

JANUARY 2023

The Government has published the <u>Climate Action Plan 2023</u> ("CAP23"), a roadmap for meeting Ireland's emissions reduction requirements.

CAP23 is structured to identify key measures in each sector of the economy. Targets / KPIs are given for 2025 and 2030, as well as the period 2031-2035. Each measure has a series of actions to be taken in 2023, 2024 and 2025.

Altogether, 180 actions are identified for 2023. What should entities involved in infrastructure development, construction and industry look out for this year?

A Roadmap to meet Emissions Targets

Ireland's 2030 target has not changed since CAP21. Under law, the State commits to reduce emissions by 51% as against 2018. The 2050 target is to reach net zero.

Within this framework, CAP23 is intended as a roadmap to meet the <u>sectoral emissions ceilings</u> which have been set in the <u>carbon budget programme</u>, summarised in the table.

An illustration of the challenge this decade is that electricity sector emissions fell by 45% between 2005 and 2020. That sector is now asked to decrease by 75% in 2030 compared to 2018. This is one of the more advanced sectors along the decarbonisation pathway, and its further growth is required for decarbonisation of transport, buildings and industry.

CAP23 therefore aptly states that the scale of the challenge is immense and requires policies to be moved from an 'end of decade' target trajectory to a 'remaining carbon budget' target.

SECTOR	REDUCTION
Electricity	75%
Transport	50%
Buildings (Commercial and public)	45%
Buildings (Residential)	40%
Industry	35%
Agriculture	25%
Other**	50%

THE DELIVERY OF CAP23 IS EXPECTED TO INCLUDE INVESTMENT OF APPROXIMATELY:

€36 BILLION

€42 BILLION

€31 BILLION

Investment

The Government's preliminary analysis estimates that delivery of CAP23 will mean mobilisation of around €119 billion of incremental and redirected capital investment in low-carbon technologies and infrastructure in the period 2022-2030.

This is expected to include investment of around €36 billion in electricity, €42 billion in transport and €31 billion in buildings. The Government suggests the most significant share of capital could flow into EV cars, renewables, and transmission and distribution system upgrades.

CAP23 states that climate action is supported by Ireland's €165 billion <u>National Development Plan</u> and <u>National Recovery and</u> <u>Resilience Plan</u>.

Electricity

Key Target: As under CAP21, it is intended to meet up to 80% of electricity consumption from renewable power by 2030, around a doubling of current levels. In the spirit of shifting from the 'end of decade' target alone, there is a 2025 target of 50%. 27 key actions are identified for 2023.

Installed Renewables Capacity: CAP23 commits to 22GW of new renewable capacity by 2030, a very significant rise from 15GW in CAP21. This breaks down as follows:

Offshore Wind: 5GW remains the target, but an additional 2GW is sought, earmarked for green hydrogen production.

Onshore Wind: 9GW, up from 8GW in CAP21. The 2025 target is 6GW.

Solar: 8 GW, a significant leap from 1.5-2.5 GW in CAP21, reflective of the EU direction under REPowerEU. The 2025 target is 5GW.

An additional 22GW by 2030 would represent a five-fold increase of current renewable capacity. Accommodating 22GW on a small island system will require an unprecedented level of investment in transmission infrastructure and, to avoid unacceptable levels of curtailment, significant investment in interconnection and storage. Compliance with Article 13 of <u>Regulation (EU) 2019/943</u>, and facilitating a swift permit-granting process, would also contribute to the regulatory certainty critical to securing new capacity.

Infrastructure: It is therefore positive to see the statement that a hitherto unseen level of electricity network upgrades and construction will be required, as a minimum. Revision of <u>Shaping our Electricity Future</u> is to complete in 2023.

Removal of barriers to hybrid connections and private wires are concrete, achievable actions that could significantly boost volumes of renewable energy in Ireland. Though they did not get checked off the CAP21 list of actions, they are now in the 2023 list. The increased focus on solar may help to expedite matters, as CAP23 pins solar potential on multi-activity sites, off grid solutions, existing windfarm connections, private wires, and use of brownfield sites and infrastructure corridors.

REPowerEU is reflected in the intent to align planning and permitting to support accelerated renewable energy development and to ensure that projects, and associated infrastructure, are considered to be in the overriding public interest. It is to be implemented through review of the Planning and Development Acts. Actions for Q1 2023 include establishing an Accelerating Renewable Energy Taskforce and developing a grid connection policy. It is intended to enable use of the public road and potentially rail networks for routing new public and private electricity circuits, though a timescale is not identified.

