Natural Fenosa and Iberdrola to test different dynamic tariffs and to engage in smart home pilots.
	6	Does the project contain some unique and innovative elements of involvement of end users?	yes	Possible innovative elements are the ones to be tested on the first pilot on 50 households: smart appliances from Fagor (which will help end users making a better use of resources, informing about current consumption); energy box (to which appliances are connected by zigbee or PLC) which is a commercial hardware with the characteristics, connectivity and accessibility to respond to domestic demand; electrical vehicle charging stations (at home) and smartphone app to control ev charge in real time.		
	7	Is it possible to directly engage with the projects' end-users?	yes	The first pilot will start in 2014. This pilot permits engagement with end users since it will involve 50 houses in which families will test smart appliances, e-boxes and smart meters.		One of the main objectives is to obtain a more responsible and efficient use by end users. Therefore, proper communication between the system operator, distributors and retailers for intelligent action on end consumer demand is one of the main challenges of this project.
	8	Are specific strategies planned to put the end-user in a central position?	yes	As stated before, on the first pilot will test energy boxes, smart appliances, electrical vehicle. Most importantly, two interaction platforms will be implemented: consumption platform and customer care platform. These two will enable consumer to manage his/her energy.		
	9	Are the end-users which are involved in the project households and/or SMEs?	-	Apparently households		
	10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	DSOs, TSO, IT Suppliers, Industrial Suppliers, Universities and Research Centers		
	11	What kind of tools and technologies are used in the project?	-	Smart meters, e-box, smart phone app for EV, smart meters		
	12	How to characterize the typical role of the project's end-users?	-	End users are citizens in the first place as they act as energy savers in the community and interact with one another in the region of Henares Corridor. Secondly, end users act as consumers since they are challenged to change their energy consumption habits in order to become more efficient and reduce their consumption.		
	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	no	The project is still in an initial phase and end user interaction has not yet been made.		
	14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?		Check 15		
	15	Does the project deal with privacy and security issues?	yes	Better to assume that consumer data is unlikely to be shared. Dsos and customers probably have the ownership of data.		
	16	Is the project scalable on different dimensions?	yes	It also depends on the sample to be tested on future pilots		
	17	Is the project replicable in different contexts?	yes	200.000 meters are replicable. However investments of 34 million euros (Price project's investment) could be barrier.		
	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	-	Contact with project managers		
	19	Can we learn from the dissemination actions carried out during the projects, if any?	no	Project is still in the beginning.		
20	Has the project shown a concrete willingness for an active partnership?	yes	no	Contact with project managers. It shouldn't be EDP contacting the project, since Gas Natural Fenosa and Iberdrola are our direct competitors.		

Name of the project:		Smartcity Yokohama				
Source from which it is extracted:						
Leading organization:						
Country involved:						
STEP	1	QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
		1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	no	Only after contact Project Manager
STEP 1	1	2	Does the project have the potential to involve end-user with a central role?	yes		Number of households involved in the operational experiments Two housing complexes (16 and 24 houses), one apartment complex (177 apartments), 83 houses for technology verifications, 4,000 houses and apartments for social verifications. Number of workplaces involved in the operational experiments 4 office buildings, 2 commercial buildings, 1 large-scale factory
		3	Does the project have some practical (field) applications?	yes		Under YSCP, one of Japan's largest full-scale demand response (electricity consumption management request with incentive, hereinafter DR) demonstration experiments will be conducted from April 2013. Yokohama City is encouraging introduction of HEMS, aiming at increasing the number of households with the systems to 4,000 by fiscal 2014
		4	Does the project have a clear link with the characterization structure?	yes		Citizens are asked to conserve energy during peak load periods (peak cut) and shift electricity consumption period (peak shift) in accordance with a "virtual electricity rate menu for energy conservation" which shows electricity price differentials between peak consumption periods in summer and winter and other times.
STEP 2	1	QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
		1	Is the project finished?		no	
STEP 2	General information	2	Is the project still ongoing?	yes		Under YSCP, one of Japan's largest full-scale demand response (electricity consumption management request with incentive, hereinafter DR) demonstration experiments will be conducted from April 2013. Yokohama City is encouraging introduction of HEMS, aiming at increasing the number of households with the systems to 4,000 by fiscal 2014
		3	At which geographical location is the project situated?	-	-	The Yokohama Smart City Project (YSCP) is an effort to develop a model for smart cities by means of cooperation between citizens, private companies, and the municipality, and to export the successful model to Japan and the rest of the world. Large-scale operational experiments are being held with Yokohama, a large, advanced city with a diverse topographical range of districts, as the stage
		4	What is the overall project objective and underlying rationale?			Through the "virtualization" function of HEMS, citizens are asked to proactively conserve energy and electricity by confirming when, where and how much electricity is used at home. Citizens are asked to conserve energy during peak load periods (peak cut) and shift electricity consumption period (peak shift) in accordance with a "virtual electricity rate menu for energy conservation" which shows electricity price differentials between peak consumption periods in summer and winter and other times.
		5	Is there a clear link with the characterization structure?	yes		Citizens are asked to conserve energy during peak load periods (peak cut) and shift electricity consumption period (peak shift) in accordance with a "virtual electricity rate menu for energy conservation" which shows electricity price differentials between peak consumption periods in summer and winter and other times.
