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Environment and Climate Action Plan Delivery Division
Department of the Environment, Climate and Communications
29-31 Adelaide Road
Dublin 2

Climate Action Plan 2023

Cork Chamber Submission

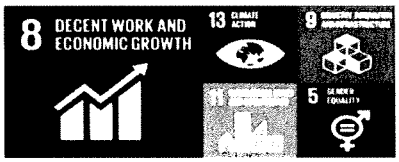
Re: Call for Expert Evidence – Climate Action Plan 2023

To whom it may concern,

Cork Chamber represents 1,200 members together employing 100,000 people throughout the city, metropolitan area and county. Our vision is to be a world-leading Chamber of Commerce, delivering on a progressive economic, social and sustainability agenda at the heart of a vibrant business community.

As such, we are determined to ensure that our over 200-year-old Chamber continues to create a positive legacy.

Our direction is guided by our formal pledge to uphold the United Nations Sustainable Development Goals, five of which have been identified by the Chambers Ireland network.



Cork Chamber welcome this opportunity to contribute to Ireland's next Climate Action Plan and we wish to offer a series of comments and advice on the matter.

We attach our submission below.

Sincerely,

[redacted]

1. Overarching and crosscutting issues

1.1 Higher population growth

With recent figures from the CSO showing that Ireland's population is growing at a faster rate than projected in the National Planning Framework, all sectoral plans need to be revised to meet this challenge with increased efforts and investment across all sectors, but especially transport and housing if decarbonisation targets are to be met.

This trend has implications across the Climate Action Plan, National Planning Framework and National Development Plan in terms of the need to provide increased investment and measures for compact growth and housing, sustainable transport, and industry and infrastructure decarbonisation in the context of a growing economy.

Recognising the reality of higher population growth early and revising the Climate Action measures accordingly, is essential to having a realistic chance of meeting the sectoral emission ceiling targets across all sectors.

1.2 Reform of the planning system

Reform of the planning system is a cross-cutting issue that is central to delivering sectoral emissions reductions because it is a key enabler for new renewable energy, transport, housing and industrial development.

The Programme for Government commitment to introduce an Environmental and Planning Court which can fast-track hearings related to key infrastructure projects and efficiently adjudicate on the merits of the cases before it, must be established. Certainty on timelines for planning decisions needs to be delivered for emissions reductions to be met across sectors. The existing timelines within the planning and judicial system are delaying developments, with many deadlines for decisions missed by months at a time.

Resourcing an effective planning and permit system for the renewable energy sector through an environmental and planning court would help reduce lengthy decision-making processes and support faster grid connection. Accompanying increased investment in An Bord Pleanála and the National Parks and Wildlife Service is essential to creating a more effective and efficient planning system. Ensuring a speedy judicial process is a key enabler for meeting 2030 sectoral emissions targets.

1.3 Emission trends

Recent figures from the EPA show that overall national emissions increased by 4.7% between 2020 and 2021, and by 1% over 2019 levels demonstrating a failure to decouple economic growth from greenhouse gas emissions. The overarching mission of the Climate Action Plan is to significantly reduce emissions annually to 2030. Given the failure to achieve this in 2021, a wholesale review of the level of effort and investment included in the plan with a ramping up in key areas that can deliver emissions reductions in the period to 2030 is required to have any chance of achieving the 2030 target.

The EPA reported that in 2021, Ireland's provisional GHG emissions were estimated to be 61.53 million tonnes carbon dioxide equivalent (Mt CO2eq), which is 4.7% higher (or 2.76 Mt CO2 eq) than emissions in 2020 (58.77 Mt CO2 eq). There was a decrease of 3.4% in emissions reported for 2020 compared to 2019. Emissions are over 1% higher than pre-pandemic 2019 figures.

In 2021 national total emissions excluding Land Use, Land Use Change and Forestry (LULUCF) increased by 4.7%, emissions in the stationary ETS sector increased by 15.2% and emissions under the ESR (Effort Sharing Regulation) increased by 1.6%. When LULUCF is included, total national emissions increased by 5.5%.

Increased emissions in 2021 compared to 2020 were observed in the largest sectors except for residential, waste and commercial and public services. These four sectors showed decreases in emissions (-4.9%, -4.5%, -3.0% and -3.8% respectively).

