Smart Grid Maturity Model Roadmap: Mapping the Smart Grid Journey

IBM

The Age of Smarter Energy Is Here

Around the globe, progressive utilities see the inevitability of adopting a smart grid to modernize the power grid. More than meters and mobility, the smart grid represents a whole new framework for improved management of electric generation, transmission and distribution.

Few question that traditional power grids are showing their age. Rising energy costs, aging network assets, an aging workforce and regulators are putting pressure on utilities to become even more operationally efficient. The convergence of environmental pressures, the demand for alternative energy sources and financial expectations requires a new level of enterprise information and integration.

In many developed and emerging economies, getting a smart grid up and running cannot come soon enough.

Smart Grid Maturity Model – Levels and Descriptions

Level 5: Pioneering		Breaking new ground; industry-leading innovation
Level 4: Optimizing		Optimizing smart grid to benefit entire organization; may reach beyond organization; increased automation
Level 3: Integrating		Integrating smart grid deployments across the organization, realizing measurably improved performance
Level 2: Enabling		Investing based on clear strategy, implementing first projects to enable smart grid (may be compartmentalized)
Level 1: Initiating		Taking the first steps, exploring options, conducting experiments, developing smart grid vision
Level 0: Default		Default level (status quo)

Getting From Here To There

Building more traditional utility grids is not the answer. Most countries today are looking for new and more efficient ways to improve in their energy generation and distribution. By contrast to traditional grids, smart grids add intelligence throughout the grid to improve system reliability and efficiency, improve management of supply and demand, optimize operations and streamline costs. The infusion of digital intelligence also enables integration of traditional as well as new sources of power and their applications — wind, solar, plug-in hybrid electric cars and so forth — providing end-to-end insight across all forms of energy.

In the process, smart grids will make possible greater levels of repeatability, reliability and security. Consumers will be able to interact with the smart grid in multiple, more convenient ways as well. For instance, they may be able to select new services and pricing options and gain near real-time visibility into their usage and costs. The smart grid helps consumers make "smart" homes and energy-conscious choices possible. But how do we get from here to there — from today's conventional power grid to tomorrow's cleaner, more efficient smart grid?

Increasingly, executives of utilities know that transformation to the smart grid is the right thing to do. But many remain unclear as to how to manage the transformation — and where to begin.

Using the Smart Grid Maturity Model, IBM can help you implement top-to-bottom processes and technologies and guide you on your path to the smart grid

Enter the Smart Grid Maturity Model

The Smart Grid Maturity Model (SGMM) is a methodology that creates a road map of activities, investments and best practices that leads to creating a smart grid. The SGMM can be used to establish the smart grid journey, to communicate vision and strategy and to assess current opportunities, choices and future goals. The SGMM can be used as a strategic framework to develop business cases and explicit plans to move forward. It uses observable indicators to measure progress. Ultimately, the SGMM helps you move in an orderly fashion through the maze of challenges in a smart grid transformation — from technological to regulatory to organizational.

The SGMM was developed by IBM in collaboration with the Global Intelligent Utility Network Coalition, which includes leading utilities from around the world, and with support from APQC (American Productivity & Quality Center). The intent for the model is to stimulate, guide and support a utility's own efforts and investments in smart grids. The more widely the SGMM is adopted and used as a tool for measuring and sharing best practices, the more benefit it will bring to all participants, the industry and the planet. Therefore, in 2009, IBM and the Global Intelligent Utility Network Coalition handed over the SGMM to Carnegie Mellon University's Software Engineering Institute (SEI). In their role as steward of the SGMM, the SEI assumes primary responsibility for the ongoing governance, growth and evolution of the model.To stimulate, guide, and support efforts and investments in smart grids and to support widespread adoption and use, the SEI ensures availability of the model and supporting materials and services for the user community. SEI maintains consistency of the SGMM application, validity, and results. The SEI also analyzes and provides feedback on SGMM use and the value and impact for stakeholders. In addition, the World Energy Council (WEC) is a channel for global dissemination, participation and adoption of the model using its worldwide network of member committees. Together, they will lead the SGMM activities globally to support the transformation of the utility industry.

It All Begins With A Vision

The Smart Grid Maturity Model — essentially a matrix of almost 175 outcomes, capabilities and benefits, plotted and tracked in eight work domains — progresses through six levels of maturity. Not every utility will need, or want, to go to the last level. Depending on their situation, a utility can select which level is optimal for their smart grid vision. Level 5 for example perpetuates innovation into new frontiers of the energy business. Before you go there, let's start at the beginning.

