

Provisional greenhouse gas emissions 1990-2022

Overview



Overall and Sectoral Highlights

EU targets

National targets, budgets and ceilings

EPA Climate Activities and Collaboration



Environmental Assessment & Strategic Environmental Assessment
Emissions Statistics
Climate Research
Emissions Trading & Registry
Industrial & Chemical Regulation
Intergovernmental Climate Science
Resource Efficiency & Behavioural Change
Climate Dialogue and Climate Ireland

Emissions Statistics outputs







Provisional 2022 greenhouse gas emissions (excl LULUCF) are 60.8 Mt CO_2 eq, a decrease of 1.9% (1.2 Mt CO_2 eq) compared to 2021





47 per cent of Ireland's Carbon Budget for 2021-2025 has been used in the first 2 years. An extremely challenging annual reduction of 12.4 per cent is required for each of the remaining years if Ireland is to stay within the Budget.



Provisional GHG data shows Ireland exceeding its Annual Emission Allowance (AEA) for 2022 by 3.72 Mt CO₂eq without the use of flexibilities.

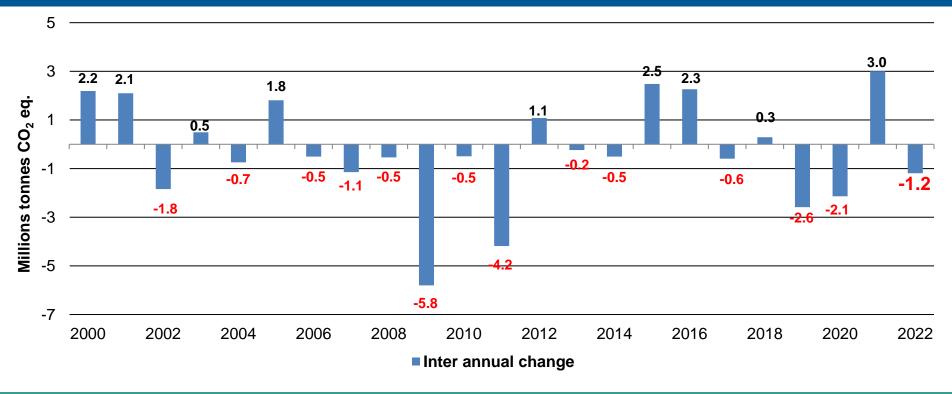
Highlights



- Overall 2022 total national greenhouse gas emissions (excluding LULUCF) are estimated to have decreased by 1.9% on 2021 levels (2.7% below 2018 incl. LULUCF).
- **Energy Industries** emissions showed a decrease of 1.8% (0.19 Mt CO₂eq) in 2022. Reductions in coal, oil and peat used along with more renewables were partly offset by an increase in gas usage following increased overall electricity demand.
- **Transport** emissions increased by 6% (0.66 Mt CO₂eq) in 2022 following a similar increase in 2021. Emissions now 4.6% below 2019 (pre-COVID) level
- Greenhouse gas emissions from the Residential sector decreased by 12.7% in 2022 (0.89 Mt CO₂eq), shifting away from coal and peat and following a milder winter.
- **Agriculture** emissions decreased by 1.2% (0.29 Mt CO₂eq) in 2021, driven by reduced fertiliser nitrogen use (down 14%) partially offset by increased numbers of livestock.