Wind Energy Development Guidelines for onshore renewables, previously scheduled for 2023, are to be published in 2024. The Renewable Electricity Spatial Policy Framework and roadmap for Regional Renewable Electricity Strategies are expected in 2023.

The Maritime Area Regulatory Authority is to start its consenting process in 2023 and be fully operational in 2024. The Offshore Wind Delivery Taskforce is to publish a systemwide plan for offshore energy in 2023. DECC is to complete economic and spatial analysis for a roadmap for the enduring offshore energy regime in 2024.

Development of transitional and enduring market arrangements for system services is timetabled, as is publication of a storage policy framework and review of the regulatory treatment of storage.

Construction of the North-South interconnection is to finish by 2026.

Demand Management and Flexibility: The target remains that 20-30% of system demand is flexible by 2030. (The 2025 target is 15-20%). DECC is to establish a Smart Energy Services Working Group in 2023. The Commission for Regulation of Utilities is to complete a Demand Side Strategy and Implementation Plan in 2023. It is to implement Dynamic Green Electricity tariffs in 2024 to incentivise use at times of high wind and solar generation. The National Smart Metering Programme is to replace over 2.4 million electricity meters by end of 2024. Tasks are identified for ESBN, including enabling distributed flexible customers to participate in wholesale and system services markets in 2024.

Large Energy Users: Note that an enhanced emissions reporting framework for electricity emissions for LEUs is to be developed in 2023 and implemented in 2024. CAP23 states that LEUs will need to deliver high levels of flexibility across time and geographical locations, and match consumption with renewable energy generation on an hourly basis. Notable too is the statement that more granular certification processes will be required, including 'time stamped' guarantees of origin.

FIVEFOLD INCREASE OF NEW RENEWABLE CAPACITY BY 2030







Built Environment

Targets: As against 2018, sectoral emissions ceilings require a 40% decrease in emissions from residential buildings, and a 45% decrease from commercial buildings, by 2030. (The 2025 target for both is 20%.)

So far, the reductions achieved are -0.62% from residential buildings and -2.76% from commercial buildings. This means that significant and urgent reduction in use of all fossil fuels to heat buildings is needed, as well as a major expansion in retrofit activity.

There are 39 key actions for 2023. Significant reliance is placed on the improvement of standards anticipated to be driven by the Fit for 55 amendments to the Energy Performance of Buildings Directive, Energy Efficiency Directive and Construction Products Regulation.

Standards and Regulations: The 2030 target is for all new buildings to be ZEB standard, with 280,000 dwellings using heat pumps. As regards the residential sector, in 2023 we should expect a review of Part L (Conservation of Fuel and Energy) of the Building Regulations and publication of a roadmap to phase out fossil fuel heating.

AS AGAINST 2018, SECTORAL EMISSIONS CEILINGS REQUIRE A





COMMERCIAL BUILDINGS

Residential Retrofit: As in the National Retrofit Plan, the 2030 target is for 500,000 dwellings to be retrofitted to BER B2, and 400,000 to use heat pumps. Actions for 2023 revolve around continued rollout of retrofit schemes, supporting low-cost finance and tax incentives for small landlords, and boosting supply chains, skills and standards.

Decarbonisation of Heating: The National Heat Study identified that district heating could, in time, provide as much as 50% of building heat demand. Volume targets are set for residential and commercial / public sector buildings for district heating and heating from renewable gases delivered through agriculture-based supply chains. Demand reduction is also envisaged through energy efficiency responses.

Actions in the residential sector for 2023 include publishing a National Heat Policy Statement, accelerating delivery of district heating schemes, implementing recommendations of the District Heating Steering Group, and publishing a geothermal policy statement.

Actions in the commercial sector include developing a roadmap for long-term decarbonisation.

Actions in the public sector include gathering data for a Public Sector Building Stock Plan and rolling out the approach to retrofitting as part of the Public Sector Pathfinder Programme.

Construction & Industry

Construction: In addition to the section on Built Environment, CAP23 sections on the Public Sector, Industry and the Circular Economy include measures aimed at the construction industry.

Public Sector Leading by Example: The public sector is to take specific action to decarbonise its buildings, transport, waste and energy usage. Actions for 2023 include delivery of an HSE Climate Action and Sustainability Strategy 2022-2050, as well as an overall strategy for achieving 51% emissions reductions and 50% improvement in energy efficiency by 2030.