Level Zero: Default

Utility has not embarked on any smart grid technology activities.

Level One: Vision

Having a vision of your smart utility, and how your business and customers ultimately benefit, is the critical first level of the Smart Grid Maturity Model. At this stage, you may not have a strategy to realize that vision, but it's a time to explore options, evaluate business cases and technology, and assess which elements you have already deployed.

Level Two: Strategizing for Investing

Getting a strategy in place for investing is next. At this level, you make decisions, at least at a functional level, regarding the way forward. With business cases developed, investments are made on one or two functional deployments — with value being realized.

Level Three: Integrating Across Operations

Now your smart grid program starts to spread. Operational linkages are established between two or more functional areas. Management decisions span functional interests, resulting in benefits ranging from shared information to repeatable practices.

Level Four: Optimizing Enterprise Wide

Real-time corrections and broad reuse of systems and information are transformative when compared to the old analog grid. Smart grid functionality and benefits are being realized in powerful new ways—from end-to-end observability to real-world aware systems to environmental score keeping and reporting.

Level Five: Perpetual Innovation

New business as well as operational, environmental and societal opportunities present themselves, and the capability now exists to take advantage of them. Self-healing and autonomic, your utility is in a perpetual state of readiness to respond (and innovate) on a dime.

Tom Standish, group president of Regulated Operations, CenterPoint Energy, encourages every utility to participate in the Smart Grid Maturity Model survey. "It provides insights into where you are on your smart grid journey and what milestone objectives to set to achieve the benefits of smart grid — for both customers and business," Standish said.

Utility Domains Impacted by Smart Grid

With this general progression of the "levels of maturity" in mind, let's take a look at the eight domains in your utilities that are impacted by the changes brought about by the smart grid transformation.

People and Technology Domains:

The core business areas that are most affected in a smart grid transformation.

Strategy, Management and Regulatory:

The mission, vision, strategy, and how it is managed must be fully integrated in order to guide the way to a smart grid. By the end of the process, you've created an open environment for new business opportunities. You've also optimized systems, resulting in likely favorable treatment for regulatory policy.

Organization:

For a smart grid to be successful, the organizational structure must promote and reward cross-functional planning and operations, but still allow for empowered decision making. In doing so, the organization flattens, which helps to drive a culture of innovation and integration.

Technology:

A cohesive technology strategy must connect and support the innumerable data sources and users that make up a smart grid, today and into the future. Eventually, the smart grid establishes a common architectural framework, which allows you to optimize processes across the board via near real-time simulation and analytics. Automated data flows — from the customer via automated metering and the power generation side, for example — streamline your entire business model.

Societal and Environment:

A smart grid allows a utility, and society, to make choices and take advantage of energy alternatives and efficiencies, regarding both production and consumption. In this domain, the utility establishes a path to actualize the "triple bottom line" — addressing financial, environmental and societal issues at once.

Process Domains:

The four process areas most affected by a smart grid transformation.

Grid Operations — A holistic smart grid is based on a solid core foundation of intelligent grid components (such as sensors and actuators) and operational design. Use of technology and automation is fused with enterprise processes. One way in which the smart grid could impact the operation is by delivering ubiquitous and dynamic control system-wide.

Work and Asset Management — When operating and maintaining assets is based on up-to-date, fact-based performance data, the utility moves from a preventative maintenance model to a predictive and self-healing model. This is a huge leap forward in optimizing the use of equipment and people.

Customer Management and Experience — Through the smart grid, the customer becomes empowered to make their own choices regarding their use and cost of energy. Customer care, pricing options, advanced services, outage detection — the smart grid makes the utility more responsive to the customer.

Value Chain Integration — Extending automation beyond traditional boundaries and across the entire value chain opens opportunities for innovation and efficiencies. Ultimately, the smart grid helps coordinate energy management and generation across the supply chain, driving down costs.

What is the Intelligent Utility Network?

The Intelligent Utility Network is IBM's solution for the smart grid. It encompasses a broad set of offerings that address the complete energy value chain, from power generation to consumer premise.

The Intelligent Utility Network fundamentally is an information network which connects together the 'participants' in the energy value chain, at multiple levels, and enables the intelligent flow of information which can be used to transform and optimize their respective roles in the regulation, generation, supply and consumption of electricity. The solution is the information management component of the smart grid.

