

‘Smart Grid Vision and Roadmap for Countries– Essential for Quality Power’: Global Roundtable

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The 21st century electric grid is witnessing several disruptive changes. After 100 years of centralized power generation and creation of massive electric grids, the shift is now towards de-centralized generation. For the past five years we are witnessing that increasing share of new generation resources are being added at the low voltage or distribution segment of the grid which is a major transformational change to the electric grid. The traditional boundaries between Generation, Transmission and Distribution are fast disappearing and the grid is evolving as an integrated grid. Smart Grid technologies have emerged as the key enablers for both integration of distributed and variable renewable energy resources as well as electric vehicles. The widespread deployment of smart grids is crucial to achieving a more secure and sustainable energy future as well as addressing current concerns with existing electricity systems, such as ageing infrastructure and increasing peak demands.

Smart Grid technologies are vital to address the challenges of the evolving electricity grids of the 21st century electricity needs. Appropriate business models are required that can engage country’s particular operating conditions and address the priority challenges: curbing power losses, and enhancing access to reliable, quality power for the common citizen. While developed nations with reliable electrical infrastructure and minimal growth rates are concentrating on smart metering, tools for forecasting and dispatch of renewable generation and analytics in their smart grid journey, countries like India with weak and growing grid, need to simultaneously strengthen the electric network as well as build additional layers of IT and automation systems to make the grid smarter.

Smart Grid is a transformation or journey from the present state of the grid towards adding a set of smarter systems/applications in a phased manner according to the business priorities of each utility. In order to manage and achieve this transformation successfully, detailed planning and development of an implementation strategy, methodology and guidelines are required, covering processes, selection of technologies and standards, resource requirements and capacity building programs for utilities, regulators, implementation agencies and technology providers. A transparent and comprehensive plan and roadmap for the implementation of smart grids would help technology development, capacity building and investment planning by all stakeholders and could ensure completion of projects in planned timelines. India Smart Grid Forum had worked with the Ministry of Power for preparation of Smart Grid Vision and Roadmap for India which offers a series of time – framed, specific, target driven measures, across these different areas, with which to enable the development and deployment of a Smart Grids in India.

The **Global Roundtable on ‘Smart Grid Vision and Roadmap for Countries – Essential for Quality Power’** is aimed to create a global platform for sharing experiences, best practices and enabling collaborations around the countries for addressing the challenges of Smart grid development and deployment in a country.



Focus:

The focus of the roundtable will be to:

1. Discuss and understand drivers and enablers for Smart grid development
2. Leverage this Global Roundtable to stimulate greater global cooperation across countries and formation of networks on a broader scale
3. Explore possibilities in the new century for collaborations for development of new Smart Grid Projects and networking for best practices and experience sharing
4. Contribute, through such sharing of experiences, for making country specific smart grid vision and roadmaps. Support countries initiating Grid Modernisation activities in their respective countries.
5. Creation of a 'Global Smart Grid Advisory Body' for advising/handholding/facilitating Smart Grid developments in the member countries.

