

Ireland

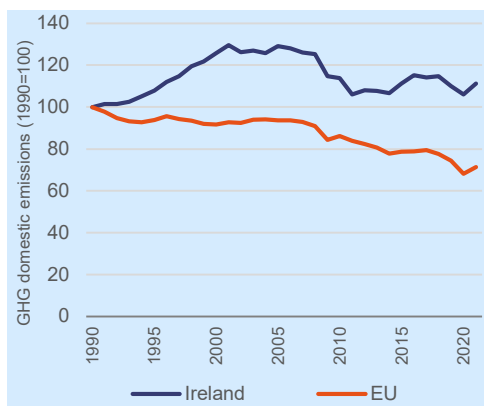
1) Key takeaways

- In 2021, GHG emissions in Ireland were 1.1% above 2019 pre-pandemic levels.
- Over the same period, ETS and Effort Sharing emissions increased by 8.2% and decreased by 0.9%, respectively.
- Net GHG emissions (i.e. including LULUCF) in 2021 were 25.3% higher than 1990 levels.
- The LULUCF sector removed 3.11 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 Ireland were 60.5 MtCO₂-eq, 4.8% higher compared to 2020 and 1.1% above pre-pandemic levels. Overall, net domestic emissions, including the Land Use, Land Use Change and Forestry (LULUCF) sector, were 25.3% higher than 1990 levels.



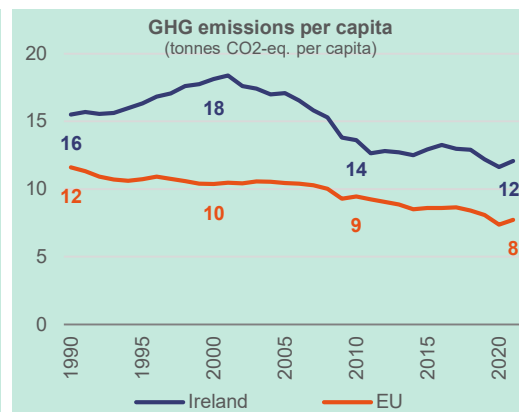
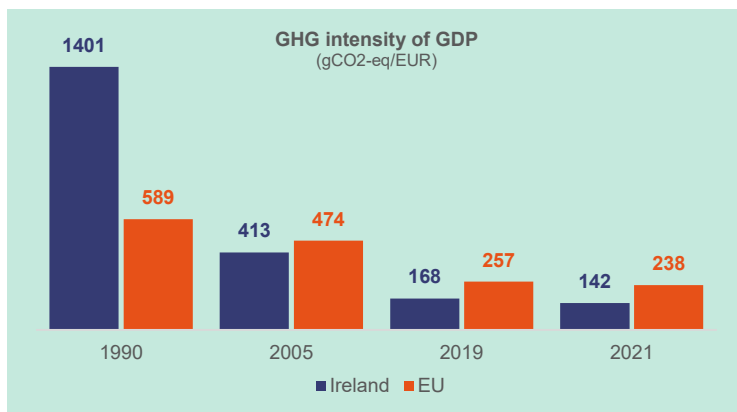
Total domestic GHG emissions

	1990 (MtCO ₂ -eq)	2005 to 1990 (% change)	2019 to 2005 (% change)	2021 to 2019 (% change)	2021 to 1990 (% change)
Ireland	54	29%	-15%	1%	11%
EU	4847	-6%	-21%	-4%	-29%

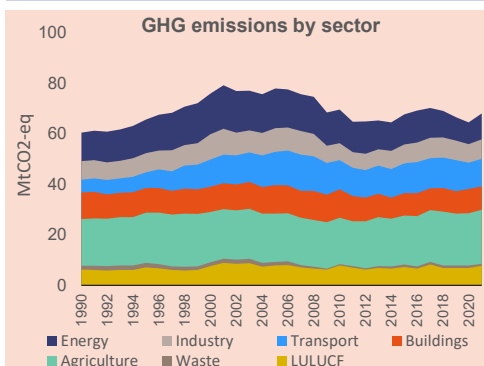
Total net domestic GHG emissions (including LULUCF)

	1990	2005 to 1990	2019 to 2005	2021 to 2019	2021 to 1990
Ireland	61	44%	-5%	14%	25%
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.



