

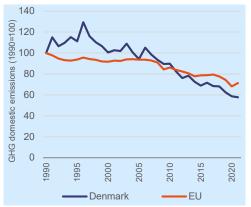
1) Key takeaways

- In 2021, GHG emissions in Denmark were 7.7% below 2019 pre-pandemic levels.
- Over the same period, ETS and Effor Sharing emissions decreased by 3.5% and by 8.4%, respectively.
- Net GHG emissions (i.e. including LULUCF) in 2021 were 37.8% lower than 1990 levels.
- The LULUCF sector removed 5.53 MtCO2-eq on average per year from 2013 to 2020, based on accounting.

2) Greenhouse gas emissions

GHG

In 2021, approximated domestic greenhouse gas (GHG) emissions in Denmark were 41.1 MtCO2-eq, 1.6% lower compared to 2020 and 7.7% below pre-pandemic levels. Overall, net domestic emissions, including the Land Use, Land Use Change and Forestry (LULUCF) sector, were 37.8% lower than 1990 levels.



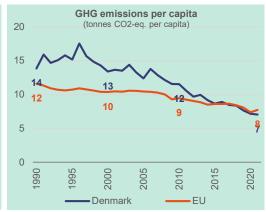
Total domestic GHG emissions					
	1990 (MtCO2-eq)	2005 to 1990 (% change)	2019 to 2005 (% change)	2021 to 2019 (% change)	2021 to 1990 (% change)
Denmark	71	-6%	-34%	-8%	-42%
EU	4847	-6%	-21%	-4%	-29%

Total net domestic GHG emissions (including LULUCF)

	Denmark	78	1%	-29%	-1%	-38%
	EU	4633	-13%	-26%	-10%	-33%
Note: GHG emissions and removals for 1990-2020 are based on data submitted by EU Member States to the UNFCCC						

under Regulation (EU) No 525/2013. Figures may change following resubmissions. GHG emissions for 2021 are based on approximated GHG inventories





4%

10%

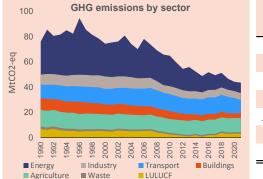
-60%

-36%

-54%

-30%

3) Greenhouse gas emissions by sector





-30%

-26%

45%

-43%

22%

Notes: (1) Energy sector refers to electricity and heat production and petroleum refining, (2) Industry includes fuel combustion in manufacturing and construction and emissions in industrial processes and product use. (3) Buildings include emissions from energy use in residential and tertiary buildings, and energy use in agriculture and fishery sectors.

Waste

LULUCF

International

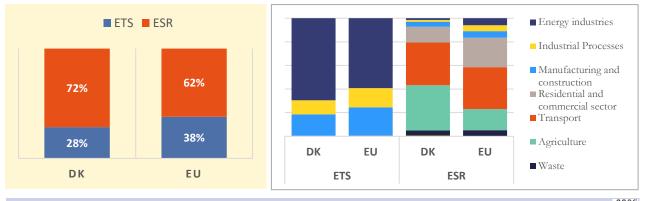
aviation

1.9

6.9

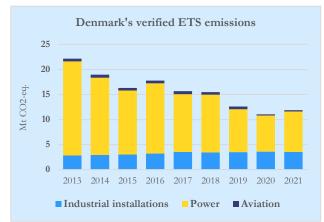
1.8

In 2021, the highest contribution to net GHG emissions in Denmark came from the Agriculture sector (25%), followed by the Transport sector (24%) and the Energy sector (19%). Emissions from sectors under the Effort Sharing Regulation (ESR) were 72% 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 Denmark emitted 11.6 million tonnes of CO2-eq emissions (equal to 28% of Denmark's total GHG emissions). This is 7.3% higher compared to 2020 but 3.5% below pre-pandemic levels. By 2021, emissions from stationary installations were down by 46.2% against 2013 level (i.e. -56.1% to 2005 levels). Aviation emissions covered by the EU ETS were 25.8% higher compared to 2020 but 53.4% below 2019 level.

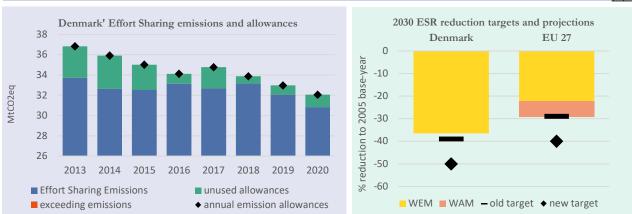


In parallel, Denmark has raised over EUR 1.1 billion in auction revenues since 2013, available for further climate action and energy transformation. Denmark reported that an average of 100% of revenues was spent for climate and energy purposes over the same period.(*)

Mt CO2-eq	2013	2020	2021
Power installations	18.8	7.2	8.1
% change since 2013	-	-61.4%	-56.9%
Industrial installations	2.8	3.6	3.5
% change since 2013	-	27.4%	25.2%
Aviation (**)	0.56	0.21	0.26
% change since 2013	-	-63.0%	-53.4%

(*) Revenues are not earmarked, example projects have been reported up to 100% of revenues each year.

