



# Achieving Clean Energy Goals

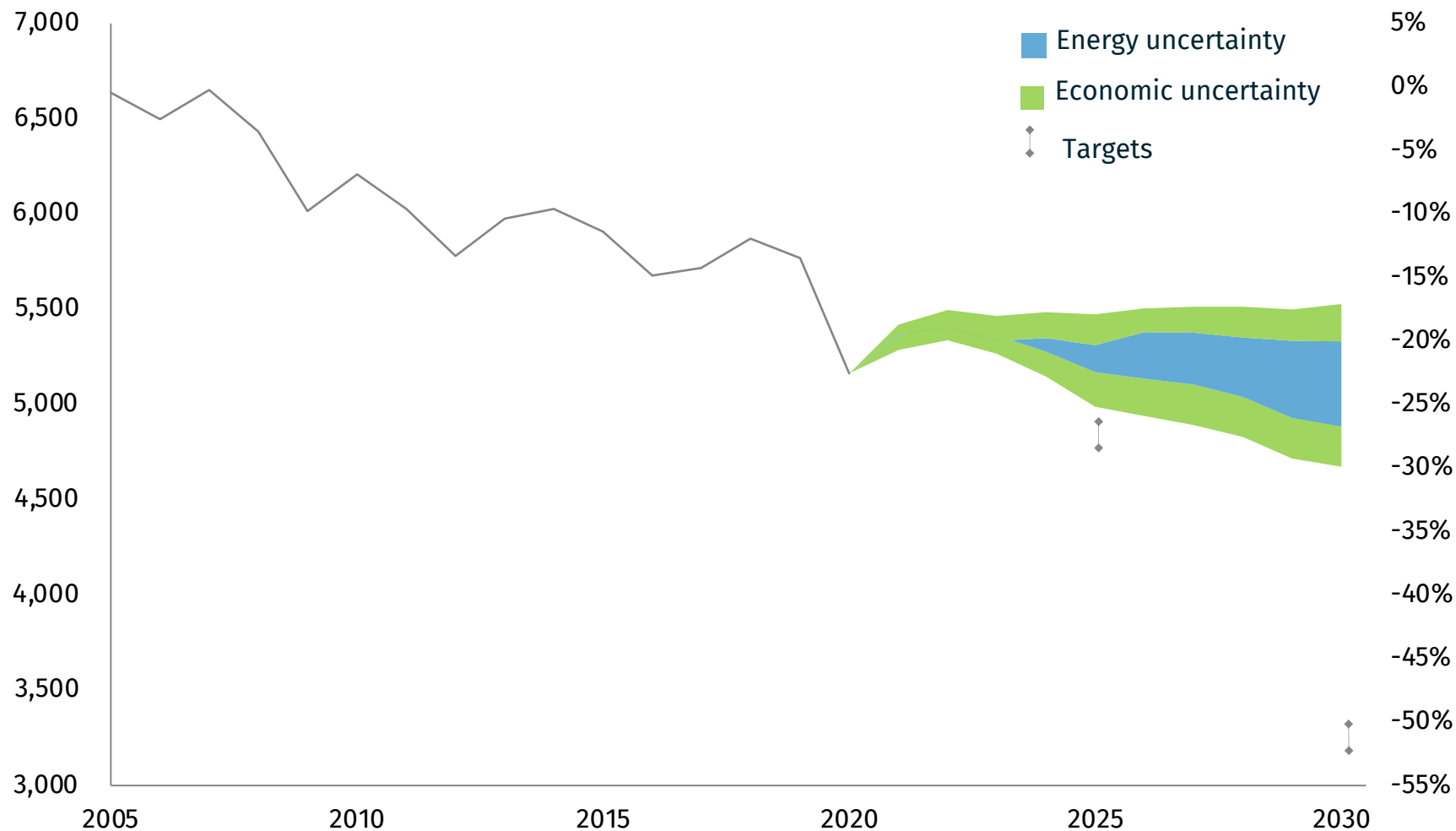
## The Role of States in Amplifying Federal Climate Policy

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)