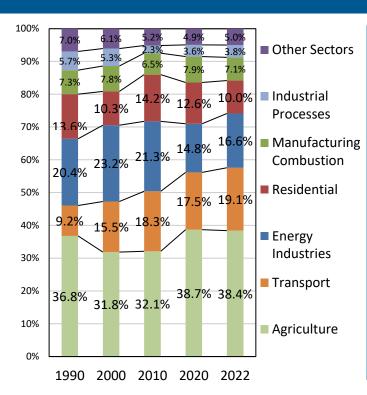
Annual Emissions trends

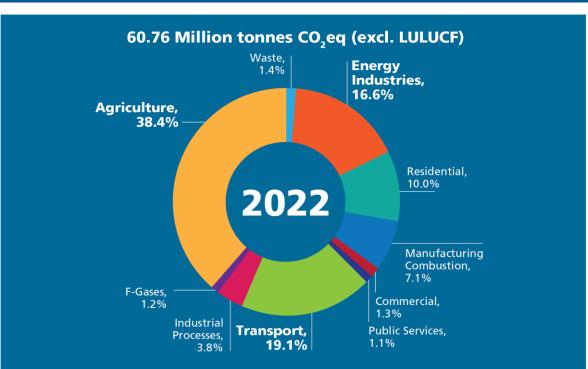




Sectoral Share of GHG emissions

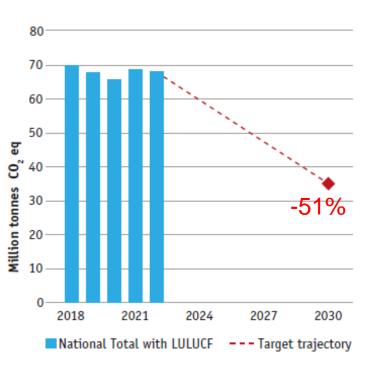


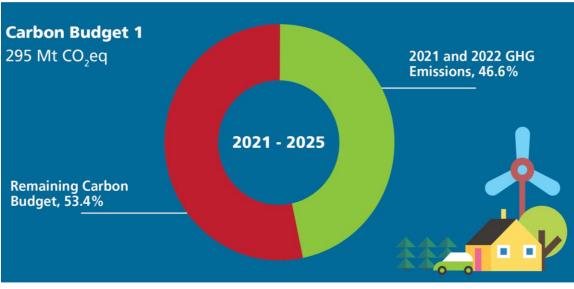




Climate Act target and Carbon Budget 2021-25)

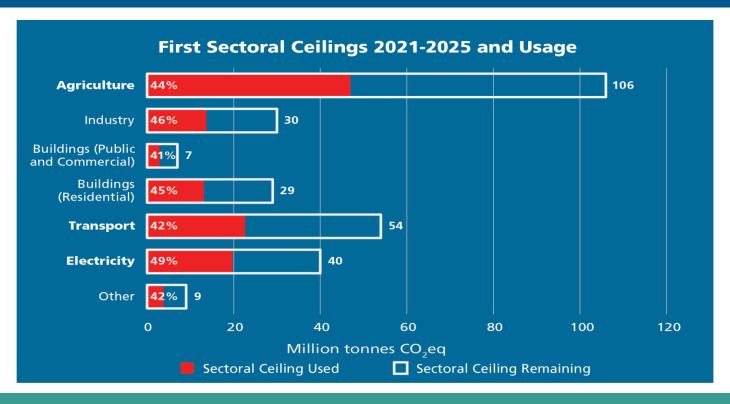






2021-25 Sectoral Ceiling and Usage

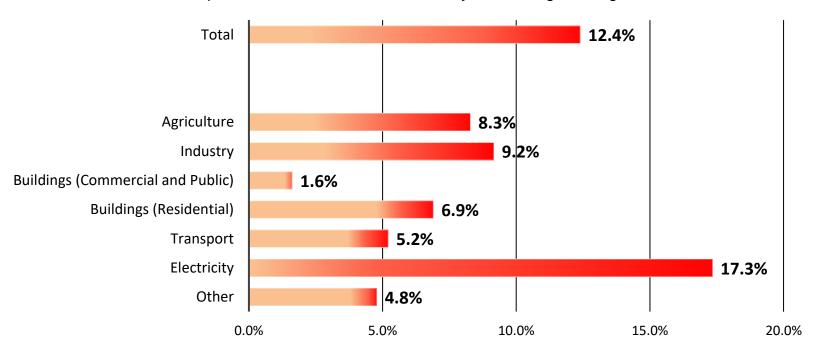




Sectoral Ceiling achievement requires



Emission reductions required in 2023, 2024 and 2025 to stay within budget/ceilings



