

Modeling carbon tax projected revenues for 2024–2030 in Ireland

Ireland—Department of Finance

Dr Mike Fahy and Jean Brennan, Climate Unit, Financial Services Division

A contribution to the ‘Compendium of Practice from a Global Community of Ministries of Finance and Leading Organizations: Economic analysis and modeling tools to assist Ministries of Finance in driving green and resilient transitions’

Topic: Addressing the climate policy questions facing Ministries of Finance: the economic and fiscal impacts the green transition

June 2025

Access the full Compendium at www.greenandresilienteconomics.org

This contribution was prepared at the request of, and with guidance from, the Ministry of Finance of Denmark as Lead of the Coalition’s Helsinki Principle 4 initiative ‘Economic Analysis for Green and Resilient Transitions’ and its Steering Group, with input from its Technical Advisory Group. The views, findings, interpretations, and conclusions expressed are those of the authors. While many Coalition members and partners may support the general thrust of the arguments, findings, and recommendations made in this contribution, it does not necessarily reflect the views of the Coalition, its members, or the affiliations of the authors, nor does it represent an endorsement of any of the views expressed herein by any individual member of the Coalition.

© The authors, 2025

Licensed under [CC BY-NC 4.0](https://creativecommons.org/licenses/by-nc/4.0/).

The Department of Finance in Ireland has recently modeled and published research examining the potential impact the transition to a lower carbon economy may have on carbon tax yields in Ireland over the six-year period from 2024 to 2030.¹ Key findings from the analysis indicate that over the decade 2013–2023, carbon tax yields in Ireland generated revenues of over €6 billion for the Exchequer, rising from €388 million in 2013 to €935 million in 2023 (this amounts to approximately 1% of total exchequer tax receipts in 2023).

Methodology

To examine the potential fiscal impacts the transition may have on carbon tax yields in Ireland over the six-year period from 2024 to 2030, the analysis first identifies and provides an overview of carbon tax yields to date. Then, to provide some fiscal insights to inform policy, findings from a scenario analysis of the potential impact of implementing CAP24 policy measure targets may have on carbon tax revenues over this period are presented. This scenario analysis maps and links projected estimates of energy use and expected fuel requirements from the Sustainable Energy Authority of Ireland (SEAI) to carbon tax rates and exchequer net carbon tax receipts to examine the potential impact of the implementation of CAP24 actions between 2024 and 2030 based on the SEAI and the Environmental Protection Agency (EPA) “with additional measures” (WAM) scenario and “with existing measures” (WEM) scenarios.

Key findings

- With the implementation of the Programme for Government (PfG), Our Shared Future, and based on increases in the carbon tax set out in the Finance Act 2020, the carbon taxes in Ireland generated revenues of over €3.3 billion from 2019 to 2023. On a hypothecated (or ring-fenced) basis, the carbon tax increases during this time contributed €1.3 billion to the Exchequer and were estimated to produce €534 million in 2023.
- Over the period 2024 to 2030, based on planned carbon tax rate increases and adjusted SEAI WAM fuel scenarios, it is estimated that the tax will raise €8.8 billion in exchequer revenue, and approximately €6.4 billion may be directly allocated to climate actions in this period on a no-policy-change basis.
- Separately, net carbon tax receipts over the same period, based on planned carbon tax rate increases and adjusted SEAI WEM fuel scenarios are estimated to raise an additional €9.7 billion in exchequer revenue. Approximately €7.1 billion of the €9.7 billion is estimated to be raised from increases above the baseline rate of €20 per tonne of CO₂ emitted, which is hypothecated for “Just Transition” climate action measures in line with the PfG.²

Policy implications

- As Ireland’s economy transitions toward lower carbon use, it remains important to consider how taxation policy, including the carbon tax, can be used to support this transition. In particular, protecting exchequer revenue streams in an environmentally appropriate fashion, alongside influencing and encouraging behavioral change to achieve decarbonization over the medium term, aiming for carbon neutrality by 2050, will be critical.
- Of course, it is important to note that changes to taxation alone cannot achieve the necessary greenhouse gas emissions reductions, but taxation clearly has an important role to play as part of the wider climate action response.

¹ <https://www.gov.ie/en/publication/8e2d0-carbon-tax-projected-exchequer-revenue-estimates-2024-2030>

² It is important to note that the quantification of carbon tax estimates is based on both a WAM and WEM scenario analysis and on a no-policy-change basis in this contribution, as there is uncertainty relating to possible future fiscal policy changes that may be taken by Government.