

# Diversifying the Grid for Decarbonization

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**nationalgrid**

## National Grid USA

**US Regulated**

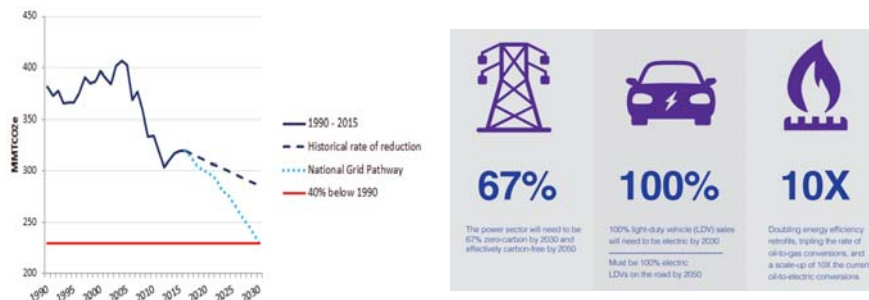
- Electricity transmission network
- Gas distribution operating area
- Electricity distribution area
- Generation
- Gas and electricity distribution area overlap

- Electric and gas utility delivering energy to **20+ million** people in New York, Massachusetts, and Rhode Island
- 7 million** electric & gas accounts
- Largest electric transmission network (**~9,000 miles**) and gas distribution businesses in the northeast
- Operator of largest **HVDC interconnector** in the U.S., supplying 10% of New England's power with clean energy
- Owns and operates the largest **battery energy storage system** on the east coast, a 48 MWh facility on Nantucket Island, MA
- Connected nation's first **offshore wind** farm, 30 MW generation off Block Island, RI

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## National Grid's 80 by 50 Pathways

The National Grid 40x30 pathway compared to historical progress on emissions reduction



The Pathway achieves emission reductions by prioritizing three mutually-reinforcing transitions:

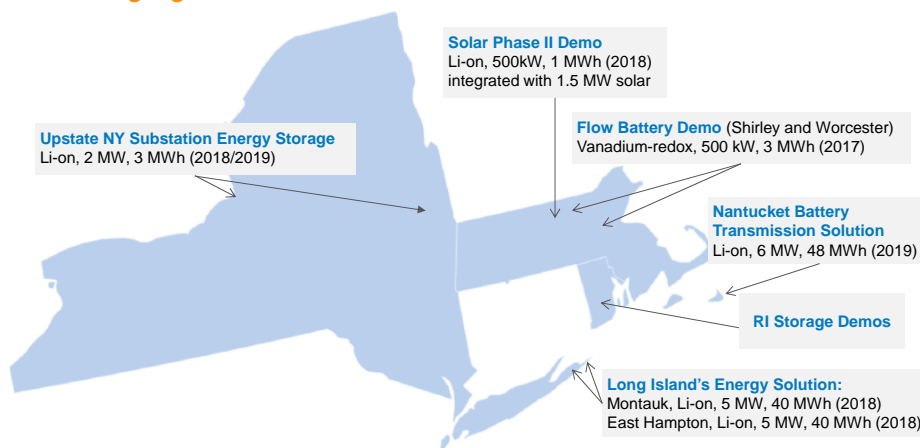
- Accelerating decarbonization of the electric sector
- Transforming the transportation sector through electrification
- Transforming the heat sector through energy efficiency, electrification, and oil-to-gas conversions

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## National Grid is Moving Forward Energy Storage

A few highlights...

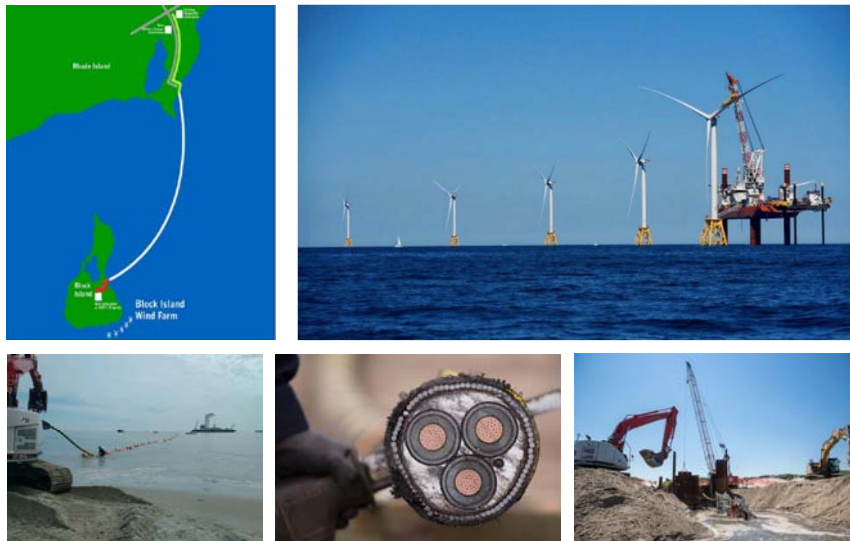


17 MW of behind-the-meter, customer owned solar plus storage on our networks

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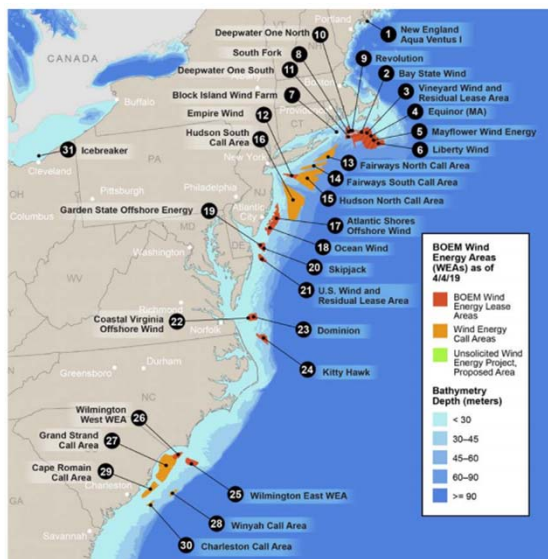
## Offshore Wind – sea2shore Project to Block Island



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## Offshore Wind: The Next Big Wave



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Over 20 GW targeted in state goals along the east coast, including:

- NY: 9 GW by 2035
- MA: 3.2 GW by 2035
- RI: 1 GW (all renewables); 430 MW offshore wind contracted
- Other states: 9.2 GW

### Considerations:

- “Wet” and “Dry” Transmission
- Long-Term System Planning and Integration

## Facilitating the Clean Energy Transition through Transmission

### Increasing efficiency and enhancing value to customers, policymakers, and other stakeholders

- Using and analyzing data to improve operational and investment decisions
- Rolling out technologies that optimize power flows and enable new, improved ways of working
- Enhancing resiliency for storms and cybersecurity
- Identifying new regulatory models to invest in infrastructure that supports clean technologies
- Informing policymakers of opportunities and aligning interests



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## Thank You



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