1) Key takeaways
- In 2021, GHG emissions in Sweden were 5.5% below 2019 pre-pandemic levels.
- Over the same period, ETS and Effor Sharing emissions decreased by 2.2% and by 7.4%, respectively.
- Net GHG emissions (i.e. including LULUCF) in 2021 were 88.5% lower than 1990 levels.
- The LULUCF sector removed 0.55 MtCO2-eq on average per year from 2013 to 2020, based on accounting.

2) Greenhouse gas emissions
In 2021, approximated domestic greenhouse gas (GHG) emissions in Sweden were 48.0 MtCO2-eq, 3.7% higher compared to 2020 but 5.5% below pre-pandemic levels. Overall, net domestic emissions, including the Land Use, Land Use Change and Forestry (LULUCF) sector, were 88.5% lower than 1990 levels.

3) Greenhouse gas emissions by sector

These country profiles support and complement the assessments of the Climate Action Progress Report 2022.
In 2021, the highest contribution to net GHG emissions in Sweden came from the Transport sector (183%), followed by the Industry sector (158%) and the Energy sector (97%). Emissions from sectors under the Effort Sharing Regulation (ESR) were 61% compared to 62% for the EU as a whole (see shares in the charts below).

4) Emissions under the EU Emissions Trading System (ETS)

In 2021, stationary installations (e.g. power generation and manufacturing industry) in Sweden emitted 18.5 million tonnes of CO2-eq emissions (equal to 38% of Sweden’s total GHG emissions). This is 10.6% higher compared to 2020 but 2.2% below pre-pandemic levels. By 2021, emissions from stationary installations were down by 8.3% against 2013 level (i.e. -21.2% to 2005 levels). Aviation emissions covered by the EU ETS were 3.3% higher compared to 2020 but 62.0% below 2019 level.

In parallel, Sweden has raised over EUR 0.8 billion in auction revenues since 2013, available for further climate action and energy transformation. Sweden reported that an average of 72% of revenues was spent for climate and energy purposes over the same period. (*)

5) Emissions in Effort Sharing sectors

These country profiles support and complement the assessments of the Climate Action Progress Report 2022.
In 2021, effort sharing approximated emissions in Sweden were 29.3 MtCO2eq (equal to 61% of Sweden's total GHG emissions), 0.2% lower than in 2020 and 7.4% lower than 2019 pre-pandemic level.

Between 2013 and 2019, Sweden's emissions have always been below the annual limits.

In 2020, effort sharing emissions in Sweden were below the annual limit.

6) Land Use, Land Use Change and Forestry (LULUCF)

Reported quantities under the Kyoto Protocol for Sweden show net removals of -42.2 Mt CO2-eq on average per year for the period 2013 to 2020. In this regard, Sweden contributes with 13.2% to the annual average sink of -320.2 Mt CO2-eq of the EU-27. Accounting for the same period depicts net credits of, on average, -0.6 Mt CO2-eq, which corresponds to 0.7% of the EU-27 accounted sink of -83.4 Mt CO2-eq. Reported net removals show small dynamics with no trend. Accounted net credits follow the same pattern with net debits in 2015.

![Graph showing net CO2 removals and credits for Sweden](image)

Notes: (1) Charts based on the submissions delivered until May 2022. (2) Data reported for the period 2013-2020, for mandatory and elected LULUCF activities, were submitted by Member States to the European Environment Agency (EEA) and underwent a simulated accounting process developed by the Joint Research Centre (JRC), together with DG CLIMA. (3) Reported data represent the gross annual flux of greenhouse gas from the sector, by activity, according to the IPCC methods for calculation in the framework of the Kyoto Protocol (KP). Accounting is aimed at assessing the impact of policies on climate actions on the actual data, for example as an increase in the sink within the Forest Management activity. (4) The simulated accounting process does not take into account any adjustments or flexibilities that a Member State may apply, for example the purchase of KP credits.

The dominating reported activity is Forest Management with removals. Emissions by Deforestation are in comparison small and removals by Afforestation/Reforestation play a negligible role in the emission budget of the LULUCF sector. Removals by Forest Management and emissions by Deforestation show small variations but no clear trend over the eight-year period.

Credits by Forest Management are the highest accounting quantity followed by debits from Deforestation Credits by Afforestation/Reforestation depict smaller amounts. Debts by Deforestation showed an increasing trend between 2013 and 2015 but remained at a lower level for the years thereafter.
7) Financing Climate Action

**Cohesion policy**

**Sweden’s Planned Financing for Climate Actions**
(EU financing & national co-financing - 2021-2027 Cohesion Policy)

<table>
<thead>
<tr>
<th>Category</th>
<th>EUR million</th>
<th>National co-financing (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU financing (€ ml)</td>
<td>382</td>
<td>0</td>
</tr>
<tr>
<td>EU Financing (€ ml)</td>
<td>270</td>
<td>0</td>
</tr>
<tr>
<td>EU Climate amount as a share of EU total financing</td>
<td>32%</td>
<td>0%</td>
</tr>
</tbody>
</table>

The chart presents information on investment plans and achievement targets from adopted programmes. Financing for cohesion policy uses a categorisation to provide thematic information on the finances planned.

*Source: https://cohesiondata.ec.europa.eu/*

**Innovation and Modernisation Fund**

**Innovation Fund** (Portfolio of signed projects)

<table>
<thead>
<tr>
<th>Type</th>
<th>n.</th>
<th>EUR million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Scale Projects</td>
<td>3</td>
<td>11.3</td>
</tr>
<tr>
<td>Large Scale Projects</td>
<td>4</td>
<td>500.2</td>
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</tbody>
</table>

**Modernisation Fund**

(List of confirmed or approved investment proposals)

<table>
<thead>
<tr>
<th>Type</th>
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</tr>
</thead>
<tbody>
<tr>
<td>non-beneficiary</td>
<td></td>
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</tbody>
</table>

**Recovery & Resilience Facilities**

**RRF allocations**

<table>
<thead>
<tr>
<th>(EUR billion)</th>
<th>Grants:</th>
<th>Loans:</th>
<th>% of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.29</td>
<td>-</td>
<td>0.6</td>
<td></td>
</tr>
</tbody>
</table>

**RRF contribution to the Green pillar in Sweden (€ bn)**

This graph displays: 1) the estimated cost of measures attributed by the Commission, in consultation with the Member State, to the green pillar either as primary or secondary assignments; and 2) how disbursements under the RRF (excluding pre-financing) relate to the green pillar.

*Source: https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/index.html*