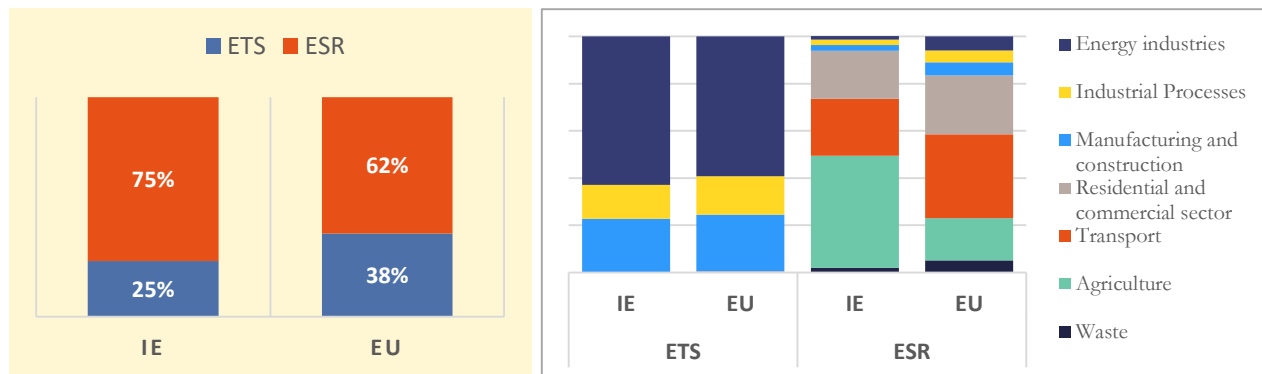
3) Greenhouse gas emissions by sector



	1990 (MtCO ₂ -eq)	2005 to 1990 (% change)	2019 to 2005 (% change)	2021 to 2019 (% change)	2021 to 1990 (% change)
Energy	11.2	41%	-41%	9%	-9%
Industry	7.4	27%	-18%	1%	6%
Transport	5.1	155%	-7%	-11%	112%
Buildings	10.4	7%	-19%	1%	-12%
Agriculture	18.5	4%	6%	5%	16%
Waste	1.6	-15%	-31%	-5%	-44%
LULUCF	6.2	27%	-12%	12%	24%
International aviation	1.1	132%	33%	-60%	23%

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.

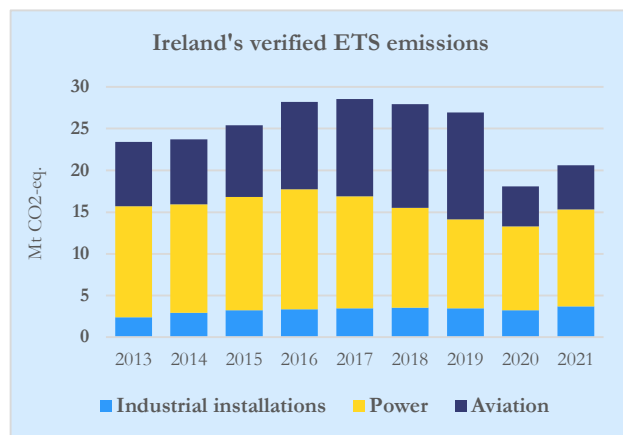
In 2021, the highest contribution to net GHG emissions in Ireland came from the Agriculture sector (31%), followed by the Transport sector (16%) and the Energy sector (15%). Emissions from sectors under the Effort Sharing Regulation (ESR) were 75% compared to 62% for the EU as a whole (see shares in the charts below).



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



In 2021, stationary installations (e.g. power generation and manufacturing industry) in Ireland emitted 15.3 million tonnes of CO₂-eq emissions (equal to 25% of Ireland's total GHG emissions). This is 15.2% higher compared to 2020 and 8.2% above pre-pandemic levels. By 2021, emissions from stationary installations were down by 2.4% against 2013 level (i.e. -32.8% to 2005 levels). Aviation emissions covered by the EU ETS were 11.4% higher compared to 2020 but 58.6% below 2019 level.



