

Effect of the US withdrawal from the Paris Agreement

1 November 2019

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The Trump Administration's intended withdrawal of the US from the Paris Agreement and its rollbacks of domestic climate policy will leave US greenhouse gas emissions at least 3% higher in 2030 than with the policies still in place. Nevertheless, the CAT projects US emissions to be 2% lower than what we projected when Trump came to power, which is 13% below 2005 levels. Trump has not stopped the fast decline of coal-fired power and the rise of renewables. Indeed, despite the weakening of the Clean Power Plan, the US power sector looks set to overachieve the CPP's emissions reduction goals.

The Administration's activities also significantly affect greenhouse gas emissions outside of the US through boosted gas exports. However, fears that it would lead to an avalanche of countries withdrawing from the Paris Agreement have proven unfounded.

On 1 June 2017, President Trump announced that the United States would pull out of the Paris Agreement. This was the first major step in his campaign to systematically walk back US federal climate policy, weakening efforts from the previous administration to reduce greenhouse gas (GHG) emissions.

Under the rules of the Paris Agreement, 4 November 2019 is the earliest date the Trump administration can officially submit a request to withdraw from the accord. This would go into effect exactly one year later, one day after the 2020 US presidential elections.

If the Trump administration sends the formal request to withdraw from the Paris Agreement, as it has indicated it will do on Monday, this would be a significant addition to the series of rollbacks in climate policy that could increase GHG emissions.

This comes as the USA is grappling with extreme events that are intensified by climate change, such as the devastating wildfires in California (Williams et al., 2019), with power cuts for over two million people - and storms on the east coast.

The Trump Administration has put forward over 50 rollbacks targeting climate policy (The New York Times, 2019a). The list below presents selected rollbacks, completed and in process, that could lead to increase of GHG emissions.

Despite this large number of policy rollbacks, the implemented and planned quantified policy rollbacks under Trump administration will lead to 2030 greenhouse gas emissions only 3% (186 MtCO₂e) higher than the CAT's projection with these policies still in place. The CAT's total projection for 2030, including accounting for implemented the Trump rollbacks, is now 2% lower than we had estimated in 2016 when Trump took office, with a reduction of 13% below 2005 levels by 2030.



Two opposite effects can be observed, which cancel each other out. The *increased emissions* from the rollbacks have been largely compensated by a *lower emissions* projection in the electricity generation sector, due to a changing power generation mix, with increased use of gas and cheaper renewables, which is continuing to displace coal (U.S. Energy Information Administration, 2019).

The market forces of cheaper renewables and gas have put coal-fired power producers under economic pressure, with eight of them filing bankruptcy this year (The New York Times, 2019b). Such market forces are reflected in current projections, which show that even though the Trump Administration replaced the Clean Power Plan (CPP), the power sector will still overachieve the CPP's original target of reducing emissions 32% below 2005 levels by 2030. So even though the Trump Administration has tried to reverse this trend it has not succeeded.

Other significant rollbacks include not enforcing a regulation of efficient lighting, regulation on fluorinated greenhouse gases, postponement of energy efficiency and emission standards for cars and not enforcing the mandatory repair of gas leaks (see table below).

Exporting increased emissions through gas

It is equally worrying that emissions outside the US might increase due to the significant support for fossil fuel production and exports in the US, mainly from unconventional gas through fracking. The US is now the world's largest producer of crude oil and gas (U.S. Energy Information Administration, 2018).

LNG exports grew by 53% from 2017-2018, and are expected to more than double by 2020 (Lester, 2019). The US is incentivising the development of new gas-related infrastructure (LNG ports and pipelines) overseas to expand its export market (U.S. Trade and Development Agency, 2017).

This significant investment into large-scale gas infrastructure will lead importing countries to a lock-in of their energy supply into a fossil-dependent pathway that is not compatible with the Paris Agreement's temperature goal. The lock-in of those technologies are also very likely to result in stranded assets (Climate Action Tracker, 2017a).