	Availability of information	6	Does the project contain some unique and innovative elements of involvement of end-users?	yes		1. Large-scale Introduction of Renewable Energy 2. Home Energy Management Systems (HEMS) 3. Building Energy Management Systems (BEMS) 4. Thermal Energy Management at the District Level 5. Mutual Supplementation between Community Energy Management Systems (CEMS) and Large-scale Power System Networks 6. Next-generation Transport Systems 7. Lifestyle Reformations 8. Organizational Structure for Project Implementation
		7	Is it possible to directly engage with the project's end-users?	yes		Through the "virtualization" function of HEMS, citizens are asked to proactively conserve energy and electricity by confirming when, where and how much electricity is used at home in accordance with a "virtual electricity rate menu for energy conservation" which shows electricity price differentials between peak consumption periods in summer and winter and other times.
		8	Are specific strategies planned to put the end-user in a central position?	yes		Setting higher rate during peak load periods to validate price elasticity. To make two other groups, one with and one without advisory information on energy conservation, in order to validate effects of information provision as well as price.
		9	Are the end-users which are involved in the project households and/or SMEs?	yes		Setting higher rates during peak load periods to validate price elasticity. To make two other groups, one with and one without advisory information on energy conservation, in order to validate effects of information provision as well as price.
	Customer involvement	10	Are any other actors involved besides end users (DSOs, TSOs, industries...)?	yes		Yokohama Smart City Project (YSCP), an initiative to establish overseas expansion of Japan's smart grid, was selected as a Next Generation Energy Infrastructure and Social System Demonstration Area by the Ministry of Economy, Trade and Industry in April 2010. The City is collaborating with the private sector (Accenture, Tokyo Gas, Tohoku, Nissan Motor, Panasonic, Matsushita, TPOCS, etc.) to work on various projects such as introduction of renewable energy, energy management of households, buildings and car-to-communication and next generation transportation systems.
		11	What kind of tools and technologies are used in the project?			1. Large-scale Introduction of Renewable Energy 2. Home Energy Management Systems (HEMS) 3. Building Energy Management Systems (BEMS) 4. Thermal Energy Management at the District Level 5. Mutual Supplementation between Community Energy Management Systems (CEMS) and Large-scale Power System Networks 6. Next-generation Transport Systems 7. Lifestyle Reformations 8. Organizational Structure for Project Implementation
		12	How to characterize the typical role of the project's end-users?			Citizens are asked to conserve energy during peak load periods (peak cut) and shift electricity consumption period (peak shift) in accordance with a "virtual electricity rate menu for energy conservation" which shows electricity price differentials between peak consumption periods in summer and winter and other times. The effects will also be verified based on data on the utilization of incentive schemes and data on the residential energy use which were collected from measuring and management systems as individual demand lines. Residents' QOL and their sensitivity toward economic incentives will also be verified based on the results of questionnaire surveys and the opinion poll on QOL.
		13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	The project is not ended.
Privacy and security	14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	The project is not ended.	
	15	Does the project deal with privacy and security issues?	yes	no	Need to contact project manager.	
	16	Is the project scalable on different dimensions?	yes		Taking into account the variety of infrastructure schemes and initiatives in this project, it is fair to assume that a subset of them can easily be replicated in different dimensions. When compared to other smart overseas cities, the City of Yokohama has advantages with regard to the four elements mentioned above with regard to creating "scalable" systems, achieving "speedy" development, creating "sophisticated" systems and providing "satisfaction". With regard to the "scalable" element, the City of Yokohama is a large city compared to many other cities and the systems used in Yokohama can be applied to other large cities, in terms of "speed". The development speed will be accelerated by enabling the introduction of the systems in condominiums, newly constructed districts and industrial estates which often exist in urban areas, in addition to the introduction of the systems in detached houses. Regarding the "sophisticated" element, good cost performance will be expected by integrating mature technologies and advanced technologies, and energy use will be streamlined by combining different energy sources rather than relying on electricity alone. With regard to "satisfaction," the achievement of both user satisfaction and carbon emissions reduction will be driven for by ensuring that convenience is not compromised and the adoption of mechanisms developed from the residents' standpoint.	
Scalability and replicability	17	Is the project replicable in different contexts?	yes		Only in urban areas. "The project will pioneer the establishment of the world's best smart city model in the City of Yokohama which is an advanced city with a population of 3.7 million people. The Yokohama model solutions will then be exported to cities overseas." Firstly, the project will aim to develop a "scalable" smart city. When considering exporting the Yokohama model solutions to cities in emerging Asian countries, it is necessary to demonstrate that the model smart city can work in a large-scale city. Therefore, a smart city will be developed using the characteristics of the City of Yokohama as one of the largest cities in the world, and solutions that can be applied to various cities around the world will be established. In order to achieve this, the project will carefully consider the case of demonstration sites. In addition, when developing the information systems needed for new infrastructure, the project will emphasize the scalability of the systems (for example, by making it possible to add new services and systems and to support larger numbers of users in the future). Secondly, the project will aim at the "speedy" development of a smart city. When considering applying the systems in emerging countries that are rapidly growing, the speedy development of a smart city is essential. As approaches for accelerating the development speed, the YSCP will employ the "urban package solutions" which include both construction and the operation of facilities, as well as utilizing existing urban infrastructure to the maximum extent possible. Thirdly, the project will aim at developing a "sophisticated" smart city. It will aim to achieve both high quality and good cost performance by integrating Japanese advanced technologies and responsive mature technologies. Therefore, when building the information systems needed for new infrastructure, the project will emphasize interoperability the ability to work together with diverse systems).	
