

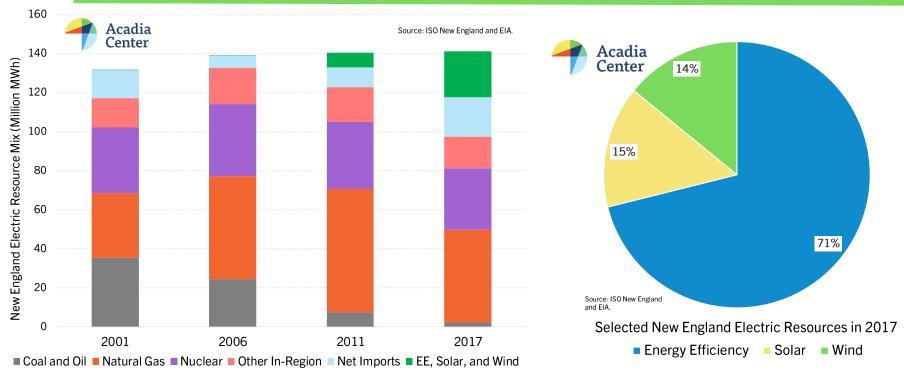
Advancing the Clean Energy Future

# Optimal Solar Policy: Maximizing Benefits of Available Zero GHG Resources

Restructuring Roundtable – December 14, 2018 Mark LeBel – Director, Energy Economics and System Reform



#### The Decarbonization Challenge

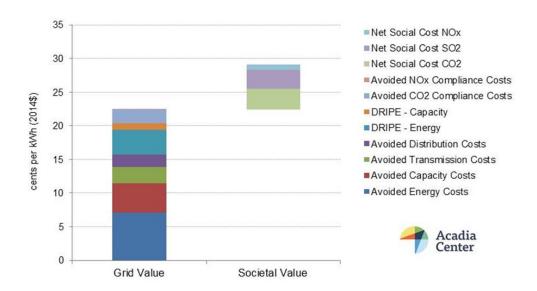


• Maximize reasonably achievable GHG emissions reductions while building clean energy industries, creating local jobs, providing equitable benefits to residents and communities, and minimizing harms





#### Why Solar in the Northeast?



- Energy system benefits Relatively easy to site
- Zero air pollution

- Reliability
- Minimal externalities Resiliency

Resource diversity

Local jobs





### Acadia Center EnergyVision 2030



- Accelerated Scenario shows a pathway to 50% GHG reduction economywide by 2030
- Approximately 10.5 GW of wind and 20 GW of solar in New England
- Assumes Seabrook and Millstone nuclear units still online, and significant new zero GHG imports





### Solar Incentive Programs

Goal: Cost effectively incentivize a diverse array of solar projects that fairly spread program benefits

- Payments based on actual generation;
- Open application processes that do not start and stop;
- Long-term, stable structure to lower overall costs and enable financing; and
- Public policy incentives and carve-outs for:
  - Low-income residents and housing;
  - Community shared solar projects;
  - Landfill and brownfield projects; and
  - Municipal projects.





## **Net Metering Reform**

- Acadia Center Principles
  - Netting periods can be changed but must be understandable and based on cost causation.
  - Credits for exports should be better aligned with energy system value.
  - Self-generation consumed on-site should be treated the same as reductions in energy usage.
- Key Net Metering Reform Processes
  - NH: Net metering reforms have been gradual, and principles and analysis for next steps are defined reasonably
  - NY: Value of Distributed Energy Resources reforms for larger projects are conceptually well structured, but more analytical work is needed and initial version is overly complex
  - CT: Major questions about new statutory framework, particularly integration of energy management and storage





#### **Cutting Edge Questions**

- Locational incentives
  - Non-wires alternatives advancing in many states
  - New York currently has VDER locational elements
- Granular price signals versus stable long-term payment structures
  - Fixed prices do not provide operational signals
  - Variable compensation increases uncertainty
- Restructuring 2.0
  - Distribution planning functions
  - Distribution system operator
  - Customer and system data provision
  - New rates and revenue models



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#### For More Information:

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