

Institute *for*
Policy Integrity

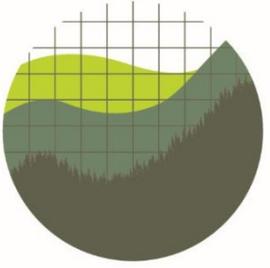
NEW YORK UNIVERSITY SCHOOL OF LAW

The Role of Carbon Pricing in State Energy Policies

Delaware Energy Conference

October 2019

Burcin Unel

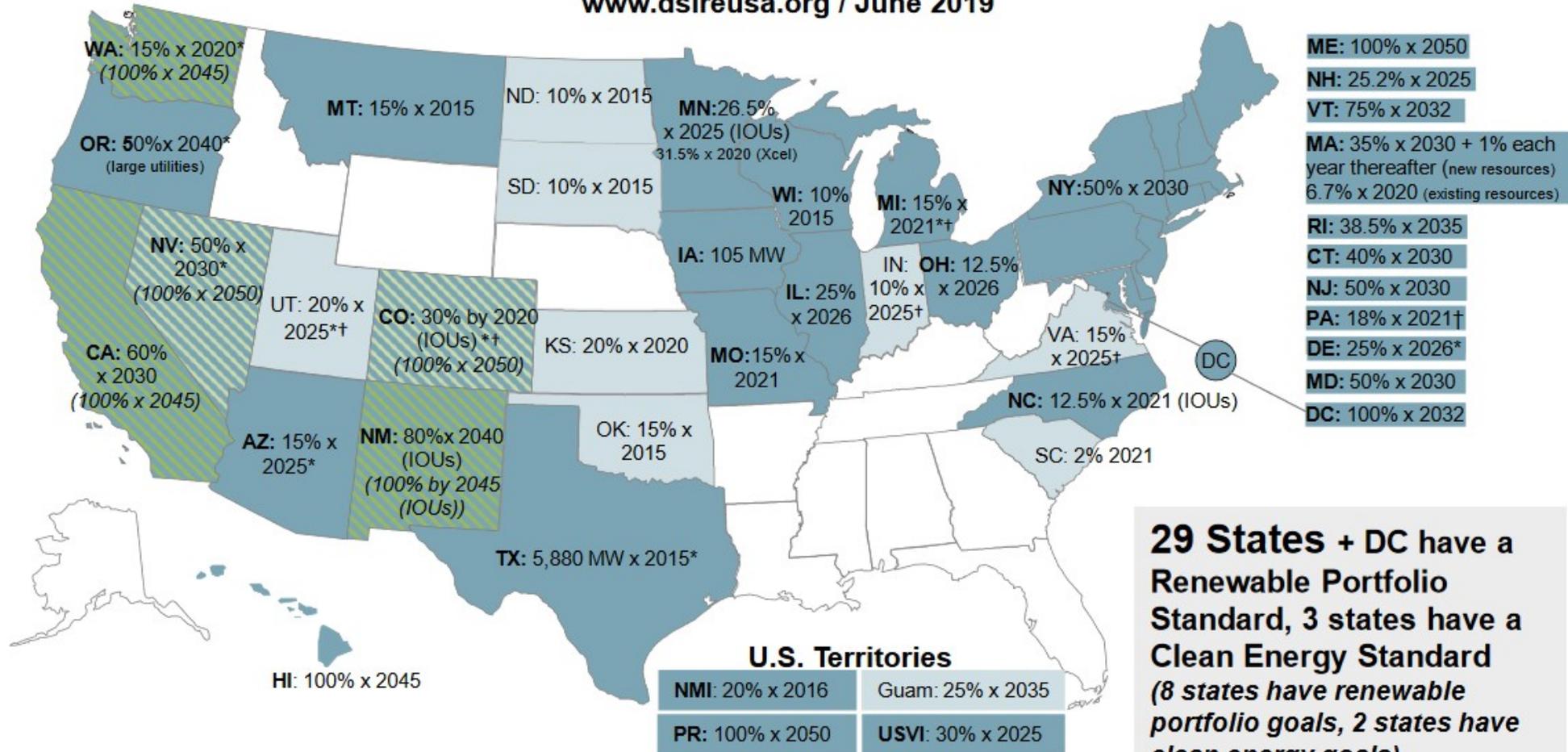


Patchwork of State Energy Policies

- Renewable Portfolio Standards
- Clean Energy Standards
- Energy Efficiency Standards
- Energy Storage Mandates
- Distributed Energy Resources goals