	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		The following service models and measures will be considered in order to promote the dissemination: Schemes for reducing the users' initial investment costs for the introduction of BEMS will be considered. The project will consider creating mechanisms which will enable a comparison between the environmental performance of buildings based on fuel utility, through virtualization. This mechanism will be used to rate buildings in accordance with their environmental performance, in order to promote the improvement of buildings (such as the introduction of heat pumps, LED, etc.) and the improvement of the operation of the buildings. The mechanism will also provide useful information for establishing appropriate management methods and increasing the real-estate value of buildings with high environmental performance. Solutions which contribute to a reduction in building maintenance costs will be developed	
Dissemination	19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	The project is not ended.	
	20	Has the project shown a concrete willingness for an active partnership?	yes	no	Only by contact project Manager	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	yes	no	Only by contact project Manager	

Name of the project:		BIDELEK - BIZKAYA					
Source from which it is extracted:		https://www.iberdrola.es/webibd/corporativa/iberdrola?IDPAG=ESWEBREDDISREDINTBZK http://www.eve.es/Noticias/Implantados-140-000-contadores-electricos-intelige.aspx					
Leading organization		Iberdrola					
Country involved		SPAIN					
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no possible restraints to the availability of the project?	yes	no	There is only technical data available at this point. 140.000 smart meters were already installed but there is no information on one to one interactions with the end users at this date		
	2	Does the project have the potential to involve end-user with a central role?	yes		Yes. Iberdrola states that one of the main goals of the project is to enhance customer involvement with the energy themes, to allow them to manage their consumption by providing them with a webportal that will provide them with detailed data regarding consumptions, will allow them to provide meter readings, establish alerts, take knowledge of the network issues, etc.		
	3	Does the project have some practical (field) applications?	yes		The main goal of the project is to provide the areas of Bilbao and Portugalete with Smart Meters as well as improving the network in order to be one of the most advanced in the world		
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?		no	Project began in 2011 and is expected to finish by 2014.	
		2	Is the project still ongoing?	yes			
		3	At which geographical location is the project situated?	-	-	Portugalete and Bilbao.	
		4	What is the overall project objective and underlying rationale?	-	-	The initiative will involve significant progress in the functionalities to be provided in upcoming deployments. These functionalities range from greater support to consumers through the new meters and the traditional network of transformer stations, substations and MV power lines, to greater integration and coordination of the entire system with electric vehicles and distributed generation.	
	Availability of information	5	Is there a clear link with the characterization structure?	yes		Technology: Smart meters, Smart Metering Portal, Algorithms for automatic grid reconfiguration, Electronic equipment management platform, Grid information management platform, Cable monitoring, Integration of electric vehicle with charging stations in public and private garages as well as supervision systems.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	no	If yes, it is important to point out the possible innovative elements.	
		7	Is it possible to directly engage with the projects' end-users?	yes	no	If yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	no	If yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	200,000 meters providing service to 360,000 inhabitants in the city of Bilbao. 27,000 meters providing service to 50,000 inhabitants in the city of Portugalete.	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	-	Smart meters, Smart Metering Portal, Algorithms for automatic grid reconfiguration, Electronic equipment management platform, Grid information management platform, Cable monitoring.	
	Potential for learning	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1- Consumer; C2- Customer; C3- Citizen.	
		13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
	Privacy and security	14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
		15	Does the project deal with privacy and security issues?	yes	no	If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and	16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	If yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	yes	no	If yes, actions should be immediately taken to bring it on board of S3C		

Name of the project:		Energy @ home					
Source from which it is extracted:		JRC database (http://www.enel.com/en-GB/innovation/smart_grids/smart_homes/energy_home/)					
Leading organization:		Indesit, Enel Distribuzione, Telecom Italia, Electrolux					
Country involved:		Italy					
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes		The responsables of the project have declared their availability to share some results with S3C		
	2	Does the project have the potential to involve end-user with a central role?	yes		The Energy@home trial has the goal to assess end users' involvement and behaviour change		
3	Does the project have some practical (field) applications?	yes		The developed technological tools are interesting applications			
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes		if yes, you can specify the begin and end dates.	The project was over in December 2011
		2	Is the project still ongoing?	no		if yes, you can specify the begin date and the expected end date.	-
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	Italy is the only country involved
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	The project aims at developing a communications platform for smart devices and domestic appliances and test it in some trials
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	This aspects should be analyzed more in detail because the available documentation is not enough to provide an adequate answer
		6	Does the project contain some unique and innovative elements of involvement of end users?	no		if yes, it is important to point out the possible innovative elements.	-
		7	Is it possible to directly engage with the projects' end-users?	no		if yes, this will allow us to gain insight in the end users' perspective on the project	-
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	Pilots foresee many engagement activities aimed at actively involving customers
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Household users are involved only in the trials
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	A DSO, a telecommunication company and some domestic appliances manufactures are involved in the project
		11	What kind of tools and technologies are used in the project?	yes		Some possible technologies might be, for example smart meters, energy monitoring systems and consumption displays.	Smart appliances and smart meters
	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	The end user can be considered both as Consumers (C1) and as Customers (C2) in this project	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	The use of technology is an important aspect
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	The trials aim at validating the technical solutions developed in the project among customers; therefore their results have certainly a potential for learning which should be further investigated because such information can not be extracted from the website of the project
	Privacy and security	15	Does the project deal with privacy and security issues?	yes		if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	All the results are presented in an aggregated form, in order to protect customers' privacy.
