

ENVIRONMENTAL INDICATORS

Quarter 2 2023 - 30 June

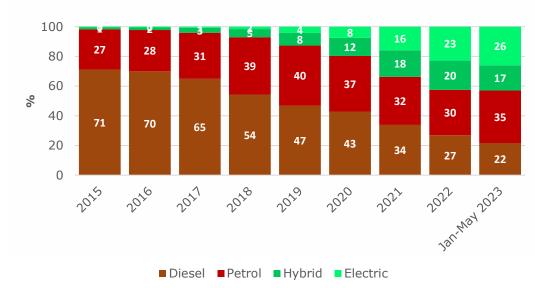
Author: Eoin McLoughlin, Senior Parliamentary Researcher (Economics)

TRANSPORT

Explainer: This indicator details the percentage of electric vehicles (full battery electric and plug-in hybrid) as a share of new private cars licensed for the first time and also the total number of passenger journeys by public transport.

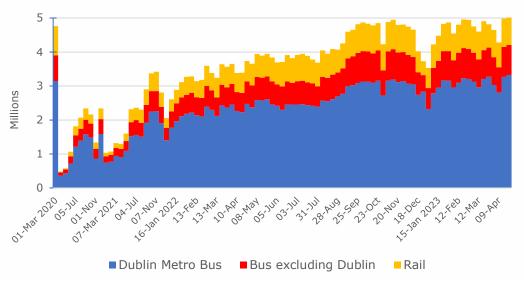
ELECTRIC VEHICLES

The number of electric vehicles (EVs) as a percentage of new licensed private cars has been increasing in Ireland every year since 2016. In 2015, **0.5%** of new licensed private cars were electric while by 2022 this had increased to **22.8%**. For the first 5 months of 2023, EVs have accounted for **25.9%** of new licensed private cars (**17.6%** of which are full battery electric as opposed to plug-in hybrids). The <u>Climate Action Plan 2023</u> aims to have **30%** of the total passenger car fleet and **100%** of new car registrations electric by 2030.



PUBLIC TRANSPORT (excluding LUAS)

The number of passenger journeys on public transport has now returned to pre-COVID-19 volumes. The latest data shows that for the week commencing 23 April 2023, public transport journeys were **7.2%** above the number in early March 2020 (before COVID-19). Rail journeys are also slightly higher at **1.1%** above pre-COVID-19 volumes. For more on transport indicators see the CSO **Transport Bulletin**.



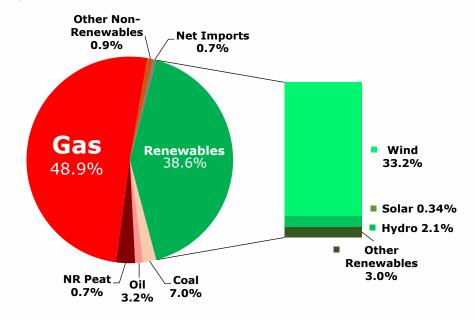
Sources: CSO – New Vehicles Licensed for the First Time and Transport Bulletin.

ENERGY

Explainer: This indicator details **Ireland's overall fuel mix for electricity generation**. It also includes figures on the **energy performance of the national dwelling stock** derived from the Building Energy Rating (BER) dataset.

ELECTRICITY FUEL MIX

The share of electricity generated by renewables over the most recent period with data available (Apr-2022 to Mar-2023) was **38.6%** with wind (alone) accounting for **33.2%** of the total. The target under the <u>Climate</u> <u>Action Plan 2023</u> is to achieve up to **80%** renewable electricity by 2030. More frequent data on the fuel mix is available <u>here</u> from EirGrid.



Sources: EirGrid database and CSO Domestic Building Energy Ratings (Apr 2023).



Explainer: This indicator measures the **quantity of municipal waste** accepted at Irish landfills and treated by incineration.

