Accelerating Smart Grid Investments
Project Overview

Background

The momentum is building globally on smart grids, with major players from the utility, IT and telecom industries developing investment plans and governments developing smart grid strategies and unlocking stimulus funding for pilot projects.

According to the World Economic Forum report, *Accelerating Smart Grid Investments*, different smart grid solutions are likely to emerge depending on historical starting points and the desired outcomes. But, generally, the Smart Grid concept stands for a modernization of the electricity system through incorporation of computer processing, sensing and control with two-way communications, operating across the electricity value chain. Making electricity systems smarter hold the promise of enabling energy efficiency, integration of renewable energy, electric vehicles, and new energy services to customers. The “digitization” of electricity could therefore become the backbone and a “must” for tomorrow's energy solutions and the low-carbon economy.

However, there is no blueprint or easy solution to smart grids. A paradigm shift in technology deployment and cross-industry collaboration, as well as in regulation and the way companies deliver energy services to consumers, is required for smart grids to succeed. Testing concepts in more and larger scale pilot projects will be instrumental to pave the way for full-scale implementation. In September 2009, the Forum’s Task Force on Low-Carbon Prosperity proposed to world leaders the establishment of an international public-private portfolio of 10 large-scale integrated smart grid demonstration projects across different regulatory regimes and implementing environments with sharing of learnings.

As governments look to accelerate smart grid developments and gain maximum value from available stimulus funding and industry players seek to set up new and larger pilot projects, there is a need to define success criteria for individual projects and the portfolio of smart grid pilots as a whole. Insights gleaned from existing and new pilot projects can help inform wider roadmaps for smart grid rollout and catalyse concrete partnerships for action. Public-private partnership and risk sharing via a series of well-designed demonstration projects will be crucial to help transcend the current challenges facing the smart grid industry and clearly illustrate the value proposition to investors and governments.

In 2010, the World Economic Forum Smart Grids project will provide a multistakeholder and neutral platform for key stakeholders across the smart grid value chain to explore success conditions for smart grid pilots and catalyse partnerships.

Project Focus

By combining research and dialogue, this project will:

- Provide a platform for public and private stakeholders across the smart grid value chain to collect and share practical knowledge and insights on what it takes to create successful and larger smart grid pilot projects and move forward smart grid developments.
- Fill the current knowledge gaps on what can be learned from existing pilot projects to define success criteria and a value case for future pilot projects, and create recommendations to inform investment and policy-making as well as roadmaps on smart grid rollout.
- Explore ways of implementing the recommendations from the project, particularly the opportunity to catalyse concrete partnerships for action.

Who Can Participate?

The Smart Grid project is driven by the Energy, ICT and the Engineering & Construction Industry Partner Communities and is supported by the Resource Partner Accenture. A project task force will be established as the core instrument of engagement for stakeholders. The project will be guided by a steering board of project champions. The task force is open to:

- World Economic Forum Industry Partner companies
- Selected experts, including academic institutions
- Policy-makers and regulators
- City leaders undertaking or planning pilot projects

Notes:

1. www.weforum.org/energy/publications
2. Low-Carbon Prosperity Task Force is a business-led multistakeholder collaboration that has engaged over 80 Forum Industry Partners and experts from nearly 40 academic and non-governmental organizations: www.weforum.org/climate
Process and Deliverables

Research and interviews with industry leaders will be conducted to generate data, insights and recommendations on creating successful and larger-scale pilot projects and how the pilot phase as a whole can be effective to provide the basis for later rollout. Case studies of lessons learned from ongoing pilot projects across different regulatory regimes will be developed.

The research will inform a dialogue series involving public and private stakeholders as well as experts. The series will consist of a blend of virtual meetings, workshops and sessions in Forum events and will seek links to relevant international and industry gatherings. The dialogue series will also focus on identifying and catalysing concrete partnerships for action in pursuit of recommendations.

A report will be published consolidating the insights from research and dialogue containing concrete recommendations on success factors for smart grid pilot projects.

A virtual platform will be established for regular task force interaction, knowledge sharing and to drive the project forward leveraging the World Economic Leaders Community (WELCOM) platform.

Calendar and Milestones

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<tr>
<th>Event</th>
<th>Description</th>
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<tr>
<td>World Economic Forum Annual Meeting 2010 in Davos-Klosters</td>
<td>Cross-industry private session: Smart Grid – From Emerging Industry to Mainstream?</td>
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<td>Research and development of report, March-June 2010</td>
<td>Research, interview process and project task force interaction to develop report</td>
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<td>IUEC Conference in Washington DC, 18-20 April 2010</td>
<td>Present early insights from research</td>
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<td>European Smart Grid workshop in Brussels, 12 May 2010</td>
<td>One-day private workshop gathering key stakeholders to discuss smart grid opportunities and pilot projects in Europe</td>
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<td>Launch of report, 30 June 2010</td>
<td>The report, Accelerating Smart Grid Investments – What Creates a Successful Smart Grid Pilot, will be launched</td>
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<td>Asia Smart Grid workshop, Incheon, South Korea, late August 2010 (tbc)</td>
<td>One-day private workshop gathering key stakeholders to discuss smart grid opportunities and pilot projects in Asia with an emphasis on South Korea</td>
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<td>World Economic Forum Annual Meeting of the New Champions 2010, Tianjin, People’s Republic of China, 13-15 September</td>
<td>Private session to share outcomes of project and discussion focusing on smart grids in Asia</td>
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<td>North America Smart Grid workshop (tbc)</td>
<td>One-day private workshop gathering key stakeholders to discuss smart grid opportunities and pilot projects in North America</td>
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<td>Virtual Sessions</td>
<td>Task force, steering board and virtual briefings to be organized as appropriate</td>
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