










Provisional greenhouse gas emissions 1990-2020

EPA Climate Science Activities

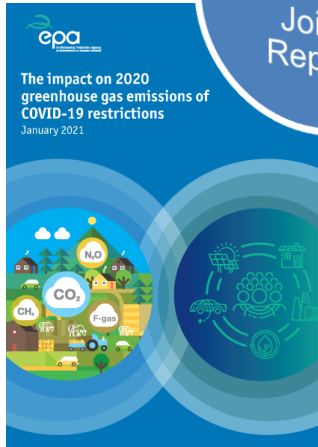
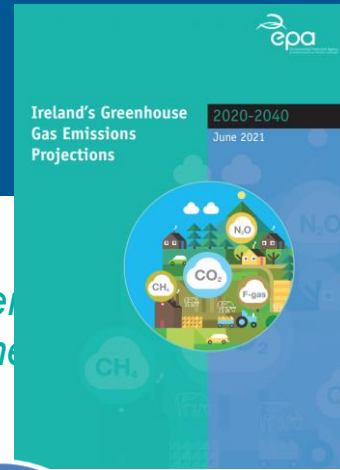


	Environmental Assessment & Strategic Environmental Assessment
	Emissions Statistics (Inventories/Projections)
	Research
	Emissions Trading & Registry
	Industrial & Chemical Regulation
	Climate Secretariat
	Intergovernmental Climate Science
	Resource Efficiency & Behavioural Change
	Climate Dialogue

Emissions Statistics role

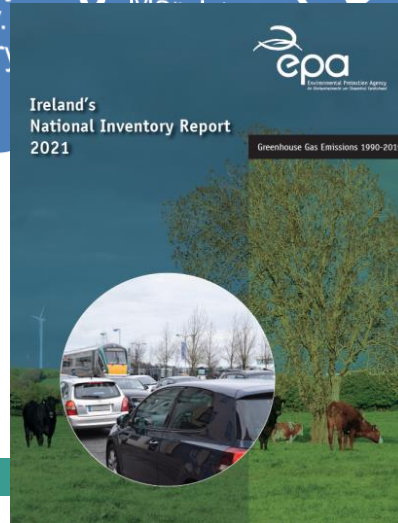


“Produce Greenhouse gas and Air Pollutant Inventories to fulfil Ireland’s international reporting commitments and provide evidence for National Climate Policy”



January - EPA/SEAI Joint Report

January - Prov. Inventory EU

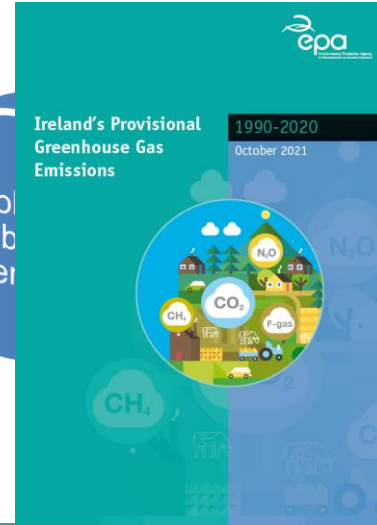


March - EU Emissions

March - Projections to EU

April/July - Publish Projections

October - Pub Inventory





Welcome Reduction in overall GHG emissions.
2020 emissions declined by 3.6% on
2019 levels



Less Peat and more wind means less
emissions from electricity
generation. 51% less peat used in
electricity generation in 2020



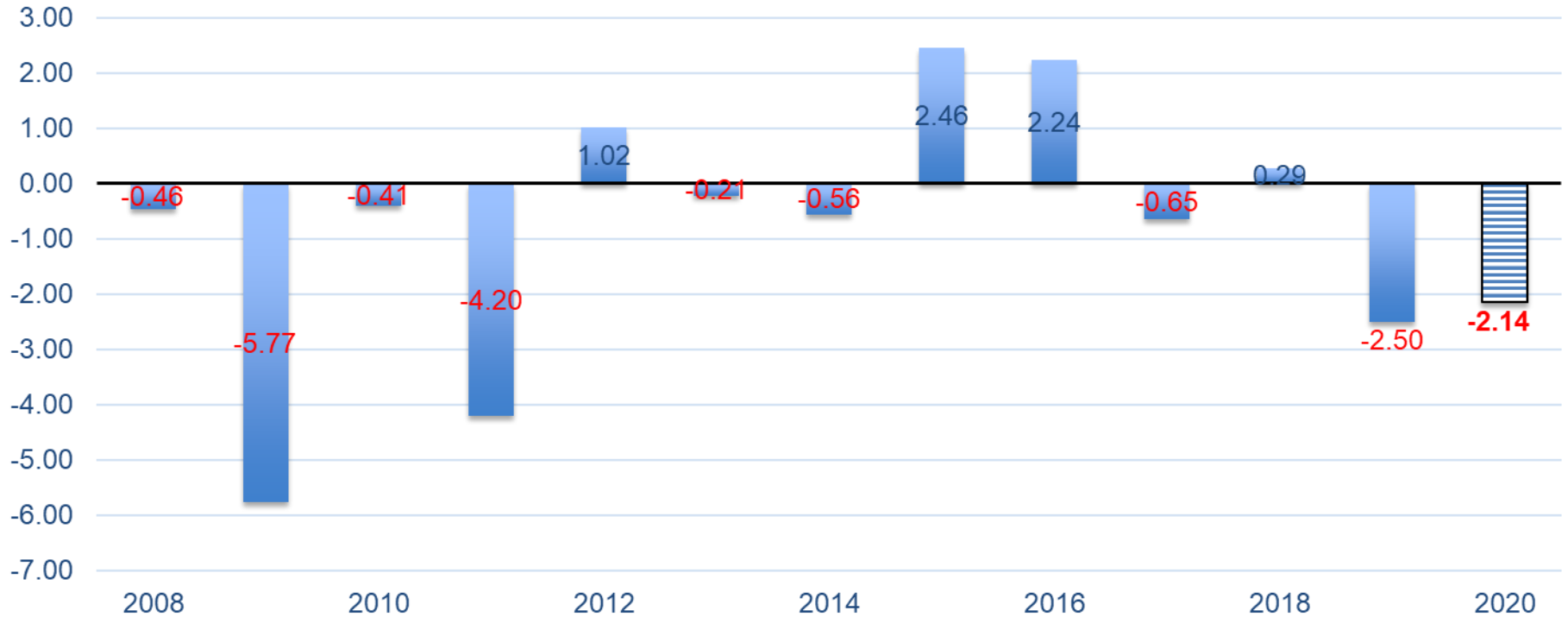
Transport emissions are down 15.7%, by almost 2
million tonnes due to COVID restrictions . Residential
and Agriculture emissions increased

Highlights



- Provisional greenhouse gas emissions data for 2020 indicate that Ireland will exceed its 2020 annual limit under the EU's **Effort Sharing Decision (ESD)** by **6.73 Mt CO₂eq**.
- **Energy Industries** emissions show a decrease of 7.9% (0.74 Mt CO₂eq) in 2020, due to a 51% decrease in peat used in electricity generation. Renewables up to 42%
- **Transport** emissions decreased by 15.7% due to COVID restrictions. Petrol and Diesel use in road transport were down 26% and 14%.
- Greenhouse gas emissions from the **Residential** sector increased by 9.0% or 0.59 Mt CO₂eq with kerosene, coal and peat use up 19%, 6% and 3%.
- **Agriculture** emissions increased by 1.4% (0.29 Mt CO₂eq) in 2020, driven by increased activity in all areas, including a 3.2% increase in dairy cows.

