

ASSESSMENT OF SUBNATIONAL AND NON-STATE CLIMATE ACTION



UNITED STATES

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United States

COUNTRY CONTEXT

In the United States (US), the second largest greenhouse gas (GHG) emitting country in the world, the Trump administration has pursued a sweeping, systematic rollback of critical climate policies. In June 2019, the Environmental Protection Agency replaced the Obama-era Clean Power Plan, which set strict limits on carbon emissions from coal- and gas-fired power plants, with a far weaker alternative. The Trump administration has abandoned the enforcement of rules prohibiting the use of hydrofluorocarbons, powerful GHGs, in refrigerators and air conditioners. In the wake of loosened rules governing how methane leaks from oil and gas production are reported and fixed (Popovich, Albeck-Ripka and Pierre-Louis, 2019), US gas flaring spiked by more than 50% in 2018 (Bazilian and Busby, 2019). The federal government also seeks to weaken Obama-era fuel-economy standards for cars and light trucks, and to remove California's ability to set its own tailpipe standards that other states can also adopt. If successfully implemented, these rollbacks could increase GHG emissions in 2030 by up to 400 MtCO₂e – almost as much as California's 2016 emissions – compared to the trajectory expected when President Trump first took office (Climate Action Tracker, 2019a)c. The ultimate direction of US federal climate policy, however, will likely hinge on the results of a series of court cases challenging these policies, and on the 2020 presidential election.

With the Trump administration's resistance to climate action, the US's nationally determined contribution (NDC) to reduce its GHG emissions by 26% to 28% below 2005 levels by 2025 is unlikely to be reached with existing federal policies (Kuramochi et al., 2018; den Elzen et al., 2019). US emissions rose in 2018, after three years of decline, driven by the electricity, industry, and building sectors (US EPA, 2019). Transportation emissions, which have formed the largest source of US emissions for the past three years, also continued to grow, reflecting greater demand from industry, diesel trucks, and air travel (Houser and Marsters, 2018; Irfan, 2019).

However, despite these setbacks, real momentum towards a decarbonised economy continues. Renewables are thriving, a result of falling costs, favourable state policies, and federal renewable energy production and investment tax credits (Jensen and Dowlatabadi, 2017). Renewable capacity doubled between 2008 and 2018, to account for 17.6% of the nation's electricity generation (EIA, 2019). A “Green New Deal” resolution, introduced to Congress in February, calls for more ambitious action mobilizing the nation to reach net-zero emissions through a “fair and just transition” (Ocasio-Cortez, 2019). While unlikely to pass, the resolution has catalysed discussions around climate change in the run-up to the 2020 presidential election and may help lay the groundwork for more ambitious climate action. Presidential candidates are releasing detailed and ambitious decarbonization plans, and current polls show climate change is a key voter issue in the primaries leading up to the 2020 election (Detrow, 2019).

INTERACTIONS BETWEEN THE NATIONAL GOVERNMENT AND SUBNATIONAL AND NON-STATE CLIMATE ACTORS

In the face of lacklustre national action, local governments and the private sector are stepping up their efforts (Hale et al., 2018). A bipartisan group of governors ran – and won – on climate and clean energy platforms. The 2018 mid-term elections resulted in state-wide victories for climate action. Michigan, Maine, Colorado, Illinois, Nevada, New Mexico, and Wisconsin elected governors who endorsed renewable energy standards of 50% or higher (Nuccitelli, 2018; State of Wisconsin, 2019). Nine states, representing 16% of US electricity demand, have enacted 100% clean energy legislation.¹ They join more than 130 cities and 11 counties with 100% clean energy goals, including six that have already reached these targets (Sierra Club, 2019).

1 California, Hawai'i, New Mexico, Nevada, Washington, Maine, New York, Puerto Rico, and Washington D.C.

In North Carolina, New Jersey, and Virginia, Democratic governors reversed past stances denying climate change or opposing policy responses to it (Irfan, 2018). Republican governors in Maryland, Massachusetts, and Vermont made progress on electric, buildings, and transportation emissions. The US Climate Alliance, a bipartisan coalition of governors committed to reducing GHG emissions consistent with the goals of the Paris Agreement, grew from 16 to 25 members (Data-Driven Yale, NewClimate Institute and PBL, 2018; U.S. Climate Alliance, 2019). “We Are Still In,” an initiative committed to moving forward with the “country’s commitments under the Paris Agreement – with or without Washington,” has roughly doubled in size since 2017. A member coalition of Alliance for Climate Action (ACA), We Are Still In now includes over 3,800 signatories from the public and private sectors (We Are Still In, 2019).

