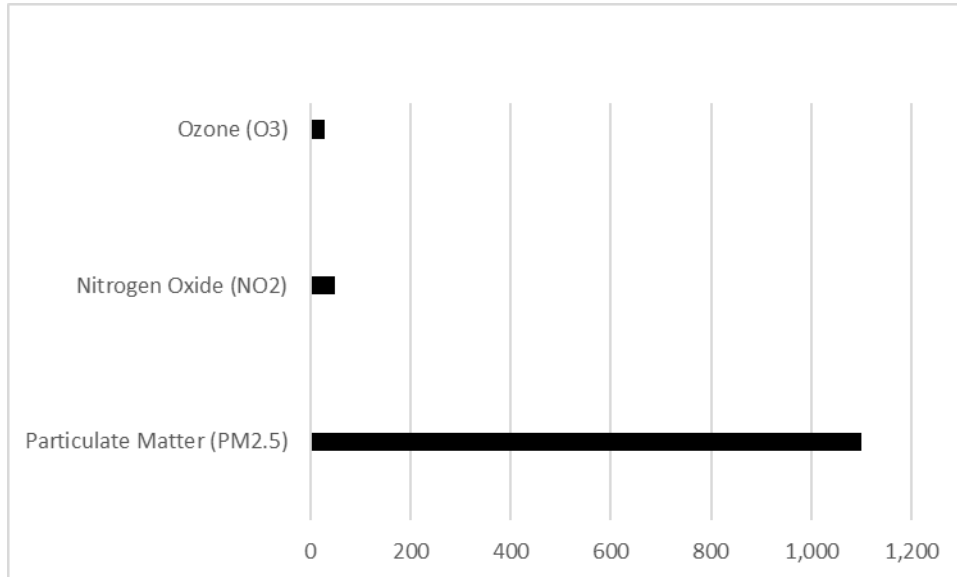


Environment and Sustainability

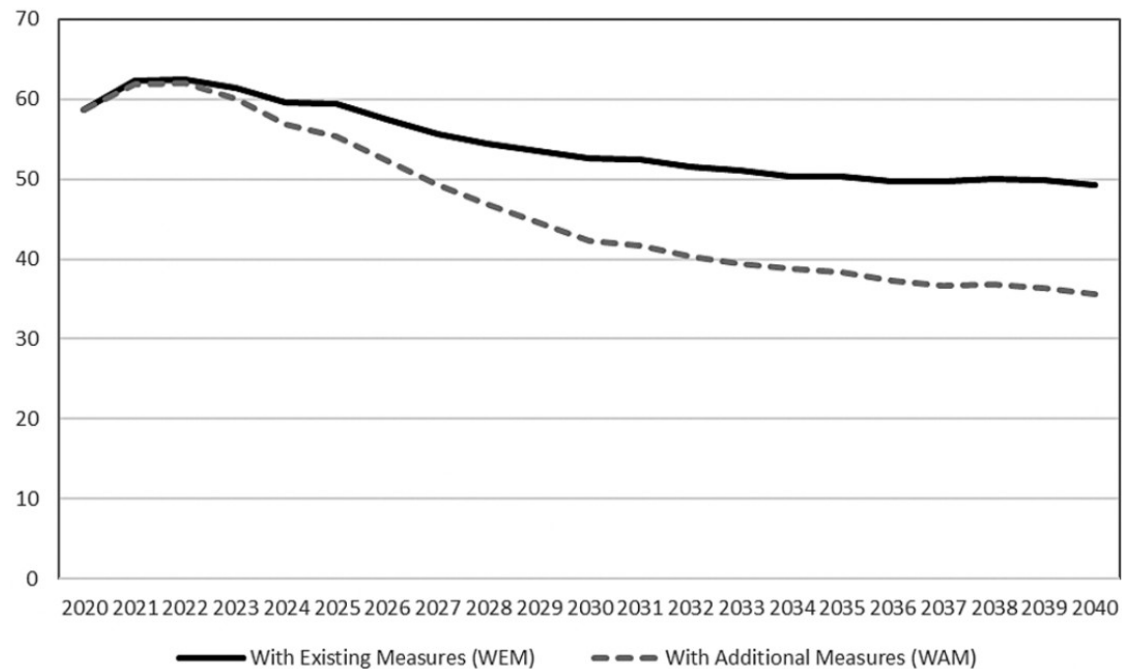
Chart 9.1: Premature Deaths Attributable to PM2.5, NO2 and O3 Exposure, 2016*



