1 What are Sectoral Emissions Ceilings?

Sectoral Emissions Ceilings refer to the total amount of permitted greenhouse gas emissions that each sector of the economy can produce during a specific time period.

Section 6C of the Climate Action and Low Carbon Development Act 2015 (as amended) (the Act) provides for the preparation of Sectoral Emissions Ceilings which set out the maximum amount of greenhouse gas emissions that are permitted in different sectors of the Irish economy.

2 Carbon Budgets

A carbon budget represents the total amount of emissions, measured in tonnes of CO₂ equivalent, that may be emitted by a country, region, etc. during a specific time period.

The Act commits Ireland to a legally-binding target of a climate neutral economy no later than 2050, and to a reduction in emissions of 51% by 2030 (compared to 2018 levels). To achieve these targets, the Act requires the Climate Change Advisory Council (CCAC) to recommend a proposed programme of economy-wide 5-year Carbon Budgets to the Minister for the Environment, Climate and Communications (the Minister).

This carbon budget programme comprises three successive 5-year Carbon Budgets as follows:

- 2021-2025: 295 Mt CO₂ eq. This represents an average reduction in emissions of 4.8% per annum for the first budget period.
- 2026-2030: 200 Mt CO₂ eq. This represents an average reduction in emissions of 8.3% per annum for the second budget period.
- 2031-2035: 151 Mt CO₂ eq. This represents an average reduction in emissions of 3.5% per annum for the third provisional¹ budget.

Following the process set out in the Act, the carbon budget programme proposed by the Climate Change Advisory Council was approved by the Government on 21 February 2022, and subsequently adopted by the Oireachtas on 6 April 2022.

The upper ends of the emissions reduction ranges in the Climate Action Plan 2021 (CAP21) are consistent with a 51% reduction in emissions by 2030, compared to 2018 levels, on the basis of the full implementation of Core Measures and Further Measures (which are

¹ It is necessary to consider how emissions might develop in the period post 2030 in order to establish a basis for proposals for the provisional third carbon budget for the period 2031-2035.
measures that have not yet crystallised and which will require further evaluation), as well as allowing for unallocated savings. The Climate Action Plan will be revised annually to specify the policies, measures and actions to deliver the Carbon Budgets and comply with the Sectoral Emissions Ceilings.

3 Sectoral Emission Ceilings as approved by Government on 28 July 2022

Section 6C of the Act provides that the Minister shall prepare, within the limits of the carbon budget, the Sectoral Emissions Ceilings. These ceilings set out the maximum amount of greenhouse gas emissions that are permitted in different sectors of the economy during a carbon budget period, and different ceilings may apply to different sectors. The sectors of the economy to which each Sectoral Emissions Ceiling shall apply will be determined from time to time by the Government.

The Act requires that the Minister finalise and submit Sectoral Emissions Ceilings to the Government for approval as soon as may be after a carbon budget takes effect. The Government approved Sectoral Emissions Ceilings on 28 July 2022.

The structure of the Sectoral Emissions Ceilings reflects the EPA Emissions Inventory, which breaks down greenhouse gas emissions into a range of categories across the economy. The sectors are slightly expanded from those listed in CAP21 to distinguish between the Commercial and Residential sectors within the ‘Built Environment’ sector, while also including an ‘Other’ sector to account for emissions related to F-Gases, Waste and Petroleum Refining.

Table 1 below sets out the Sectoral Emissions Ceilings and the associated percentage change in emissions, relative to 2018 levels. These emissions ceilings are split among a number of sectors and are detailed for the 2021-2025 and 2026-2030 periods. A comparison with the CAP21 indicative ranges is also provided.

As preparation of the Sectoral Emissions Ceilings was being finalised, important additional information in relation to Land-Use, Land-Use Change and Forestry (LULUCF) emerged. As a result, the finalisation of this ceiling has been temporarily deferred. More detail on the LULUCF ceiling is provided in Section 4 below. In addition, further work will need to be done on assigning the 5.25 MtCO2 eq. in annual unallocated savings for the period 2026 to 2030.

2 For further detail, see Section 5 below on unallocated savings in the second carbon budgetary period.
in order to ensure the -51% target for 2030 is reached. Further detail on unallocated savings is provided in Section 5 below.

