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# EU Climate Action and Implications for the United States

## The European Union: A Key Actor

The European Union (EU) has sought to play a leading role on international climate action for decades. It worked closely with the United States to negotiate the 2015 Paris Agreement (PA) to combat greenhouse gas (GHG)-induced climate change. The 27-member EU and the United Kingdom (UK)—which exited the EU in January 2020—have welcomed President Joe Biden’s decision to rejoin the PA (reversing the U.S. withdrawal carried out by the former Trump Administration). Biden Administration climate positions are expected to align with EU views in many respects. The 117<sup>th</sup> Congress may compare EU climate action policies with Biden Administration plans and may assess prospects for and challenges to U.S.-EU cooperation on climate change and mitigation efforts in the years ahead. (Table 1 compares selected U.S. and EU GHG emissions indicators.)

**Table 1. Selected GHG Emissions Indicators for 2018**

	EU-27	U.S.
Total GHG Emissions	3.5 Gt CO <sub>2</sub> e	5.9 Gt CO <sub>2</sub> e
GHG Emissions per Capita	7.9 t CO <sub>2</sub> e	18.1 t CO <sub>2</sub> e
GHG Emissions per Million \$ GDP	220 t CO <sub>2</sub> e	288 t CO <sub>2</sub> e
Share of Global CO <sub>2</sub> Energy-Related Emissions	8.4%	14.7%

**Sources:** World Resources Institute, Climate Watch 2021; International Energy Agency, Key World Energy Statistics 2020.

**Notes:** CO<sub>2</sub> = carbon dioxide; CO<sub>2</sub>e = carbon dioxide-equivalent: the tons of CO<sub>2</sub> that would have the equivalent effect of 1 ton of the GHG on forcing global average temperature. Units are metric: t = metric ton; Gt = gigaton, or 1 billion metric tons. Although the UK was a member of the EU in 2018, EU data exclude the UK.

## EU Climate Policies and Challenges

The EU designates environmental policy—including climate action—as an area of *shared competency* in which both the EU and its member states may adopt legally binding acts. All EU members must abide by agreed EU laws and regulations on climate action, and national laws or policies must not conflict with or undercut common EU measures. European public demands for stronger climate action are growing, as seen by results from recent European elections (including those in 2019 for the European Parliament, the EU’s only directly elected institution). The EU has set a goal of a climate-neutral economy (no net GHG emissions) by 2050 and has pledged to put “green” policies at the center of its Coronavirus Disease 2019 (COVID-19) economic recovery plans. Of the EU’s €1.85 trillion (about \$2.2 trillion) pandemic recovery and 2021-2027 budget package, 30% of total expenditure is to be devoted to climate objectives.

## EU Greenhouse Gas Mitigation Efforts

The EU negotiates on behalf of its member states in the U.N. Framework Convention on Climate Change, including the Kyoto Protocol (KP) and the PA. Under the KP, the EU met its 2008-2012 obligations and, by 2019, had surpassed its 2013-2020 obligation of 20% below 1990-level GHG emissions (Figure 1). In the PA, the EU committed in its initial Nationally Determined Contribution (NDC) to an aggregate “binding target of at least a 40% domestic reduction in GHG emissions by 2030 compared to 1990.” In December 2020, following agreement by all member states, the EU updated its NDC to an enhanced target of at least a 55% reduction in GHG emissions by 2030 compared with 1990 levels. (To fulfill the EU’s collective NDC, each EU country agrees to a distinct target that is legally binding within the EU context.) The EU’s NDC target covers all GHG not controlled by the Montreal Protocol on Substances That Deplete the Ozone Layer, including carbon dioxide (CO<sub>2</sub>), from the energy sector, industrial processes, product use, agriculture, waste, and net removals by land use, land-use change, and forestry (LULUCF).

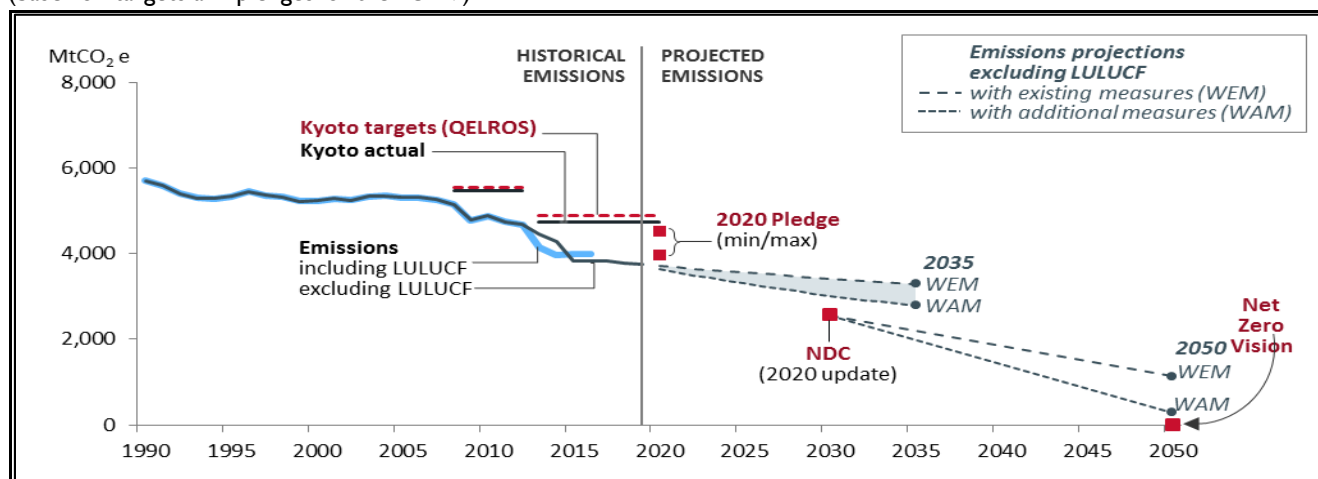
To help achieve its initial NDC target, the EU pursued several measures. It reformed and strengthened its Emissions Trading System (ETS), which limits CO<sub>2</sub> emissions from energy-intensive companies and installations. The EU adopted legislation to reduce emissions in other sectors (including buildings, transport, waste, and agriculture) and to ensure no net emissions from the land use and forestry sector. The EU also views transitioning to “cleaner” energy as crucial to reducing emissions, and it established stricter energy efficiency and renewable goals for 2030.

