Executive summary

The Energy DATA FEED PLATFORM project is an initiative to design, implement and test an open software platform for energy consumptions monitoring and management from the customer (consumers/prosumers) side capable to interact with the energy network and to provide data feeds for an efficient use of energy.

The project aims to build a software platform capable to integrate many data sources and to provide appropriate services to convert these data into valuable information for energy flexibility management, audit and benchmarking. Development efforts will be distributed in four main topics: software architecture, communications, data acquisition/management and computational intelligence. A Service Oriented Architecture will serve as integration and open platform with specialised services for data acquisition and management at different time scales (from real time to season) capable to deal with existing solutions (SCADAS, energy monitors), but also capable to integrate new sensing technologies (smart metering, sensor networks) deployed.

The goal of Energy DATA FEED PLATFORM is to build common framework and validate it in several scenarios as industries, administrative buildings and homes, but at the same time it is conceived as multi user platform capable to take advantage of its intensive use for benchmarking purposes. Its development will be based on international recommendations (as the ISO, IEC standards), experience of partners in the consortium with a large trajectory in both, development of industrial solutions for energy monitoring, in different domains (industry, administration).

The Energy DATA FEED PLATFORMsolution aims to be a reference framework capable of operating as workbench to check and validate energy monitoring and management solutions with the intention to contribute to the standardisation of energy monitoring platforms with enhanced sensor integration and communication capabilities. Aim is to start reliable data feeds and allow market participants develop applications on top of that. Some of the first applications will be developed by the project, showing potential and real value for the market.

Energy DATA FEED PLATFORM is a well-balanced consortium of 5 entities (transmission network operator, global scale ICT Company, electricity distribution network operator, heating grid operator and renewable energy producers).

Grid and system operators discover solutions that allow customer involvement and feedback for more balanced relationship (demand side management, aggregator). Consumers find new tools that allow near real time energy consumption analysis, including benefits from micro generation. Application providers can approach number of new customers who are willing to use smart energy services. Renewable energy producers can look for business models that allow small scale and intermittent generation, supporting grid operations. Standards and sharing of best practices allow lower initial investments and operating costs for the society.

There is great potential hidden into non transparent grid that needs to be discovered without hurting any security requirements or rationality.