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February 14, 2020

EU Climate Action and Implications for the United States

European Union: A Key Actor

The European Union (EU) has sought to play a leading role on international climate action for decades. The EU and the United States worked closely to negotiate the 2015 Paris Agreement (PA) to combat greenhouse gas (GHG)-induced climate change. The EU reacted negatively to President Trump's 2017 decision to withdraw the United States from the PA, scheduled to take effect in November 2020. The EU remains committed to the PA and seeks to enhance its climate policies in light of increasing political pressure throughout Europe for more robust action. Still, the EU faces challenges in reaching consensus on more ambitious EU-wide measures. Despite U.S. withdrawal from the PA, many Members of Congress are interested in the possible geostrategic and economic implications of climate change and international mitigation efforts. (**Table 1** compares selected U.S. and EU GHG emissions indicators.) U.S.-EU frictions on climate policies also may affect broader U.S.-EU relations. (See CRS In Focus IF10668, *Potential Implications of U.S. Withdrawal from the Paris Agreement on Climate Change*, by Jane A. Leggett.)

Table 1. Selected GHG Emissions Indicators

	EU	U.S.
Total GHG Emissions in 2016	3.6 Gt CO_2e	5.8 Gt CO_2e
GHG Emissions per Capita in 2016	7.1 t CO_2e	18.1 t CO_2e
GHG Emissions per Million $ GDP in 2016	220 t CO_2e	310 t CO_2e
Share of Global GDP based on Purchasing Power Parities in 2016	16.8%	15.6%
Share of Global CO_2 Emissions Related to Energy in 2017	10%	14.5%

Sources: World Resources Institute, Climate Watch 2020; International Monetary Fund, World Economic Outlook 2016; International Energy Agency, Key World Energy Statistics 2019.
Notes: CO_2 = carbon dioxide; CO_2e = carbon dioxide-equivalent: the tons of CO_2 that would have the equivalent effect of 1 ton of the GHG on forcing global average temperature. Units used are metric: t = metric ton; Gt = gigaton, or 1 billion metric tons.

EU Climate Action Policies

In the EU context, environmental policy—including climate action—is an area of *shared competency* in which both the EU and its 27 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.

EU GHG 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 obligation and is on track to meet its 2013-2020 obligation (**Figure 1**). In the PA, the EU made an aggregate GHG-reduction pledge in its Nationally Determined Contribution (NDC) in which the EU and its member states commit to a "binding target of at least a 40% domestic reduction in GHG emissions by 2030 compared to 1990." To fulfill the EU's NDC, each EU member agreed 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_2), from the energy sector, industrial processes, product use, agriculture, waste, and net removals by land use, land-use change and forestry.

The EU's NDC target is the same as the binding target agreed in 2014 in the EU's 2030 Climate and Energy Framework. To help achieve this target, the EU adopted legislation in 2018 to reform and strengthen its Emissions Trading System (ETS), which limits CO_2 emissions from energy-intensive companies and installations. Also in 2018, the EU updated legislation to curb emissions in sectors not covered by ETS (including buildings, transport, waste, and agriculture) and legislation to ensure no net emissions from the land use and forestry sectors.

The EU also views transitioning to "cleaner" energy as crucial to reducing emissions. In 2018 and 2019, the EU finalized several measures to promote clean energy, including setting stricter energy efficiency and renewable goals for 2030. EU officials estimate that, once fully implemented, these new policies will lead to steeper emission reductions than previously anticipated, cutting EU emissions by 45% by 2030 compared to 1990 levels.