It is acknowledged that the achievement of these Sectoral Emissions Ceilings will be challenging for all sectors. Delivering the actions and measures required to achieve the ceilings will require a major ramp up in key decarbonisation activities across all sectors. This will provide numerous benefits to the country – in terms of health, competitiveness, employment opportunities, biodiversity and climate impact. Collaborative effort will be needed by Government, businesses, communities, and individuals to underpin the enormous social and economic transformations envisaged.
<table>
<thead>
<tr>
<th>Sector</th>
<th>2018 Baseline (MtCO₂eq.)</th>
<th>Sectoral Emission Ceilings for each 5-year carbon budget period (MtCO₂eq.)</th>
<th>Indicative Emissions in Final Year of 2021-2025 carbon budget period (MtCO₂eq)</th>
<th>Indicative Reduction in Emissions in Final Year of 2021-2025 budget period compared to 2018</th>
<th>Emissions in final year of 2026-2030 carbon budget period (MtCO₂eq)</th>
<th>Reduction in Emissions final year of 2026-2030 carbon budget period compared to 2018</th>
<th>Agreed CAP21 Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>10</td>
<td>20</td>
<td>6</td>
<td>~40%</td>
<td>3</td>
<td>~75%</td>
<td>60 – 80%</td>
</tr>
<tr>
<td>Transport</td>
<td>12</td>
<td>37</td>
<td>10</td>
<td>~20%</td>
<td>6</td>
<td>~50%</td>
<td>40 – 50%</td>
</tr>
<tr>
<td>Built Environment - Residential</td>
<td>7</td>
<td>23</td>
<td>5</td>
<td>~20%</td>
<td>4</td>
<td>~40%</td>
<td>45 – 55%</td>
</tr>
<tr>
<td>Built Environment - Commercial</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>~20%</td>
<td>1</td>
<td>~45%</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>7</td>
<td>24</td>
<td>6</td>
<td>~20%</td>
<td>4</td>
<td>~35%</td>
<td>30 – 40%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>23</td>
<td>96</td>
<td>20</td>
<td>~10%</td>
<td>17.25</td>
<td>~25%</td>
<td>20 – 30%</td>
</tr>
<tr>
<td>LULUCF</td>
<td>5</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>40 – 60%</td>
</tr>
<tr>
<td>Other (F-Gases, Waste &amp; Petroleum refining)</td>
<td>2</td>
<td>8</td>
<td>2</td>
<td>~25%</td>
<td>1</td>
<td>~50%</td>
<td>N/A</td>
</tr>
<tr>
<td>Unallocated Savings</td>
<td>-</td>
<td>-26</td>
<td>-5.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>68</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Table - Sectoral Emission Ceilings

(Figures for MtCO₂eq for 2018 and 2030 have been rounded. This may lead to some discrepancies)

3 Table reflects what was agreed by Government on 28 July 2022
4 Million tonnes of carbon dioxide equivalent.
5 CAP21 outlined 45-55% range for all buildings i.e. it did not split out residential and commercial buildings
6 Finalising the Sectoral Emissions Ceiling for the Land-Use, Land-Use Change and Forestry (LULUCF) sector has been deferred for up to 18 months to allow for the completion of the Land-Use Strategy
7 Unallocated savings on an economy-wide basis in the second 5-year carbon budget period from 2026-2030, before factoring in net LULUCF sector emissions
8 Following finalisation of the Sectoral Emissions Ceiling for the Land-Use, Land-Use Change and Forestry (LULUCF) sector, total figures will be available
9 As provided by section 6A(5) of the Climate Action and Low Carbon Development (Amendment) Act 2021
4 Sectoral Emissions Ceiling for the Land-Use, Land-Use Change and Forestry (LULUCF)

At the time preparation for the economy-wide Sectoral Emissions Ceilings was being finalised, important additional scientific knowledge emerged about Land-Use, Land-Use Change and Forestry (LULUCF) emissions. As a result of these developments, it has been necessary to defer finalising the sectoral emissions ceiling for the LULUCF sector for a period of up to 18 months. While the LULUCF ceiling will be finalised as soon as possible, the implications of these developments must be examined before an emissions ceiling for the sector can be meaningfully assessed. In addition, many of the supporting actions and frameworks which will be required to meet the ceiling for this sector shall form part of the Programme for Government’s Land-Use Strategy, which is due over the same period.

As a result of developments in the scientific knowledge of the metrics for monitoring and reporting of LULUCF emissions, the 2021 EPA projections for LULUCF for 2030 of 7 MtCO₂eq net emissions, were updated by the EPA to 11 MtCO₂eq. LULUCF is a novel and emerging sector having both significant sinks and sources, with dynamic and complex fluxes within these activities. Our understanding of LULUCF continues to evolve as the National Inventory Reports and Projections are being updated, revising LULUCF baselines and outlooks. In addition, the first phase of the Land-use Review (the gathering of evidence and data) will report in Q3 2022. Its findings will inform the second phase of the Land-use Review (policies and measures), which in turn will provide a strong basis for identifying actions for this sector.

In reaching a decision on the Sectoral Emissions Ceilings, the Government had to factor in a large number of inputs and progress with climate action in well-understood sectors. Over the coming period of the second phase of the Land-use Review there will be an opportunity to review the economy-wide Carbon Budgets as necessary. This is in line with section 6D of the Act which provides for revision of the Carbon Budgets under certain circumstances, including where there are significant developments in scientific knowledge in relation to climate change.

