



# Smart grid roadmap

What is a smart grid roadmap?

This roadmap provides a consensus view from more than 200 government, industry, academia and consumer representatives on the current status of smart grid technologies, and it charts a course for expanding their use from today to 2050.

What is smart grid roadmap methodology (SGRM)?

Smart Grid Roadmap Methodology (SGRM) The goal of the SGRM is to help companies transition from understanding what the Smart Grid is generically to achieving the most effective timing and adoption of Smart Grid technology in a way that uniquely maximizes the benefits and minimizes risks for the utility or independent system operator (ISO).

Who created the Smart Grid technology roadmap?

The Smart Grids Roadmap was contributed to by David Beauvais of Natural Resources Canada for the development of the smart grid technologies sections and George Arnold of the National Institute of Standards and Technology (NIST) for the section on standards. The roadmap was edited by Andrew Johnston of Language Aid.

How do you start a smart grid roadmap?

The answer that we would give is "you start with the IntelliGrid Methodology." In 2007, EPRI began working with companies to develop company-specific Smart Grid roadmaps. EPRI was not the only company that was working with utilities to develop roadmaps. IBM, Accenture and KEMA were some of the others developing roadmaps.

What is the IEA global smart grid roadmap?

In addition, the IEA global smart grid roadmap, Technology Roadmap: Smart Grids, was released in 2011.2 1. The Distribution SG H2G is based on the methodological approach to road mapping in the updated version of the IEA Roadmap Guide (IEA, 2014a). It envisages four phases of roadmap development, as does this H2G.

What happened to the smart grid roadmap?

The Roadmap was helpful in providing direction for where SRP wanted to go. However, with the first four initiatives complete or well under way, the Smart Grid leadership has been dissolved and the remaining initiatives reside within their respective departments.

WASHINGTON, D.C. -- The U.S. Department of Energy (DOE) released a new roadmap outlining solutions to speed up the interconnection of clean energy onto the nation's transmission grid and clear the existing backlog of solar, wind, and battery projects seeking to be built. The Transmission Interconnection Roadmap, developed by DOE's Interconnection ...

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This IEEE Vision for Smart Grid Communications: 2030 and Beyond Roadmap is a high-level supplement of the full vision document IEEE Vision for Smart Grid Communications: 2030 and Beyond. Communication is a major enabling technology for the Smart Grid. We believe that the power grid will tend to utilize advances in communications since the data exchange ...

Smart Grid Interoperability Standards Roadmap. 1. Under the Energy Independence and Security Act (EISA) of 2007, the National Institute of Standards and Technology (NIST) has "primary responsibility to coordinate development of a framework that ...

The Smart Grid 1 Smart Grid Policy Roadmap: Consumer Focused and Technology Driven TIA believes modernization of the U.S. electric grid is a vital component of the nation's energy strategy aiming to reduce U.S. dependence on foreign oil, decrease carbon emissions, create

NIST Draft Interim Roadmap - Outline Executive Summary Chapter 1: Purpose and Scope Chapter 2: Smart Grid Vision Chapter 3: Smart Grid Conceptual Model Chapter 4: Smart Grid Applications and Requirements Chapter 5: Cyber Security Considerations for the Smart Grid Chapter 6: Prioritized Actions Chapter 7: Definitions Chapter 8: References

To launch the development of a smart grid roadmap for Indonesia, the first phase of the Siemens Smart Grid Compass - "Orientation" - was executed with a joint PLN-Siemens workshop in Makassar, Indonesia, under patronage of GIZ. This paper presents the method and direct experiences as well as the lessons learned from setting up a smart ...

An example of this more collaborative approach is the Smart Metering Task Force that was established to perform planning activities to establish a roadmap for the future upgrades and enhancements to Toronto Hydro's smart grid infrastructure which includes not only AMI, but also the OT aspects of grid operations both in the field (SCADA RTU ...

The smart grid roadmap of Switzerland offers a much needed analysis of barriers for smart grids in Switzerland. It initiated a process that will lead to regulatory changes, thereby fostering more intelligence in Swiss electricity grids, which is needed for increasingly distributed and a fluctuating infeed of renewable energy sources into ...

3 days ago; The Strategic Roadmap document includes establishment of Innovation Park, Technology Incubation Hub and SGKC to be a preferred institute of learning for Smart Grid technologies. This roadmap was formally released by MoP on 30th June 2020 during virtual private sector consultation event organized to promote & seek stakeholder's feedback on ...

Since the release of the last edition of the NIST Smart Grid Framework and Roadmap for Interoperability Standards (Release 2.0),<sup>1</sup> in February 2012, significant technological advances in smart grid infrastructure have been implemented, supported by standards development across the entire smart grid arena.

Figure 1: the Smart Grid Roadmap depicts different ways and options to develop the current into an intelligent system. The Role of the Roadmap The objective of the Roadmap, besides providing the common understanding of Smart Grids, is to achieve a consensus on current challenges for electricity networks - ...