1.4 Security of supply

The decarbonisation of all sectors of the economy is essential to creating a resilient economy and society and essential to meet our targets to 2030 and 2050 but decarbonisation must be accompanied by assurance of security of supply for society and business. With the war in Ukraine and the ensuing energy crisis, there is additional urgency to decarbonise but also to ensure a secure supply of energy which may involve difficult decisions in the short term. The continuing role of varied sources of supply of gas, including renewable gas, will have to play in ensuring energy security should be central to decarbonisation planning for the energy and industrial sectors. A renewed focus on balancing sustainability, affordability and security of supply while driving decarbonisation should be at the core of the new plan.

1.5 EU climate neutral mission cities

The designation of Cork and Dublin as EU mission cities for climate neutrality by 2030 opens up a myriad of opportunities to tap increased EU and private sector investment to accelerate the transition to Net Zero across all sectors in these cities. This should be exploited as a lever for both Cork and Dublin to draw down increased EU investment and lending to decarbonise housing, transport and industry and accelerate the transition to a zero-carbon future. An all of government approach should be taken to capitalising on this opportunity.

1.6 Balanced regional growth

Balanced regional growth is central to delivering national decarbonisation, but early indications from progress on the National Planning Framework show that development continues to be overly concentrated in the greater Dublin area. This is concerning given investment priorities in the NDP are directly linked to the balanced regional growth envisaged in the NPF. The consequences of this trend continuing would lead to both investment failing to be targeted where it is most needed for decarbonisation, but will also make it much more difficult and expensive to decarbonise unplanned expansion of population, leading to further urban sprawl, congestion and higher emissions.

1.7 Carbon tax ringfencing

Taxation can be a key measure to assist decarbonisation across sectors but providing a signal to industry and the public that these revenues will be used to drive the transition to net zero is essential. Exchequer returns from the carbon tax should be ringfenced and strategically invested in green infrastructure, public transport and to fund investment in green transition measures.

1.8 Brownfield development and acceleration of investment in public transport

Given the scale of transport emissions and the challenge in achieving a 75% reduction in emissions from the transport sector, acceleration of investment in mass transit – including bringing forward commencement of light rail in Cork – will be required to achieve the 2030 target. Full electrification and extension of suburban rail and buses should be the target by 2030 for Cork and other cities, rather than a mix of low emission and full electric vehicles.

In tandem with this, delivering affordable high-density high-quality housing on brownfield sites close to city centres will be key to achieving modal shift, with proximity obviating the need for the use of cars and encouraging the use of public transport and active travel. Without this change in housing patterns, it is hard to see how public transport systems and active travel can achieve the critical mass change in behaviour to reduce private car use.

With a growing population, a failure to deliver higher densities near and in city centres will make it impossible to deliver on transport emission cuts, even with large investments in public transport infrastructure and services. Linked to this is the current unviability of development of brownfield sites for high density development which Cork Chamber have published two reports on[1] [2].

To deliver more compact and sustainable spatial patterns requires brownfield development to be viable. City centre brownfield sites, such as those at the docklands in Cork, should be designated for accelerated tax reliefs over a time-limited period to unlock high density development. A Vienna-style model of development through an urban finance fund should also be adopted to deliver affordable high-density housing with low-cost land, low interest loans alongside capped rents and high energy performance buildings. A package of measures to ensure the viability of brownfield high density development in Ireland's cities is central to delivering the compact growth on which the achievement of our emissions targets depends.

[1] https://www.corkchamber.ie/wp-content/uploads/2022/03/Viability-and-Affordability-of-Apartment-Building-in-Cork-City.pdf

[2] https://www.corkchamber.ie/wp-content/uploads/2022/03/Apartment-Viability-Report-FINAL-13-July-2021.pdf

2. Energy and Renewables

2.1 Speeding up delivery and deployment of renewables

Ireland has had much success in decarbonising electricity through the deployment of onshore wind, but to reach 2030 targets and to enable the decarbonisation of heat and transport will require accelerated delivery of renewables supply into our energy system. Key to this is cutting red tape and eliminating delays in the planning system through the rapid establishment of an Environmental and Planning Court and other measures to secure certainty on timelines in the planning system as referenced above. A properly resourced MARA that can hit the ground running and can process licencing and other permitting effectively and efficiently is required for us to meet our 2030 targets.