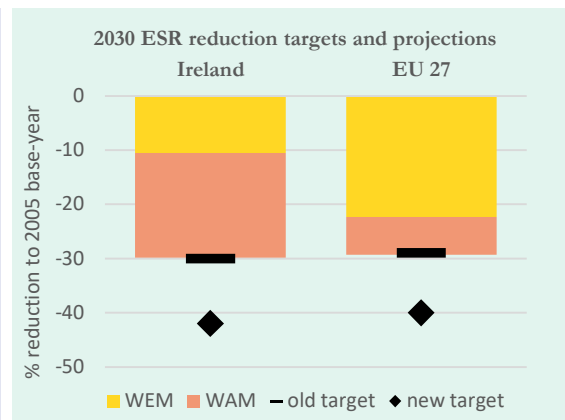
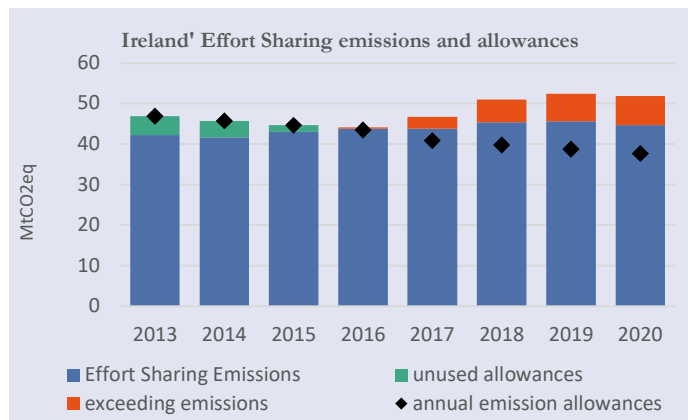
In parallel, Ireland has raised over EUR 0.8 billion in auction revenues since 2013, available for further climate action and energy transformation. Ireland reported that an average of 100% of revenues was spent for climate and energy purposes over the same period. (*)

Mt CO ₂ -eq	2013	2020	2021
Power installations	13.3	10.1	11.6
% change since 2013	-	-24.3%	-12.7%
Industrial installations	2.4	3.2	3.7
% change since 2013	-	34.7%	54.9%
Aviation (**)	7.73	4.75	5.29
% change since 2013	-	-38.5%	-31.6%

(*) While ETS auction revenues are not earmarked for specific purposes, amounts spent are equivalent to 100% of these revenue (less ETS administration costs for the Environmental Protection Agency) and are attributed to emission reduction activities in line with the purposes specified in the ETS Directive.

(**) 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 Ireland were 45.2 MtCO₂eq (equal to 75% of Ireland's total GHG emissions), 1.0% higher than in 2020 but 0.9% lower than 2019 pre-pandemic level.

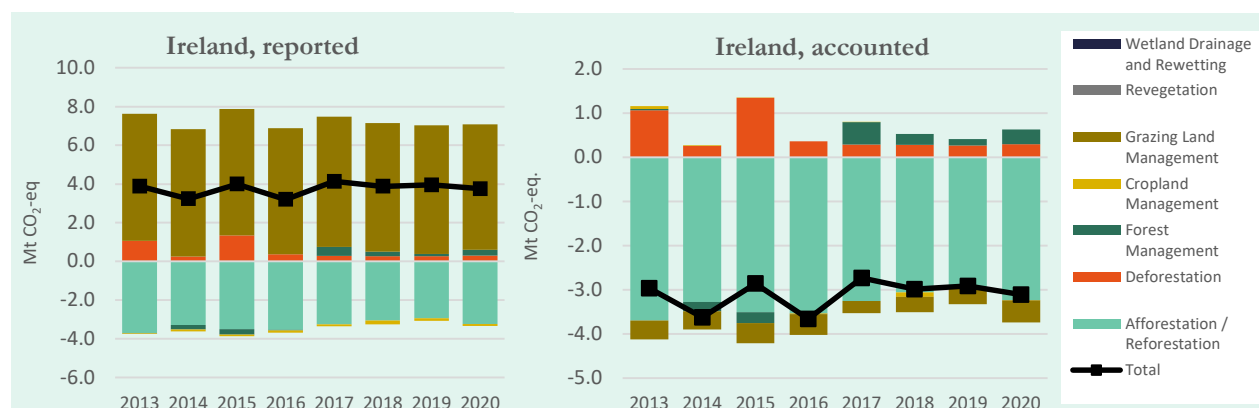
Between 2013 and 2019, Ireland exceeded its annual emission allocations (AEAs) 4 times. However, Ireland complied with the Effort Sharing Decision by making use of the flexibilities provided therein.