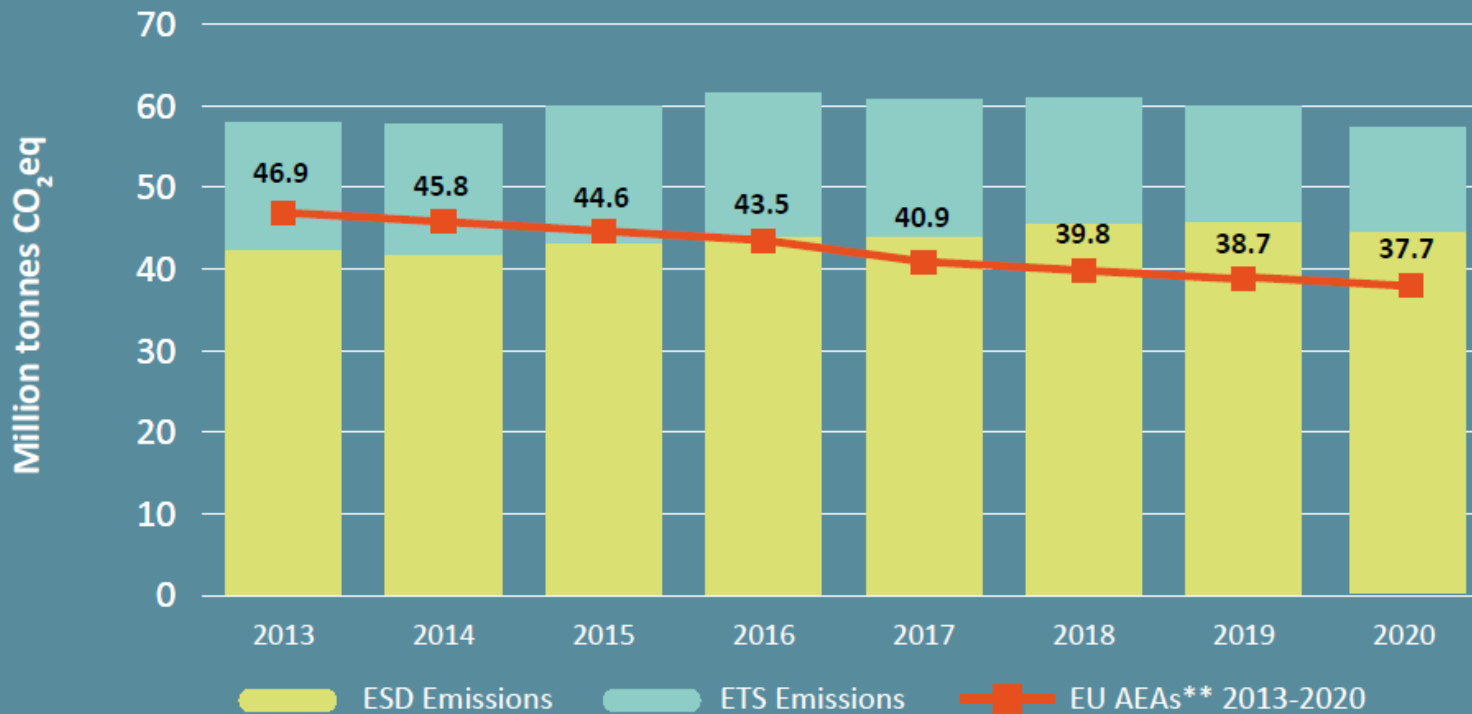
Annual Emissions trends (Mt CO₂ eq)