Source: CSO, Table 5.1 - SDG 3.9.1 Premature Deaths Attributable to PM2.5, NO2 and O3 Exposure

* PM_{2.5} signifies that it is particulate matter of 2.5 microns or less in diameter, Nitrogen oxide and ozone.

Chart 9.2: Ireland GHG Emissions Projections 2020-2040 (Mt CO2 eq)



Source: EPA, 2022.

Environment and Sustainability

Damaging environmental activity not only destroys ecosystems and biodiversity, it also affects health. According to the EPA about 1,300 premature deaths annually in Ireland can be attributed to air pollution (Chart 9.1).¹ Those most impacted include older adults, people with chronic illnesses, children and those living in deprived communities. The World Health Organisation has described air pollution as the 'single biggest environmental health risk'.

Studies have also shown that the physical environments experienced by children have important impacts on their cognitive and socioemotional development² and that exposure to air pollution is associated with a range of childhood developmental complications.³

Emissions in Ireland are cyclical, and even though emissions fell during the recession, they immediately increased as economic activity increased. Even with the impact of the pandemic taken into account, Ireland missed our energy and climate targets for 2020.⁴

Provisional greenhouse gas emissions published by the Environmental Protection Agency for 2021 show that Ireland's greenhouse gas emissions increased by 4.7 per cent in 2021 compared with 2020 figures.⁵ The EPA projections also indicate that Ireland will exceed its 2021 annual limit, a continuation of a worrying trend.

According to these estimates, 23.5 per cent of the carbon budget for the period 2021-2025 has already been used, requiring an 8.4 per cent

annual emissions reduction from 2022-2025 to stay in budget.

To date, there has been a complete failure at a political level to implement policies that will decouple emissions from economic trends and put our economy and our society on a more sustainable footing. Ireland came closest to meeting the (missed) 2020 emission reduction targets in the period 2011-2012, during the economic recession. The EPA noted at the time that Ireland's reduced emissions resulted from reduced economic activity, not from any policy success, and has since noted that emissions continue to increase in line with economic growth. We must not let history repeat itself. Chart 9.2 outlines Ireland's projected level of emissions based on the latest data available from the EPA. It is clear from these projections that the existing measures contained in the Climate Action Plan will not be enough, and additional measures will be required.

Policy Priority

Develop a comprehensive Just Transition strategy aimed at leaving no people, communities, economic sectors or regions behind as we transition to a low carbon future. Transition is not just about reducing emissions, it is also about transforming our society and our economy, and investing in effective and integrated social protection systems, education, training and lifelong learning, childcare, out of school care, health care, long term care and other quality services. Social investment must be a top priority of transition.

¹ https://www.epa.ie/publications/monitoring--assessment/air/EPA-Air_Quality_in-Ireland-Report_2021_-interactive-pdf.pdf

² Ferguson KT, Cassells RC, MacAllister JW, Evans GW (2013). The physical environment and child development: an international review. *Int J Psychol.* 2013;48(4):437-68

³ Ha S. (2021) Air pollution and neurological development in children. *Dev Med Child Neurol.* 2021 Apr;63(4):374-381.

⁴ Environmental Protection Agency (2022) Ireland's Provisional Greenhouse Gas Emissions 1990-2021. Dublin: EPA.

⁵ Environmental Protection Agency (2022) Ireland's Greenhouse Gas Emissions Projections 2021-2040. Dublin: EPA.