The intention of the world's second-largest polluter to withdraw from the Paris Agreement was initially a major concern, sparking fears that it would potentially lead to an avalanche effect on other countries that voiced their intention to also pull out from the accord. Brazil has threatened to abandon the Paris Agreement but has not done so. After more than two years since the Trump administration first announced its intention to withdraw from the Paris Agreement, the international support behind the Paris Agreement has proven strong, and no other country besides the US has yet pulled out. The last remaining major emitter, Russia, joined the Paris Agreement on October 7th (United Nations, 2019).



Selection of policy rollbacks since the start of Trump's Administration

Policy	Status	Trump Administration action	Estimated emissions impact if Trump Administration action is implemented (as compared to current policy scenario)
Clean Power Plan (CPP)	Rollback completed	Replacement in July, 2019 (U.S. Environmental Protection Agency, 2019a)	No effect. Even without the policy the cost reduction of gas and renewables in the power sector lead to overachievement of the 32% emissions reduction goal in the sector compared to 2005 levels, that was envisaged by the CPP (U.S. Energy Information Administration, 2019)
Energy Conservation Standards for General Service Lamps (GSL)	Rollback completed	Will not enforce (U.S. Department of Energy, 2019)	Cumulative + 100 MtCO₂e through 2020-2028, no effect in 2030, policy rollback only postpones the development (CAT calculations)
Significant New Alternatives Policy (SNAP) Programme	Rollback completed	Will not enforce (U.S. Environmental Protection Agency, 2018a)	+ 78–101 MtCO₂e/yr in 2030 (U.S. Environmental Protection Agency, 2015)
CAFE standards for light duty vehicles	In-process	Proposal to freeze standards at 2020 levels (U.S. Environmental Protection Agency et al., 2018)	+22–76 MtCO₂e/yr in 2030 (Climate Action Tracker, 2017b)
Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources	In-process	Proposal to modify standards (U.S. Environmental Protection Agency, 2018b)	+9.2 MtCO₂e/yr in 2030 (U.S. Environmental Protection Agency, 2016)

Additional relevant rollbacks that we don't quantify include:

Completed rules

- Postpone due date for state plans to limit methane emissions from landfills and postpones compliance deadlines (Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills (U.S. Environmental Protection Agency, 2019b)
- Cancel requirements for oil and gas companies to report methane emissions.
- Reversed regulation that was designed to limit methane waste from oil & gas production on public lands (Methane Waste Prevention Rule (U.S. Bureau of Land Management, 2018)
- Directed agencies to stop using an Obama-era calculation of the "social cost of carbon" that rulemakers used to estimate the long-term economic benefits of reducing carbon dioxide emissions.
- Instructed government agencies to change their climate science methodology.



Proposed rules

- Limit states' abilities to cut their own emissions: The Trump Administration challenges California's right to set its own more stringent car standards, which other states can choose to follow
- Completed preliminary environmental reviews to clear the way for oil and gas drilling in the Arctic National Wildlife Refuge.
- Weakened the way the Endangered Species Act. New rules will allow reducing the amount of
 habitat set aside for wildlife and remove tools that officials use to predict future harm to
 species as a result of climate change. This will allow for more oil and gas drilling and limit how
 much regulators consider the impacts of the climate crisis.
- Proposed eliminating Obama-era restrictions that in effect required newly built coal power plants to capture carbon dioxide emissions.
- Propose to weaken emissions standards for new coal-fired power plants from the 2015 standard of 635 gCO₂/kWh to between 860-1000 gCO₂/kWh, depending on the type of plant (U.S. Environmental Protection Agency, 2018c).



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The Climate Action Tracker (CAT) is an independent scientific analysis produced by two research organisations tracking climate action since 2009. We track progress towards the globally agreed aim of holding warming well below 2°C, and pursuing efforts to limit warming to 1.5°C.

climateactiontracker.org

The Consortium



Climate Analytics is a non-profit climate science and policy institute based in Berlin, Germany with offices in New York, USA, Lomé, Togo and Perth, Australia, which brings together interdisciplinary expertise in the scientific and policy aspects of climate change. Climate Analytics aims to synthesise and advance scientific knowledge in the area of climate, and by linking scientific and policy analysis provide state-of-the-art solutions to global and national climate change policy challenges.

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