The Smart Grid Maturity Model : Matrix

	Technology (TECH)	Customer (CUST)
PIONEERING **5**	1. Autonomic computing and machine learning are implemented. 2. The enterprise information infrastructure can automatically identify, mitigate, and recover from cyber incidents.	1. Customers can manage their end-to-end energy supply and usage levels. 2. There is automatic outage detection at the premise or device level. 3. Plug-and-play, customer-based generation is supported. 4. Security and privacy for all customer data is assured. 5. The organization plays a leadership role in industry-wide information sharing and standards development efforts for smart grid.
OPTIMIZING **4**	1. Data flows end to end from customer to generation. 2. Business processes are optimized by leveraging the enterprise IT architecture. 3. Systems have sufficient wide-area situational awareness to enable real-time monitoring and control for complex events. 4. Predictive modeling and near real-time simulation are used to optimize support processes. 5. Performance is improved through sophisticated systems that are informed by smart grid data. 6. Security strategy and tactics continually evolve based on changes in the operational environment and lessons learned.	1. Support is provided to customers to help analyze and compare usage against all available pricing programs. 2. There is outage detection and proactive notification at the circuit level. 3. Customers have access to near real-time data on their own usage. 4. Residential customers participate in demand response and/or utility-managed remote load control programs. 5. Automatic response to pricing signals for devices within the customer's premise is supported. 6. In-home net billing programs are enabled. 7. A common customer experience has been integrated.
INTEGRATING **3**	1. Smart grid-impacted business processes are aligned with the enterprise IT architecture across LOBs. 2. Systems adhere to an enterprise IT architectural framework for smart grid. 3. Smart grid-specific technology has been implemented to improve cross-LOB performance. 4. The use of advanced distributed intelligence and analytical capabilities are enabled through smart grid technology. 5. The organization has an advanced sensor plan. 6. A detailed data communication strategy and corresponding tactics that cross functions and LOBs are in place	1. The organization tailors programs to customer segments. 2. Two-way meter communication has been deployed. 3. A remote connect/disconnect capability is deployed. 4. Demand response and/or remote load control is available to residential customers. 5. There is automatic outage detection at the substation level. 6. Residential customers have on-demand access to daily usage data. 7. A common experience has been implemented across two or more customer interface channels. 8. Customer education on how to use smart grid services to curtail peak usage is provided. 9. All customer products and services have built-in standards based on security and privacy controls.
ENABLING **2**	1. Tactical IT investments are aligned to an enterprise IT architecture within an LOB. 2. Changes to the enterprise IT architecture that enable smart grid are being deployed. 3. Standards are selected to support the smart grid strategy within the enterprise IT architecture. 4. A common technology evaluation and selection process is applied for all smart grid activities. 5. There is a data communications strategy for the grid. 6. Pilots based on connectivity to distributed IEDs are underway. 7. Security is built into all smart grid initiatives from the outset.	1. Pilots of remote AMI/AMR are being conducted or have been deployed 2. The organization has frequent (more than monthly) knowledge of residential customer usage. 3. The organization is modeling the reliability of grid equipment. 4. Remote connect/disconnect is being piloted for residential customers. 5. The impact on the customer of new services and delivery processes is being assessed. 6. Security and privacy requirements for customer protection are specified for smart grid-related pilot projects and RFPs.
INITIATING **1**	1. An enterprise IT architecture exists or is under development. 2. Existing or proposed IT architectures have been evaluated for quality attributes that support smart grid applications. 3. A change control process is used for applications and IT infrastructure. 4. Opportunities are identified to use technology to improve departmental performance. 5. There is a process to evaluate and select technologies in alignment with smart grid vision and strategies.	1. Research is being conducted on how to use smart grid technologies to enhance the customer's experience, benefits, and participation. 2. Security and privacy implications of smart grid are being investigated. 3. A vision of the future grid is being communicated to customers. 4. The utility consults with public utility commissions and/or other government organizations concerning the impact on customers.
DEFAULT **0**		