Renewable & Clean Energy Standards

www.dsireusa.org / June 2019

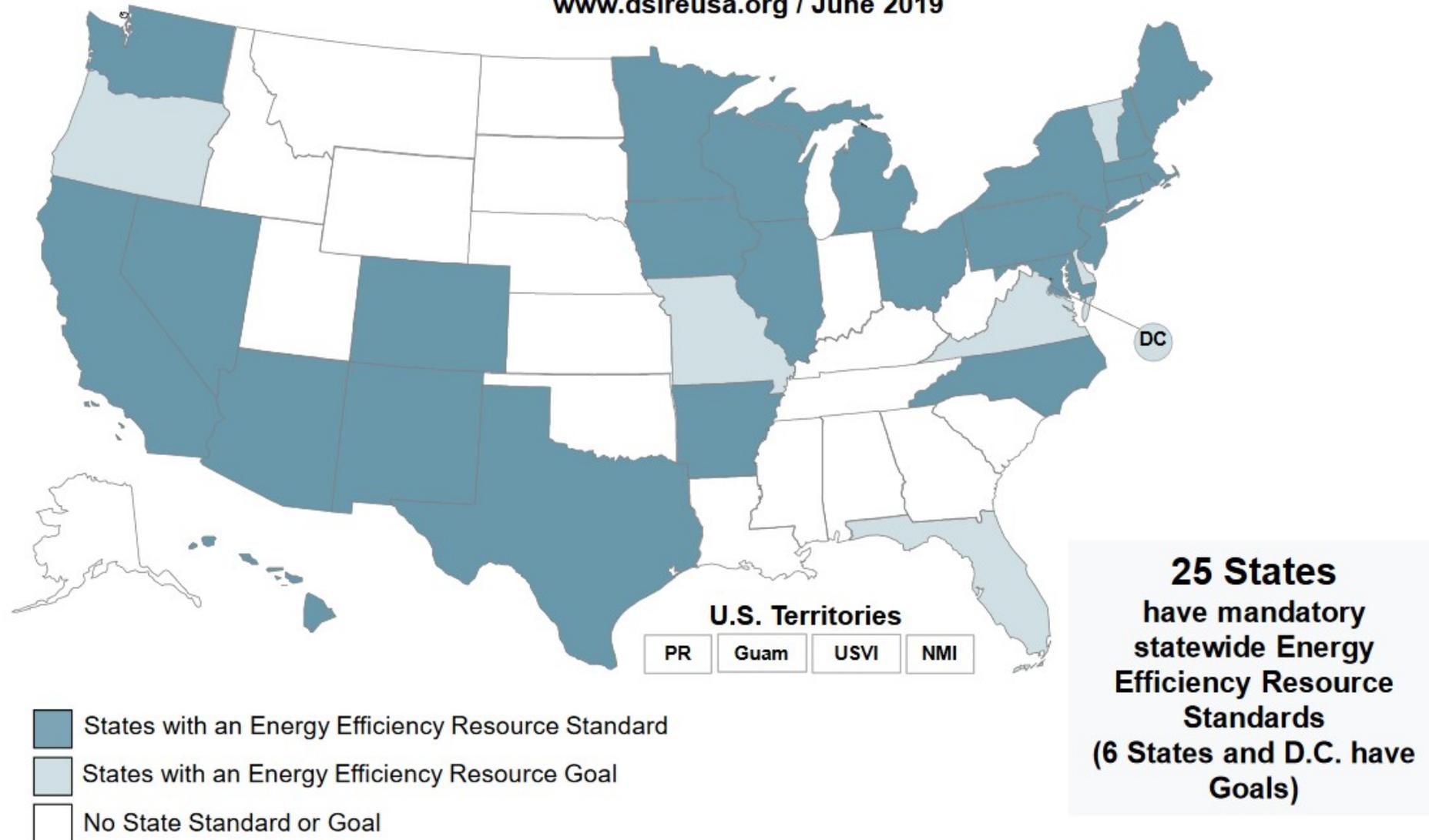


- Renewable portfolio standard
- Clean energy standard
- Renewable portfolio goal
- Clean energy goal

