

Clean Power Plan System Impacts and Interactions

nationalgrid



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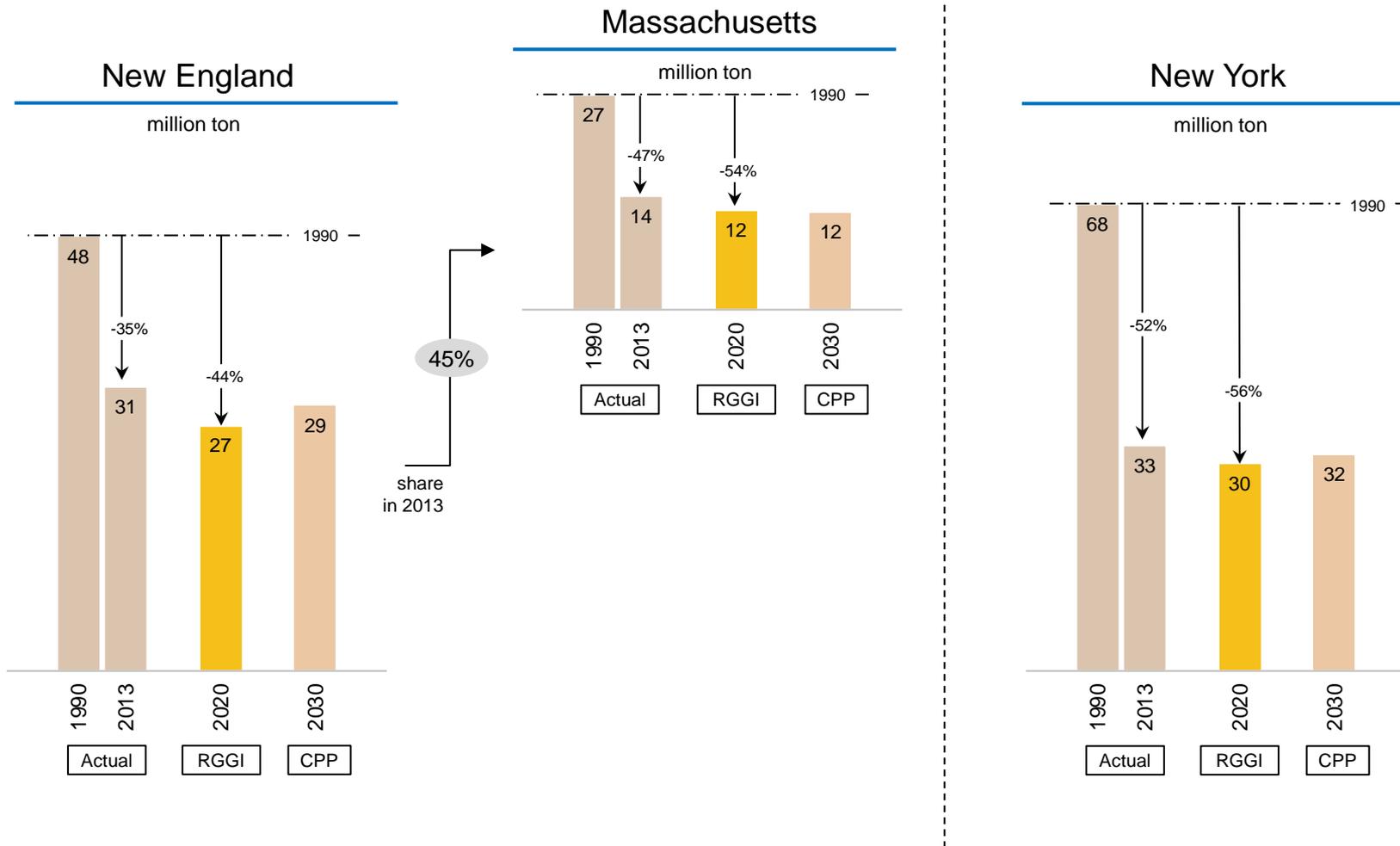
United States Department of Energy

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A Clean Energy Future

- National Grid supports the Clean Power Plan aimed to meaningfully reduce GHG emissions
- The Northeast region is well positioned to comply with the Clean Power Plan goals, and beyond
 - State RPS, energy efficiency, demand response
- RGGI cap and trade emissions program is a flexible and market-based approach that's been operational for several years

Electric sector CO₂ emissions declined 35%-52% between 1990 and 2013; current RGGI 2020 cap could reduce them further to about 44%-56% below their 1990 levels



Analysis Notes: The CPP mass-based cap for 2030 includes affected and new sources

Understanding and managing impacts

- Physical system impacts arising from changing load and generation dispatch will need to be further understood
 - Reliability, affordability, achievability
- Infrastructure, grid capabilities, and energy technology deployments are important enablers to achieving desired timescales for carbon reduction

DOE Leadership is Critical

- Focus and support for electric transmission role and improvements
- Interconnection-wide system and economic modeling to further understanding of potential reliability and cost impacts
- DOE programs to advance technology development and deployment, including focus on utility test bed sites as vital accelerants