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	The technologies developed in the project have already been tested in different contexts (also outside Italy) having different dimensions;
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	therefore there should be no restraints to their scalability and replicability
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	no		if yes, are they an important part of the project?	The only dissemination actions are the presentation of the results of the project during both national and international conferences
		19	Can we learn from the dissemination actions carried out during the projects, if any?	no		Some best practices can be derived and pointed out.	-
Active participation	20	Has the project shown a concrete willingness for an active partnership?	yes		if yes, actions should be immediately taken to bring it on board of S3C	maybe	

		Name of the project: Living lab - future energy use in an office space					
		Source from which it is extracted: Private communication					
		Leading organization: Interactive Institute, SP Technical Research Institute of Sweden					
		Country involved: Sweden					
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	no			
	2	Does the project have the potential to involve end-user with a central role?	yes	no			
	3	Does the project have some practical (field) applications?	yes	no			
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?	yes	no	if yes, you can specify the begin and end dates.	
		2	Is the project still ongoing?	yes	no	if yes, you can specify the begin date and the expected end date.	
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	Sweden (Borås)
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	To create a set of tools/prototypes for energy visualisation and to support the organisation in communicating its energy use. It also aims at increasing the knowledge on how energy efficiency measures are addressed and how different energy technologies are applied in office spaces.
	Availability of information	5	Is there a clear link with the characterization structure?	yes	no	if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	no	if yes, it is important to point out the possible innovative elements.	Energy visualisation is usually applied in households, while this is an office space and a new concept with prototypes for both individual and joint energy use and both as display/computer app/ambient interface.
		7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight in the end users' perspectives on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	no	if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	The end user is, for example, invited to contribute to the design phase of the prototypes.
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	office employees
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	Three new prototypes for energy visualisation: one display and an ambient interface showing the total electricity use at the office space and one computer app showing the individual electricity use of each office.
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C1 - Consumer (& C3 - Citizen)
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because if not an aspect, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	Probably with some modifications.
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	if yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	yes	no	if yes, actions should be immediately taken to bring it on board of S3C		

		Name of the project:		Linear			
		Source from which it is extracted:		Kris Kessels - VITO (project member), Wim Cardinaels - VITO (project coordinator)			
		Leading organization:		VITO			
		Country involved:		Belgium			
STEP 1	QUESTION	ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	Yes, VITO is project coordinator which makes the link quite easy, but before we can share certain information within S3C we should of course check with the other project partners.	except specific data considered as confidential or IPR; this needs to be discussed with the owner(s) involved		
	2	Does the project have the potential to involve end-user with a central role?	yes	Yes, the project really focuses on the demand side, more specifically residential demand response (both via dynamic tariffs and automated demand response)			
	3	Does the project have some practical (field) applications?	yes	There will be a field trial engaging about 250 Flemish households			
STEP 2	QUESTION	ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS		
	General information	1	Is the project finished?	no	If yes, you can specify the begin and end date.	NA	
		2	Is the project still ongoing?	yes	If yes, you can specify the begin date and the expected end date.	Begin date: 01/05/2009 End date: 31/12/2014	interaction with households since 2011; final questionnaire 2014Q2
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	Belgium - Flanders
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	-Generate a technological and implementation breakthrough for demand side management in residential areas in Flanders -Investigate technical and economical feasibility of demand response mechanisms -Focus on residential areas and domestic appliances, including PV and wind energy production
	Availability of information	5	Is there a clear link with the characterization structure?	yes	If yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	Methods used: dynamic tariffs, Direct DSM contracting, metering, control system and smart appliances, different kinds of feedback and information and the project involves residential consumers and other stakeholders (see question 10)	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	If yes, it is important to point out the possible innovative elements.	The participants are split in two groups. For each group a different reward system will be tested during a period of 12 months: Time of Use tariffs and Flexibility (remote start within user defined constraints). An other innovative element is that during the project four business cases for residential demand response are being analysed and also tested within the field trial. Two of these cases are to the interest of the retailer / BRP, i.e. "portfolio management" (optimization of electricity purchases and sales by means of AD) and "wind balancing" (reducing the deviations between predicted and measured wind power generation by means of AD). The DSO (Distribution System Operator) is the party concerned in the other two cases, i.e. "LV transformer load" (avoiding peak loads on low voltage transformers by means of AD) and "LV feeder voltage profile" (managing the voltage profile of low voltage feeders by means of AD).	
		7	Is it possible to directly engage with the projects' end-users?	yes	If yes, this will allow us to gain insight in the end user's perspective on the project	Yes, S3C can be involved in setting up surveys / a workshop with the consumers participating in the field trial	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	If yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	Yes, see question 2/3	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Households
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	Besides the research partners (VITO, KULeuven, Imec, iMinds) and Laborelec, the research department from GDF Suez, following industrial partners are involved: -DSO (Infrax, Eandis) -Retailer / BRP / producer (EDF Luminus) -Telecom operators (Telenet, Belgacom) -Equipment manufacturers of gate ways (FifthPlay), smart appliances (Messman, Siemens, Miele)	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	Smart meter + Home Energy Management System + submetering plugs + Smart appliances (dishwasher, washing machine, tumble dryer, domestic hot water buffer) + Electric Vehicles + Display - webservice + Transformer measurements + existing PV production
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen	C2 - Smart Customer
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	Yes, the outcome of the field trial will be analysed and consumers participating in the field trial will be surveyed after the trial.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	If, for example, something went wrong but there is a suspect that things might have gone differently probably it is the case to investigate.	Yes, see previous question - field trial currently ongoing	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	Data is anonymized. Only the recruitment/support team has access to all data. Data communication is organized via secured protocols.	