- * Extra credit for solar or customer-sited renewables
- † Includes non-renewable alternative resources

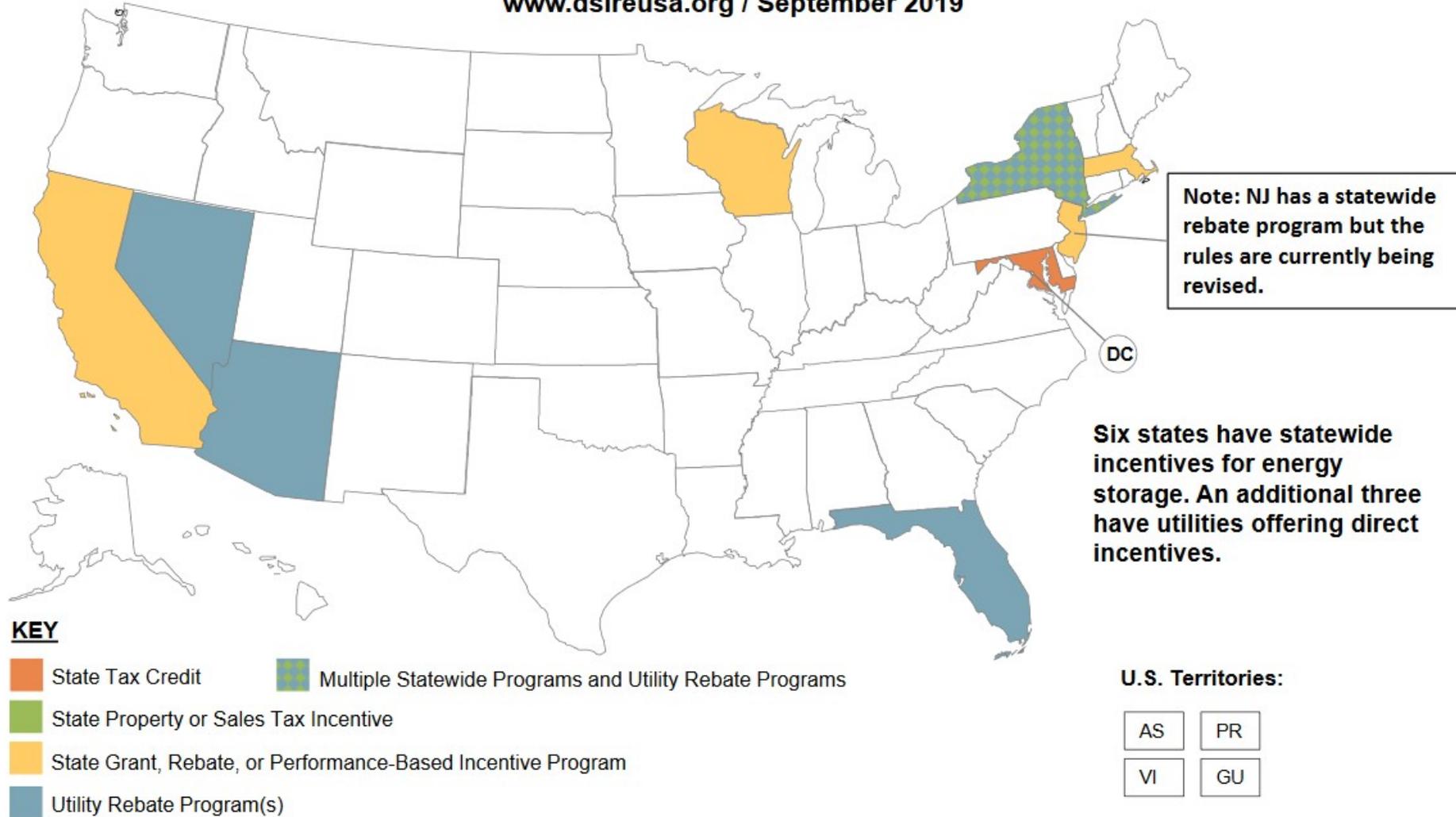
Energy Efficiency Resource Standards (and Goals)