2.2 "Go to zones" for renewable energy

REPowerEU calls for the establishment of "go to zones" to improve the planning system for renewable energy. It is essential that these recommendations are implemented to accelerate the growth of the market, provide certainty on planning and timescales and incentivise industries to locate near production to reduce transmission losses and costs for electricity and hydrogen.

2.3 Increasing renewable generation - Renewable Energy Relief

A key measure that can drive increased renewable generation is the reintroduction of the relief for investment in renewable energy generation (s486B TCA 97) which ceased in 2014 which encouraged corporate investment.

2.4 Renewable Energy Hubs

With its massive offshore wind potential and world-leading port Cork should be designated as a Hub for Renewable Energy to receive targeted investment, incentives and tax breaks to build out supporting infrastructure and accelerate the delivery of offshore renewables.

Cork Harbour has the capacity to become an unparalleled hub for floating offshore wind energy in the Celtic Sea from 2025, presenting an opportunity for a new industrial sector to emerge in the region. It presents an unparalleled opportunity, not just for electricity generation, but for the creation of green hydrogen. Government must enact key policy improvements to unleash the potential of floating offshore wind as a driver for Ireland's Climate Action targets, or risk losing out on significant private sector investment.

The European Commission estimates that Europe needs to produce 450GW of offshore wind energy by 2050. A resource assessment study of the Celtic Sea estimates that there is potential for up to 50GW of floating offshore wind capacity. Cork Harbour is already in the process of being transformed into an offshore renewables hub by the private sector in a bid to realise this potential, with circa €200m of investments already underway by companies such as Green Rebel Marine, Mainport, Doyle Shipping Group (DSG), Simply Blue Energy, DP Energy and the Port of Cork.

As one of the largest natural harbours in the world, with extensive maritime and energy infrastructure, the harbour is positioned in close proximity to the Celtic Sea, and ideally located to support developments off the east, south and west coasts as well as projects off the coasts of France and the UK. Government must support emerging sectors and the potential of locations and our natural resources to catalyse national energy security, resilience and our achieving of RE targets.

The development of green hydrogen production facilities can create a route to market from our wind resources, allowing the country to capitalise on its economic potential while addressing climate and energy security concerns. For solar and onshore wind farms without grid connection, the electricity generated could be converted to hydrogen and supply a hydrogen valley. Hydrogen production should work in parallel with electricity production.

The ultimate goal is to connect Ireland with the EU and transport hydrogen via the Hydrogen Backbone. It is vital that this goal is prioritised to capture Ireland's full offshore wind recourses[3].

2.5 Port Capital Allowances

Port infrastructure will be central to enabling the deployment and maintenance of offshore wind farms. Capital allowances for new port infrastructure linked to offshore renewable energy deployment should be introduced to incentivise investment in new infrastructure.

2.6 Offshore wind target increase by 2030

The offshore wind target for 2030 has increased from 5 GW to 7 GW under the sectoral emissions ceilings. However, additional resources and commitments should be made to scale up and speed up our progress. The Celtic Sea alone has potential for 50GW of offshore wind. To put our target in context, the UK is set for 40GW by 2030, Germany for 40GW by 2040 and France for 40GW by 2050.

2.7 Indexation of RESS & ORESS

Ireland is competing internationally to attract investment in renewables. This competition has been accentuated by the energy crisis driven by the war in Ukraine. To continue to be competitive for international investment, indexation is essential for forthcoming RESS and ORESS rounds and to continue to build certainty.

2.8 Integrated strategy for hydrogen and offshore wind

To achieve the potential for offshore wind and clean hydrogen we need to join the dots and create an integrated strategy that connects the hydrogen strategy with its equivalent for offshore wind.

2.9 Role of renewable gas

The European Commission has identified that a decarbonised gas network is key to achieving climate neutrality by 2050 and the Commission predicts only 50% of final energy needs will be met by electricity, meaning decarbonised fuels must meet the remaining 50% share. It forecasts that 20% will be met through networked renewable gas[4] and Ireland's gas network can play a crucial role in helping Ireland to achieve its Net Zero 2050 ambition.

The more Ireland electrifies, the more critical reliable gas-powered electricity becomes to Ireland's energy security. Ireland can achieve Net Zero 2050 by using a mix of electricity and renewable gases, leveraging

[3] https://ehb.eu/page/european-hydrogen-backbone-maps
[4] EU Energy System Integration Strategy

existing assets rather than pursuing electrification on its own. Using biomethane and/or hydrogen would also avoid the cost of deep retrofitting homes near the gas network and support hard to decarbonise sectors such as agriculture and transport, as well as high-heat industries that are highly dependent on gas.