		Scalability and replicability	16	Is the project scalable on different dimensions?	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	Results should be representative for Belgium and also other countries with similar consumption profiles/practices.
	17		Is the project replicable in different contexts?	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	See previous question	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	If yes, are they an important part of the project?	The project reports yearly to the industry and government. Event based, the project organises press releases/conferences in cooperation with partners. An update of the public website to promote the concept of Demand Response is under construction. A slot event will be scheduled for 2014.	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes	Some best practices can be derived and pointed out.	Yes, see previous question	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	yes	If yes, actions should be immediately taken to bring it on board of S3C	The S3C project has already been presented to the steering committee of the Linear project		

Name of the project:	Tweewaters (demonstration site as part of the FP7 project E-hub)
Source from which it is extracted:	Kris Kessels (member of E-hub Project) - Benoit Broos (Ertzberg) E-hub website: http://www.e-hub.org/tweewaters-demonstration.html Tweewaters website: http://www.tweewaters.be/#index
Leading organization:	Ertzberg (project developer)
Country involved:	Belgium

	QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS
STEP 1	1 Are all data available and enough and there are no any possible restraints to the availability of the project?	yes		
	2 Does the project have the potential to involve end-user with a central role?	yes	Smart control will be applied to the smart appliances of the residents within the district.	
	3 Does the project have some practical (field) applications?	yes	The demo is part of a real development project of a new district. In a first trial 10 apartments will be equipped with three smart appliances (washing machines, dish washer, dryer). Moreover all (about 100) residents will receive My James – a butler service offering energy related and other service (e.g. information on energy consumption)	

	QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS		
STEP 2	General information	1 Is the project finished?	no	If yes, you can specify the begin and end date.	NA	
		2 Is the project still on-going?	yes	If yes, you can specify the begin date and the expected end date.	E-hub project: 12/2010-11/2014 The demonstration site in the district of Tweewaters is now under construction. First people will be living there as from July 2013. Tweewaters demonstration: as from 01/09/2013 – end of E-hub project	
		3 At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	The field trial is in Leuven, Belgium
		4 What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	The energy concept of the Tweewaters district is based on local production and consumption of heat and electricity. Smart control will be applied to the flexible energy sources to match energy supply and demand to decrease the disturbance to the grid and to enhance the opportunity for green energy production. The energy concept of Tweewaters thus starts from local decentralized production, local distribution, local supply and rational use of energy - at district level - of green energy and green heat. Important impact parameters for the energy concept of the Tweewaters district are: • 70% savings in primary energy use compared to a traditional district (BAU). • 50 % reduction in CO2 emissions.
	Availability of information	5 Is there a clear link with the characterization structure?	yes	If yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	Methods used: Direct DSM contracting, metering, control system and smart appliances, different kinds of feedback and information, energy services and the project involves residential consumers and other stakeholders (see question 10)	
		6 Does the project contain some unique and innovative elements of involvement of end users?	yes	If yes, it is important to point out the possible innovative elements.	Automated active demand will be tested with residential consumers. Moreover this field trial will be done in a new district with low energy buildings so that the flexibility potential of buildings with low energy demand can be tested realistically.	
		7 Is it possible to directly engage with the projects' end-users?	yes	If yes, this will allow us to gain insight in the end user' perspective on the project	Surveying of the participants is foreseen in the E-hub project. Potentially there could be a collaboration between S3C and the research partners within E-hub to collaborate on the surveying of the participants.	
	Customer involvement	8 Are specific strategies planned to put the end-user in a central position?	yes	If yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	Yes, see killer questions 2/3	
		9 Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	Households
		10 Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	Local producer (electricity + heat) Tweewaters multi-commodity retailer (heat and electricity) ICT supplier - equipment provider Local Heat Distribution Network Operator (DNO) Local Electricity Distribution Grid Operator (DGO) Project developer Aggregator ("Smartness company") - not a separate entity during the trial Tweewaters Consumers
		11 What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	The Energy management system consists of a home gateway (RTU server, data concentrator) connected to the smart meters, the smart appliances, a touch screen PC on which the end user interface – My James – is installed (information on energy consumption) and the data plug for the internet connection.
	Potential for learning	12 How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C2 - Customer
		13 Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	yes	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	Yes, field trial will start in September 2013 and ends in November 2014. Results will be analysed during and after the field trial.
	Privacy and security	14 Would it be interesting to analyse the reasons behind the success/failure of the project, if they still remain unclear?	yes	yes	If, for example, something went wrong but there is a suspicion that things might have gone differently, probably it is the case to investigate.	
		15 Does the project deal with privacy and security issues?	yes	yes	If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	Since it is a real implementation, these issues will have to be dealt with.
	Scalability and replicability	16 Is the project scalable on different dimensions?	yes	yes	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	Medium? Results should be representative for new and innovative districts in Belgium although the sample group with smart appliances is limited (20)
		17 Is the project replicable in different contexts?	yes	yes	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	Medium? Results should be representative for new developments in countries with similar consumption profiles/practices.