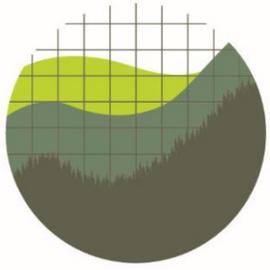
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Energy Storage Financial Incentives

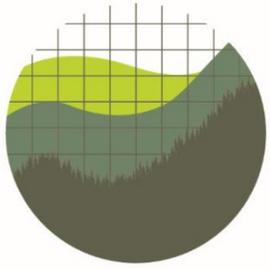
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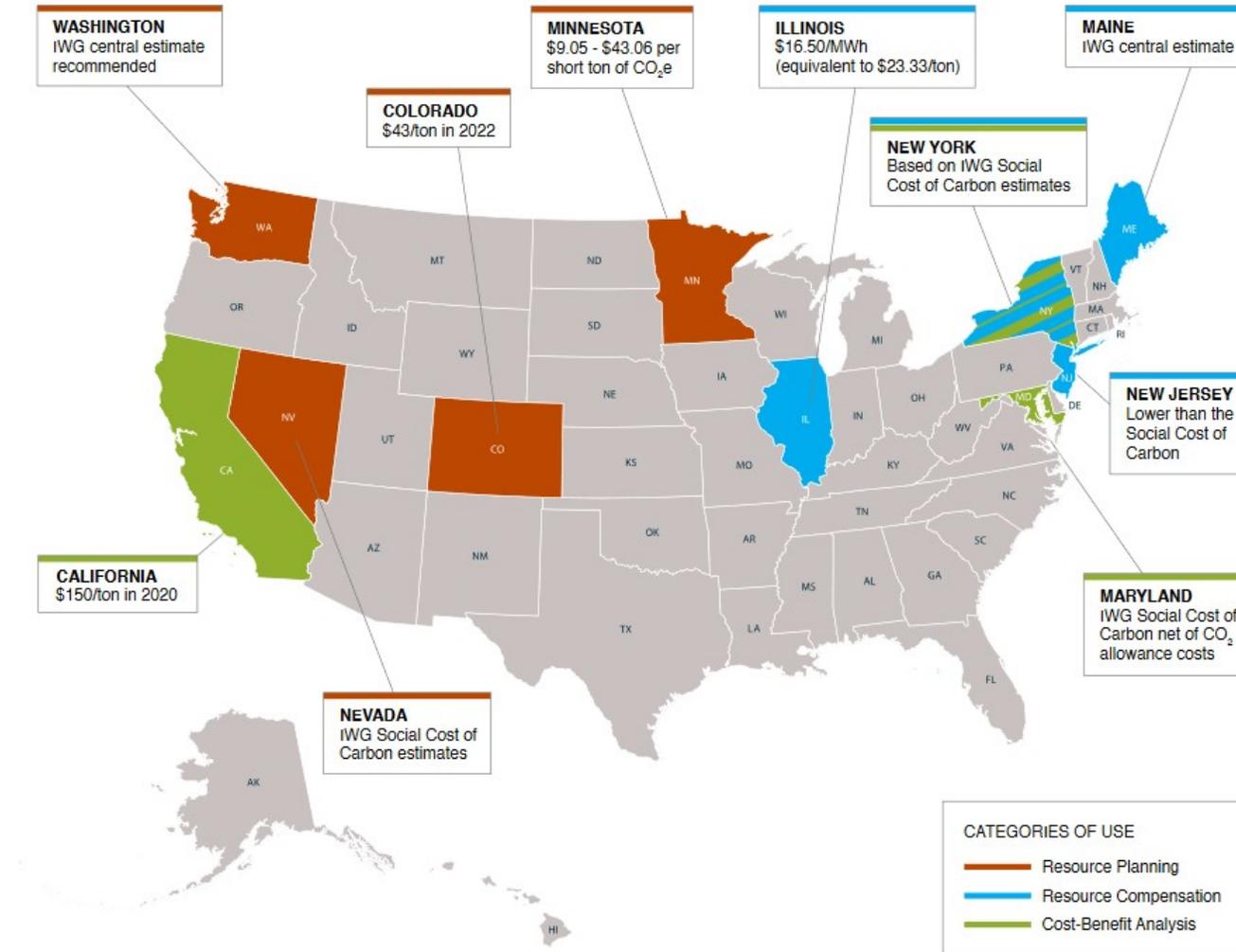


