

The Road to COP26

US and EU commit to ambitious reductions in greenhouse gas emissions

A COP26 initiative white paper - By Jeff Plewes with Viktoriya Kuz

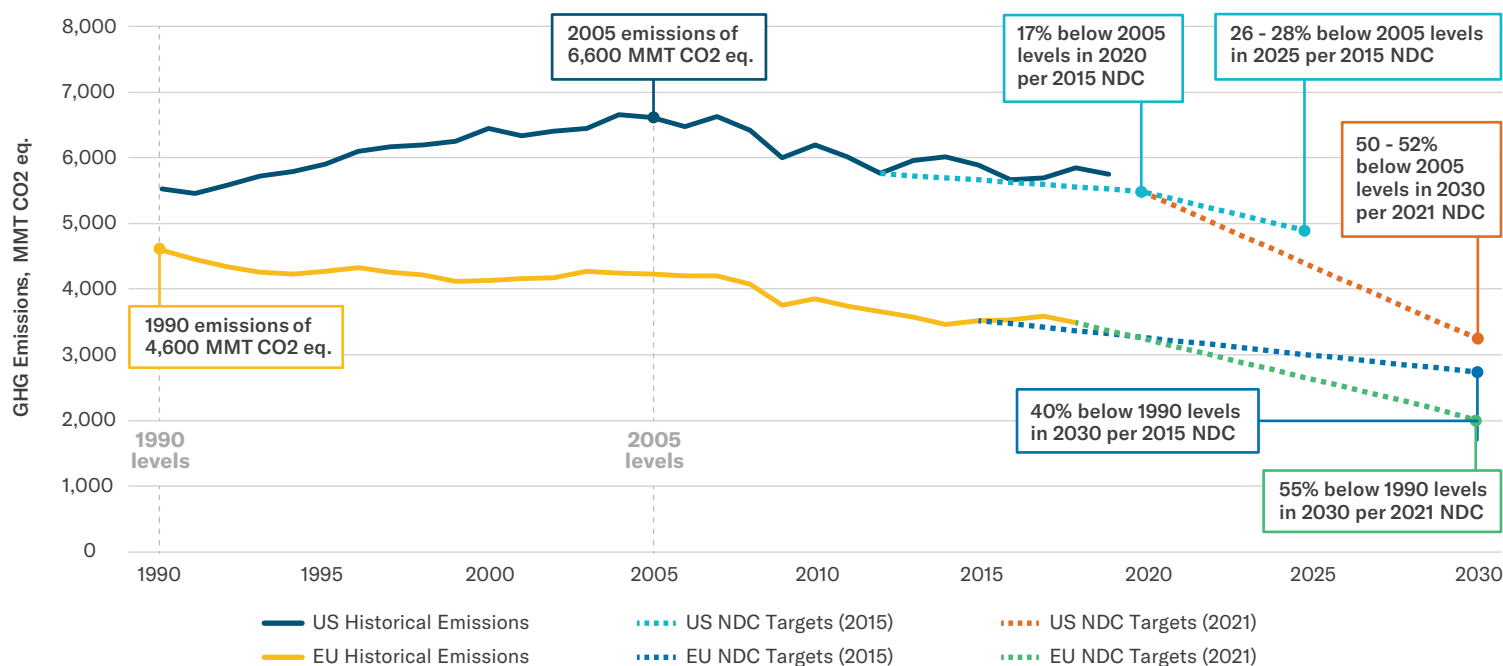
On Earth Day (April 22) 2021, the Biden administration kicked off a virtual two-day climate summit with a commitment to reduce greenhouse gas emissions to 50-52% below 2005 emissions levels by 2030. A day earlier, the EU confirmed its previously signaled target to reduce greenhouse gas emissions to 55% below 1990 levels by 2030, and to achieve net-zero emissions by 2050. Under the Paris Agreement of 2015, every five years members set emissions reduction targets, called nationally determined contributions (NDC).

The US commitment is more ambitious than its original NDC from 2015, which had a target of 17% below 2005 emissions by 2020 and 26-28% below 2005 emissions by 2025. Emissions in the reference year of 2005 were within 1% of the peak annual emissions. Emissions increased significantly from 1990 to 2005 and decreased 13% from 2005 to 2019. The NDC target significantly accelerates the recent trajectory (not including the anomalous year of 2020).

The previous EU commitment was to reach 45% below 1990 levels by 2030. The EU has shown a steady decline in emissions since 1990 and the target seems to continue the trajectory with a slight acceleration.

The following chart illustrates historical emissions and NDC targets for the US and the EU through 2030.

US and EU GHG Emissions, Historical and NDC Targets



The EU and US NDCs are more ambitious than the global emissions reductions that the UN Intergovernmental Panel on Climate Change (IPCC) estimates is required to keep warming under 1.5°C above pre-industrial levels (~45% below 2005 emissions levels by 2030). Such ambition by the developed countries is seen as necessary to meet the IPCC goals as emissions are expected to rise in many large developing countries through at least the mid-2020s. For example, the China NDC aims for peak emissions in 2027. Both NDCs are also more aggressive than a straight-line emissions reduction to get to net-zero emissions by 2050.

Policymakers must now confront the challenges to meet the commitments. The Biden administration has issued executive actions and proposed major climate initiatives as part of its infrastructure package. Achieving the new NDC will require significantly more policy and regulatory initiatives from the US that may face legislative and judicial constraints. We expect all emissions sources to receive attention in the coming years, as explained in our February 2021 [white paper](#).

Sources: IPCC, Global Warming of 1.5°C report, <https://www.ipcc.ch/sr15/>; EPA Inventory of US Greenhouse Gas Emissions and Sinks, 1990–2019; European Environment Agency, Annual European Union greenhouse gas inventory 1990–2018 and inventory report 2020.