Achieving Clean Energy Goals

The Role of States in Amplifying Federal Climate Policy

NGA GOVERNORS’ ADVISORS ENERGY POLICY INSTITUTE | JULY 12, 2021

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US GHG emissions under current policy with uncertainty

Net million metric tons CO2e (left), percent change from 2005 (right)

The power sector remains a leading source of GHG emissions

US Emissions by Sector, 2005-2030

Net million metric tons CO2e

Source: Rhodium Group
US power generation in 2020 and 2030

Electric power sector generation 2020

- Natural gas: 39%
- Coal: 20%
- Wind: 21%
- Nuclear: 9%
- Hydro: 7%
- Others: 4%

Projected electric power sector generation 2030

- Natural gas: 35%
- Coal: 15%
- Wind: 15%
- Nuclear: 15%
- Solar: 11%
- Hydro: 7%
- Others: 1%

Source: Rhodium Group
Power sector takeaways

- US power sector emissions dropped 40% from 2005 to 2020

- US power sector emissions increase slightly over the next few years as the US recovers from COVID-19 but then continue to decline through 2025

- Wind and solar generation increase through 2030 but natural gas remains the dominant energy source

- Decarbonizing the power sector can amplify GHG reductions in transportation, buildings, and industry as these sectors electrify
# Power sector policies to achieve clean energy goals

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The role of states in clean energy policy

- Existing state regulatory framework can expedite GHG reductions
- State policy can leverage federal incentives to amplify GHG reductions
- State policy can provide framework for sub-national coordination
- State policy can provide a framework for future federal climate action
- State policy can reduce emissions given federal policy uncertainty
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