	Dissemination	18 Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	yes	If yes, are they an important part of the project?	As part of the FP7 E-hub project
		19 Can we learn from the dissemination actions carried out during the projects, if any?	yes	yes	Some best practices can be derived and pointed out.	Depending on the timing, end of E-hub foreseen in November 2014
	Active participation	20 Has the project shown a concrete willingness for an active partnership?	yes	no	If yes, actions should be immediately taken to bring it onboard of S3C	Benoit Broos, the contact person from Ertzberg for Tweewaters, has indicated that the S3C approach seems interesting for Tweewaters, but that supplementary information and further tuning with project partners within E-hub would be needed to see whether they would be willing to do this. Potentially there could be a collaboration between S3C and the research partners within E-hub to collaborate on the surveying of the participants.

		Name of the project: Network design and management in a Smart City with large deployment of DER					
		Source from which it is extracted: https://portal.smartgridsprojects.eu/projects/Pages/proj012.aspx					
		Leading organization: Ores					
		Country involved: Belgium					
		Contact: michel.lefort@ores.net / 010-486834					
STEP 1	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	no			
	2	Does the project have the potential to involve end-user with a central role?	yes				
	3	Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION		ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information	1	Is the project finished?		no	if yes, you can specify the begin and end dates.	
		2	Is the project still ongoing?	yes		if yes, you can specify the begin date and the expected end date.	1/1/2010 - 1/1/2020
		3	At which geographical location is the project situated?	-	-	you can specify the name of the countries involved in the project	Belgium
		4	What is the overall project objective and underlying rationale?	-	-	you can add more details about the goal of the project	implement DSM at relatively large scale (~ 10.000 customers)
	Availability of information	5	Is there a clear link with the characterization structure?	yes		if yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	smart metering, TOU, load shifting
		6	Does the project contain some unique and innovative elements of involvement of end users?		no	if yes, it is important to point out the possible innovative elements.	no
		7	Is it possible to directly engage with the projects' end-users?	yes	no	if yes, this will allow us to gain insight in the end users' perspective on the project	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes		if yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	A second phase (starting fall 2013) will focus stronger on customer involvement. Unclear yet to what extent end-user strategies are planned. Advice on end-user engagement will be appreciated.
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	households
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?		no	The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	smart meters
	Potential for learning	12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	C1
		13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	no	This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.	
	Privacy and security	14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	no	if, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
		15	Does the project deal with privacy and security issues?	yes	no	if yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
		16	Is the project scalable on different dimensions?	yes	no	This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
	Scalability and replicability	17	Is the project replicable in different contexts?	yes	no	The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
		Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	no	if yes, are they an important part of the project?
	19		Can we learn from the dissemination actions carried out during the projects, if any?	yes	no	Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	yes		if yes, actions should be immediately taken to bring it on board of S3C	Positive impressium during first telephone call, but needs to be followed up.	

Name of the project:		KIBERnet					
Source from which it is extracted:		http://www.kiber-net.com/ , http://www.smartgrids.si/index.php/sl/projekti					
Leading organization:		INEA					
Country involved:		Slovenia					
STEP 1	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS		
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes				
	2	Does the project have the potential to involve end-user with a central role?	yes				
	3	Does the project have some practical (field) applications?	yes		Pilot project involving 4 industrial partners		
STEP 2	QUESTION	ANSWER		ADDITIONAL DETAILS	NOTES/COMMENTS		
	General information	1	Is the project finished?	yes	from 2010 to 2012		
		2	Is the project still ongoing?		no		
		3	At which geographical location is the project situated?	-	-	Slovenia	
		4	What is the overall project objective and underlying rationale?	-	-	Prototype Development of the System for the Control of Industrial Loads and Distributed Sources on the Distribution Electricity Grid.	KIBERnet system is a demonstration system that was developed in the framework of the KIBERNET project. It is a demand side management solution, which connects a pool of consumers and distributed energy sources into the virtual power plant, which monitors and automatically controls electricity consumption to the benefit of the user. The system is monitoring the clients' consumption/production online and receives the clients' offers concerning their availability for the adaptation of their consumption/production of electric power.
	Availability of information	5	Is there a clear link with the characterization structure?	yes		If yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes		If yes, it is important to point out the possible innovative elements.	
		7	Is it possible to directly engage with the projects' end-users?	yes		If yes, this will allow us to gain insight in the end users' perspective on the project.	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	no	If yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	-	you can specify if the involved end user are households and/or SMEs	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes		The presence of such actors may be useful to test their mutual interactions, especially with the customers.	
		11	What kind of tools and technologies are used in the project?	-	-	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.	
		12	How to characterize the typical role of the project's end-users?	-	-	The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes		This is important to find both the best practices, which should be taken into account and the bad practices which should be avoided.	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes		If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes		If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes		This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.	
		17	Is the project replicable in different contexts?	yes		The answer to this question can be derived using the information on how many countries and which kind of customers are involved.	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes		If yes, are they an important part of the project?	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	yes		Some best practices can be derived and pointed out.	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	yes		If yes, actions should be immediately taken to bring it on board of S3C		

Name of the project:		Promoting energy efficiency in households using smart technology					
Source from which it is extracted:							
Leading organization:		JSC Latvenergo					
Country involved:		Latvia					
STEP 1	QUESTION		ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS	
	1	Are all data available and enough and there are no any possible restraints to the availability of the project?	yes	Customer who participate in project, has access to the customer portal. They have access to the information about actual energy consumption - 5 minutes load profile (meter readings done on hourly base)		http://www.latvenergo.lv/portal/page/portal/english/latvenergo/main/about_latvenergo/smart_technology/about	
	2	Does the project have the potential to involve end-user with a central role?	yes	I hope Yes.		As part of the project, smart electricity meters have been purchased and are installed in 500 households. A data readout system will be introduced, and each household will be able to view detailed information regarding its electricity consumption using the www.e-latvenergo.lv customer self-service portal, as well as to receive advice on the necessary energy efficiency measures.	