Hydrogen is a zero-carbon gas, meaning it emits no carbon upon combustion. Ireland's gas network is one of the safest and most modern 'hydrogen-ready' gas networks in Europe. Blends of up to 20% hydrogen could be transported on the existing gas network and used in existing appliances, technology and vehicles, with minimal disruption and upfront cost to customers. Pure 100% hydrogen can be transported with some modifications.

2.10 National hydrogen export target

There is a growing market for green hydrogen and with our offshore wind resources, prioritising the exportation of Condensed Green Hydrogen by 2030 in the National Hydrogen policy is needed.

2.11 Energy storage and demand response

Energy storage including electricity and hydrogen will play a key role in balancing as our energy supply is decarbonised and renewables take an increasing share of electricity production on the grid. A wide variety of energy storage options should be considered, but given our large offshore wind resource and the potential for that to generate clean hydrogen as a multi-use energy storage medium, fuel for industry and transport and feedstock for agricultural fertilisers, hydrogen investment should be prioritised. The establishment of renewable energy hubs and hydrogen clusters in locations like Cork can provide security and balancing through storage while also meeting a range of other decarbonisation needs.

Demand response is also important. Large energy users should be incentivised to engage in demand response to increase flexibility on the grid. Incentivisation rather than penalties should be central to approaches to shifting load from peak demand times.

2.12 Microgeneration

Practical hurdles to domestic and commercial users introducing small scale solar photovoltaic supply as a source of microgeneration need to be monitored and adapted on a quarterly basis if we are to avoid a delayed rollout.

3. Enterprise

3.1 Decarbonising high temperature heat in industry

The generation of high-temperature heat for industrial use represents 25% of Ireland's industrial energy demand[5]. Hydrogen is well suited to generating high temperatures and decarbonising these hard-to-abate sectors including the cement industry, aluminium and distilleries. Developing hydrogen clusters and valleys in locations like Cork where there is a huge offshore wind resource is key to matching supply and demand and achieving economies of scale to decarbonise industry. It should form a key plank of the climate action plan.

3.2 Hydrogen valleys and sector synergies

The establishment of a hydrogen valley in Cork can create synergies between industry clusters, agriculture and our ports to fully support hydrogen use given the large offshore wind resource in close proximity. Costs can be reduced and large demand centres created by sharing infrastructure which would kickstart economies of scale, making it a viable fuel for decarbonising high temperature heat in industry. These hydrogen valleys would also stimulate economic growth, create employment and revenue in rural communities and act as a vehicle to attract investment.

3.3 Moving away from high embodied carbon products

The carbon footprint from the embedded energy of raw materials used for construction are often neglected in the appraisal and approval of development plans. While efforts are being made to decrease the carbon footprint of cement production, it is a significant source of global CO2 emissions equivalent to 8% of the global total in 2016. It would be prudent that all developments are mandatorily assessed to appraise the carbon footprint and embedded energy content, with mandatory compliance with environmental sustainability and green energy efficiency protocols a requirement for approval. The opportunity to reduce emissions using natural materials for example through use of hemp, and recycled materials, must be strategically pursued and supported through regulation and policy to ensure compliance and integration in large-scale developments.

The use of alternative and natural materials should form the basis of skills training in the construction sector. The use of these materials must be a strong focus in any publicly funded courses. Education and awareness will be instrumental in motivating change in practice. To stimulate the demand side, targeted tax incentives and a tax depreciation for sustainable office developments that use alternative low carbon materials, with this tax incentive/depreciation scaled by the percentage usage in the design and construction, would be a strong fiscal instrument.

3.4 Awareness raising and information on F-gases

There is a low level of awareness across industry on the role and impact of F-gases. A ramped-up information and engagement campaign across industrial sectors about the role and impact of F-gases and information on the more climate-friendly options, would assist in raising awareness and prompting action by companies, particularly SMEs to reduce the use of F-gases. A grant scheme to support the switch away from F-gases by businesses, particularly SMEs would enable the transition. There is a very low level of awareness of the

[5] https://www.fch.europa.eu/sites/default/files/file_attach/Brochure%20FCH%20Ireland%20%28ID%209473093%29.pdf

impact of these gases across industries. Informing decisionmakers and managers on both the opportunities and options in this area of action should be a key objective.