Current Ways of Addressing Climate Damages in State Electricity Regulation

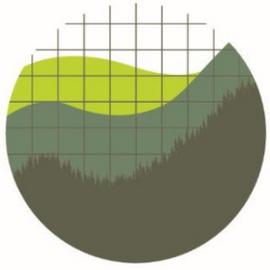
- Resource Planning Decisions
- Resource Compensation
- Cost-Benefit Analysis



States Valuing Climate Damages

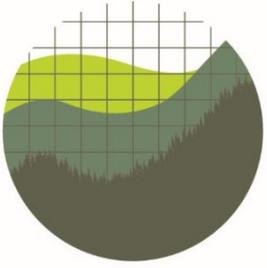


Source: Grab et al, Opportunities for Valuing Climate Impacts in U.S. State Electricity Policy, https://policyintegrity.org/files/publications/Valuing_Climate_Impacts.pdf



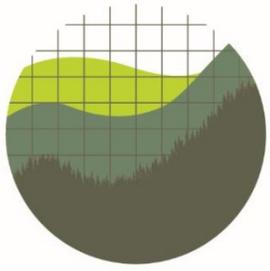
Shifting the Focus: Carbon Pricing

- First-best way to internalize the externality
- Is technology neutral
- Provides efficient investment signals
- Can address leakage
- Provides regulatory certainty