	3	Does the project have some practical (field) applications?	yes	We test potencial of smart meters to reduce eenergy consumption of end-users, by provide they with actual energy consumption data.			
STEP 2	QUESTION		ANSWER	ADDITIONAL DETAILS		NOTES/COMMENTS	
	General information	1	Is the project finished?	no	<small>If yes, you can specify the begin and end dates.</small>	NO	
		2	Is the project still ongoing?	yes	<small>If yes, you can specify the begin date and the expected end date.</small>	First stage, instalation of smart meters, IHD, integration of meter reading system and integration with customer portal was finished on 1 April 2013. Second stage - consumption monitoring will be provided till January 2016. Project should be alive till July 2018.	
		3	At which geographical location is the project situated?	-	<small>you can specify the name of the countries involved in the project</small>	Project not located in ope place, smart meters installed in varios regions of Latvia.	
		4	What is the overall project objective and underlying rationale?	-	<small>you can add more details about the goal of the project</small>	As result of project implementation, monitored 500 households are expected to reduce their electricity consumption by 10% and achieve carbon dioxide reduction of 267 975 kg/year.	
	Availability of information	5	Is there a clear link with the characterization structure?	yes	<small>If yes, how many classes can be covered? All the provided details will be useful in the next stages of the analysis.</small>	???	
		6	Does the project contain some unique and innovative elements of involvement of end users?	yes	<small>If yes, it is important to point out the possible innovative elements.</small>	In Latvian context yes, this is first smart meter installation project in Latvia - we provide end-users with actual consumption data! customer portal.	
		7	Is it possible to directly engage with the projects' end-users?	no	<small>If yes, this will allow us to gain insight in the end users' perspective on the project</small>	NO	
	Customer involvement	8	Are specific strategies planned to put the end-user in a central position?	yes	<small>If yes, it is important to point out such strategies such as demand response measures, consumption reduction awareness initiatives.</small>	We provide end-users with their actual consumption data, provide users with tips how to use household electrical appliances, organize seminars about effective use of electricity, will organize contest between participants of project.	
		9	Are the end-users which are involved in the project households and/or SMEs?	-	<small>you can specify if the involved end user are households and/or SMEs</small>	Only households	
		10	Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	<small>The presence of such actors may be useful to test their mutual interactions, especially with the customers.</small>	DSO, and customers and Latvenergo	
		11	What kind of tools and technologies are used in the project?	-	<small>Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption displays.</small>	Smart meters, IHD (35 households have energy monitors, set of smart plugs with possibilities switch on/off, access to consumption data by monitor, web page and smartphones), other have actual consumption data via customer portal and smartphones.	
		12	How to characterize the typical role of the project's end-users?	-	<small>The answer can be chosen among the following options: C1 - Consumer; C2 - Customer; C3 - Citizen.</small>	C2	
	Potential for learning	13	Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	<small>This is important to find both the best practices which should be taken into account and the bad practices which should be avoided.</small>	One of project aim is to explore impact of smart technology on household energy consumption and find answer to question "what should be yearly energy consumption to get benefits from smart metering".	
		14	Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	no	<small>If, for example, something went wrong but there is a suspect that things might have gone differently, probably it is the case to investigate.</small>	No	
	Privacy and security	15	Does the project deal with privacy and security issues?	yes	<small>If yes, are they sufficiently examined and treated? These issues cannot be neglected and adequate measures should be taken to face them in every project.</small>	YES, we have requirements regarding security of smart meeters, data communication, system of reading and customer portal. Access to the consumption data has DSO and customer. Latvenergo (as retailer) has allowance to use consumption data by end-user, who engaged in project.	
	Scalability and replicability	16	Is the project scalable on different dimensions?	yes	<small>This is an important aspect because it let us assess, for example, the exportability of the best practices stemming out from the project.</small>	YES	
		17	Is the project replicable in different contexts?	no	<small>The answer to this question can be derived using the information on how many countries and which kind of customers are involved.</small>	NO	
	Dissemination	18	Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	no	<small>If yes, are they an important part of the project?</small>	NO	
		19	Can we learn from the dissemination actions carried out during the projects, if any?	no	<small>Some best practices can be derived and pointed out.</small>	NO	
Active participation	20	Has the project shown a concrete willingness for an active partnership?	yes	<small>If yes, actions should be immediately taken to bring it on board of SSC</small>	???		

Name of the project		Salzburg Smart Grid Model Region (HT)			
Source from which it is extracted		www.smartgrid.salzburg.at, www.ennergysystemedevs.kit.edu			
Leading organization		Salzburg AG			
Country involved		Austria			
STEP 1	QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	1 Are all data available and enough and there are no any possible restraints to the availability of the project?	yes			
	2 Does the project have the potential to involve end-user with a central role?	yes			
3 Does the project have some practical (field) applications?	yes				
STEP 2	QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS	
	General information				
	Is the project finished?	no	If yes, the end date is indicated in the project plan.		
	Is the project still ongoing?	yes	If yes, please specify the start and end dates of the project.		
	At which geographical location is the project situated?	Salzburg, AT	the project is situated in the city of Salzburg, Austria.		
	What is the overall project objective and underlying rationale?	strongly integrated Smart Grid projects that seeks to deploy and investigate a broad range of Smart Grid technologies within a building complex. projects seeks to find the optimal interaction between a smart home/smart complex and its inhabitants.	the project aims to investigate the potential of smart grids in a building complex.		
