

Hungary

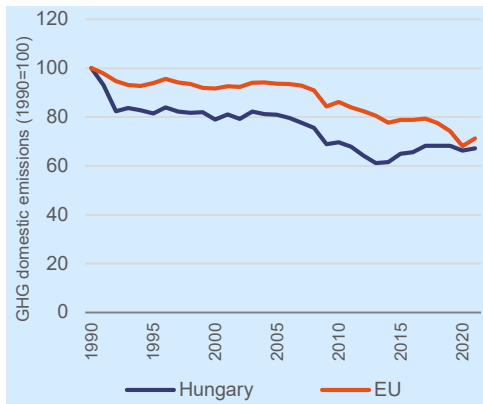
1) Key takeaways

- In 2021, GHG emissions in Hungary were 1.4% below 2019 pre-pandemic levels.
- Over the same period, ETS and Effort Sharing emissions decreased by 9.8% and increased by 2.6%, respectively.
- Net GHG emissions (i.e. including LULUCF) in 2021 were 39.4% lower than 1990 levels.
- The LULUCF sector removed 2.94 MtCO₂-eq on average per year from 2013 to 2020, based on accounting.

2) Greenhouse gas emissions

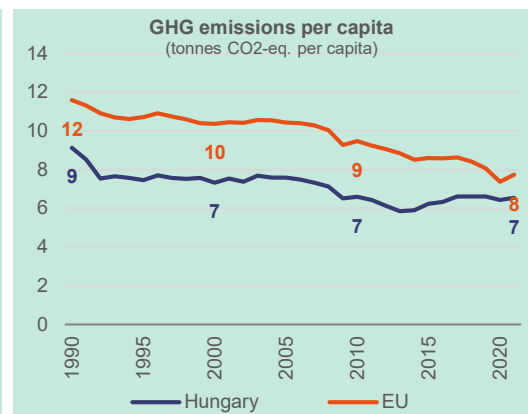
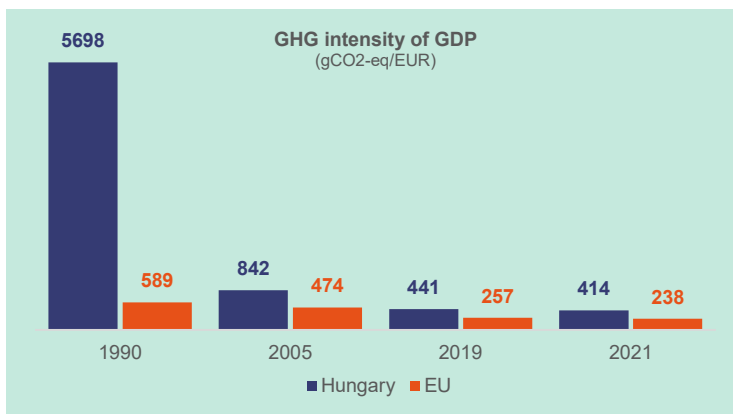


In 2021, approximated domestic greenhouse gas (GHG) emissions in Hungary were 63.7 MtCO₂-eq, 1.4% higher compared to 2020 but 1.4% below pre-pandemic levels. Overall, net domestic emissions, including the Land Use, Land Use Change and Forestry (LULUCF) sector, were 39.4% lower than 1990 levels.

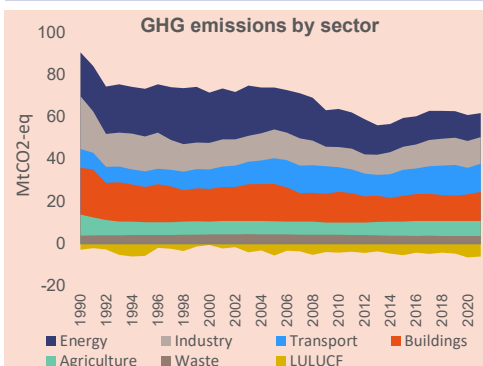


	1990 (MtCO ₂ -eq)	2005 to 1990 (% change)	2019 to 2005 (% change)	2021 to 2019 (% change)	2021 to 1990 (% change)
Total domestic GHG emissions					
Hungary	95	-19%	-16%	-1%	-33%
EU	4847	-6%	-21%	-4%	-29%
Total net domestic GHG emissions (including LULUCF)					
Hungary	92	-25%	-22%	-11%	-39%
EU	4633	-13%	-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.