In 2020, effort sharing emissions in Ireland exceeded its AEAs. Ireland will need to buy AEAs from other Member States and/or use international credits to comply in 2020 as it does not have enough banked AEA surplus.

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



Reported quantities under the Kyoto Protocol for Ireland show net emissions of 3.8 Mt CO₂-eq on average per year for the period 2013 to 2020. In this regard, Ireland represents -1.2% of 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, -3.1 Mt CO₂-eq, which corresponds to 3.7% of the EU-27 accounted sink of -83.4 Mt CO₂-eq. Reported net emissions and accounted net credits show fluctuations with 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.

The dominating reported activity is Grazing Land Management with emissions followed by removals by Afforestation/Reforestation. Removals by Forest Management and emissions by Deforestation are small, and removals by Cropland Management are negligible in the overall emission budget of the LULUCF sector. Emissions by Deforestation and, albeit to a lesser extent, removals by Afforestation/Reforestation and Forest Management show fluctuations.

Credits by Afforestation/Reforestation are the dominating accounting component, followed by debits from Deforestation, which determine the variability of the overall accounting. In comparison, credits by Grazing Land Management and Cropland Management are respectively small and negligible. Forest Management fluctuates between relatively small debits and credits.

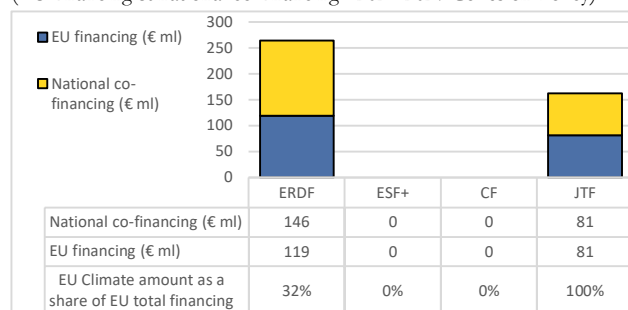
7) Financing Climate Action



Cohesion policy

Ireland'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	1	4.2
Large Scale Projects	-	-

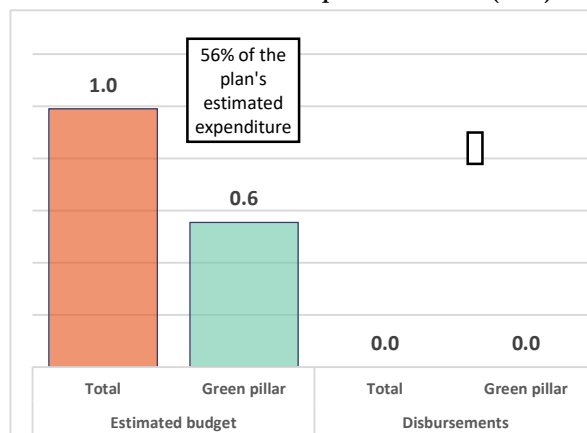
Modernisation Fund

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

Recovery & Resilience Facilities

RRF allocations (EUR billion)	Grants:	Loans:	% of GDP
	0.99	-	0.2

RRF contribution to the Green pillar in Ireland (€ 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 RRF² (excluding pre-financing) relate to the green pillar.

Source: https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/index.html?lang=en