Incentives and supports to adapt and adopt F-Gas neutral production methods/ operations should be incorporated with a comprehensive assessment of scope 2 scope 3 emissions of businesses with expert support.

3.5 Opportunities to decarbonise enterprise sector – collective procurement

Our member research shows that sustainability is top of companies' agenda across all company sizes, but there is a gap between that interest and having the capacity and resources to decarbonise and deploy the new technologies. One measure to decarbonise enterprise would be for agencies like SEAI to support groups of businesses to collectively procure and install energy efficiency or renewable energy technologies like solar. This would reduce costs, administrative burden, and enable companies that do not have internal resources to examine and manage these investments to engage with a managed process that cuts costs and the administrative burden.

3.6 Carbon capture

Carbon capture and storage is mainly suitable for hard to abate sectors but should not interfere with primary efforts to transition where possible to clean and renewable sources of energy. CCS must not deter efforts, energy, or funding for businesses to meaningfully transition and to reach the full potential of what can be achieved via alternative operational practices and processes. The focus should be on exploring all avenues to renewable and efficiency technologies before exploring the need for carbon capture due to its high cost and the fact that the technology is immature. Specific use cases do exist in the cement and beverages industry for example, and pilot programmes should be supported to investigate its viability and effectiveness.

3.7 Upfront capital and de-risking moving to new low carbon technology

One of the key barriers to businesses moving to new low carbon technologies is the upfront capital investment in a new technology that their operations and management are unfamiliar with. The city of Aberdeen has pioneered a new system of leasing new low carbon equipment and technology to businesses, obviating the need for a large capital investment upfront. A similar scheme could be introduced here to reduce the capital burden on businesses, particularly SMEs, and spreading repayments over a number of years while the business generates savings from the introduction of those new technologies to pay the leasing fees.

3.8 Plant and machinery super deduction

A time limited 'super deduction' (up to 130% of capital expenditure incurred) should be introduced until December 2023 for the purchase of all plant and machinery and capital expenditure on buildings/ factories that receive a recognised accreditation for overall energy performance to incentive investment in energy efficient equipment and machinery.

3.9 Retail solar PV

There is a requirement to develop clear guidelines on solar PV for all business premises and provide new financial supports to help businesses invest in on-site energy generation (solar or wind). Practical hurdles to domestic and commercial users introducing small scale solar photovoltaic supply as a source of microgeneration need to be monitored and adapted on a quarterly basis if we are to avoid a delayed rollout.

3.10 Climate change risk assessment for companies

Awareness is the central barrier to businesses assessing and reducing the vulnerability of their operations to climate change risks. Enterprise Agencies should be tasked with developing a climate risk assessment toolkit and service to enable companies to examine their vulnerabilities to climate change impacts and inform to introduce solutions to reduce or eliminate the risks to their operations.

4. Built Environment

4.1 Addressing split incentives in rental properties

The first step to addressing split incentives for home energy upgrades for rental properties is a change in rental and tenure legislation to address the provision where landlords can evict tenants once they upgrade a rental property by a certain level of BER. This obviously disincentivises tenants from seeking improvements in their rental accommodation and creates an incentive to oppose any works that would deliver an increase in the energy performance of their property.

4.2 Helping SMEs upgrade efficiency of their buildings

One of the key barriers to businesses moving to new low carbon technologies is the upfront capital investment in a new technology that their operations and management are unfamiliar with. The city of Aberdeen has pioneered a new system of leasing new low carbon equipment and technology to businesses obviating the need for a large capital investment upfront. A similar scheme could be introduced here to reduce the capital burden on businesses, particularly SMEs, and spreading payments over a number of years while the business generates savings from the introduction of those new technologies to pay the leasing fees.

4.3 Additional supports for homeowner energy upgrades

A range of new measures are needed to enable homeowners to afford the upgrade of their homes to a higher energy standard. The Help to buy scheme should be extended to include 'help to insulate' on second hand homes alongside a new country wide "retrofitting scheme" aimed at modernising Ireland's housing stock with attention to households on the brink of living in energy poverty to support a just transition.

A reduced rate of stamp duty, or indeed an exemption from stamp duty, where a retrofit of a second-hand property has taken place within a specified time period after the initial purchase of the property should be introduced.