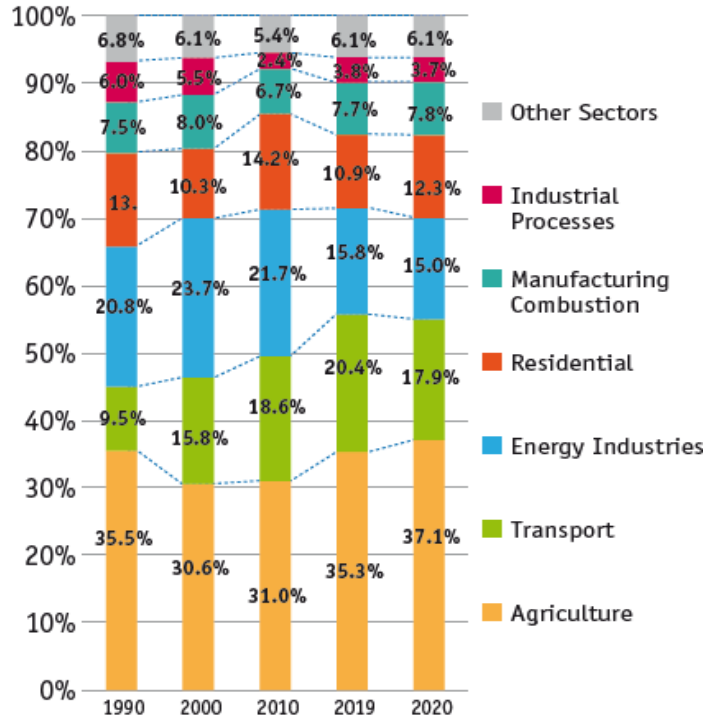
Effort Sharing Decision targets



For years 2013-2020, total allocation was exceeded by 12 million tonnes



Sectoral Share of GHG emissions



57.7 Million tonnes CO₂eq



Agriculture
37.1%



Energy Industries
15.0%

Residential
12.3%

Manufacturing
Combustion
7.8%

Commercial
Services
1.6%

Public Services
1.6%

2020


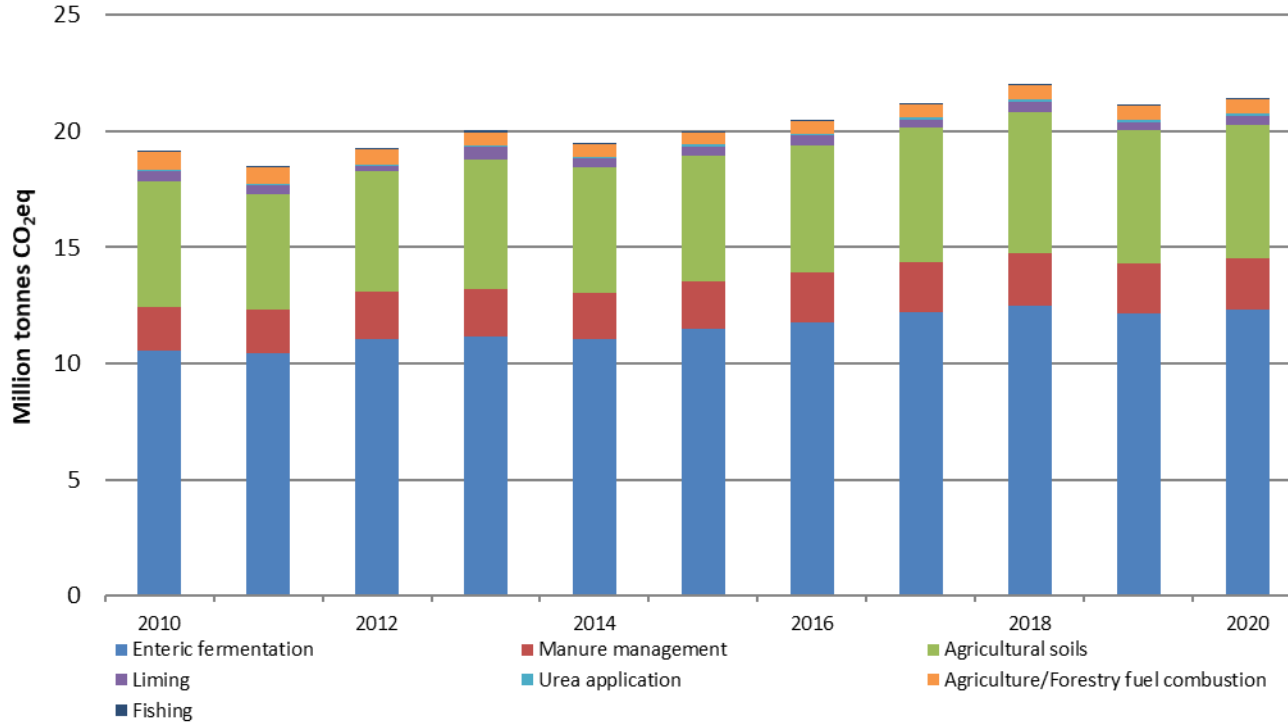
F-Gases
1.4%

Industrial Processes
3.7%

Transport