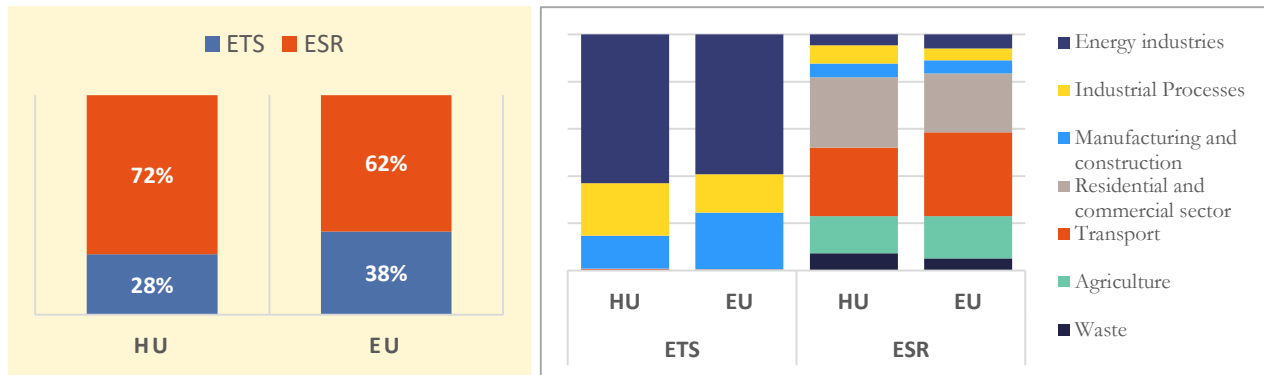
3) Greenhouse gas emissions by sector



	1990 (MtCO ₂ -eq)	2005 to 1990 (% change)	2019 to 2005 (% change)	2021 to 2019 (% change)	2021 to 1990 (% change)
Energy	20.9	-4%	-37%	-9%	-45%
Industry	25.1	-46%	-6%	-2%	-50%
Transport	8.9	36%	22%	-8%	52%
Buildings	22.2	-19%	-33%	14%	-38%
Agriculture	10.0	-39%	16%	2%	-27%
Waste	3.7	14%	-18%	-2%	-9%
LULUCF	-3.1	89%	-16%	28%	102%
International aviation	0.5	63%	3%	-54%	-22%

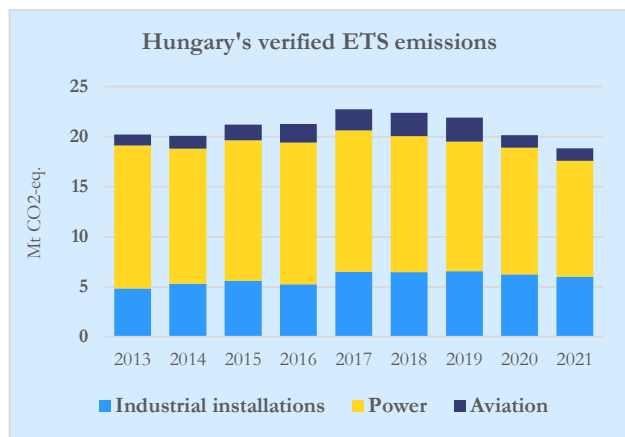
Notes: (1) Energy sector refers to electricity and heat production and petroleum refining. (2) Industry includes fuel combustion in manufacturing and construction and emissions in industrial processes and product use. (3) Buildings include emissions from energy use in residential and tertiary buildings,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

In 2021, the highest contribution to net GHG emissions in Hungary came from the Buildings sector (24%), followed by the Transport sector (24%) and the Industry sector (22%). 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 Hungary emitted 17.6 million tonnes of CO₂-eq emissions (equal to 28% of Hungary's total GHG emissions). This is 6.8% lower compared to 2020 and 9.8% below pre-pandemic levels. By 2021, emissions from stationary installations were down by 7.9% against 2013 level (i.e. -40.4% to 2005 levels). Aviation emissions covered by the EU ETS were 0.7% lower compared to 2020 and 48.5% below 2019 level.