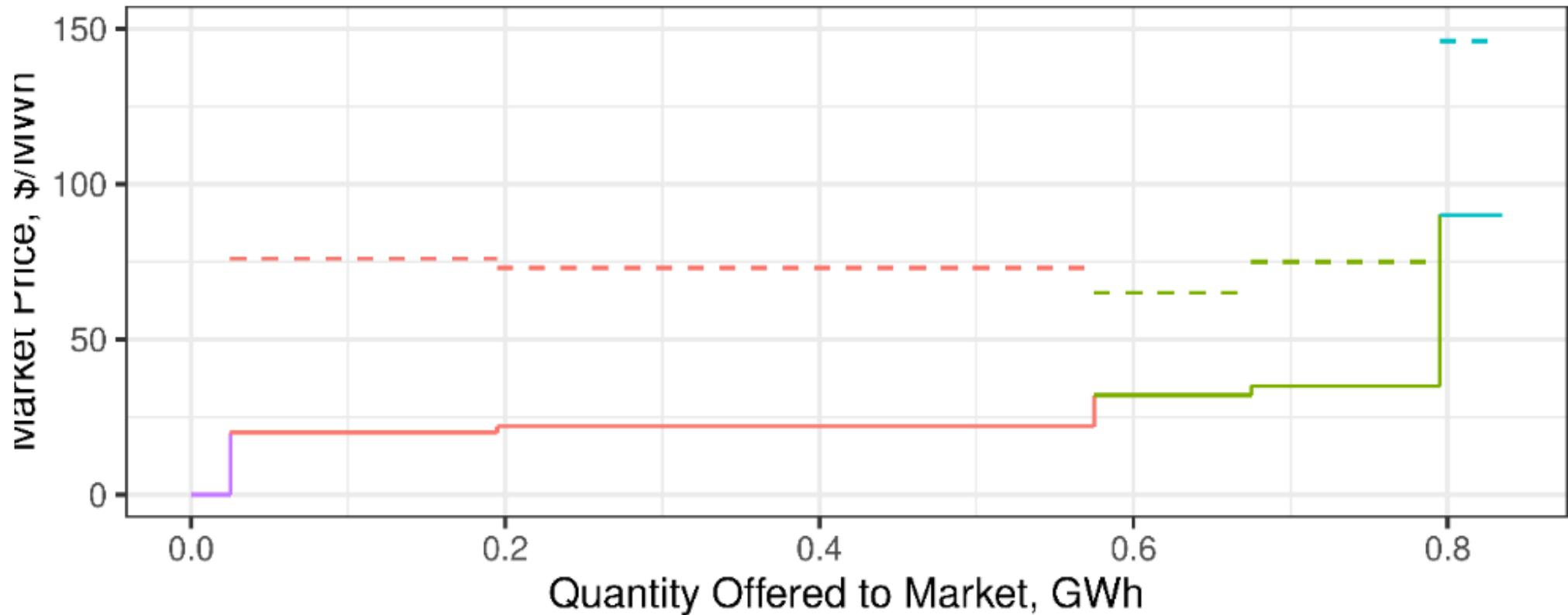
Carbon Pricing in Wholesale Markets

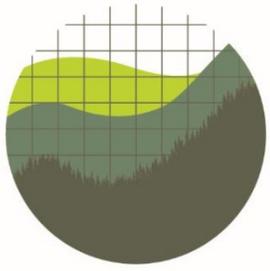




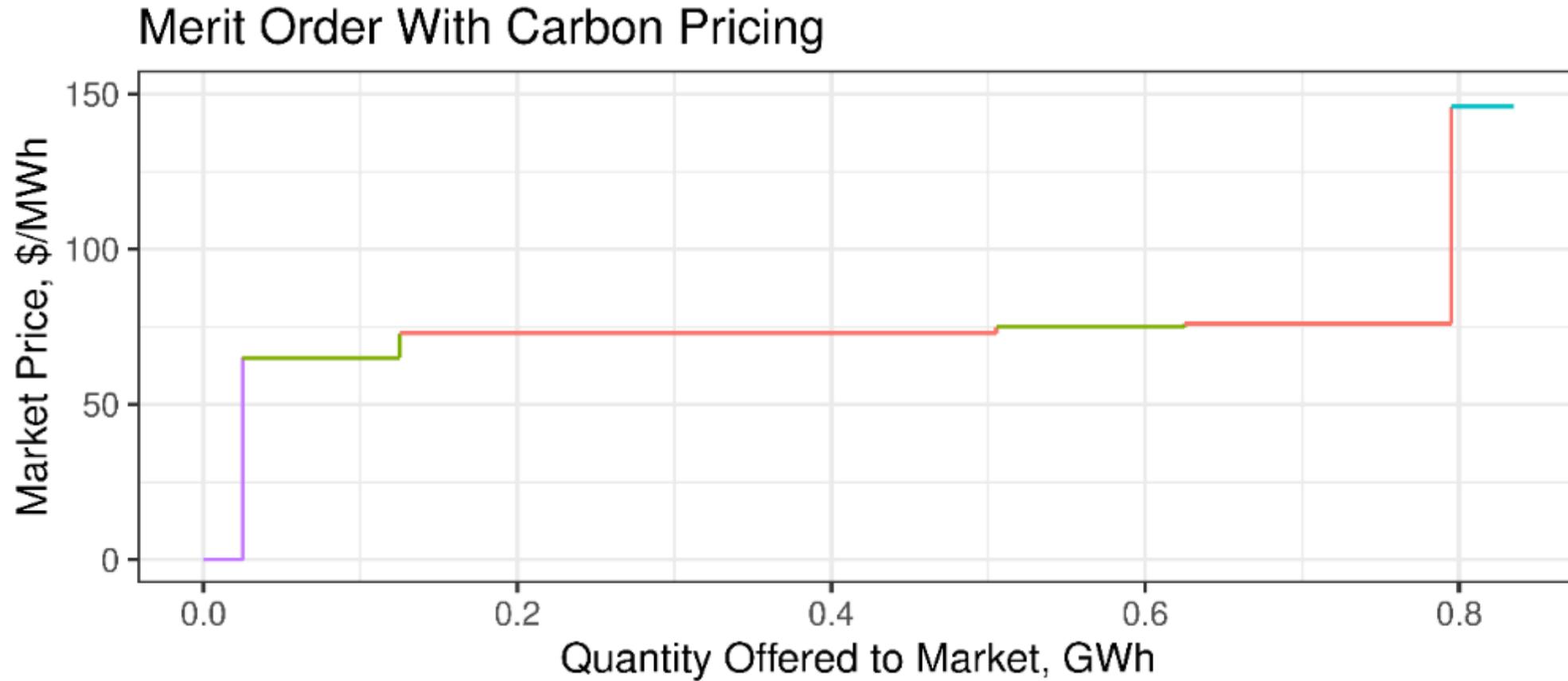
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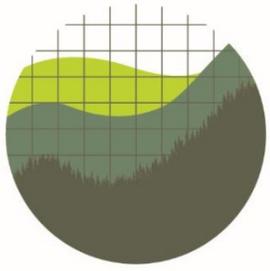
Applying Carbon Price to Generation