The Smart Grid Maturity Model : Matrix

	Strategy, Management, and Regulatory (SMR)	Organization and Structure (OS)
PIONEERING 5	1. Smart grid strategy capitalizes on smart grid as a foundation for the introduction of new services and product offerings. 2. Smart grid business activities provide sufficient financial resources to enable continued investment in smart grid sustainment and expansion. 3. New business model opportunities emerge as a result of smart grid capabilities and are implemented.	1. The organizational structure enables collaboration with other grid stakeholders to optimize overall grid operation and health. 2. The organization is able to readily adapt to support new ventures, products, and services that emerge as a result of smart grid. 3. Channels are in place to harvest ideas, develop them, and reward those who help shape future advances in process, workforce competencies, and technology.
OPTIMIZING 4	1. Smart grid vision and strategy drive the organization's strategy and direction. 2. Smart grid is a core competency throughout the organization. 3. Smart grid strategy is shared and revised collaboratively with external stakeholders.	1. Management systems and organizational structure are capable of taking advantage of the increased visibility and control provided by smart grid. 2. There is end-to-end grid observability that can be leveraged by internal and external stakeholders. 3. Decision making occurs at the closest point of need as a result of an efficient organizational structure and the increased availability of information due to smart grid.
INTEGRATING 3	1. The smart grid vision, strategy, and business case are incorporated into the vision and strategy. 2. A smart grid governance model is established. 3. Smart grid leaders with explicit authority across functions and lines of business are designated to ensure effective implementation of the smart grid strategy. 4. Required authorizations for smart grid investments have been secured.	1. The smart grid vision and strategy are driving organizational change. 2. Smart grid measures are incorporated into the measurement system. 3. Performance and compensation are linked to smart grid success. 4. Leadership is consistent in communication and actions regarding smart grid. 5. A matrix or overlay structure to support smart grid activities is in place. 6. Education and training are aligned to exploit smart grid capabilities.
ENABLING 2	1. An initial smart grid strategy and a business plan are approved by management. 2. A common smart grid vision is accepted across the organization. 3. Operational investment is explicitly aligned to the smart grid strategy. 4. Budgets are established specifically for funding the implementation of the smart grid vision. 5. There is collaboration with regulators and other stakeholders regarding implementation of the smart grid vision and strategy. 6. There is support and funding for conducting proof-of-concept projects to evaluate feasibility and alignment.	1. A new vision for a smart grid begins to drive change and affect related priorities. 2. Most operations have been aligned around end-to-end processes. 3. Smart grid implementation and deployment teams include participants from all impacted functions and LOBs. 4. Education and training to develop smart grid competencies have been identified and are available. 5. The linking of performance and compensation plans to achieve smartgrid milestones is in progress.
INITIATING 1	1. Smart grid vision is developed with a goal of operational improvement. 2. Experimental implementations of smart grid concepts are supported. 3. Discussions have been held with regulators about the organization's smart grid vision.	1. The organization has articulated its need to build smart grid competencies in its workforce. 2. Leadership has demonstrated a commitment to change the organization in support of achieving smart grid. 3. Smart grid awareness efforts to inform the workforce of smart grid activities have been initiated.
DEFAULT 0		

