U.S. Subnational Leadership to Secure Carbon Pollution Reductions

United States subnational and private sector leadership continues, demonstrating that ambitious carbon dioxide reductions from the power and transportation sectors are readily achievable despite Trump administration’s reversals.

- U.S. states, cities, and companies are strengthening efforts to cut greenhouse gas (GHG) emissions in the wake of the Trump administration’s threats to move backwards.
- Clear market trends towards clean energy, increasing public pressure amidst devastating disasters made worse by climate change, and leadership actions by governors, mayors, and private sector executives are keeping U.S. emissions on a downward trajectory.¹

![Figure 1: Current power sector CO₂ projections and EPA’s CPP headline 2030 target](image)

**Figure 1:** Current power sector CO₂ projections and EPA’s CPP headline 2030 target

Source: EPA, BA and Rhodium Group analysis.
U.S. states and cities are progressing towards deep reductions in greenhouse gas emissions consistent with U.S. goals under the Paris Agreement.

36%

Percent of U.S. population represented by U.S. Climate Alliance — 14 states and Puerto Rico committed to meeting their share of the U.S.’s Paris Agreement goals.²

35

U.S. states and territories with ambitious GHG reduction targets, mandatory renewable portfolio standards, and/or statewide energy efficiency targets.³

Under the leadership of both Democratic and Republican governors and mayors, states and cities across the U.S. are taking ambitious climate action:

- **The fourteen states and Puerto Rico in the U.S. Climate Alliance** are projected to reduce emissions 24-29% below 2005 levels by 2025 — on track to achieve their portion of the U.S. goals under its first Nationally Determined Contribution.⁴
- **Nine states comprising the Regional Greenhouse Gas Initiative (RGGI)**, with four Democratic and five Republican governors, in August 2017 announced a proposal to cut carbon pollution from the power sector an additional 30% between 2020 and 2030.⁵
- **382 U.S. mayors** have committed to upholding the Paris Agreement goals.⁶
- **Alaska** Gov. Bill Walker (I) signed an order in October 2017 committing to support the Paris Agreement goals and establishing a committee to develop a climate action plan for Alaska within a year.⁷
- **California** extended and strengthened its limits on greenhouse gas emissions in September 2016, requiring a 40% reduction below 1990 levels by 2030.⁸ In July 2017, California passed a ten-year extension to its landmark cap-and-trade program.⁹
- **Colorado** in July 2017 committed to slash greenhouse gas emissions to 26% below 2005 levels by 2026.¹⁰
- **Illinois** enacted legislation in December 2016 that will reduce greenhouse gas emissions to 56% below 2012 levels by 2030 through doubling the state’s energy efficiency portfolio and building 4,300 MW of new wind and solar generation.¹¹
- **Virginia** is working to establish a “trading-ready” program to reduce power plant carbon emissions.¹²

“By working together, we are showing that it is possible to find consensus to protect our natural resources, promote clean energy, and grow our economy for current and future generations.”

— Maryland Governor Larry Hogan (R), announcing RGGI’s updated pollution reduction targets for 2030.¹³
Major U.S. power companies are embracing the clean energy revolution and slashing carbon dioxide emissions.

76%

U.S. power sector progress towards achieving the Clean Power Plan targets for 2030, as of December 2016.14

At least 20%

Percent of U.S. electric generating capacity operated by power companies committed to ambitious reductions in carbon pollution.15

The U.S. power sector, which constitutes 29% of U.S. greenhouse gas emissions, has already made enormous strides in deploying clean energy resources and slashing emissions.16

Recent analysis by the Institute for Policy Integrity found that due to the accelerated shift to cleaner power generation in recent years, the cost to the power sector of complying with the Clean Power Plan — part of the U.S. climate action plan — is expected to be significantly less than the U.S. government projected in 2015.17

Wind and solar comprised more than 60% of new U.S. utility-scale generating capacity added in 2016. And many of the largest power companies in the U.S. are embracing the imperative to take action on climate change by committing to cut carbon pollution and deploy renewable energy.18

- **American Electric Power** (26,000 MW capacity), the largest generator of electricity from coal in the U.S.,19 has cut carbon pollution by 44% since 2005, and has planned to add more than eight gigawatts of wind and solar in the coming years.20

- **Duke Energy** (52,700 MW capacity) the nation’s largest power producer,21 this year announced plans to reduce carbon emissions to 40% below 2005 levels by 2030.22

- **DTE Energy Co.** (11,000 MW capacity) announced plans in May 2017 to curb its carbon emissions more than 80% by 2050.23

- **MidAmerican Energy** (8,700 MW capacity) a subsidiary of Berkshire Hathaway Energy, has announced a goal to provide 100% of its energy from renewables.24

- **Xcel Energy** (17,000 MW capacity) committed in June 2017 to achieving a 60% reduction in carbon emissions by 2030, relative to 2005 levels.25

“Not only is [DTE’s] 80% reduction goal achievable – it is achievable in a way that keeps Michigan's power affordable and reliable.”

— **DTE Energy** Chairman and CEO Gerry Anderson in May 2017.26
U.S. states and automakers are taking steps to unlock deep carbon pollution reductions from the transportation sector through electrification, as electric power grows cleaner.

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By investing billions in research and development of electric vehicles and charging infrastructure, and pursuing policies to incentivize fuel-efficient, low-emitting vehicles, U.S. states and automakers are making strides in reducing emissions from the transportation sector — now the largest source of U.S. carbon dioxide emissions.

- **General Motors** announced in October 2017 that it is building towards an all-electric future, including with plans to introduce at least 20 new electric vehicles by 2023.
- **Ford** plans to invest $4.5 billion and introduce 13 new electric vehicles globally in the next five years.
- **Jaguar Land Rover** announced its entire fleet of new vehicles will be electric or hybrid-electric starting in 2020.
- **VW** announced it will spend $24 billion to bring no fewer than 80 new electric vehicles to market globally by 2025, and will invest $2 billion in U.S. electric vehicle infrastructure as part of a settlement agreement with the U.S. government.
- **California** affirmed in March 2017 that it would continue to implement its vehicle greenhouse gas emission standards for model year 2022-2025 cars and light-duty trucks, and Governor Jerry Brown has expressed an interest in banning the sale of vehicles powered by internal-combustion engines.
- **Twelve other states and the District of Columbia** follow California’s vehicle emission standards. Together, the 13 states and D.C. have a population of 113 million and constitute roughly 30% of the U.S. auto market.
- In **New Jersey**, a diverse coalition called ChargEVC aims to ramp up electric vehicle infrastructure to support two million EVs on New Jersey roads by 2035.
- The governors of **Montana, Nevada, Wyoming, Utah, Idaho, New Mexico** and **Colorado** signed a memorandum of understanding in October 2017 to coordinate funding and policies to encourage the adoption of electric vehicles across the western U.S.
- **Virginia** plans to spend $14 million on an electric vehicle charging network that would help the state realize its target of a 15% EV adoption rate by 2017.
15. Calculated from generating capacities of Alliant, American Electric Power, Dominion, DTE, Duke, MidAmerican, Xcel, and more. Total installed capacity: http://www.eei.org/resourcesandmedia/industrydataanalysis/industrydata/Pages/default.aspx
21 M.J. Bradley.
34 Fred Lambert, “VW unveils how it will spend its $2 billion for electric vehicle infrastructure from the Dieselgate settlement,” Electrek, 8 Feb. 2017. https://electrek.co/2017/02/08/vw-electric-vehicle-charging-infrastructure-dieselgate-settlement/