(**) ETS emissions from aviation include flights within the European Economic Area (EEA) and outgoing flights to Switzerland and to the UK.



5) Emissions in Effort Sharing sectors

Note: (1) Verified emissions based on annual inventory review under the Effort Sharing Decision (ESD). (2) Projections as reported by Member States under Reg. (EU) 2018/1999, compiled and checked by the EEA. (3) ESR base-year emissions and targets bave been approximately converted into GWP AR4 for comparability. For these reasons, the distances to targets for 2030 are provided for illustrative purposes only (4) WEM = with existing measures, WAM = with additional measures. In 2021, effort sharing approximated emissions in Denmark were 29.4 MtCO2eq (equal to 72% of Denmark's total GHG emissions), 4.7% lower than in 2020 and 8.4% lower than 2019 pre-pandemic level.

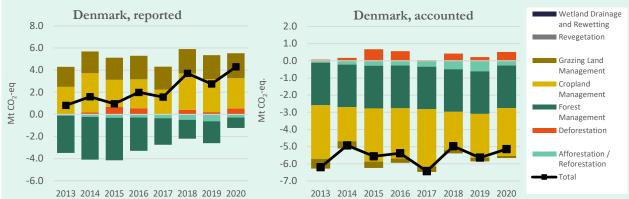
Between 2013 and 2019, Denmark's emissions have always been below the annual limits.

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

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



Reported quantities under the Kyoto Protocol for Denmark show net average annual emissions of 2.2 Mt CO2-eq for the period 2013 to 2020. In this regard, Denmark represents -0.7% of the annual average sink of -320.2 Mt CO2-eq of the EU-27. Accounting for the same period depicts net average annual credits of -5.5 Mt CO2-eq, which corresponds to 6.6% of the EU-27 accounted sink of -83.4 Mt CO2-eq. There is an overall increasing pattern of reported net emissions. Accounted net credits show no clear trend.



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.

In the period of 2013 to 2016 the dominating reported activity is Forest Management with removals, which is superseded by emissions by Cropland Management and Grazing Land Management in subsequent years. Removals by Forest Management decreased since 2016. One reason for this development is the aging of forests, removing less CO2 from the atmosphere, along with increased harvest. Emissions by Grazing Land Management continue to increase over time, and emissions by Cropland Management are particularly high in 2014 and 2018. Removals by Afforestation/Reforestation and emissions by Deforestation vary and play a minor role in the overall emission budget of the LULUCF sector.

Credits by Forest Management and Cropland Management dominate the accounts. In this preliminary simulated accounting exercise potential credits by Forest Management of, on average, -3.2 Mt CO2-eq per year are capped to -2.5 Mt CO2-eq per year. Credits by Afforestation/Reforestation are noteworthy for past years including 2020. Credits by Grazing Land Management and debits by Deforestation are very small.

7) Financing Climate Action

Cohesion policy Denmark's Planned Financing for Climate Actions (EU financing & national co-financing - 2021-2027 Cohesion Policy) 200 ■ EU financing (€ ml) 150 National cofinancing (€ ml) 100 50 0 ERDF ESF+ CF JTF National co-financing (€ ml) 99 0 0 89 EU financing (€ ml) 0 0 89 80 EU Climate amount as a 100% 32% 0% 0% share of EU total financing The chart presents information on investment plans and achievement targets from adopted programmes.

Financing for cobesion policy uses a categorisation to provide thematic information on the finances planned.

Innovation and Modernisation Fund

Innovation Fund (Portfolio of signed projects)				
	n.	EUR million		
Small Scale Projects	-	-		
Large Scale Projects	-	-		
Modernisation Fund	n.	EUR million		

(List of confirmed or approved non-beneficiary investment proposals)

Grants: % of GDP Loans: **RRF** allocations (EUR billion) 1.55 0.5 RRF contribution to the Green pillar in Denmark (€ bn) 59% of the 1.6 plan's estimated expenditure Π 1.0 0.0 0.0 Total Green pillar Total Green pillar Estimated budget Disbursements

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?lang=en

Recovery & Resilience Facilities