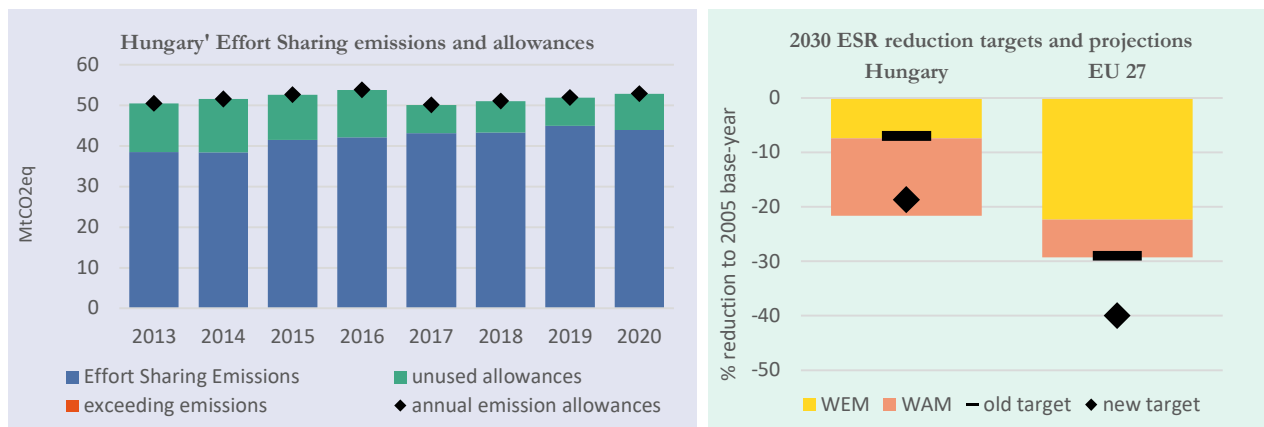


In parallel, Hungary has raised over EUR 1.3 billion in auction revenues since 2013, available for further climate action and energy transformation. Hungary reported that an average of 46% of revenues was spent for climate and energy purposes over the same period. (*)

Mt CO ₂ -eq	2013	2020	2021
Power installations	14.3	12.7	11.6
% change since 2013	-	-11.4%	-18.9%
Industrial installations	4.8	6.3	6.0
% change since 2013	-	29.1%	24.4%
Aviation (**)	1.10	1.24	1.23
% change since 2013	-	12.7%	11.9%

(*) 50% of the revenues are spent on climate and energy (any revenues not spent are carried over to future years) and the remainder goes to the national general budget. Amounts included in the (***) 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 have 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 Hungary were 46.1 MtCO₂eq (equal to 72% of Hungary's total GHG emissions), 4.9% higher than in 2020 and 2.6% higher than 2019 pre-pandemic level.

