EU Emissions Trading System (EU ETS)

Summary

Status: ETS in force

Jurisdictions: Member states: 27 EU Member States and three European Economic Area-European Free Trade Association (EEA-EFTA) states: Iceland, Liechtenstein and Norway

The European Union Emissions Trading System (EU ETS) is a cornerstone of the EU’s policy to combat climate change and a key tool for reducing, on a cost-effective basis, GHG emissions from the regulated sectors. The system covers ~40% of the EU’s emissions, from the power sector, manufacturing industry, and aviation within the European Economic Area. It is the oldest and now second-largest ETS in force. Introduced in 2005 and now in its fourth trading phase, the EU ETS has gone through several reforms. The latest reform of the ETS was proposed in July of 2021 as a part of the European Green Deal. As of January 2020, the EU ETS became linked to the Swiss ETS, the first linking of this kind for both parties.

Overall GHG emissions (excluding LULUCF)

Emissions: 3,893.1 MtCO2e (2018*)

*Overall GHG emissions for the EU-27 that comprises all European Member States, which as of 2021 no longer includes the United Kingdom.

Overall GHG emissions by sector (in MtCO2)

<table>
<thead>
<tr>
<th>Sector Name</th>
<th>MtCO2e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy (2,907.1)</td>
<td>2907.1</td>
</tr>
<tr>
<td>Industrial Processes (343.5)</td>
<td>343.5</td>
</tr>
<tr>
<td>Agriculture (394.4)</td>
<td>394.4</td>
</tr>
<tr>
<td>Waste (117.2)</td>
<td>117.2</td>
</tr>
<tr>
<td>International Aviation (129.2)</td>
<td>129.2</td>
</tr>
</tbody>
</table>

GHG reduction target

By 2030: At least 55% below 1990 GHG levels proposed (European Green Deal), to be set in the Climate Law

By 2050: Climate neutrality target proposed (European Green Deal), to be set in the Climate Law*

*Both updated targets (2030 and 2050) recently have been endorsed by the European Parliament and European Council, and are currently in the process of being enshrined into the European Climate Law.

Carbon Price

Current Allowance Price (per t/CO2e): EUR 24.76 (USD 28.28) (average 2020 secondary market spot price from EEX exchange; updated prices available here)

Covered emissions

0.39

GHGs covered

CO2, N2O, PFCs
### Sectors and thresholds

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td><strong>PHASE ONE (2005-2007):</strong></td>
<td>Power stations and other combustion installations with &gt;20MW thermal rated input (except hazardous or municipal waste installations), industry (various thresholds) including oil refineries, coke ovens, and iron and steel plants, as well as production of cement, glass, lime, bricks, ceramics, pulp, paper, and cardboard.</td>
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<tr>
<td><strong>PHASE TWO (2008-2012):</strong></td>
<td>Aviation was introduced in 2012 (&gt;10,000 tCO2/year for commercial aviation; &gt;1,000 tCO2/year for non-commercial aviation since 2013) (see &quot;Aviation&quot; section). A number of countries included NOx emissions from the production of nitric acid. The EU ETS also expanded to include Iceland, Liechtenstein, and Norway.</td>
</tr>
<tr>
<td><strong>PHASE THREE (2013-2020):</strong></td>
<td>Carbon capture and storage installations, production of petrochemicals, ammonia, nonferrous and ferrous metals, gypsum, aluminum, as well as nitric, adipic, and glyoxylic acid (various thresholds) were included.</td>
</tr>
<tr>
<td><strong>PHASE FOUR (2021-2030):</strong></td>
<td>Based on the current legislation, no changes to the scope have been agreed on for Phase 4. Changes are being considered as part of the review of the ETS foreseen under the 2030 Climate Target Plan (see “Year in Review” section).</td>
</tr>
</tbody>
</table>

**Aviation:** Emissions from international aviation were included in the EU ETS in 2012. In November 2012, the EU temporarily suspended enforcement of the EU ETS requirements for flights operating from or to non-EEA countries (“stop the clock”) while continuing to apply the legislation to flights within and between countries in the EEA. Exemptions for operators with low emissions have also been introduced.

In light of the progress made under the International Civil Aviation Organization (ICAO) towards a global measure to reduce emissions from the aviation sector (the Carbon Offsetting and Reduction Scheme [CORSIA]), the EU will maintain the intra-EEA scope for the ETS Aviation until 31 December 2023. In 2020, the Commission initiated a process to revise the ETS Directive to address the implementation of CORSIA in EU law in a way that is consistent with the EU’s 2030 climate target, with a view of adoption in 2021.

### Point of regulation

**Downstream**

### Number of entities

10,569 power plants and manufacturing installations.

### Institutions involved

The European Commission and the relevant authorities of all EU Member States as well as Iceland, Liechtenstein, and Norway.
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