17.9%

Waste
1.6%

Agriculture



AGRICULTURE

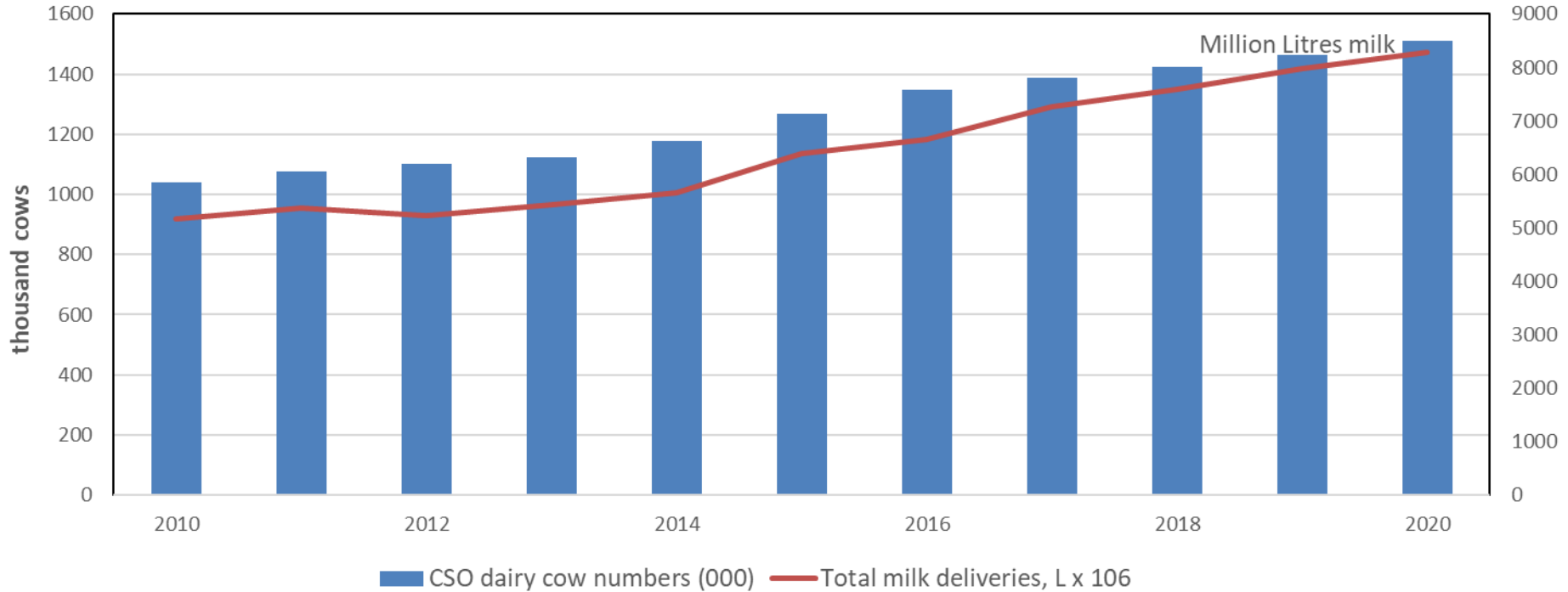
↑ **+1.4 %**

Growth in Agriculture not impacted by COVID measures

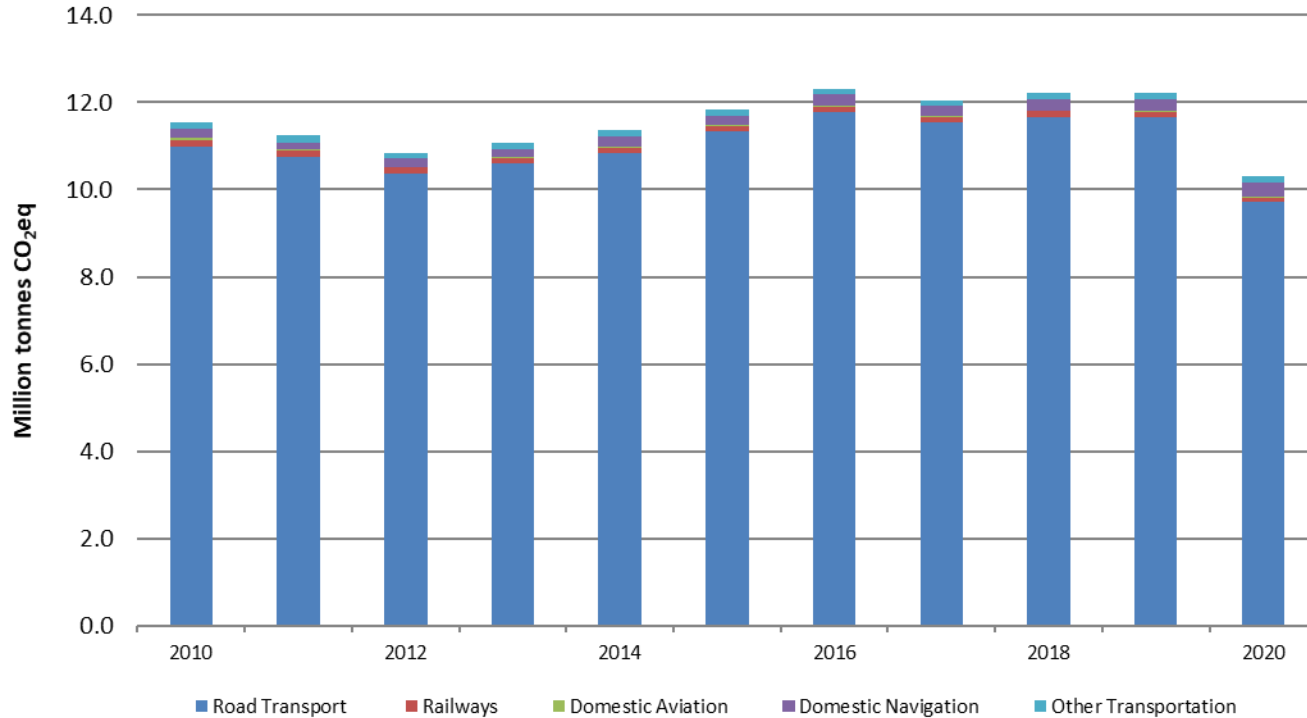
Fertiliser use **+ 3.3%**

Dairy cow numbers **+3.2%**

Agriculture emissions drivers



Transport

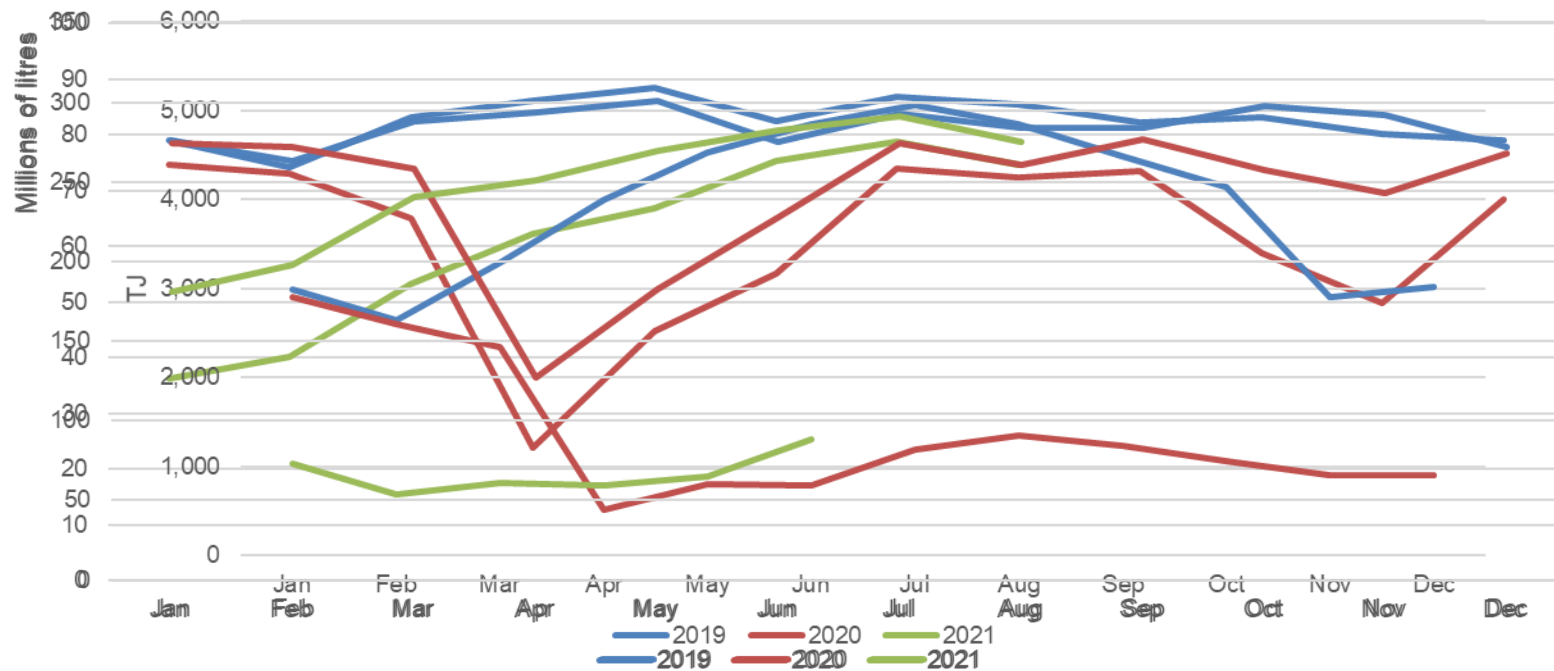


TRANSPORT
↓ -15.7%
COVID restrictions on car and public transport journeys led to a sharp drop in emissions.

