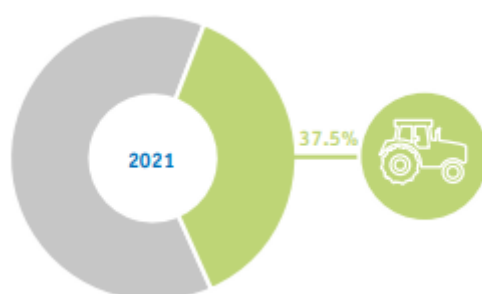


Summary Note on Ireland's Provisional Greenhouse Gas Emissions for 2021

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Report Link https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/EPA-Ireland's-Provisional-GHG-Emissions-1990-2021_July-2022v2.pdf

Agricultural Share of National Greenhouse Gas (GHG) Emissions



Total emissions from the agriculture sector in 2021 were **23.1 Mt CO₂ eq** an **increase of 3.0% on 2020**. The most significant drivers for the increased emissions in 2021 were

Synthetic nitrogen fertiliser use	+ 5.2%
Higher dairy cow numbers	+ 2.8%
Increase in milk production	+ 5.5%

2021 Agricultural Emissions Target -2.2% to -3%

2021 Agricultural Emissions Actual +3.0%

Net result is Agricultural Emissions are **5.2% to 6% higher in 2021 than where the target was set for Agriculture in 2021**. This 5.2% to 6% over the target gets added to the 2.2% to 3% reduction Agriculture needs to deliver in 2022. So Agriculture needs to deliver a **7.4% to 9% reduction in 2022** GHG emissions to get back on track.

Methane emissions originate from Enteric Fermentation, Manure Management and fuel combustion. In 2021, **CH₄ emissions** contribute 69.6% to the

Agriculture sector and have **increased by 1.8% since 2020**. Nitrous Oxide emissions originate from Manure Management, Agricultural Soils and fuel combustion. In 2021, **N₂O emissions contribute** 24.8% to the Agriculture sector and have **increased 3.4% since 2020**. **Carbon dioxide emissions** originate from Liming, Urea Application and fuel combustion. In 2021, CO₂ emissions contribute 5.6% to the Agriculture sector and have **increased by 17.3% since 2020**. Agriculture emissions by source category are presented in Figures 6. Increasing methane emissions are evident in the gas share trend, 16.1 Mt CO₂ eq (69.6% share) in 2021 compared to 13.5 Mt CO₂ eq (67.2% share) in 1990, increasing in level by 19.3%. The current situation indicates methane emissions from agriculture are steadily increasing due to increased production when methane emissions reduction of almost 30% is required to achieve at least a 22% reduction in Agriculture emissions compared to 2018, the lower end of the range committed to in the 2021 Climate Action Plan. This is the 11th consecutive year of increases in dairy cow numbers. Milk output per cow also increased (2.5%), therefore increased production was driven by an increase in livestock numbers in conjunction with an increase in milk yield per cow. In 2021, total cattle numbers increased by 0.8% and sheep numbers increased by 0.3%, pig numbers increased by 4.5% and the poultry population decreased by 0.5%. Total fossil fuel consumption in agriculture/forestry/fishing activities remained at similar levels to 2020. In 2021, liming on soils increased by 49.5%, a welcome measure in improving soil fertility, which should lead to a reduction in fertiliser nitrogen use in future years.

Figure 6. Trend in Agriculture 1990-2021