Many in the EU view the new minimum 55% emissions reduction target as a key step toward helping the EU reach its 2050 climate-neutrality goal and as significant for overcoming years of resistance from Poland and other member states more reliant on coal and fossil fuels. Environmental groups and some in the European Parliament, however, contend the new target remains insufficient to contain global warming to the levels called for in the PA. Germany is one of only a few countries to enact legislation requiring “net greenhouse gas neutrality” by 2050. A number of EU countries likely will need to make structural changes and implement further measures to meet their shares of the EU 2030 targets; these countries may meet their EU obligations in part by acquiring extra GHG reductions from other EU member states. For some EU members, such as Belgium and Germany, reducing GHG emissions is made more difficult by cutbacks in nuclear power generation. The EU is expected to unveil

new legislative proposals in June 2021 to help meet the new 55% emissions reduction target.

**Figure 1. EU Historical GHG Emissions and Emissions Projections**

(based on targets and pledges for the EU-27)



**Source:** Graphic created by CRS, based on data from the European Environment Agency, at [https://www.eea.europa.eu/data-and-maps/daviz/greenhouse\\_gas\\_trends\\_and\\_projections#tab-chart\\_1](https://www.eea.europa.eu/data-and-maps/daviz/greenhouse_gas_trends_and_projections#tab-chart_1).

**Notes:** LULUCF = Land Use, Land-Use Change, and Forestry; NDC = Nationally Determined Contribution; QELROS = Quantified Emission Limit or Reduction Objectives. The **EU's Kyoto targets** were 8% below 1990 emissions levels (average 2008-2012) and 20% below 1990 levels (average 2013-2020); its actual net emissions including acquired international offsets were below the target levels in both periods. The **EU's pledge for 2020** (made in 2009) is a 20%-30% reduction below 1990 emissions levels by 2020, conditional on developed countries committing to comparable efforts and developing countries contributing according to capabilities. The **EU's 2030 updated NDC target** is to reduce GHG emissions to at least 55% below 1990 levels by 2030. For 2050, the EU has adopted a net zero vision of "climate neutrality," in which emissions would be offset by negative emissions (i.e., photosynthesis) in LULUCF as well as by negative emission technologies.

## The European Green Deal

The European Green Deal, launched in December 2019 by the European Commission (the EU's executive), sets out a multipronged EU approach to climate change and other environmental challenges, while promoting resource-efficient economic growth and innovation. A key element is a "just and inclusive transition" in which no segments of EU society are "left behind" economically. Initial plans to finance the European Green Deal in its entirety called for mobilizing at least €1 trillion (about \$1.2 trillion) over the next decade from the EU budget and financial institutions, member states, and private investors. EU plans include providing financial assistance for areas, industries, and workers dependent on carbon-intensive activities and fossil fuels (for example, in Central Europe and the Baltic states). EU efforts to foster "green" COVID-19 recovery policies prompted the investment plan for the overall Just Transition Mechanism to be increased to €150 billion (roughly \$178 billion), including €17.5 billion (around \$21 billion) from the EU budget for a Just Transition Fund to support those regions with the most pressing transition challenges.

The EU is working on additional climate action initiatives, including a future *carbon border adjustment mechanism*—such as a border tax—to reduce risks to competitiveness and avoid risks of emission shifts to countries with less ambitious climate policies. The European Commission has issued a new strategy to "adapt to the unavoidable impacts of climate change and become climate resilient by 2050." A proposal to enact into EU law the goal of a climate-neutral economy by 2050 also would require member states to implement adaptation measures to enhance resilience. The EU is considering new strategies on biodiversity, industrial

policy, sustainable food, and a circular (waste-minimizing) economy. Specific legislation to help implement the European Green Deal must be approved by the member states (acting in the Council of the EU) and by the European Parliament to become EU law, a process that can take two years or more.

## Implications for U.S.-EU Relations

The Biden Administration has asserted the importance of close U.S.-EU cooperation in tackling climate challenges. EU officials have proposed a robust U.S.-EU climate agenda to include addressing, among other issues, carbon leakage, implications of climate efforts for the international trading system, sustainable finance, and clean and circular technologies. U.S. Special Presidential Envoy for Climate John Kerry met with EU leaders during a March 2021 visit to Europe and indicated a renewed U.S. commitment to partnering with the EU on global climate change mitigation. U.S. and EU officials reportedly are working to develop a shared strategy for the U.N. Climate Change Conference (COP26) in November 2021 and on coordinating efforts to urge China to peak its GHG emissions before 2025.

At the same time, some U.S.-EU tensions on climate issues could emerge. U.S. climate envoy Kerry has cautioned that a carbon border tax could have "serious" trade implications. Evolving U.S.-EU views may differ on sustainable finance standards and regulation. U.S.-EU competition in clean energy and technology markets also could become more pronounced in the years ahead. Also see CRS In Focus IF11746, *United States Rejoins the Paris Agreement on Climate Change: Options for Congress*, by Jane A. Leggett.

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