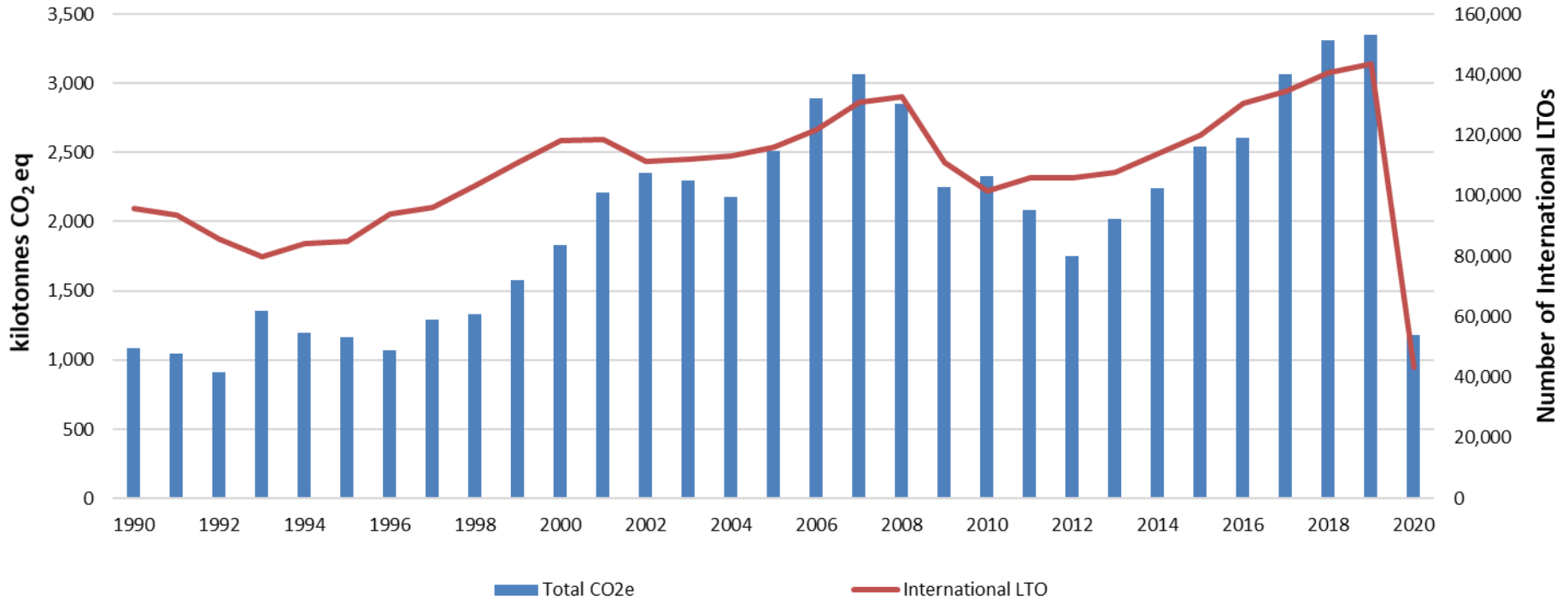
Transport Fuels




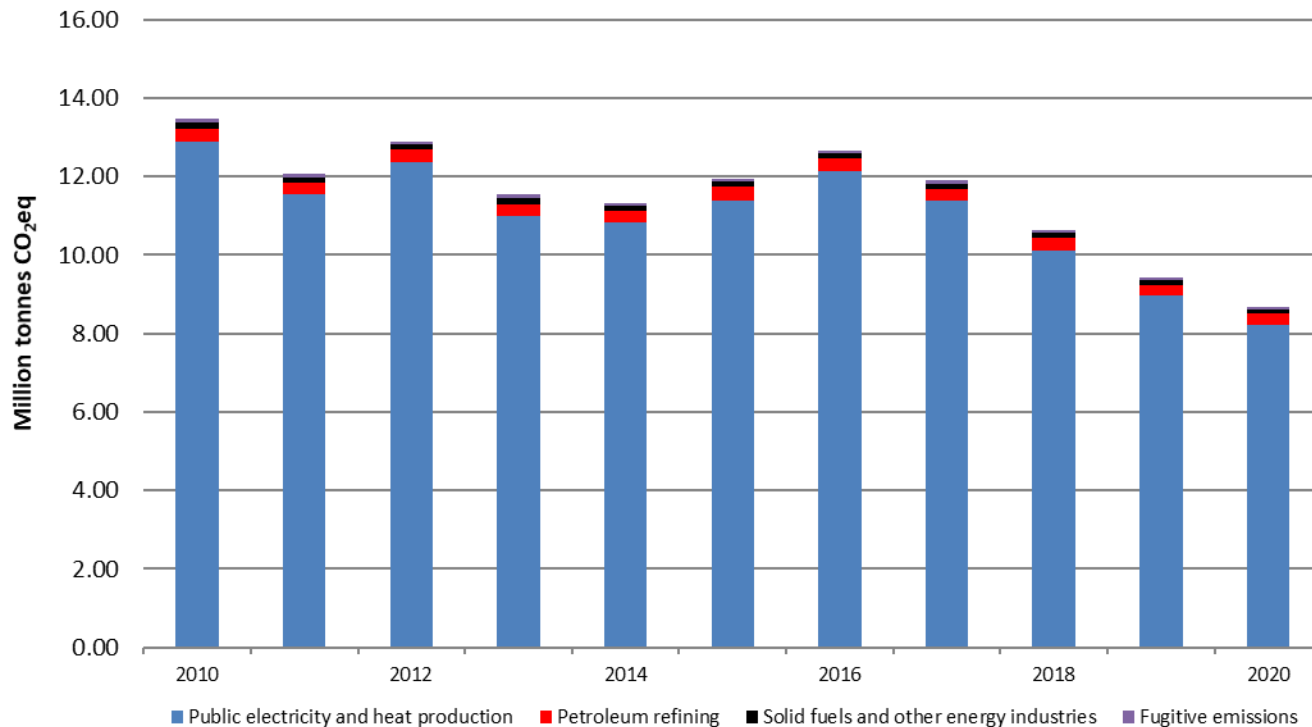
Jet fuel kerosene Gasoline Diesel Inland Deliveries (TJ)



Transport (International Aviation)




Energy Industries



ENERGY INDUSTRIES

↓ **-7.9%**

Less peat in electricity generation
-51% in 2020



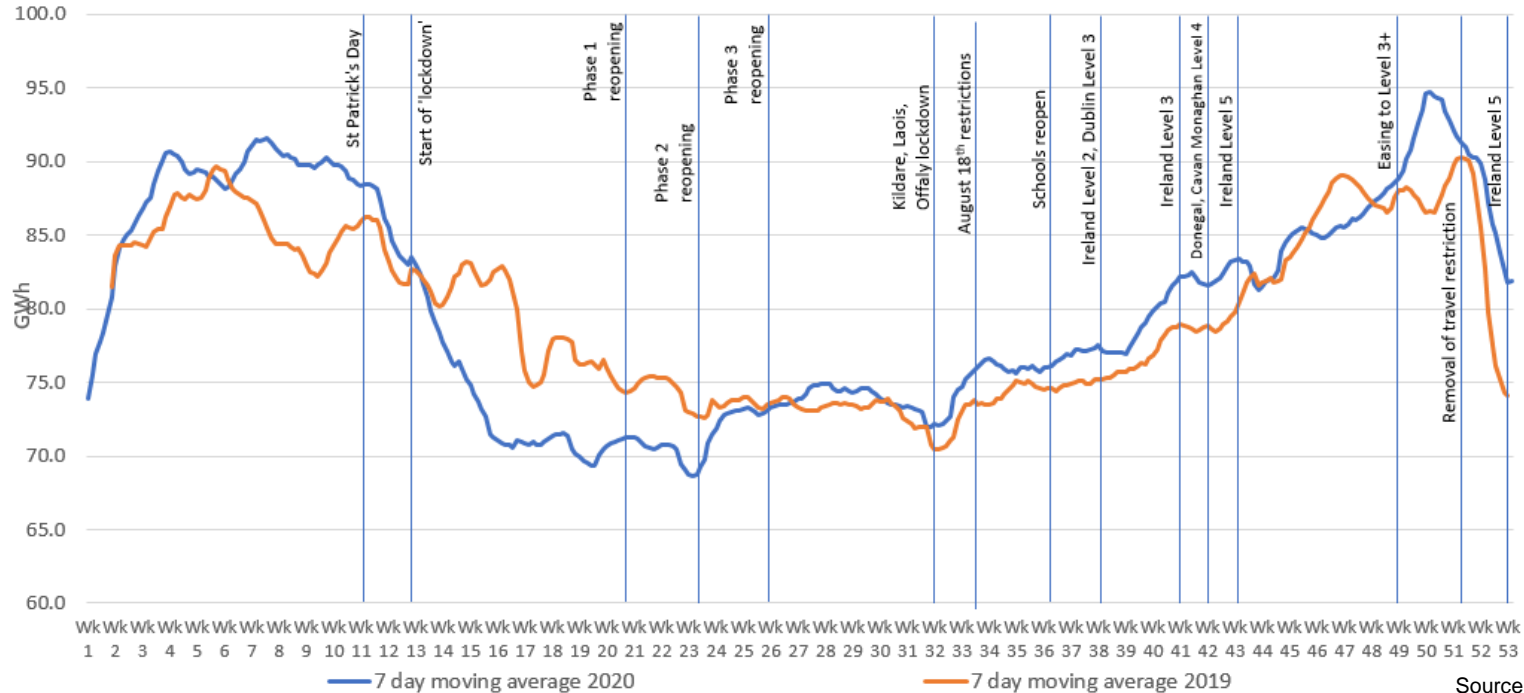
Renewable share up to 42.1%.