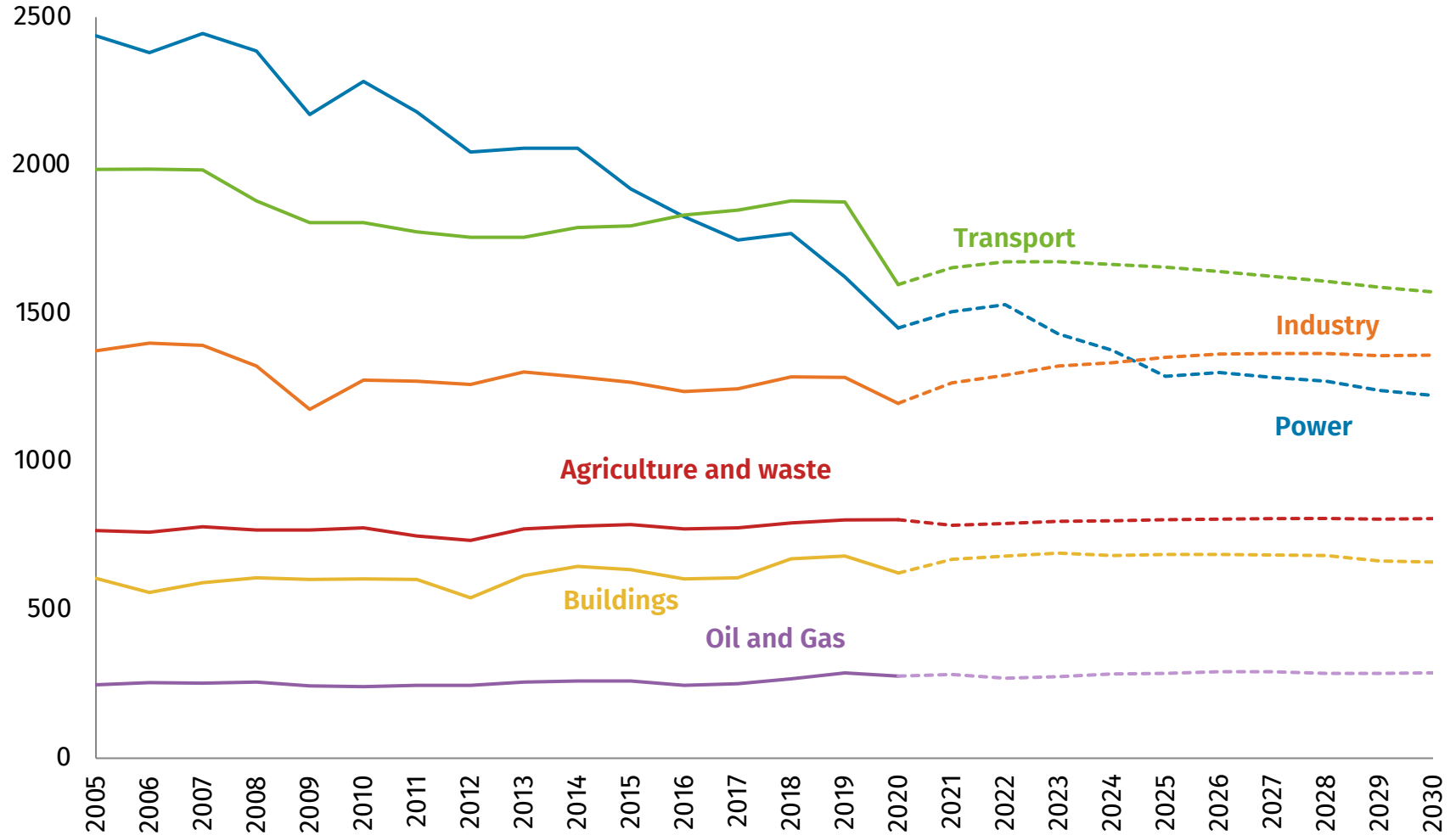


Source: Rhodium Group. Targets represent US GHG emission reduction commitments, including the 2015 Paris Agreement pledge to reduce economy-wide US emissions by 26-28% below 2005 levels by 2025, and the updated commitment made in April 2021 to achieve a 50-52% reduction below 2005 levels by 2030.

