Connecting the US Energy Network to the 21st Century

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Our Challenge

Current energy networks can’t support 21st century customer demands and innovations

Tasks

- Need greater agility and resiliency
- Need greater efficiency and productivity
- Need smarter Tx and Dx network designs
- Solve for increasing electric & natural gas interdependency
Our Opportunity

Together we can advance America’s economic and environmental health

- Change regulatory paradigm
- Embrace tech partners
- Put customers in charge
- Mitigate climate change
Integrated Blueprint

The Connect21 framework links customer needs & policy goals with technology & market solutions.

Our job

- Build a resilient backbone
- Inform and educate customers about choice and energy management
- Offer customized solutions
What’s Driving the Solution

Customer & Policy Drivers
- Resiliency and Reliability
- Cost Efficiency
- Efficient Consumption
- Greenhouse Gas Emissions
- CAFE standards – Alt Fuels
- Oil to Gas Conversions

The Energy Network
- **Resilient Backbone** – prevents and reduces impact of outages while integrating clean, central and distributed resources
- **Market Enabler** - facilitates and sends the right price signals to customers and 3rd parties
- **Customized Solutions** – provides utility-customized solutions

Technology & Market Drivers
- Energy Efficiency
- Demand Response
- Distributed Generation
- Electric Vehicles
- Information
- Combined Heat & Power
- Energy Storage
Call to Action

Let’s build on core US electricity and gas networks to deliver superior customer services
Already Underway in NY

- Newtown Creek Renewable Gas Project
- Buffalo Niagara Medical Campus
- NYC Clean Heat Initiative
- Long Island Natural Gas Expansion
- Microgrid Site at Clarkson University
Already Underway in RI

- Natural Gas Expansion Pilot Project
- I-195 Tx Relocation Project
- Substation Resiliency Enhancements
- Partnership with Utilidata
- Non wires alternative pilot Tiverton/Little Compton, RI
Already Underway in MA

- Worcester Smart Energy Solutions Pilot
- Northampton Reliability Project
- Natural Gas Expansion Projects
- Partnership with OPower on Big Data Behaviors
- Solar Distributed Generation
- Grid Modernization Docket
Already Underway: FERC

- NEEWS Reliability Project
- DeepWater Wind Tx
- Cape Wind
- New England-ISO Gas and Electric Interdependency
- Clean Line Partnership
Next Steps

- Expand local public-private partnerships
- Drive regulatory innovation
- Drive financing innovation
- Drive tech innovation

http://us.nationalgridconnecting.com/connect21/