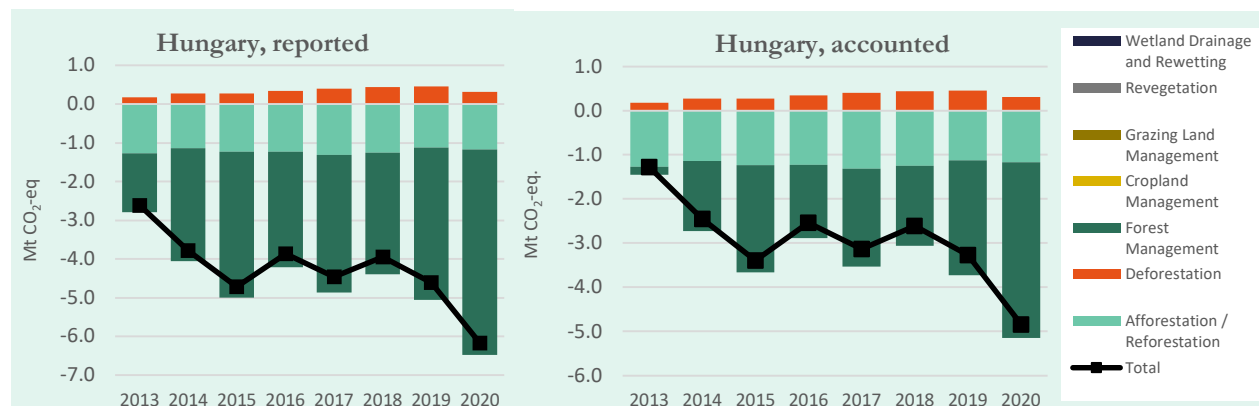
Between 2013 and 2019, Hungary's emissions have always been below the annual limits.

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

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



Reported quantities under the Kyoto Protocol for Hungary show net removals of -4.3 Mt CO₂-eq on average per year for the period 2013 to 2020. In this regard, Hungary contributes with 1.3% 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, -2.9 Mt CO₂-eq, which corresponds to 3.5% of the EU-27 accounted sink of -83.4 Mt CO₂-eq. Reported net removals and accounted net credits show a strongly fluctuating pattern with a small increase over the eight-year period.



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 followed by moderate removals by Afforestation/Reforestation and small emissions by Deforestation. Removals by Forest Management show an overall increasing trend over the course of the eight-year period and especially on the latest reported year, and emissions by Deforestation increase up to 2019 with a decrease in 2020.

Credits by Forest Management are generally the dominating accounting activity over the eight-year period. Credits by Afforestation/Reforestation are sizable; in fact, they are the biggest quantity in 2013. Debits by Deforestation represent a smaller fraction of the total accounted quantities. Major fluctuations with an overall increase of credits by Forest Management dominate the dynamics. Small increases in debits by Deforestation play a minor role.

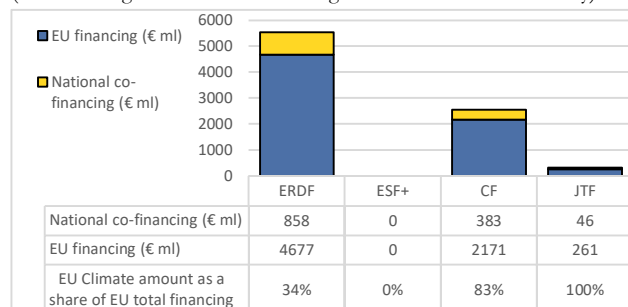
7) Financing Climate Action



Cohesion policy

Hungary's Planned Financing for Climate Actions

(EU financing & national co-financing - 2021-2027 Cohesion Policy)



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)

	n.	EUR million
Small Scale Projects	-	-
Large Scale Projects	-	-

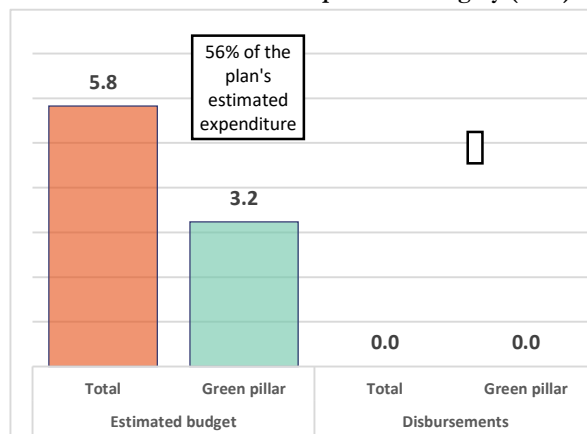
Modernisation Fund n. EUR million

(List of confirmed or approved investment proposals)	5	109
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Recovery & Resilience Facilities

RRF allocations (EUR billion)	Grants:	Loans:	% of GDP
	7.20	-	4.7

RRF contribution to the Green pillar in Hungary (€ 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?lang=en