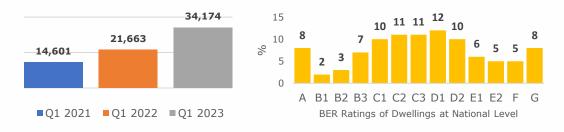
WASTE

In Q3 2022, 98,230 tonnes of municipal waste was accepted at Irish landfills (-9% compared to Q3 2021). Energy recovery as a municipal waste option has become increasingly available. In Q3 2022, energy recovery at municipal waste incinerators was 263,511 tonnes (+7% compared to Q3 2022). n.b. this EPA waste dataset has been discontinued and therefore the indicator will be revised in future editions.



BUILDING ENERGY PERFORMANCE

There were **34,174** BER audits in Q1 2023, a **58%** increase on the same period in 2022. Dwellings with BERs have been weighted by the CSO to estimate a BER profile for all dwellings at a national level. This shows that **13%** of dwellings (201,975) have an energy rating of B2 or higher. The target set under the Programme for Government is for at least 500,000 homes to upgrade to a B2 equivalent BER by 2030. In Q1 2023, **3,304** homes were retrofitted to a B2 BER or better with SEAI support. Further information in relation to BER statistics is available here based on data from SEAI.



Explainer: This indicator details **current exceedances of air quality limit values for nitrogen dioxide and particulate matter** in Ireland.

AIR QUALITY

NITROGEN DIOXIDE (NO₂)

The main source of NO_2 in Ireland is road transport. The hourly limit for NO_2 is 200 ug/m3. EU limits are deemed breached if more than 18 exceedances occur during the year. Based on available data from existing monitoring stations to 31 March 2023, no station had recorded values in excess of the hourly limit.

Station Name	No. of values greater than 200 ug/m³ (year to date)	Station Location	Station Type		
No station has recorded values in excess of the hourly limit to 31 March 2023.					

PARTICULATE MATTER (PM₁₀)

The main source of PM_{10} in Ireland arises from the burning of solid fuel. The daily limit for PM_{10} is 50 ug/m3. EU limits are deemed breached if more than 35 exceedances occur during the year. Based on available data from existing monitoring stations to 31 March 2023, the stations showing the most recorded values in excess of the daily limit are shown in the table below.

Station Name	No. of values greater than 50 ug/m³ (year to date)	Station Location	Station Type	
Ennis	6	Co. Clare	Suburban Background	
Longford Town	2	Co. Longford	Suburban Traffic	
Athlone	1	Co. Westmeath	Suburban Background	
Edenderry	1	Co. Offaly	Suburban Background	
Enniscorthy	1	Enniscorthy Town	Suburban Background	

Source: EPA - Air Quality Bulletin



ENVIRONMENTAL INDICATORS

Annual statistics

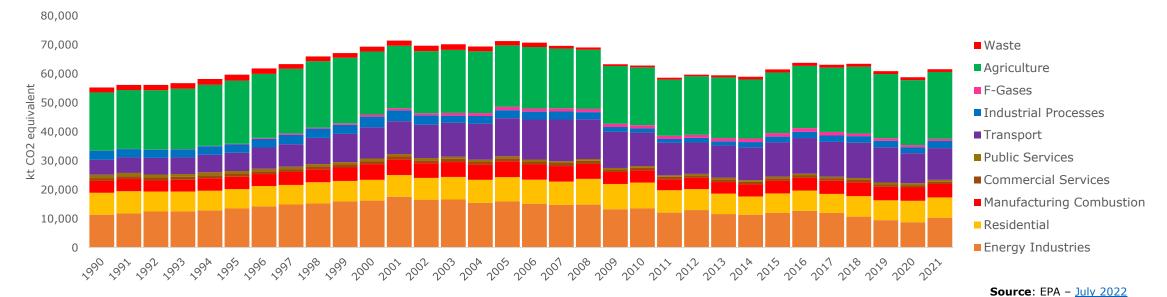
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GHG EMISSIONS

Explainer: This indicator details overall greenhouse gas (GHG) emission figures for Ireland since 1990 by sector. Reference is also made to current GHG emission projections.