Many of subnational and non-state actors are also directly challenging the federal administration’s rollback of key climate policies. A coalition of 29 states and cities led by New York has sued the Environmental Protection Agency over the weakening of the Clean Power Plan (Friedman, 2019; General New York State Office of the Attorney, 2019). California, along with a coalition of 18 other states, plans to fight the administration’s attempt to dilute its vehicle emissions standards (Shepardson, 2019). In July 2019, the state struck a deal with four of the world’s largest automakers that largely maintains its vehicle emissions standards, bypassing the Trump administration’s efforts to weaken them (Davenport and Tabuchi, 2019). Colorado employed a similar approach, working directly with car companies to structure its adoption of California’s zero-emission vehicle (ZEV) requirements (Shepardson, 2019). In August, it became the eleventh state to adopt these zero-emissions standards, despite the Trump administration’s attempt to roll this target back (Elliott, 2019).

COMPARING SUBNATIONAL AND NON-STATE TRAJECTORY WITH NATIONAL TRAJECTORY

The assessment includes more than 150 cities, representing nearly 72 million people, and 19 regions, representing a population of over 167 million, that have made quantifiable commitments to reduce GHG emissions.² It also includes roughly 740 companies, controlling over \$8 trillion USD in revenue³ – and including 166 of the world’s largest companies⁴ – that have made quantifiable climate commitments, most frequently in the financial services, biotech and pharma, and electrical & electronic equipment sectors.

Together, these cities, states, and companies represent nearly 2,600 MtCO₂e/year in 2015, accounting for overlap between actors. If fully implemented, they would reduce emissions in 2025 by an additional 390 to 540 MtCO₂e/year beyond the projected emissions under current national policies – leading to total emission levels of 21% to 24% below 2005 levels including LULUCF. This would fill much of the gap between the country’s current national policies trajectory and its NDC target emission levels (Figure 1, top and bottom-left panels). For 2030, the impact would be even larger – a 540 to 820 MtCO₂e/year reduction compared to the current national policies scenario, which would lower US emissions 25% to 32% below 2005 levels. Our lower bound projections for 2030 (32% below 2005 levels) are similar to the “Enhanced Engagement” scenario projections in the America’s Pledge report (America’s Pledge, 2018).

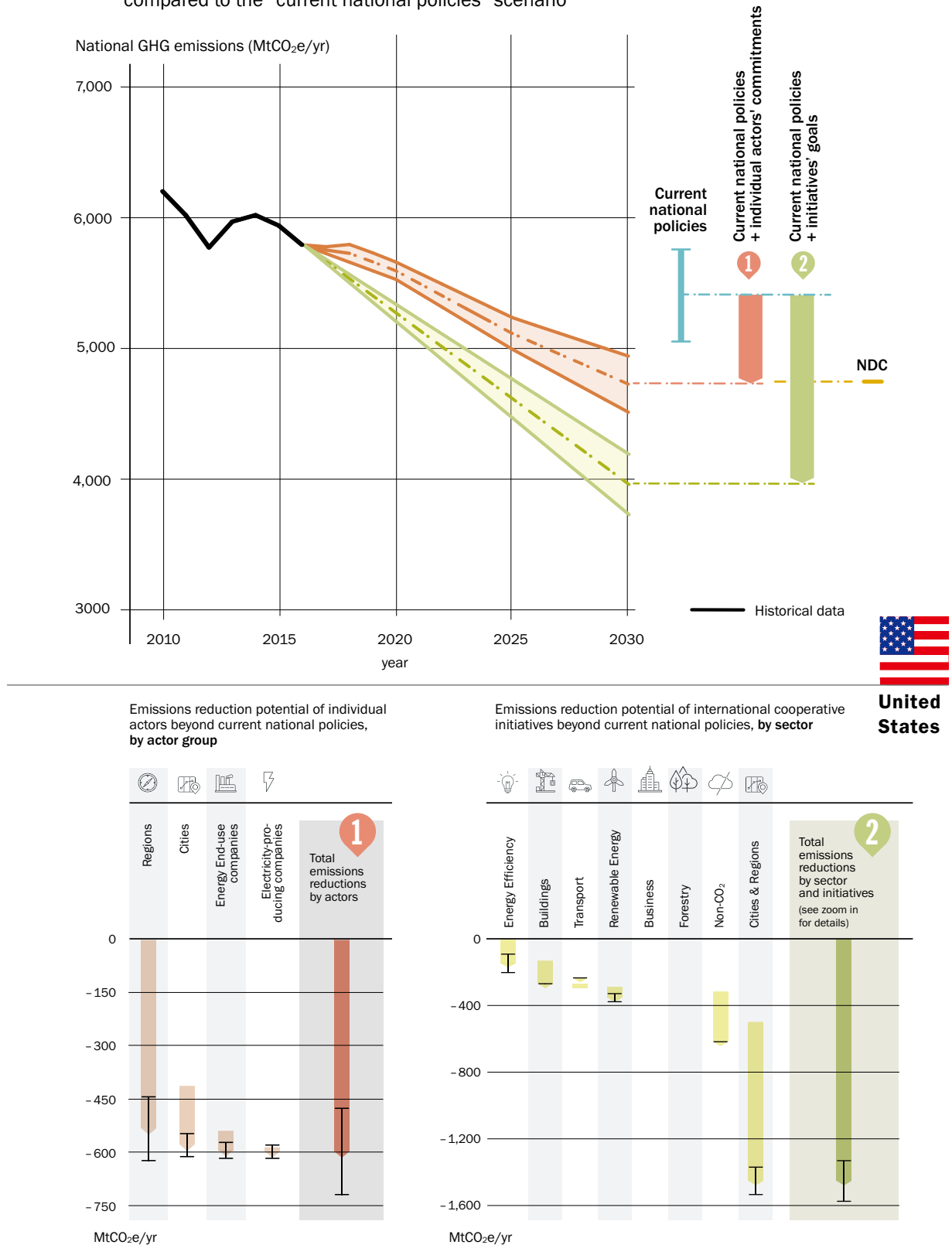
International cooperative initiatives (ICIs) – networks of cities, regions, companies, investors, civil society, and, in some cases, countries, pursuing common climate action – could have a more substantial impact. If they realise their goals, they could reduce emissions by 1,300 to 1,500 MtCO₂e/year below the current national policies scenario projections or 36% to 43% below 2005 levels by 2030. Initiatives focused on cities and states account for the largest share of this estimated mitigation potential, followed by initiatives targeting non-CO₂ GHGs (Climate and Clean Air Coalition) (Figure 1, bottom-right panel). These initiatives’ success could enable the US to go beyond its NDC target.