Overall emissions in 2020 are 23.3% below 1990 levels

Electricity Demand

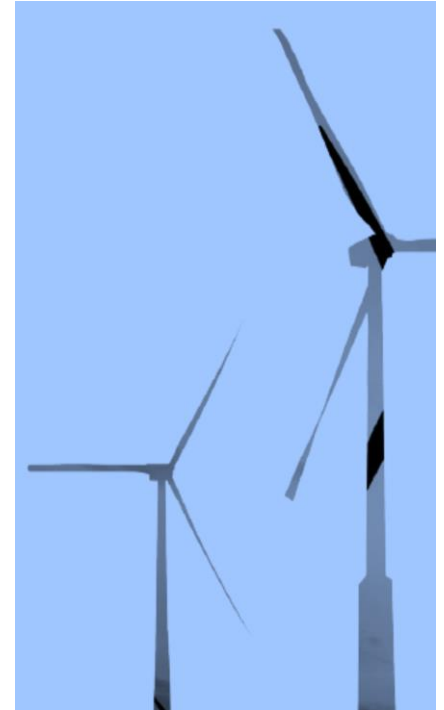
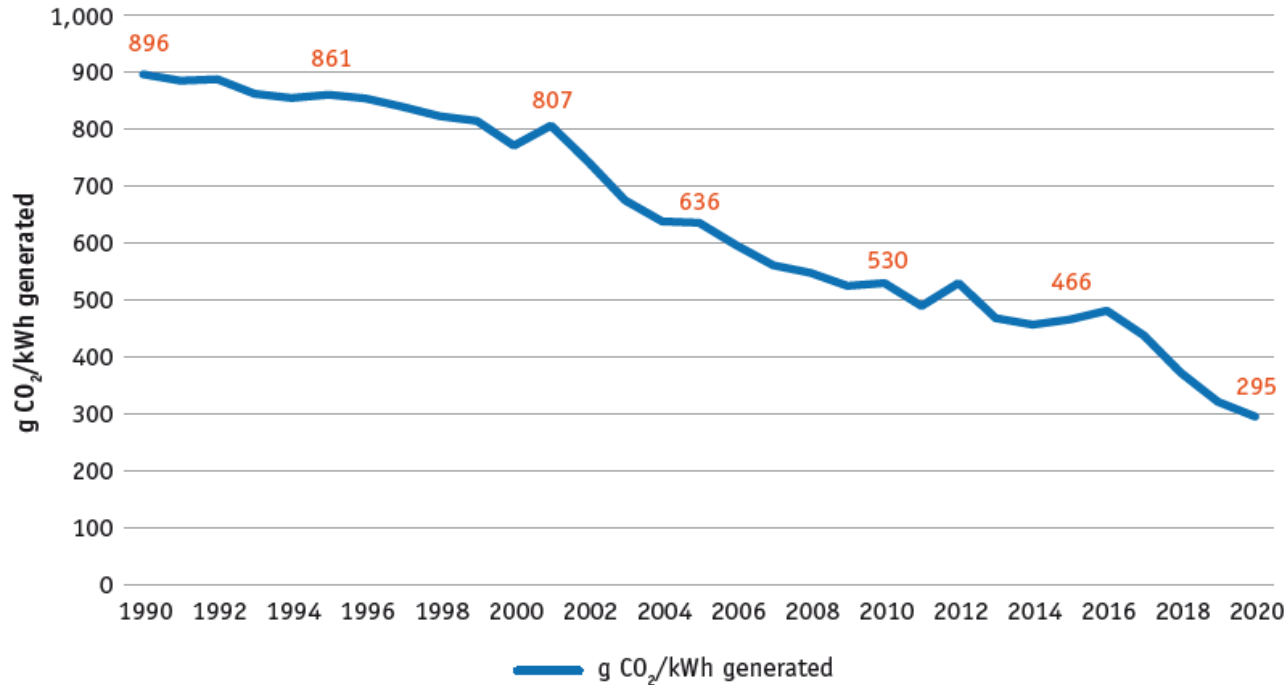


