



EU Climate Action and U.S.-EU Relations

The European Union: A Key Actor

The European Union (EU) has played 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. Since 2019, the EU has raised its domestic climate ambitions further and, in doing so, has sought to be a global standard-setter. The EU welcomed President Biden's decision to rejoin the PA (reversing the U.S. withdrawal carried out by the former Trump Administration). Both EU and Biden Administration officials repeatedly assert the importance of U.S.-EU cooperation in tackling climate challenges. The 117th 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 mitigation efforts in the years ahead. (Table 1 compares selected U.S. and EU GHG emissions indicators.)

	EU-27	U.S.
Total GHG Emissions	3.5 Gt CO2e	5.9 Gt CO2e
GHG Emissions per Capita	7.9 t CO2e	18.1 t CO ₂ e
GHG Emissions per Million \$ GDP	220 t CO ₂ e	287 t CO2e
Share of Global CO ₂ Energy-Related Emissions	8.4%	14.7%

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

Notes: $CO_2e =$ carbon dioxide-equivalent: the tons of carbon dioxide 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. EU data is for the EU's current 27 member states; they exclude the United Kingdom (which withdrew from the EU in 2020).

EU Climate Policies

The 27-member 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. Headline EU initiatives include

• The European Green Deal. A multipronged approach, launched in December 2019 by the European Commission (the EU's executive), to address climate change and other environmental challenges, while also promoting resource-efficient economic growth and innovation. A just economic transition for all segments of European society is integral to the initiative.

- More Ambitious Climate Goals. In 2020, the EU committed to reducing GHG emissions by at least 55% from 1990 levels by 2030, both in the EU context and in its Nationally Determined Contribution (NDC) under the PA. The EU also has committed to a climate-neutral economy (no net GHG emissions) by 2050.
- Fit for 55. Unveiled in July 2021, this initial package of 16 legislative proposals and policies aims to meet the EU's 55% emissions reduction goal and to implement measures linked to the European Green Deal.

Specific legislation to help implement the European Green Deal and Fit for 55 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. The EU also has pledged to put "green" policies at the center of its Coronavirus Disease 2019 (COVID-19) economic recovery plans. Of the EU's \notin 2 trillion (about \$2.3 trillion, in current prices) pandemic recovery and 2021-2027 budget package, 30% of total expenditure is to be devoted to climate objectives.

EU GHG Emissions Reduction Target

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 or surpassed its 2008-2012 and 2013-2020 GHG reduction obligations (see Figure 1). In 2020, the EU updated its commitment in its NDC from an aggregate target of at least a 40% reduction in GHG emissions by 2030 to at least a 55% reduction (below 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 (CO₂) and methane (CH₄), from the energy sector, industrial processes, product use, agriculture, waste, and net removals by land use, land-use change, and forestry (LULUCF).

Many in the EU view the new minimum 55% emissions reduction target as key to helping the EU reach its 2050 climate-neutrality goal and as significant for overcoming years of resistance from Poland and other members more reliant on coal and fossil fuels. Environmental groups and some Members of the European Parliament (MEPs), however, contend the new target remains insufficient to hold global warming to the levels called for in the PA. Some EU countries likely will need to make structural changes to meet their shares of the EU's 2030 targets; they may do so in part by acquiring extra GHG reductions from other EU member states. For some, such as Belgium and Germany, reducing GHG emissions is made more difficult by policies to phase out nuclear power generation.



Figure 1. EU Historical GHG Emissions, EU-27 Future Targets, and Emissions Projections

Source: CRS using European Environment Agency (EEA), Total Greenhouse Gas Emission Trends and Projections in Europe, 2020; Kyoto 2nd Commitment Period (2013-20); and European Commission, 2050 Long-Term Strategy.

Notes: The EU's Kyoto Protocol (KP) targets were 8% below 1990 emissions levels (average 2008-2012) and 20% below 1990 levels (average 2013-2020). For KP compliance, EU official net emissions, including acquired international offsets, were below the target levels in both periods. The EU's 2030 Enacted Target is at least a 40% emissions reduction below 1990 levels. The EU's updated 2030 Nationally Determined Contribution (NDC) Target is at least 55% below 1990 levels. "With Existing Measures" (WEM) projections count existing domestic policies; "With Additional Measures" (WAM) projections include planned domestic policies. For 2050, the EU has adopted a Net Zero Vision of "climate neutrality."

Key EU GHG Mitigation Efforts

A key EU GHG mitigation policy centers on reforming and expanding its emissions trading system (ETS), begun in 2005. The ETS caps CO₂ emissions from the electricity sector, certain energy-intensive industries, and aviation within Europe. The Fit for 55 package proposes measures to strengthen the ETS, expand it to the maritime sector, and create a second ETS for fuels for road transport and building heating. Some member states and MEPs express concern about increased energy costs to households and consumers. Fit for 55 includes plans for a \in 72.2 billion (about \$84 billion) Social Climate Fund to provide temporary income support to vulnerable households and to help finance investments in energy efficiency.

The EU also views transitioning to "cleaner" energy as crucial to reducing emissions. Fit for 55 calls for adopting stricter energy efficiency and renewable goals for 2030, including raising the portion of renewables in the EU's energy mix from 32% to 40%. Fit for 55 also proposes reducing CO₂ emissions for new cars and vans by 100% by 2035. Other measures in Fit for 55 include enhancing emissions reduction targets in sectors outside the current ETS, strengthening existing EU legislation on LULUCF, new initiatives to promote sustainable aviation and maritime fuels, and a new EU Forest Strategy.

Carbon Border Adjustment Mechanism

As part of Fit for 55, the EU proposed a carbon border adjustment mechanism (CBAM)—which would put a carbon price on imports of selected products—to reduce risks to EU competitiveness and avoid risks of emission shifts to countries with less ambitious climate policies. To be phased in from 2023, the CBAM would apply initially to imports of cement, iron, steel, aluminum, fertilizers, and electricity. The European Commission asserts that the "overarching objective" is to "fight climate change by reducing GHG emissions in the Union and globally." Some experts suggest the EU is seeking to leverage its trading relationships to persuade countries to adopt more robust climate policies.

U.S.-EU Cooperation and Challenges

At a June 2021 summit, the United States and the EU identified the goal to "protect our planet and foster green growth" as one of four priority areas for cooperation. The two partners committed to work together on implementing the PA, sustainable finance, and the development of green technologies, among other issues. In September 2021, the United States and the EU announced the Global Methane Pledge to reduce global methane emissions by at least 30% from 2020 levels by 2030. Over 100 countries have joined this initiative, officially launched at the 26th U.N. Climate Change Conference (COP26) in November 2021.

Despite renewed U.S.-EU efforts to cooperate on climate action, some challenges remain. U.S. officials express some concerns about the EU's proposed CBAM, including possible trade implications. Tensions have arisen over anticipated changes to EU food and agriculture policies that are part of the European Green Deal's Farm to Fork (F2F) and Biodiversity Strategies. U.S.-EU views also may differ on sustainable finance standards and regulation.

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