We should expect a 2023 update to <u>Green Tenders: an Action Plan on Green</u> <u>Public Procurement</u>. The Cement Task Force is to submit to Government a public procurement policy by no later than Q2 2023 to help incorporate low carbon construction methods and materials in public projects. By 2025, public bodies shall specify low carbon construction methods and low carbon cement material for construction projects.

Industry: Key targets for 2030 are reaching a 70-75% share of carbon neutral heating, decreasing embodied carbon in construction materials by at least 30% for materials produced and used in Ireland, reducing fossil fuel demand by 10% through energy efficient measures, and increasing use of zero emission gas to at least 2.1 TWh. So far, emissions from industry have risen by 1.4% since 2018, increasing the challenge of meeting 2030 goals.

The 14 actions for Industry in 2023 include publishing a report on action to decrease embodied carbon in construction materials. In 2025, SEAI is to begin work on an embodied carbon building rating calculation methodology, taking account of the Construction Products Regulation and Energy Performance of Buildings Directive.

Other 2023 actions include feasibility assessments on CCS and development of a roadmap for green hydrogen use. Several actions follow into 2024, when it is intended to implement a revised Support Scheme for Renewable Heat and a Decarbonisation Roadmap for Industrial Heat, and to establish a Heat and Built Environment Acceleration Taskforce.

The Circular Economy: CAP23 states that Ireland's material consumption is well above the EU average, Ireland having a circularity rate of 1.8% as compared to the EU average of 12.8%. Priority areas for prevention planning include construction and commercial waste. The Circular Economy and Miscellaneous Provisions Act 2022 is said to underpin Ireland's shift from 'take-make-waste' towards a circular economy.

There are 11 actions for 2023, including publication of a second Circular Economy Strategy, establishment of a Circular Economy Innovation Scheme, and phased introduction of levies on single-use disposable items.

1.8% 12.8%

IRELAND'S CIRULARITY RATE IS: EU CIRULARITY RATE AVERAGE IS:

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Transport

Targets: There is an intent to reframe the pathway in CAP21 under the Avoid-Shift-Improve Framework, further elaborated in CAP23. The following 2030 targets, measured against 2018 levels, are higher than in CAP21.

'Avoid' targets include a 20% reduction in total vehicle kilometres travelled and a 50% reduction in fuel usage.

'Shift' targets include a 50% increase in daily active travel journeys and a 130% increase in daily public transport journeys.

'Improve' targets set percentage shares for low fossil public and private vehicles, including that 100% of new car registrations should be EVs.

Interim targets are also given for 2025, including in relation to biofuel blend rates. 67 key actions are identified in the transport sector for 2023.

Public Transport: 2023 actions focus on continuing programmes of work: advancing <u>BusConnects</u> in five cities, <u>MetroLink, DART+</u>, <u>Cork Area Commuter Rail Programme</u>, PSO electric bus fleet procurement including depot charging upgrades, and investment in passenger freight rail. Several actions are identified for the development of public transport coverage, including prioritisation of NTA <u>Connecting Ireland</u> and new town services. Several actions are identified for smart, shared and integrated mobility including rollout of 'eMobility Hubs' in five cities, and establishment of a new Unit in the Department of Transport to engage with shared mobility stakeholders. An action for the public sector is supporting development of a Public Procurement Framework for charging infrastructure for public sector fleets.

Electrification: A high-powered charging strategy is to be published in 2023 and an en route high-powered charging network rolled out in 2024. There is a commitment to undertake planning and enabling works for Alternative Fuel Infrastructure Regulation high-power charging requirements on the TEN-T network. Other 2023 actions include advancing a Destination Charge Point Scheme and a Residential Charge Point Scheme and shared charging app pilot. Actions will be led by the recently established <u>Zero</u> <u>Emission Vehicles Ireland</u> Office. **Renewable Fuels:** Actions for 2023 include consultation on a National Policy Framework on Alternative Fuels, and a Renewable Transport Fuel Policy Statement for 2023-2025. 2023 actions also reference rollout of <u>Project Causeway</u> and <u>Green Connect</u> Compressed Natural Gas refuelling. Transition to E10 petrol is said to be envisaged by 2023. The outcome of research on the safety regulation and interoperability of green hydrogen refuelling on the island of Ireland is also anticipated in 2023.