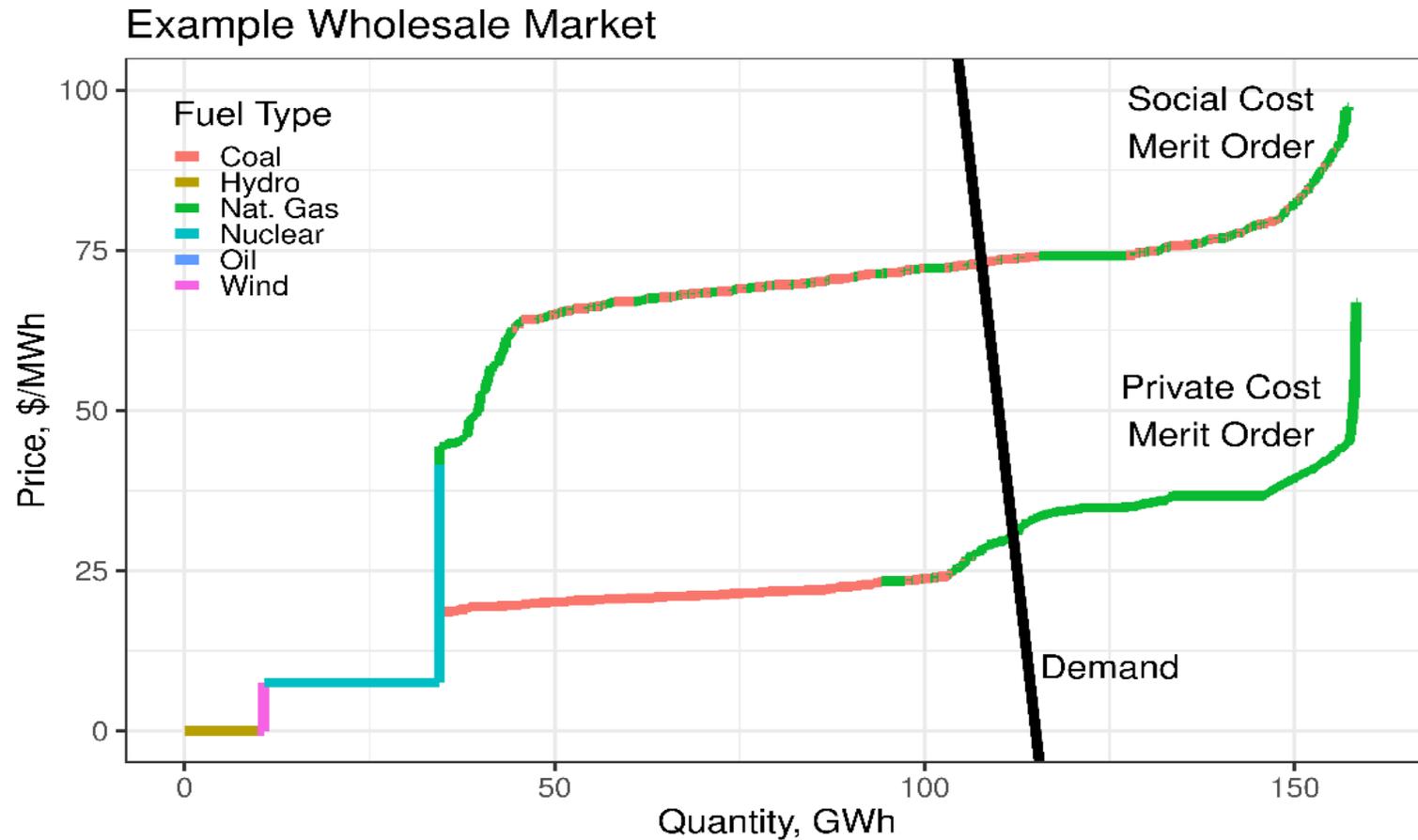


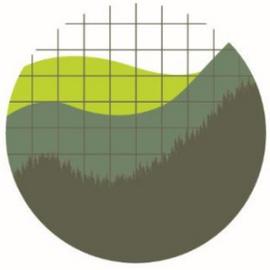
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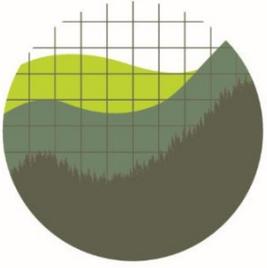
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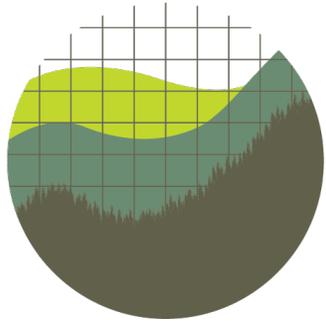
NYISO Carbon Pricing Proposal

- New York State sets a carbon price
 - Current analysis is based on the IWG's Social Cost of Carbon – RGGI
- NYISO incorporates it into unit commitment, dispatch, and price formation decisions
- Emitting generators pay for their emissions
- Cleaner resources receive higher revenues
- Any remaining carbon charge residual is credited to LSEs
- Border adjustments to prevent leakage



Delaware

- Del. Code Ann. tit. 26, § 1007 (2018)
 - to accept or reject an IRP after making a determination that the utility’s plan is “in the public interest.”
 - In its proposal, the utility may consider “the economic and environmental value of . . . [r]esources that provide short- or long-term environmental benefits to the citizens of this State (such as renewable resources like wind and solar power).”
 - The utility shall include a current evaluation, detailing and giving consideration to environmental benefits and externalities associated with the utilization of specific methods of energy production.
 - Need not be based on original research by the utility and may rely on published research and peer reviewed scientific and/or medical studies commonly available.



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For questions and comments:

Burcin Unel, Ph.D.

Energy Policy Director

burcin.unel@nyu.edu

(212) 992-6285