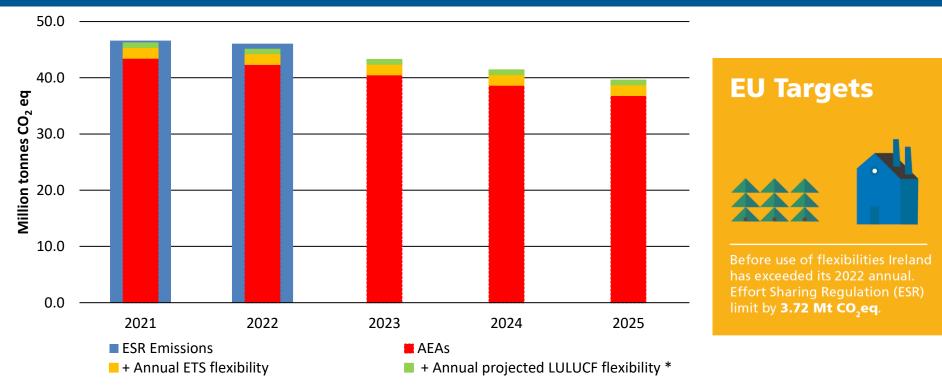
Sectoral Ceiling progress



Sector	2018 (Mt CO ₂ eq)	2022 (Mt CO ₂ eq)	% change 2018-2022	Indicative % reduction by 2025	Indicative % reduction by 2030
Electricity	10.33	9.77	-5.4%	~40%	~75%
Transport	12.19	11.63	-4.5%	~20%	~50%
Buildings (Residential)	7.09	6.11	-13.9%	~20%	~40%
Buildings (Commercial and Public)	1.54	1.43	-7.5%	~20%	~45%
Industry	6.98	6.58	-5.8%	~20%	~35%
Agriculture	23.39	23.34	-0.2%	~10%	~25%
Other	2.14	1.92	-10.6%	~25%	~50%
LULUCF	6.26	7.31	16.6%	NA	NA
National Total (incl LULUCF)	69.93	68.07	-2.7%		51%

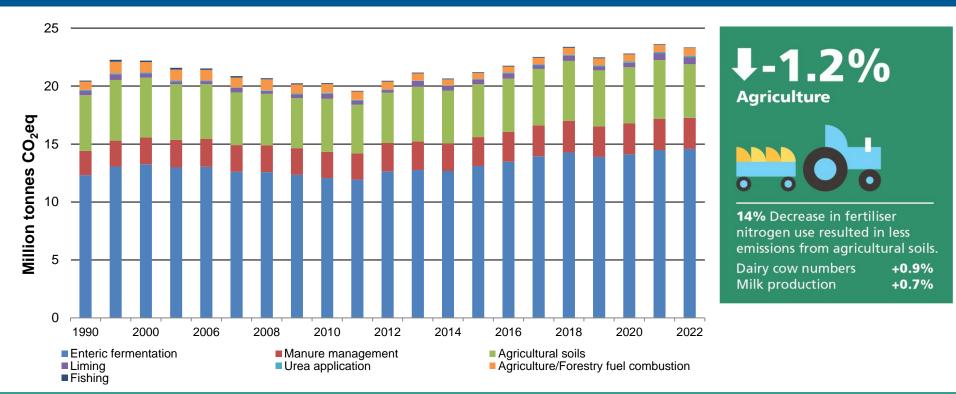
Compliance with EU Effort Sharing Targets