By taking this approach, the Government has acted positively to give some certainty and direction to other sectors of the economy by providing Sectoral Emissions Ceilings for their sectors of the economy, and a clear target for emissions reduction. Further certainty will be provided following the settling of the emissions ceiling for the LULUCF sector as soon as may be, in conjunction with the second phase of the Land-use Review.
In parallel with the progress on Sectoral Emissions Ceilings, the Government continues to take active steps in relation to this sector and, in particular, is committed to peatland rehabilitation and enhanced delivery of afforestation. This will be realised through:

a) immediate measures in Budget 2023;

b) an enhanced new Forestry Programme which, amongst other elements, enables farmers to plant up to one hectare of native woodland;

c) a revamped regulatory system, including planning and legislation this autumn; and

d) continuing funding to the Enhanced Decommissioning Rehabilitation and Restoration Scheme (EDRRS) for 33,000 ha of post-production peatlands across the midlands.

5 Unallocated Savings in Second Carbon Budget Period (2026-2030)

The Sectoral Emissions Ceilings assume 5.25 MtCO₂ eq. in annual unallocated savings for the period 2026 to 2030 (i.e. the second carbon budgetary period).

This reflects the recognition in the Programme for Government¹⁰ that, in setting the second carbon budget for 2026-2030 it will not be possible to identify all the emerging technologies, changing scientific consensus or policies to meet our full ambition. This will require a further allocation within the overall carbon budget, subject to intense evaluation. Consistent with the Programme for Government position, section 4(3)(b) of the Act provides that the roadmap of actions contained in a climate action plan can set out an overview of the policies and, to the extent feasible, measures, that, in the Minister’s opinion, will be required for the second budget period in a carbon budget programme.

This approach has been reflected in the Climate Action Plan 2021 by distinguishing between Core Measures and Further Measures, with the Further Measures having not yet crystallized at this stage and requiring evaluation to identify their mitigation potential, cost, feasibility, and fairness ahead of their conversion into specific measures for the second budgetary period.

The Minister intends to fully allocate the unallocated savings on a whole-of-economy basis as soon as possible so as to ensure the putting in place of the necessary policies, measures and actions ahead of the second carbon budgetary period (2026 – 2030).

¹⁰ Pg. 32 [https://www.gov.ie/en/publication/7e05d-programme-for-government-our-shared-future/]
6 Ministerial Responsibility for the Sectoral Emissions Ceilings

On 28 July 2022, Government agreed the initial allocation of Ministerial responsibility for the Sectoral Emissions Ceilings as follows:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Minister with Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>Minister for the Environment, Climate and Communications</td>
</tr>
<tr>
<td>Transport</td>
<td>Minister for Transport</td>
</tr>
<tr>
<td>Residential Buildings</td>
<td>Minister for the Environment, Climate and Communications</td>
</tr>
<tr>
<td>Industry</td>
<td>Minister for Enterprise, Trade and Employment</td>
</tr>
<tr>
<td>Commercial Buildings</td>
<td>Minister for Enterprise, Trade and Employment</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Minister for Agriculture, Food and the Marine</td>
</tr>
<tr>
<td>LULUCF</td>
<td>Minister for Agriculture, Food and the Marine, coordinating with the Minister for Housing, Local Government and Heritage</td>
</tr>
<tr>
<td>Public Sector</td>
<td>Minister the Environment, Climate and Communications, with the Minister for Public Expenditure and Reform to take a joint coordinating role across various Departments (Hospitals – Minister for Health, and Schools – Minister for Education)</td>
</tr>
<tr>
<td>Other (F-Gases, Waste &amp; Petroleum Refining)</td>
<td>Minister for the Environment, Climate and Communications</td>
</tr>
</tbody>
</table>

The Minister intends to undertake a review of the Ministerial accountability framework for the Sectoral Emissions Ceilings within six months to ensure an optimal enduring approach to this vital aspect of climate governance.

7 Climate Action Plans and Sectoral Emissions Ceilings

Climate Action Plan 2021 and its accompanying Annex of Actions provide a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030. The Plan lists actions needed to deliver on our climate targets. Prior to the finalisation of the Sectoral Emissions Ceilings, it had set indicative ranges of emissions reductions for each sector of the economy. It will be updated annually to ensure alignment with our legally binding economy-wide Carbon Budgets and Sectoral Emissions Ceilings.
The next Climate Action Plan is due to be published by the end of 2022. It will reflect the Carbon Budgets and Sectoral Emissions Ceilings for the relevant sectors and provide a roadmap of actions to ensure compliance.