Smart Grid Vision and Roadmap for India (2013) Training and Capacity Building Programs for Energy Transition (Since 2013 (On Going)) ... India Smart Grid Forum CBIP Building, Malcha Marg, Chanakyapuri, Delhi-110021. Phone +91-114103 0398. Email [contactus@indiasmartgrid](mailto:contactus@indiasmartgrid) .

Source: Smart Grid Roadmap, GIZ Consultant for ERAV. 8 Smart Grid in Vietnam -Decision 1670 in 2012 Decision 1670/QD-TTg/2012 of the Prime Minister approving the smart grid development project in Vietnam guideline for the development of SG in Vietnam Goals

Smart Grid Framework and Roadmap identifies 75 standards, specifications, or guidelines that are immediately applicable (or likely to be applicable) to the ongoing transformation to the Smart Grid. In this report, the total is divided into two sets. The first set of 25 standards, specifications,

A smart grid is an electricity network that uses digital and other advanced technologies to monitor and manage the transport of electricity from all generation sources to meet the varying electricity demands of end users. Smart grids co-ordinate the needs and capabilities of all generators, grid operators, end users and electricity market stakeholders to ...

3.2 Decision 1670/QD-TTg - First Smart Grid Development Roadmap 21 3.3 Decision 4602/QD-BCT - Comprehensive Smart Grid Development Plan 27 3.4 Other Legal Documents supporting Smart Grid Development 30 3.5 Assessment of Effectiveness and Challenges in the Current Policy Landscape 30 4 REVIEW OF SMART GRID PROGRAMS ...

PEA Smart Grid Roadmap (Under revision) MEA Smart Grid Roadmap: Focus o SAS/DAS, SCADA-DMS o Smart Meters @large customers for EMS o EV-related business development and technical impacts; with 10 charging stations. EGAT Smart Grid Mission & Core Values Smart Planning in evolving ESI Smart Generation for sufficiency

The objective of the German E-Energy/Smart Grids 2.0 Standardization Roadmap is to illustrate necessary prerequisites for the implementation and investment security of smart grids in order to completely exhaust potential resulting from the energy revolution in energy supply for energy producers, consumers and electrical grid operators and to overcome existing challenges.

A modernized grid enables all participants to benefit from the new introduction of new technologies, from distributed resources to advanced communications and controls. Working with stakeholders and partners from industry, government, and academia, NIST has published the NIST Smart Grid Framework Release 4.0. This program advances the ...

SMART GRID POLICY FRAMEWORK AND ROADMAP FOR THE PHILIPPINES Redentor E. Delola Assistant Secretary Department of Energy 27 November 2019 44th IEEE Annual National Convention SMX Convention Center, Mall of Asia Complex, Pasay City. Department of Energy Powering the Nation Presentation Outline

INTERNATIONAL JOURNAL of SMART GRID F. YEM SOUHE et al., Vol.5, No.1, March, 2021 Roadmap for Smart Metering Deployment in Cameroon ... implement a smart grid roadmap in the distribution network of five islands of Hawaii and to achieve the AMI part in 2018. They presented the implementation of a smart grid on

The Department Circular No. DC2020-02-0003 Providing a National Smart Grid Policy Framework for the Philippine Electric Power Industry and Roadmap for Distribution Utilities provides a policy framework and a roadmap for transitioning the Philippine Power ...

It has already carried out an impact assessment on the introduction of smart grids. It has also drawn up both a smart grid strategy and a smart grid roadmap for Switzerland. This road map includes a schedule and sets out the available options for developing the electricity network in Switzerland, establishing where and when action needs to be ...

NIST Framework and Roadmap of Smart Grid Interoperability Standards, Release 4.0 . NIST invites your input on the newly released draft of its Framework and Roadmap for Smart Grid Interoperability Standards, Release 4.0. Your comments can be submitted to smartgridframework [at] nist.gov (smartgridframework[at]nist[dot]gov) and will be used by NIST ...

Smart Grid Roadmap Lessons Learned . 1. Developing a Roadmap is Always a Bigger Effort Than You Think it Will Be 2. There is as Much Value From the "Journey" as in the End Product 3. A Successful Roadmap Must be Driven From the Top 4. A Successful Roadmap Must Take a Holistic View 5. A Successful Roadmap Put the

This How2Guide provides direction for developing and implementing a national or regional smart grid roadmap, in mature and developing grids alike, walking stakeholders through the process, including: planning and preparation, visioning, preparing the ...

The smart grid is an enhancement of the 20th century electrical ... The National Electric Delivery Technologies Roadmap is the implementation document for the Grid 2030 vision. The Roadmap outlines the key issues and challenges for modernizing the grid and suggests paths that government and industry can take to build America's future electric ...

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