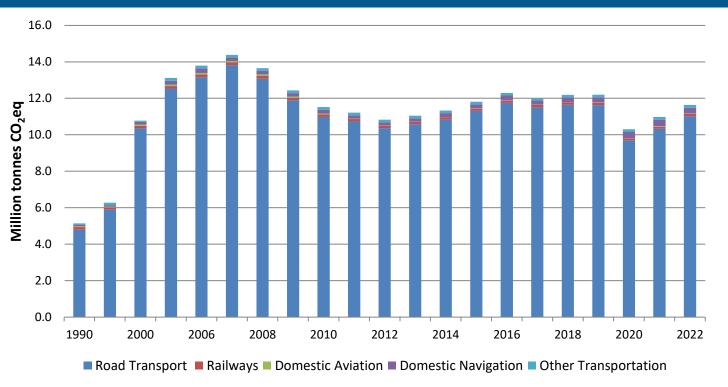
Agriculture 1990-2022

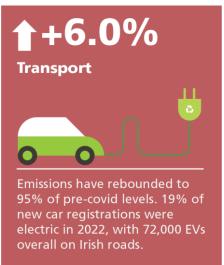




Transport

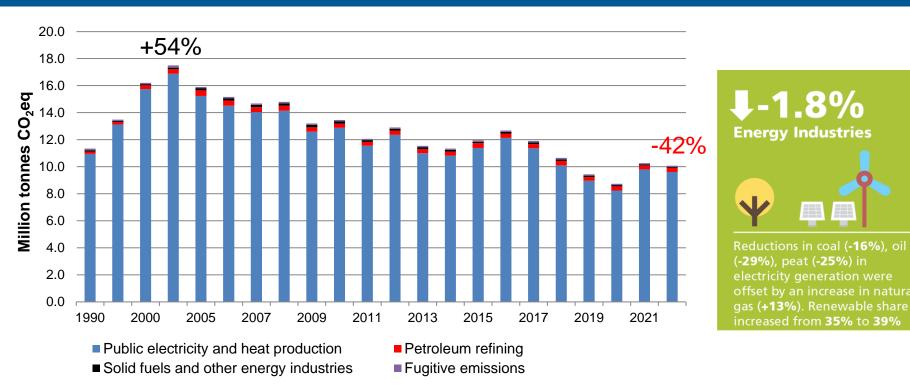






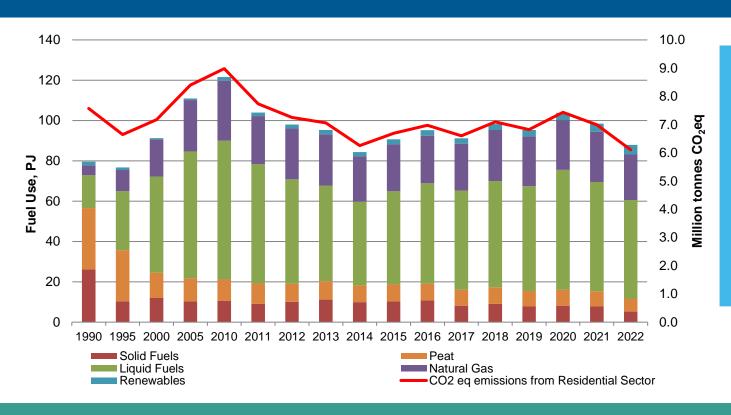
Energy Industries





Residential



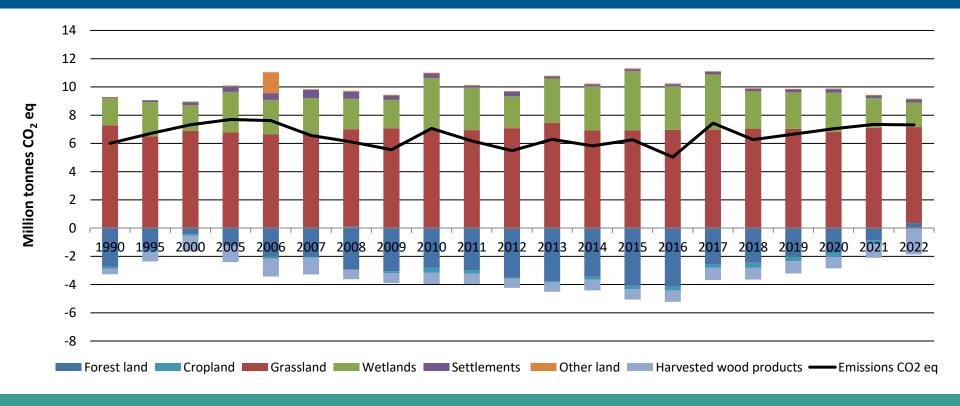


↓-12.7%Residential



Substantial reduction in emissions driven by high fuel prices, regulation, and a milder winter. Coal use reduced by **33%**, peat by **13%**, oil by **10%** and natural gas by **9%**.

Land use, land-use change and forestry (LULUCF) cod



Remaining Sectors



- Emissions from the **Manufacturing Combustion** sector decreased by 7.1% or 0.33 Mt CO₂eq in 2022, decreases across major sectors and fuels
- Emissions from the **Industrial Processes** sector decreased by 7.5% (0.19 Mt CO₂eq) in 2022 due to a decrease in cement production
- Emissions from the **Waste sector**, which account for 1.4% of total national emissions, increased by 4.9% in 2022.
- **F-Gas** emissions in 2022 are at similar levels to 2021, down only 0.5%, following an increase of 5.5% in the previous year.
- Emissions from **Commercial Services** increased by 0.2% and **Public Services** decreased by 1.9% in 2022.



More sectors, drivers and trends to follow...