The Smart Grid Maturity Model : Matrix

	Value Chain Integration (VCI)	Societal and Environmental (SE)
PIONEERING **5**	1. The optimization of energy assets is automated across the full value chain. 2. Resources are adequately dispatchable and controllable so that the organization can take advantage of granular market options. 3. Automated control and resource optimization schemes consider and support regional and/or national grid optimization.	1. Triple bottom line goals align with local, regional, and national objectives. 2. Customers control their energy-based environmental footprints through automatic optimization of their end-to-end energy supply and usage level (energy source and mix). 3. The organization is a leader in developing and promoting industry-wide resilience best practices and/or technologies for protection of the national critical infrastructure.
OPTIMIZING **4**	1. Energy resources (including Volt/VAR, DG, and DR) are dispatchable and tradable. 2. Portfolio optimization models that encompass available resources and real-time markets are implemented. 3. Secure two-way communications with Home Area Networks (HANs) are available. 4. Visibility and potential control of customers' large-demand appliances to balance demand and supply is available.	1. The organization collaborates with external stakeholders to address environmental and societal issues. 2. A public environmental and societal scorecard is maintained. 3. Programs are in place to shave peak demand. 4. End-user energy usage and devices are actively managed through the utility's network. 5. The organization fulfills its critical infrastructure assurance goals for resiliency, and contributes to those of the region and the nation.
INTEGRATING **3**	1. An integrated resource plan is in place and includes new targeted resources and technologies. 2. Customer premise energy management solutions with market and usage information are enabled. 3. Additional resources are available and deployed to provide substitutes for market products to support reliability or other objectives. 4. Security management and monitoring processes are deployed to protect the interactions with an expanded portfolio of value chain partners.	1. Performance of societal and environmental programs are measured and effectiveness is demonstrated. 2. Segmented and tailored information that includes environmental and societal benefits and costs is available to customers. 3. Programs to encourage off-peak usage by customers are in place. 4. The organization regularly reports on the sustainability and the societal and environmental impacts of its smart grid programs and technologies.
ENABLING **2**	1. Support is provided for energy management systems for residential customers. 2. The value chain has been redefined based on its smart grid capabilities. 3. Pilots to support a diverse resource portfolio have been conducted. 4. Secure interactions have been piloted with an expanded portfolio of value chain partners.	1. Smart-grid strategies and work plans address societal and environmental issues. 2. Energy efficiency programs for customers have been established. 3. The organization considers a "triple bottom line" view when making decisions. 4. Environmental proof-of-concept projects are underway that demostrate smart grid benefits. 5. Increasingly granular and more frequent consumption information is available to customers.
INITIATING **1**	1. Assets and programs necessary to facilitate load management are identified. 2. Distributed generation sources and the capabilities needed to support them are identified. 3. Energy storage options and the capabilities needed to support them are identified. 4. There is a strategy for creating and managing a diverse resource portfolio. 5. Security requirements to enable interaction with an expanded portfolio of value chain partners have been identified.	1. The smart grid strategy addresses the organization's role in societal and environmental issues. 2. The environmental benefits of the smart grid vision and strategy are publicly promoted. 3. Environmental compliance performance records are available for public inspection. 4. The smart grid vision or strategy specifies the organization's role in protecting the nation's critical infrastructure.
DEFAULT **0**		

The Smart Grid Maturity Model : Matrix

	Grid Operations (GO)	Work and Asset Management (WAM)
PIONEERING 5	1. Self-healing capabilities are present. 2. System-wide, analytics-based, and automated grid decision making is in place.	1. The use of assets between and across supply chain participants is optimized with processes defined and executed across the supply chain. 2. Assets are leveraged to maximize utilization, including just-in-time as set retirement, based on smart grid data and systems.
OPTIMIZING 4	1. Operational data from smart grid deployments is being used to optimize processes across the organization. 2. Grid operational management is based on near real-time data. 3. Operational forecasts are based on data gathered through smart grid. 4. Grid operations information has been made available across functions and LOBs. 5. There is automated decision-making within protection schemes that is based on wide-area monitoring.	1. A complete view of assets based on status, connectivity, and proximity is available to the organization. 2. Asset models are based on real performance and monitoring data. 3. Performance and usage of assets is optimized across the asset fleet and across asset classes. 4. Service life for key grid components is managed through condition-based and predictive maintenance, and is based on real and current asset data.
INTEGRATING 3	1. Smart grid information is available across systems and organizational functions. 2. Control analytics have been implemented and are used to improve cross-LOB decision-making. 3. Grid operations planning is now fact-based using grid data made available by smart grid capabilities. 4. Smart meters are important grid management sensors. 5. Grid data is used by an organization's security functions. 6. There is automated decision-making within protection schemes.	1. Performance, trend analysis, and event audit data are available for components of the organization's systems. 2. CBM programs for key components are in place. 3. Remote asset monitoring capabilities are integrated with asset management. 4. Integration of remote asset monitoring with mobile workforce systems, in order to automate work order creation, is underway. 5. An integrated view of GIS and asset monitoring is in place. 6. Asset inventory is being tracked using automation. 7. Modeling of asset investments for key components is underway.
ENABLING 2	1. Initial distribution to substation automation projects are underway. 2. Advanced outage restoration schemes are being implemented, which resolve or reduce the magnitude of unplanned outages. 3. Aside from SCADA, piloting of remote asset monitoring of key grid assets to support manual decision making is underway. 4. Investment in and expansion of data communications networks in support of grid operations is underway.	1. An approach to track, inventory, and maintain event histories of assets is in development. 2. An integrated view of GIS for asset monitoring based on location, status, and interconnectivity (nodal) has been developed. 3. An organization-wide mobile workforce strategy is in development.
INITIATING 1	1. Business cases for new equipment and systems related to smart grid are approved. 2. New sensors, switches, and communications technologies are evaluated for grid monitoring and control. 3. Proof-of-concept projects and component testing for grid monitoring and control are underway. 4. Outage and distribution management systems linked to substation automation are being explored and evaluated. 5. Safety and security (physical and cyber) requirements are considered.	1. Enhancements to work and asset management have been built into approved business cases. 2. Potential uses of remote asset monitoring are being evaluated. 3. Asset and workforce management equipment and systems are being evaluated for their potential alignment to the smart grid vision.
DEFAULT 0		

Putting the Smart Grid Maturity Model into Action

DONG Energy is Denmark's largest energy company formed in March 2006 by the merger of six diverse companies in the fields of electrical and gas distribution and sales, power generation, and oil and gas exploration. An energy company in the truest sense of the word, Dong is also an innovator, now running pilots in wind energy to power electric vehicles.

