

Capgemini Community Power



The energy utility industry is undergoing a major transformation. The cost of solar power and energy storage is dropping. The rapidly increasing use of affordable renewable power generation is triggering new types of consumer and community behavior. New players are using new technology to enter traditional energy utility markets.

These changes represent unique opportunities for utilities and communities to work with. Utilities can help communities get organized, manage their distributed power production, storage, and consumption. These changes also create potential risk for those Utilities that aren't engaged.

People matter, results count.

Capgemini Community Power Models and Technologies are available to help. We are working with and for Utilities to innovate in the use of the Internet of Things and Big Data. Community Power Models engage Utilities, communities, consumers, and other key stakeholders, in a way that focuses on community power goals. Community Power Technologies are orchestrated by business rules that manage the flow of information between the Internet of Things.

Capgemini Community Power was created to enable communities and the Utilities that serve them in new ways. The platform and the Analytics Engine work with energy information at the home and community level to help balance the goals and rules defined by the community and the Utility. This is

not a Distribution Management System (DMS) but works with the DMS to help balance the distributed power generated and stored across the community with traditional power sources.

At the home level, Capgemini Community Power enables the consumer to optimize their energy generation, storage, and consumption. At the community level, it enables communities of homeowners to work together in new cooperative models with shared goals. At the Utility level, it provides more granular visibility into distributed energy resources and enables Utilities to work with consumers in new ways.

All these things happen with real-time information flowing from energy devices to the Cloud and

back again. Utilities continue to manage a safe, reliable, and efficient power supply while working with their customers in new ways.

Capgemini has embarked on a continuous cycle of innovation with Capgemini Community Power. We continue to grow the power of the platform by leveraging expertise and technologies that we have built over many years. Capgemini Community Power is built with solid technology bricks, leveraging Cloud based M2M solutions (device management, event management, and rules engines) designed by our Sogeti High Tech unit. Those M2M solutions, while being based on the latest innovative approaches for the Internet of Things, have also proven to be robust and scalable in very demanding environments in other industries (oil pipelines, nuclear, aerospace).

IT'S AS SIMPLE AS 1, 2, 3: MOTIVATION TO OPTIMIZE, ENABLING TECHNOLOGIES ORCHESTRATED BY CAPGEMINI COMMUNITY POWER

1



Community Motivated to Act on Energy Goals



Utility Motivated to Act on New Energy Models



Consumer Motivated to Act on Energy Goals

2



Renewable Electric Generation



New Energy Storage Technology



New Building Energy and Micro Grid Control Technology

3



Data Communications



Data Orchestration



Analytics and Decision Support



ENABLING COLLABORATION BETWEEN CUSTOMERS AND UTILITIES

Utilities are quickly learning to integrate distributed energy resources and implementing grid automation programs to adapt to and leverage two-way power flows on their distribution networks. Orchestration of information is more critical now than ever before to enable next-generation customers and their utilities to work together in new ways. This successful relationship is predicated upon consumers, prosumers, communities, and the

utilities that service them, having the orchestrated information and analytics they need to each play their part in the emerging world of distributed energy generation, community energy co-operatives, advanced energy storage solutions, changing energy prices, shifting regulatory environments, and surging new technologies.

Capgemini Community Power is at the heart of this new world. To ensure that we stay in lockstep

with emerging trends, we are teaming with energy technology start-up incubators, such as the Advanced Energy Centre at the MaRS Discovery District in Canada, and with Utility clients who also want to be ready to serve in this bold new energy optimized world. We look forward to continuing the conversation with you and your company and map out how we can help you use Capgemini Community Power for your customers and the communities that they live in.

To find out more about how Capgemini Community Power can benefit your business, please contact:

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About Capgemini

With almost 140,000 people in over 40 countries, Capgemini is one of the world's foremost providers of consulting, technology and outsourcing services. The Group reported 2013 global revenues of EUR 10.1 billion.

Together with its clients, Capgemini creates and delivers business and technology solutions that fit their needs and drive the results they want. A deeply multicultural

organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

Capgemini's Global Utilities Sector serves the top Utilities worldwide and draws on a network of more than 10,000 dedicated sector consultants. As a leader in smart grid and advanced metering infrastructure solutions, Capgemini's

Smart Energy Services is helping Utility customers throughout the world. Our integrated Digital Utilities Transformation framework empowers utilities to drastically improve their customer experience, operating and business models through disruptive technologies.

More on industry specific solutions is available at www.capgemini.com/utilities

About Sogeti High Tech, Leader in Engineering and R&D Services

With an experience of over 25 years, Sogeti High Tech makes its skills and know-how available to Aeronautics- and Space-, Defense-, Energy-, Telecoms & media-, Railway- and Life Sciences industries.

To be more responsive to market needs, Sogeti High Tech has developed a range of expertise

based on its R&D department, High Tech Labs, a real innovations incubator.

In close partnership with its customers, Sogeti High Tech develops and manufactures solutions with a high added value in the areas of Internet of Things, collaborative multi-agents systems, Big Data and cyber-security.

Subsidiary company of Capgemini Group, Sogeti High Tech is a center of excellence in System Engineering, Physical Engineering, Software Engineering, Testing and Consulting services.

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