Governance: A Project Management Office will be established to support the work of the Sustainable Mobility Policy Leadership Group and the progression of its Pathfinder Programme, which supports innovative projects.

Strategic Planning: 2023 actions include bringing forward new legislation to extend the remit of the <u>National Transport Authority</u> to all cities, with planning continuing to be led through Metropolitan Area Transport Strategies.

Wider Strategy: In line with the Avoid-Shift-Improve approach, other actions are identified to pursue enhanced spatial and land use planning; demand management strategy; road space reallocation; and active travel infrastructure.

include a **50% increase**

increase in daily public

in daily active travel

transport journeys.

iournevs and a **130%**

'AVOID' TARGETS

include a **20%** reduction in total vehicle kilometres travelled and a 50% reduction in fuel usage.

'SHIFT' TARGETS 'IMPROVE' TARGETS

set percentage shares for low fossil public and private vehicles, including that **100% of new car registrations should be EVs**.

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Other Key Areas

Just Transition: A Just Transition Commission is to be established to input to climate policy. Further actions for 2023 concern fuel poverty and education and training. A dedicated section deals with Just Transition in the Midlands Region, where 56 Just Transition Fund Projects will continue until 2024 and €169 million of EU Just Transition Funding has been allocated up to 2030.

Carbon Pricing: As set out in CAP21, the carbon tax, which is to reach €100/tonne by 2030, is forecast to raise €9.5 billion for retrofits, just transition and promotion of sustainable agriculture. Actions for 2023 include considering a number of reforms to the taxation system from an environmental perspective and considering further opportunities for issuing new Irish Sovereign Green Bonds.

Agriculture: A main target for 2030 is to expand production of agri-centric biomethane to 5.7 TWh/ annum of biomethane in 2030, up from 1.6 TWh in CAP21. This is estimated to require the construction of 150 to 200 AD plants of scale. 15 actions are identified for 2023, including development of a National Biomethane Strategy. The Renewable Heat Obligation 2024 is flagged as a support.

Land Use, Land Use Change & Forestry: While LULUCF is a net sink for emissions across the EU, in Ireland it is a source of emissions. CAP23 states that the understanding of the sector has fundamentally changed since the publication of CAP21. A sectoral emission ceiling is yet to be agreed. There are 18 actions for 2023, including developing, assessing and adopting a Forestry Programme 2023-27 and Coillte's Strategic Vision, launching the Common Agricultural Policy Strategic Plan, and continuing Bord na Móna programmes aimed at peatland restoration.

The Marine Environment: Planned outcomes include a comprehensive planning and consenting regime for the marine environment to support development of offshore renewable energy, designated Special Areas of Conservation and Special Protection Areas. There are 16 actions for 2023 including establishing the Maritime Area Regulatory Authority, adopting a statutory Marine Planning Policy Statement, and developing Marine Planning Guidelines to support decision making by An Bord Pleanála. Legislation for designation and management of Marine Protected Areas is to be enacted as early as possible in 2023, and an Ocean Environment Policy Statement adopted.

International Climate Action: Ireland is committed to provide €225 million climate financing to developing countries by 2025 and is active in several international initiatives.

Adaptation: Updating the 2018 National Adaptation Framework is described as a priority for 2023. Within this framework, three of the Sectoral Adaptation Plans relate to critical infrastructure, 19 actions are identified for 2023.

A focused year ahead

Significant work is involved in the actions identified. Although there is still low-hanging fruit, many actions contemplate complex operational change and delivery will hinge on adequate public sector resourcing and sustained stakeholder collaboration. Regulatory certainty is critical to attracting the private sector involvement required. EU commitment to climate action, evident in new legislation, will be a strong impetus to deliver on CAP23.

CAP23 also looks at Citizen Engagement. National Dialogue on Climate Action in 2022 indicated that nearly all Irish people believe that climate change is happening. 9 in 10 are worried about climate change, and 8 in 10 say the Government is extremely important in delivering climate action. People identified better infrastructure in areas like energy and transport as a priority. Effective communication around what is needed to deliver this - such as planning reform and investment in State infrastructure - will be important to enable Government to move forward. Equally, fair risk allocation, and faithful implementation of the legislation designed to achieve this, will be needed to avoid unnecessary delay.

> PEOPLE ARE WORRIED ABOUT CLIMATE CHANGE

> > PEOPLE SAY THE GOVERNMENT IS EXTREMELY IMPORTANT IN DELIVERING CLIMATE ACTION

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