Electricity Daily Demand

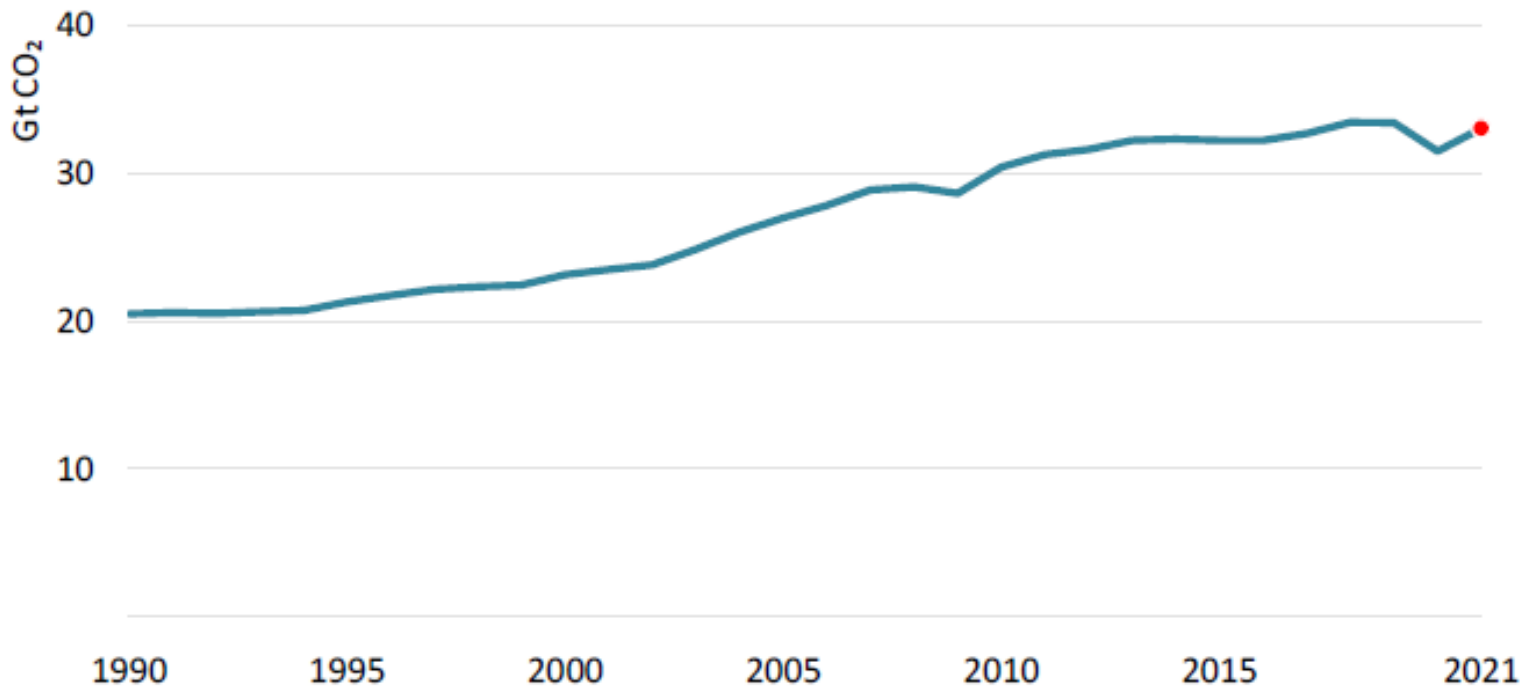


Source: SEAI from Eirgrid data


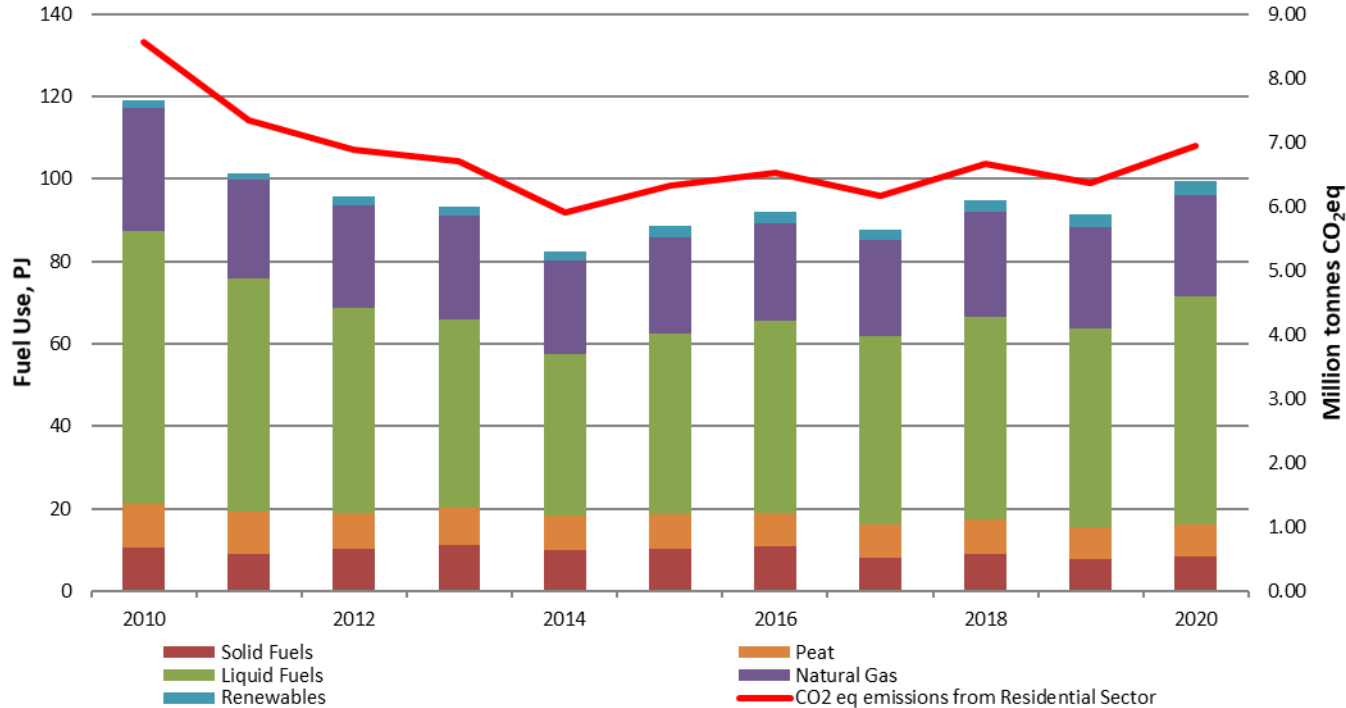
CO₂ Intensity of electricity generation



Global Impact of COVID - Energy




Residential



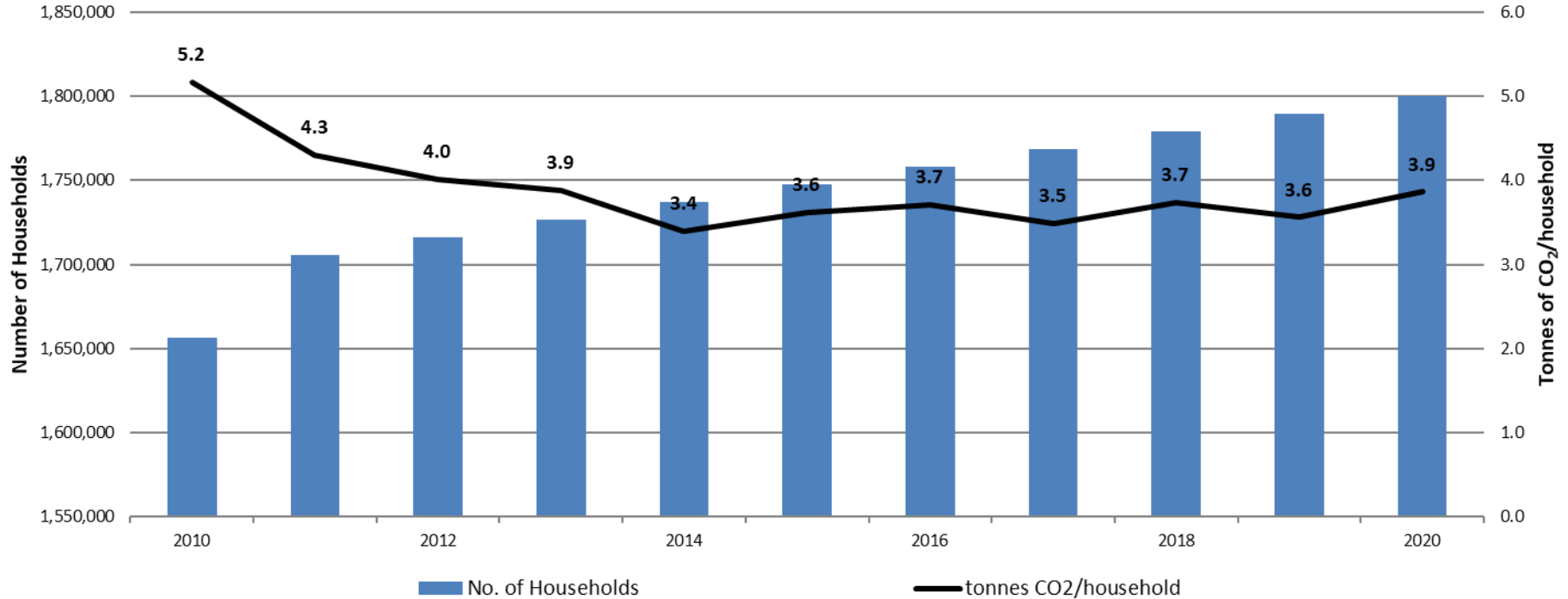
RESIDENTIAL

↑ +9.0%



Residential emissions increased by 9.0% due to historic low oil prices and working from home.

Residential emissions drivers

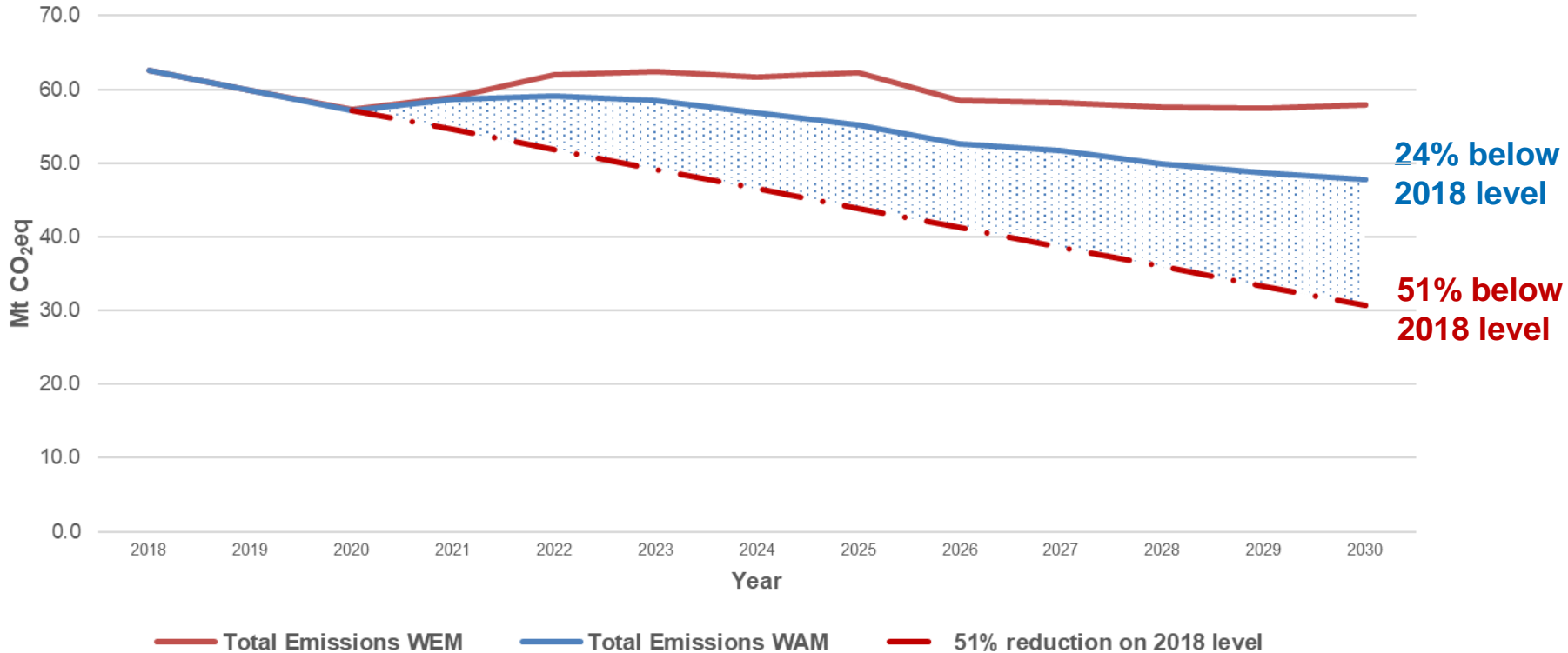


Remaining Sectors



- Emissions from the **Manufacturing Combustion** sector decreased by 1.5% or 0.07 Mt CO₂eq in 2020
- Emissions from the **Industrial Processes** sector decreased by 7.0% (0.16 Mt CO₂eq) in 2020 due to a reduction in cement production with extended closures (COVID)
- Emissions from the **Waste sector** decreased by 0.8% in 2020 or 0.01 Mt CO₂eq.
- **F-Gas** emissions were down 14.4% from 2019 to 2020. This is driven by a reduction in refrigeration and air conditioning emissions.
- Emissions from **Commercial Services** sector decreased by 0.3% and **Public Services** sector emissions increased by 1.0% in 2020.

Planned National targets



Conclusion



- While the overall reduction in emissions is welcome, the majority (almost 2 Mt) was due to a short term decrease in transport emissions due to the Covid 19 pandemic, which is likely to be once-off
- In many sectors, greenhouse gas emissions are still closely coupled with activity and output, To meet the Climate Act target or the increased EU 'fit for 55' ambition need to break this link