Like many electrical distribution companies around the world, Dong is moving through a transformation from a conventional energy model to one that takes advantage of alternative and traditional energy sources. These companies face similar challenges in integrating renewable energy into their business models, from managing innovation to the daily challenge of relieving stressed-out grids.

The path forward is the Intelligent Utility Network (IUN), which uses information technology to improve the management and, therefore, the performance of electrical grids. DONG Energy used the Smart Grid Maturity Model to determine their overall aspirations and to identify where they were on their path to a smart grid and where they wanted to be. Through its planning process, DONG Energy identified more than 80 projects that would advance its smart grid implementation. The company turned to the Maturity Model to prioritize its list of projects and focus on a core set of five projects that will provide the greatest benefit, giving DONG Energy a clear path forward on its smart grid journey.

Why Participate Now?

With the Smart Grid Maturity Model, best practice organizations stand out, as leaders and innovators among peers and customers alike. In the transition to a smart grid, participants who use the Maturity Model can benefit greatly from the sharing of best practices — including shared research, benchmarking data and custom reports. These utilities can use it to collaborate with regulators, vendors and other utilities, network with peers, and share their experiences — all of which contribute to an evolving industry view of smart grid value.

By participating today rather than down the road, utilities can become a leader in a movement to advance the energy industry forward. At the same time, participating utilities will demonstrate efforts to improve customer service and the environment in association with other industry leaders.

"The Smart Grid Maturity Model has been a key tool in Essential Energy (formerly known as Country Energy) progressing along the path to our Intelligent Network. Through mapping and benchmarking, our current operations against the model has allowed us to identify the areas in which to focus our efforts to make the greatest gains and form our overall Intelligent Network strategy." — Col Ussher, Executive General Manager, Essential Energy

Why IBM?

Along with leading the global support for the Smart Grid Maturity Model, IBM has proven successful around the world in delivering smart grid solutions that provide improved reliability and end-to-end network data in near real-time. We bring to the table the integration skills, leading-edge technology, partner ecosystem, and business and regulatory expertise required to support every level of Smart Grid Maturity Model activities. We provide planning and business case development from pilot programs to full-scale execution. Our extensive experience can deliver a comprehensive Intelligent Utility Network solution that is manageable and scalable in a secure environment.

We can become smarter about energy by applying technology and accessing information to transform the way power is sourced, distributed and consumed. IBM scientists and industry experts are working with clients to build smart energy solutions around the world. We are working with utility companies globally to accelerate the adoption of smart grids to help make them more reliable and give customers better usage information.

Proven, tested and validated solutions and methodologies

IBM's successful Energy & Utilities Solutions Framework has been validated with top energy and utilities companies, and is focused on transformative solutions found in the SGMM.

In addition, our global Centers of Excellence and solutions labs ensure proven solutions even before they are implemented—minimizing risk in scheduling, cost and performance.

Relevant industry expertise, supported by an industry-leading partnership ecosystem

IBM alliances with best-of-breed Business Partners reduce customer project costs and minimize implementation and integration risks. We bring together the relevant tools, resources and people experienced in the Energy & Utilities industry. Global reach with local service. We can send in local teams that understand your business, technical and regulatory environments.

IBM's unique capabilities and presence in 170 countries mean utility companies around the globe have the resources and responsiveness they need to implement and support a mature Intelligent Utility Network solution of any scale.

Financing options

IBM Global Financing offerings are available. Flexible payment structures allow utilities to more effectively distribute initial costs and match payments to service benefits.

For more information

To learn more about the Smart Grid Maturity Model or to start using it today, please contact your local IBM representative or visit us

ibm.com/energy

IBM Global Services
Route 100
Somers, NY 10589
U.S.A.

Produced in the United States of America
October 2011

Please Recycle

GBB14018-USEN-00