	Availability of information				
	Is there a clear link with the characterization structure?	yes	If yes, the link is clearly stated in the project plan.		
	Does the project contain some unique and innovative elements of involvement of end users?	yes	If yes, it is important to point out the innovative elements.		
	Is it possible to directly engage with the project's end-users?	to be clarified	If yes, the end users are engaged in the project.		
	Customer involvement				
	Are specific strategies planned to put the end-user in a central position?	yes	If yes, it is important to point out the strategies.		
	Are the end-users which are involved in the project households and/or SMEs?	residential end-user-site (apartment complex)	the project involves residential end-users.		
	Are any other actors involved besides end users (DOOs, TSOs, industries...)?	yes	The presence of other actors is indicated in the project plan.		
	What kind of tools and technologies are used in the project?	DSM units, energy management systems, smart meters, feedback instruments	the project uses various tools and technologies.		
How to characterize the typical role of the project's end-users?	C1, C2, C3	the project involves end-users with different roles.			
Potential for learning					
Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to the success/failure of the project.			
Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	It is important to analyze the reasons behind the success/failure of the project.			
Privacy and security					
Does the project deal with privacy and security issues?	yes	If yes, please specify the issues.			
Scalability and replicability					
Is the project scalable on different dimensions?	yes	This is an important aspect to be considered for the replicability of the project.			
Is the project replicable in different contexts?	yes	The project is replicable in different contexts.			
Dissemination					
Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	If yes, specify the actions.			
Can we learn from the dissemination actions carried out during the projects, if any?	yes	Dissemination actions are carried out during the project.			
Active participation					
Has the project shown a concrete willingness for an active partnership?	yes	If yes, specify the actions.			

		Name of the project	B.R.I.S.T.O.L			
		Source from which it is extracted	www.westernpowerinnovation.co.uk/So-La-Bristol.aspx			
		Leading organization	Bristol City Council			
		Country involved	UK			
	QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS		
STEP 1	1 Are all data available and enough and there are no any possible restraints to the availability of the project?	yes				
	2 Does the project have the potential to involve end-user with a central role?	yes				
	3 Does the project have some practical (field) applications?	yes				
	QUESTION	ANSWER	ADDITIONAL DETAILS	NOTES/COMMENTS		
STEP 2	General information					
	Is the project finished?	no	If yes, when was it finished and when?	2019/2020		
	Is the project still ongoing?	yes	If yes, please specify the begin date and the expected end date.			
	At which geographical location is the project situated?	Bristol, UK	Please specify the exact location provided in the questionnaire.			
	What is the overall project objective and underlying rationale?	deployment of renewable energy sources and balancing energy consumption, building a Smart City	Please add more details about the goal of the project.			
	Availability of information					
	Is there a clear link with the characterization structure?	yes	If yes, the main classes can be covered? All the provided details will be used in the next stage of the analysis.			
	Does the project contain some unique and innovative elements of involvement of end users?	yes	If yes, it is important to point out the possible innovative elements.	consumers involved in the field but will not only be part of the technical solution to integrate the generation from intermittent solar sources, they will also learn about the availability of renewable energy and will be sensitive for their arising more active new role in the energy system.		
	Is it possible to directly engage with the projects' end-users?	to be clarified	If yes, how did you do it? Please specify the end users' participation in the project.			
	Customer involvement					
Are specific strategies planned to put the end-user in a central position?	yes	If yes, it is important to point out each strategy such as demand response programs, interruption, induction, new services provision.				
Are the end-users which are involved in the project households and/or SMEs?	residential, commercial and public consumption sites	Please specify if the involved end users are households and/or SMEs.	In schools, one office building and 30 homes			
Are any other actors involved besides end users (DSOs, TSOs, industries,...)?	yes	The presence of such actors may be useful to had the needed interactions, especially with the end users.				
What kind of tools and technologies are used in the project?	Battery Storage with Demand Response, Direct Current Networks to connect PV panels and DC appliances together and Smart Tariffs.	Some possible technologies might be, for example, smart meters, energy monitoring systems and consumption analysis.				
How to characterize the typical role of the project's end-users?	C1, C2, C3	The typical roles chosen among the following options: C1 - Consumer, C2 - Customer, C3 - Citizen.				
Potential for learning						
Can we learn from the reasons behind the success/failure of the project, if they have been made explicit?	yes	This is important to find both the good practices which should be taken into account and the bad practices which should be avoided.				
Would it be interesting to analyze the reasons behind the success/failure of the project, if they still remain unclear?	yes	If not already, following users being the most in respect that through their feedback, it is necessary to identify the reasons for their success.				
Privacy and security						
Does the project deal with privacy and security issues?	yes	If yes, with the sufficient measures and needed? Please specify control measures and possible measures should be taken to cope them in every project.				
Scalability and replicability						
Is the project scalable on different dimensions?	yes	This is an important aspect because for all reasons, the replicability of the best practices stemming out from the project.				
Is the project replicable in different contexts?	yes	The answer to this question can be derived along the information on how many other sites and which kind of end-users are involved.				
Dissemination						
Are specific dissemination actions foreseen during or after the project in the regions interested by its activities?	yes	If yes, with an important part of the project?				
Can we learn from the dissemination actions carried out during the projects, if any?	yes	Some best practices were derived and pointed out.				
Active participation						
Has the project shown a concrete willingness for an active partnership?	yes	If yes, where would be immediately lead to being a member of SOC?				