NATIONAL GHG EMISSIONS

For 2021, provisional total GHG emissions are estimated to be 61.53 million tonnes carbon dioxide equivalent (Mt CO₂eq). This is 4.7% higher than emissions in 2020 and was largely driven by increased use of coal and oil for electricity generation and increases in both the agriculture and transport sectors. Agriculture (37.5%), Transport (17.7%) and Energy Industries (16.7%) account for the largest share of emissions. The EPA published Ireland's Greenhouse Gas Emissions Projections 2022-2040 in June 2023 which produced two scenarios - With Existing Measures (WEM) and With Additional Measures (WAM). The EPA notes that Ireland can achieve compliance with its original 2030 EU target of a 30% reduction in emission levels compared to 2005 under the WAM scenario and including all flexibilities. However, reaching the new 42% target will require full and rapid implementation of Climate Action Plan 2023 measures and further measures to be implemented.

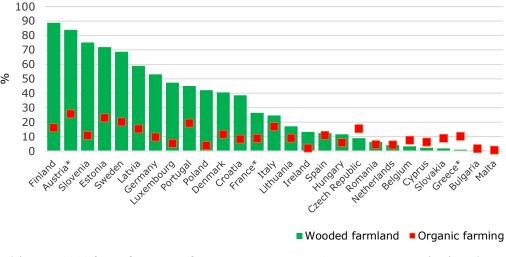


AGRICULTURE

Explainer: This indicator shows the **percentage** of Irish farms with forested areas and also the share of total organic area compared to other EU countries.

FOREST OWNERSHIP & ORGANIC FARMING

In 2020, around 13% of Irish farms contained wooded areas. Forest ownership on farm holdings is most widespread in countries with large forested areas. In Finland, about 9 in every 10 farm holdings also contained wooded areas. In 2021, the share of total utilised agricultural area converted or under conversion to organic farming in Ireland was 2%. In 2020, 9.1% of the EU's agricultural area was farmed organically.



*denotes 2020 figure for organic farming

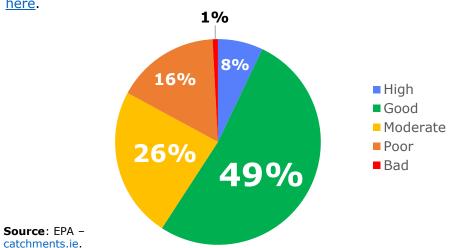
Sources: Eurostat database here.

WATER

Explainer: This indicator shows the water quality status of Irish surface waters and groundwater.

WATER QUALITY

Around 57% of surface waters and groundwater in Ireland are of good or high quality. About 26% are in moderate condition while the remainder are either in poor (16%) or bad (1%) status. Further information on water quality in Ireland can be found <u>here</u>.

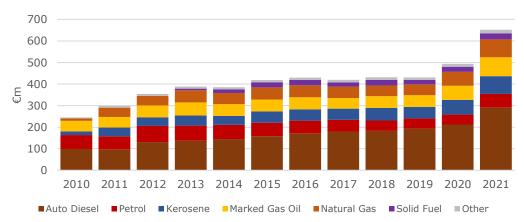


Explainer: This indicator details the **current** level of the carbon tax in Ireland as well as the breakdown of revenue receipts.

CARBON PRICING

CARBON TAX

A carbon tax was introduced in Ireland from 2010 onwards. In Budget 2023 the rate increased to €48.50/tonne. Revenue from the carbon tax rose to **€652m** in 2021. Auto diesel accounts for the largest share of receipts at 45%. In 2022, €412m of the carbon tax funds were allocated to areas such as energy efficiency supports, social protection interventions, and incentivising greener farming practices [see detailed carbon tax revenue analysis from DPER here].



Source: Revenue - Excise Receipts by Commodity.

Explainer: This indicator measures the trends in biodiversity across a range of different categories.

BIODIVERSITY

BIODIVERSITY TRENDS

National Biodiversity Indicators have been developed for Ireland and provide a key resource for tracking changes in our environment over time. The status of birds is currently classified as intermediate though there are variations among different species. Short-term declines have now been established for bee populations and long-term declines for butterfly populations. Further information in relation to other biodiversity indicators for Ireland is available here.

	Status		
Biodiversity Indicator	Current	Short-term	Long-term
Trends in the status of birds			
Trends in the status of bees			
Trends in the status of butterflies			
Trends in the status of plants			

green = positive orange = intermediate red = negative grey = unknown

Source: National Biodiversity Data Centre indicators.