Additional 'green' tax reliefs in respect of Capital Gains Tax liabilities arising on the disposal of properties that have been retrofitted should be considered and new measures to incentivise both private individuals and the private business sector to invest in green properties are needed.

4.4 District heating and data centres

A major opportunity exists to use excess heat from data centres to heat homes and businesses. At the planning stage considering the location of data centres near heat centres that can tap into that excess heat and expanding the heat network to facilitate transfer and use of excess heat would be a welcome step. New developments of scale such as the Cork Docklands should be assessed for the opportunity to integrate district heating.

4.5 Skills shortage

Increased funding for apprenticeships should be introduced to meet the skills shortage with support for apprentices to gain hands-on experience while pursuing higher education with the support of their employer.

A new skills tax credit to incentivise employers to invest in training for workers with no or low qualifications and to upskill existing employees should be introduced.

4.6 Oil boiler replacement

Current grant levels to incentivise a move to heat pumps from oil boilers are inadequate given the high upfront capital cost that homeowners face for heat pump installation. Low interest loans with long repayment periods, and innovative leasing finance alongside grants should be introduced to enable homeowners to install low carbon heating systems to replace oil boilers.

4.7 Addressing Fuel Poverty

The current energy crisis has exacerbated energy poverty and enhanced the urgency in engaging households in energy efficiency measures. There are a number of schemes, grants, and low-cost loans for green energy home improvements available to homeowners. Several of these require upfront capital investment by the household. However, even where additional investment is not required, studies highlight limited uptake, particularly in deep retrofits, among lower income households due to requirement of upfront payments, ineligibility, lack of information or fear of disruption to everyday household activities.

To overcome this, grant assistance and tailored loans are required to offer supports to households to encourage engagement with energy upgrades. Additional household level face to face advice through the SEAI Community Energy Advisors would overcome information asymmetry barriers.

Currently, to avail of free retrofitting schemes households must be in receipt of social welfare payments. By establishing criteria solely on this basis, many experiencing energy poverty are excluded. It must be noted that energy poverty is a complex condition with various causal factors including but not limited to, energy availability, climatic variation, household composition, low levels of energy literacy and engagement in the energy market, high living costs, stock type and performance (particularly for the private rented sector), and personal vulnerability leading to high energy needs[6]. The criteria for both energy poverty and eligibility criteria for free retrofitting schemes need to be re-evaluated to take a more holistic approach, along with an updated National Energy Poverty Strategy.

[6] Social Watt, 2019. Report on the status quo of energy poverty and its mitigation in the EU.

5. Transport & Sustainable Mobility

5.1 Secure bike parking and attractiveness of active mobility

To improve the attractiveness of active mobility like cycling the provision of secured and covered bike shelters and parking in city and town centres should form a key part of cycling infrastructure. This is a key barrier to more of the population engaging in cycling.

5.2 Bus display updates

There is a continuing issue with buses listed on information displays scheduled to arrive, disappearing from those displays while passengers are waiting at the stop, with the scheduled bus failing to arrive without explanation. We understand that drivers are currently able to patch their bus out of the tracking system and this feature should be disabled, while a thorough examination of how buses frequently fail to arrive at stops when scheduled and displayed at the stop should be undertaken. This phenomenon is significantly undermining the switch to public transport on buses as it undermines trust in the service, creates uncertainty about journey times and alienates new users who are piloting switching from private transport. The certainty that a bus will arrive at the time displayed at a stop is essential.

5.3 Low or no interest loans for EV purchase

To bridge the affordability gap between ICEs and EVs, low-cost loans should be extended to car buyers to drive the transition to electric vehicles as suggested by the Climate Change Advisory Council. The CCAC point to the fact that EVs already have a lower lifetime cost to the owner than conventional vehicles for high kilometre drivers such as rural households, taxi drivers and commercial drivers. Overall emissions savings are greater when a high kilometre driver makes the switch to electric in comparison to a low kilometre driver.

5.4 Second hand electric vehicles

There is currently a shortage of supply of new electric vehicles due to rising demand. Mobilising the second-hand electric vehicle market is a key enabler to transitioning our national fleet to net zero. Measures should be introduced to encourage a market for second hand electric vehicles by way of tax incentives. Consider reducing the VAT rate on EVs to reduce the cost of these vehicles and make them a competitive greener choice.