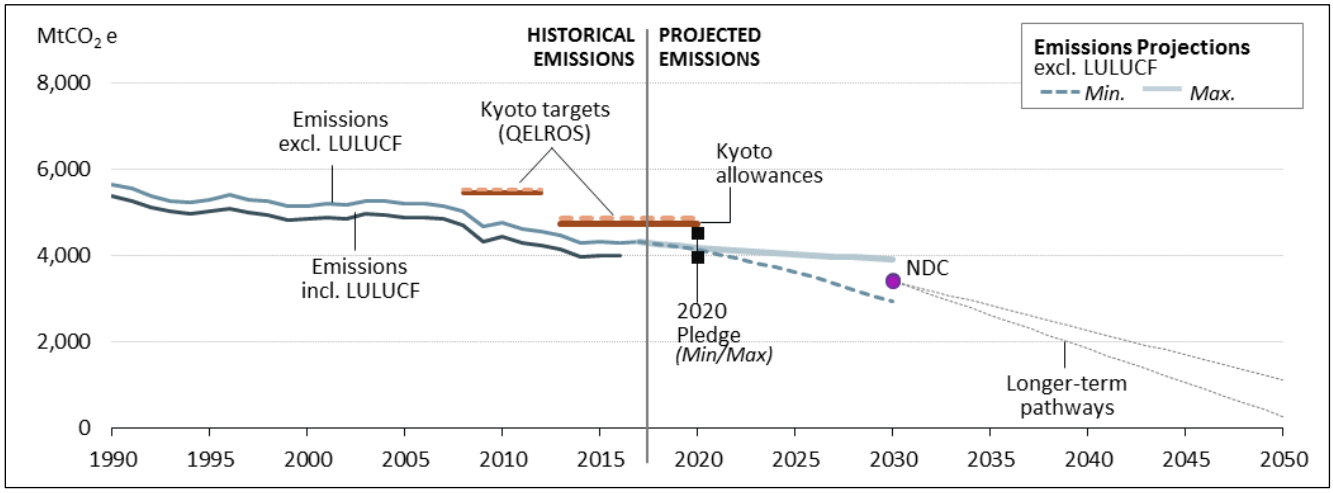
A Proposed European Green Deal

European public demands for stronger climate action are growing, as seen by gains for pro-environment "green" parties in recent European elections (including those in 2019 for the European Parliament, the EU's only directly elected institution). In December 2019, the new European Commission (the EU's executive) proposed a European Green Deal as its flagship initiative for its 2019-2024 term.

The European Green Deal sets out a multipronged approach to climate change and other environmental challenges, while promoting resource-efficient economic growth and innovation. Key elements include increasing the EU's 2030 emissions reduction target from 40% to at least 50% from

1990 levels and adopting in EU law the goal of a climate-neutral economy (no net GHG emissions) by 2050.

Figure 1. EU Historical GHG Emissions and Emissions Projections
(based on targets and pledges)



Source: Graphic created by CRS, based on data from Climate Action Tracker, https://climateactiontracker.org/methodology.

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). The **EU's 2020 pledge** (from 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 unconditional target** (in its NDC from 2015) is to reduce GHG (greenhouse gas) emissions at least 40% below 1990 levels by 2030. In projections to 2030, the higher trajectory reflects biennial reporting by EU member states and policies adopted as of 2017. The lower bound assumes full implementation of existing EU directives on renewable energy and energy efficiency.

The European Green Deal pledges a "just and inclusive transition" in which no segments of EU society are "left behind" economically. The European Commission announced plans to mobilize at least €1 trillion (about $1.08 trillion) over the next decade for the European Green Deal from the EU budget and financial institutions, member states, and private investors. This funding is expected to include a €100 billion (about $108 billion) Just Transition Mechanism for regions dependent on carbon-intensive activities and fossil fuels (for example, in Central Europe and the Baltic states).

In its proposal for the European Green Deal, the European Commission suggests the EU might consider implementing a future "carbon border adjustment mechanism"—such as a carbon border tax—to reduce risks to competitiveness and of carbon emission shifts to countries with less ambitious climate policies. In addition, the European Commission plans to adopt a more robust EU strategy on adaptation to climate change in recognition that many European regions will remain vulnerable despite mitigation efforts. The European Commission also intends to propose new EU strategies on biodiversity, industrial policy, sustainable food, and a circular (waste-minimizing) economy. Any legislation proposed in the European Green Deal must be approved by the member states (acting in the Council of the EU) and the European Parliament to become EU law, a process that often can take two years or more. In January 2020, the European Parliament passed a nonbinding resolution in support of the European Green Deal.

Ongoing Challenges

Several EU members, including Germany, face challenges in meeting existing GHG targets through domestic efforts alone. These countries may meet their EU obligation by acquiring extra GHG reductions from other EU member states. Reflecting concerns about the costs of existing and anticipated climate policies, certain business sectors and member state governments have expressed a degree of resistance to setting more ambitious EU climate goals. Poland, for example, remains reluctant to commit to a GHG-neutral EU by 2050 given its reliance on coal and is tying its support to greater EU financial assistance. In Belgium and Germany, reducing GHG emissions is made more difficult by cutbacks in nuclear power generation. Some observers also contend that the EU's institutional structure and bureaucracy could impede the holistic approach envisioned in the European Green Deal.

Implications for U.S.-EU Relations

EU efforts to step up its climate action policies and elements of the proposed European Green Deal may exacerbate U.S.-EU tensions. The EU has pledged that it will not conclude future free trade agreements with countries that are not parties to the PA, creating another potential friction point in already fraught U.S.-EU trade talks. Some analysts suggest that possible EU carbon border adjustments could increase costs for U.S. firms doing business in Europe. U.S.-EU frictions also may mount if a perceived lack of U.S. engagement and cooperation on climate issues impedes the EU's ability to convince other countries to pursue more robust GHG-mitigation measures.

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