2 Quantifiable commitments to reduce GHG emissions typically include a specific emissions reduction goal, target year, baseline year, and baseline year emissions. See Technical Annex I for more details.

3 Companies’ combined revenue reflects companies making quantifiable commitments to reduce GHG emissions, whose headquarters are in the United States, and whose revenue data is publicly available. See Technical Annex I for more details.

4 The world’s largest companies are defined in terms of their inclusion in the 2019 Forbes 2000 and Global Fortune 500 lists.

Figure 1. Potential greenhouse gas (GHG) emissions reductions in the United States resulting from the full implementation of individual subnational and non-state actor commitments and the full implementation of international cooperative initiatives (ICIs) goals compared to the “current national policies” scenario



The „current national policies” scenario (Kuramochi et al., 2018) includes land use, land-use change and forestry. Top panel: historical GHG emissions up to 2016 (with authors’ own estimates for years between the last inventory data year and 2016) and scenario emissions pathways up to 2030, alongside the NDC target emissions range (indicative target level for 2030). Emissions reduction target trajectories from individual actors’ commitments and initiatives’ goals are assumed to be achieved linearly from the latest historical data year and are presented here for illustrative purposes. Bottom-left panel: the breakdown of potential GHG emissions reductions from individual subnational and non-state actor commitments in 2030 by actor group. Bottom-right panel: the breakdown of potential GHG emissions reductions from ICIs in 2030 by sector. The results for “Current national policies plus initiatives’ goals” scenario do not include the potential emissions reductions from Science Based Targets, RE100 and Collaborative Climate Action Across the Air Transport World (CAATW); they are only quantified at a global level.

ABOUT THIS FACT SHEET

The **Global Climate Action from Cities, Regions, and Businesses** country fact sheet series takes a close look at the potential impact of subnational and non-state climate change mitigation action for ten high-emitting economies.

In each fact sheet, we: (1) provide general information on the country's greenhouse (GHG) emissions and its energy and climate policies (the country context); (2) describe the interactions between the national government and subnational and non-state actors on climate action; (3) identify and map the type of GHG emissions reduction commitments made individually by cities, regions and companies within that country, as well as the actors making them; and (4) quantify the potential GHG emissions reduction impact that city, region and company commitments, as well as those of international cooperative initiatives (ICIs), could have on that country's emissions trajectory. The analytical steps follow those described in an earlier 2018 report (Data-Driven Yale, NewClimate Institute and PBL, 2018) and adopts the methodological recommendations made in Hsu et al. (2019). Detailed descriptions of this can be found in the main report and its Technical Annexes I and II, all of which can be downloaded from the NewClimate Institute website (<https://newclimate.org/publications>). A full list of references can also be found in the main report (Section 5).

Regarding the emissions data presented in this section, total national GHG emissions include land use, land use change and forestry (LULUCF) unless otherwise stated. The historical GHG emissions data are plotted up to 2016; for a number of UNFCCC non-Annex I countries, the values between the last inventory year and 2016 were estimated based on current policies scenario projections by NewClimate Institute, PBL and IIASA (Kuramochi et al., 2018). All GHG emissions figures presented are aggregated with 100-year global warming potential (GWP) values of the IPCC Fourth Assessment Report. For the NDC target emission levels, we used LULUCF sector emission levels projected under the current policies scenario when a country's NDC: (i) excludes LULUCF emissions, (ii) is not clear about the LULUCF accounting or (iii) considers LULUCF credits. For these countries, the NDC target emission levels may not match the official values reported by the national governments.

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