5.5 Charging network

To support the roll out and uptake of EVs, more rapid deployment of fast charging infrastructure nationally is required, including both urban and rural areas. Rural areas must not be side-lined given the longer average commuting times and distances, as well as more challenging terrain, rural communities must be facilitated to make this transition. A comprehensive charging network is a necessity to convince motorists to switch to EVs.

5.6 EV target

The achievement of our transport emissions targets is predicated on the transformation of our private vehicle fleet to electric, with 845,000 private electric vehicles projected to be on the road by 2030. On current sales figures that would entail an average of around 100,000 electric vehicles being sold every year between now and 2030. At the end of May 2022 there were around 41,000 electric and plug-in hybrid vehicles on the road.

While the Chamber supports the transition to electric vehicles realism is needed on the electric vehicle target, even with an increasing population, reaching this target even at this early stage seems improbable. Only 8,646 purely electric vehicles were sold in the whole of 2021 accounting for just over 8% of total sales. Increased and accelerated investment in public transport, especially suburban rail, active travel and rural transport measures will be required for Ireland to come anywhere achieving a 75% cut in national transport emissions alongside additional incentives to increase the uptake of electric vehicles.

5.7 Excise duty on transport fuels

The excise duty for natural and renewable gases as transport fuels was set at the EU minimum rate in Budget 2015 for a period of eight years and is due to expire at the end of 2022. Aimed at addressing the price disparity between CNG (compressed natural gas) and conventional fuels such as diesel, this is key to accelerating the uptake of a lower carbon technology such as CNG. The low rate of excise duty for gas in transport should be extended to 2030. The UK's favourable excise duty is in place until 2032.

5.7 Hydrogen for freight transport

Heavy goods vehicles account for 15% of transport energy demand in Ireland today, but this is projected to rise to 30% by 2050[7]. Fuel cell electric vehicles (FCEV's) are the preferred low carbon solution, followed by hydrogen combustion, for decarbonising HGV's[8]. Dublin Bus and Translink have undertaken hydrogen fuel cell bus trials. There is also potentially a role for hydrogen in the long-distance train transport network. Hydrogen should be pursued as a viable long-term option for decarbonising freight and public transport.

5.8 Acceleration of investment in public transport

Given the scale of the challenge in achieving a 75% reduction in emissions from the transport sector, acceleration of investment in mass transit – including bringing forward commencement of light rail in Cork – will be required to achieve the 2030 target. Full electrification and extension of suburban rail and buses should be the target by 2030 for Cork and other cities, rather than a mix of low emission and full electric vehicles.

For example, accelerated investment in suburban rail electrification in the Cork region along with twin tracking and construction of eight new stations would deliver faster, more frequent, more sustainable services. Suburban rail is the fastest way to deliver sustainable mass transit in Cork and there are no barriers to delivering on the programme of investment pre-2025.

In tandem with this, delivering affordable high-density high-quality housing on brownfield sites close to city centres will be key to achieving modal shift, with proximity obviating the need for the use of cars and encouraging the use of public transport and active travel. Without this change in housing patterns, it is hard to see how public transport systems and active travel can achieve the critical mass change in behaviour to reduce private car use.

With a growing population, a failure to deliver higher densities near and in city centres will make it impossible to deliver on transport targets, even with large investments in public transport infrastructure and services.

[7] https://www.skillnetireland.ie/publication/the-role-of-green-hydrogen-in-irelands-energy-transition/
[8] https://www.sciencedirect.com/science/article/pii/S0360319922026404

Linked to this is the current unviability of development of brownfield sites for high density development. To deliver more compact and sustainable spatial patterns requires brownfield development to be viable. City centre brownfield sites, such as those at the docklands in Cork, should be designated for accelerated tax reliefs over a time-limited period to unlock high density development. A package of measures to ensure the viability of brownfield high density development in Ireland's cities is central to delivering the compact growth on which the achievement of our emissions targets depends.

6. Agriculture

6.1 Farm renewables including biomethane

Mobilising Ireland's anaerobic digestion resources, while ensuring principles of sustainability and circularity with regards to feedstock selection, is an obvious solution to enhancing the industry's sustainability, reducing GHG emissions, providing an additional source of revenue to farmers, while decarbonising industrial heat and transport. The immense value of creating better and more sustainable organic fertilizers in the form of digestate further illuminates the potential awaiting the nation in transitioning to a circular bioeconomy. By utilising and capitalising on currently under-utilised and often wasted resources, the country can make its mark globally as a leader in the bioeconomy. Please see Cork Chamber's Anaerobic Digestion report[9], which extensively deals with this topic.