- Urgent action is also necessary to avoid a growth in greenhouse gas emissions during post-COVID economic recovery.

change

The EPA's role in addressing climate change challenges includes collating national greenhouse gas emissions and projections; regulating emissions from industrial sectors; supporting climate science research; supporting behavioural change and facilitating the National Dialogue on Climate Action.



What can you do?

Reduce your transport carbon footprint, improve the energy efficiency of your home and avoid food waste - a climate action you can do every day.

Remember:

"EVERY BIT OF WARMING MATTERS. EVERY YEAR MATTERS.

EVERY CHOICE MATTERS"

Intergovernmental Panel on Climate Change

Greenhouse gas emissions Ireland



Key messages

Greenhouse gas (GHG) emissions in Ireland decreased in 2020

Change in emissions since 2019

-3.6%

Emissions decreases were driven by the COVID impact on transport highlighting that



Latest emissions estimates

Ireland's latest greenhouse gas (GHG) emissions 1990-2020 are provisional figures based on the SEAI's energy balance released in September 2021.

Latest emissions data

57.70 Mt CO₂eq



Energy industry

Greenhouse gas emissions decreased by 7% in 2020 due to a reduction in peat use and an increase in renewable electricity generation

Emissions mainly from electricity generation

-7.9%

Early implementation of climate and environmental actions needed for long term improvement.



Learn more on www.epa.ie/ghg