# The power sector remains a leading source of GHG emissions

## US Emissions by Sector, 2005-2030

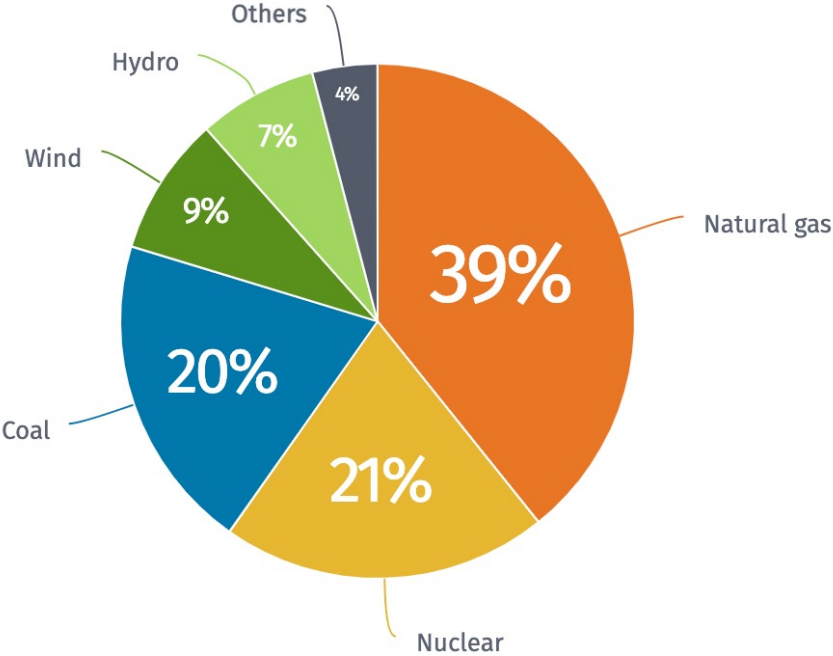
Net million metric tons CO<sub>2</sub>e



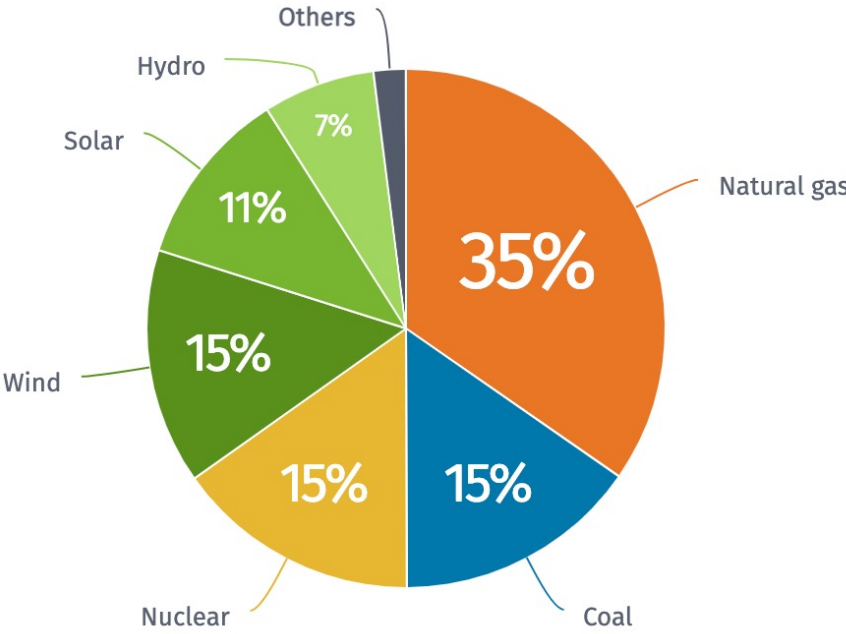
Source: Rhodium Group

# US power generation in 2020 and 2030

Electric power sector generation 2020



Projected electric power sector generation 2030



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

## Federal Policy

- Renewable energy tax incentives
- Tax credit for carbon dioxide sequestration (45Q)
- Judicial vacation of the Affordable Clean Energy (ACE) rule
- Cross-State Air Pollution Rules (CSAPR)
- Mercury and Toxics Standards (MATS)
- New Source Review (NSR)

## State Policy

- Renewable Portfolio Standard (RPS)
- Clean Energy Standard (CES)
- Nuclear Zero Emission Credit (ZEC) programs
- Carbon pricing
- Energy storage mandates
- Offshore wind mandates

# 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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