Utilising Ireland's cooperative model, which has remained an integral part of the Irish dairy sector, would provide security of feedstock to plants while enable the large-scale commercial development of bioenergy production. Additional projects like the GRAZE Gas project in Mitchelstown Co., Cork which follows a model similar to dairy cooperatives and is funded under the Climate Action Fund, should be sought out and encouraged. To encourage adoption rates of on-farm AD cooperatives the following should be implemented:

- Introduce tax incentives for farmers and landowners to make their land available to deliver renewable energy.
- Devise a Biomethane support scheme, with appropriate supporting policy to support the development and viability of a new indigenous anaerobic digestion/biomethane production industry (fully compatible with the existing national gas network).
- Outline the scale of the ambition and start providing certainty for developers and farmers to invest.

6.2 Supporting the transition for Farmers

Ireland's agricultural products are recognised internationally for their high-quality and are a substantial economic driver. While agriculture accounts for a high proportion of our GHG emissions, 37.5%[10], the sectors global and national importance cannot be overlooked. Adapting to climate change and supporting farmers transition to more sustainable practices should be pursued through incentives and enhancing farm viability is an important part of ensuring a just transition as the sector seeks to reduce its emissions by 25% by 2030.

A number of agri-environment schemes (AES) and European Innovation Partnership Schemes (EIPs) are aiding agricultural producers, researchers and experts to collaborate and develop more sustainable farming practices while increasing economic viability. Regenerative agriculture, which goes a step beyond sustainability and reducing emissions, takes a holistic approach focusing on strengthening the health of the ecological system as a whole. Regenerative agriculture has five main principles: improving soil health, increasing biodiversity, carbon sequestration, humane treatment of livestock and farmworkers, and improving the overall ecosystem. By focusing on soil health, biodiversity, and incorporating a polyculture in agricultural practices, fewer inputs including fertiliser are required.

A common barrier to transitioning to regenerative practices amongst farmers is the perceived financial costs and lower yields. While regenerative agriculture may produce lower yields, the reduced inputs required result is similar and sometimes higher profits. Informal networks should be utilised to overcomer barriers around misconceptions, creating dialogue and instilling trust among producers.

[9] https://www.corkchamber.ie/wp-content/uploads/2022/03/10793-Anaerobic-Digestion-report_final.pdf
[10] https://www.epa.ie/our-services/monitoring--assessment/climate-change/ghg/agriculture/

Providing incentives and compensation for famers is critical to increasing participating rates in AES[11]. Funding for agri-environment schemes should be expanded and extended to continue to support the industry in the transition.

6.3 Fertiliser feedstock from hydrogen

Hydrogen presents opportunities to increase food security and the sustainability of our food systems in Ireland by deploying it as a feedstock in fertiliser production. Ireland is the 13th largest importer of fertiliser in the world bringing in 1.5 million tonnes annually. The production of green hydrogen can bring fertiliser production to Ireland reducing our dependence on imports of nitrogen-based fertiliser and creating a stable demand for local use. Its deployment harnessing the cooperative model would also contribute to the decarbonisation of Irish agriculture.

6.4 Ireland's Marine Protected Areas

Ireland's marine environment will play a key role in our renewable energy production, and thus our energy security over the coming years. We have an extensive maritime area encompassing more than 480,000 square kilometres that is rich in species and habitats. Protecting this ecosystem is critical to our climate, supporting fisheries, aquaculture, recreation and tourism all of which are significant contributors to our economy and quality of life. Protecting our marine environment and ocean health is crucial to maintaining the richness of this resource and ensuring its long-term resilience, and thus the resilience of our coastal communities and livelihoods.

As such the designation of 30% of Marine Protected Areas (MAPs) in the last Climate Action Plan was positive to see. In tandem, it is essential that these areas be managed effectively. It has come to our attention that not all MAPs are not being managed accordingly. A review of MAPs management systems and internal capacities should be undertaken to ensure that all guidelines are adhered to.

[11] https://www.sciencedirect.com/science/article/pii/S030147972030178X?via%3Dihub