



BUILDING A ZERO CARBON IRELAND

Government Policy Scorecard



February 2024



#BUILDING LIFE



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In 2022, the Irish Green Building Council (IGBC) launched [Building a Zero Carbon Ireland – A Roadmap to decarbonise Ireland’s built environment across its whole life cycle](#). The development of the roadmap was informed by a [detailed carbon modelling report](#) produced by the Building in a Climate Emergency (BIACE) Research Lab of UCD and by extensive stakeholder engagement. The roadmap includes recommendations for policy makers, industry, and education providers, but it’s a living document that will need to be updated on a regular basis. To support this process and ensure real progress is made, the IGBC is developing policy scorecards and industry progress reports every second year.

Disclaimer:

The objective of the scorecard is to track progress against the roadmap, highlight any gaps in current government policies, and showcase the areas we need to focus efforts on in the next few years. It is hoped that it will provide useful information to government and industry as to where the opportunities lie for the years ahead.

This document should be read in conjunction with the original Building a Zero Carbon Ireland roadmap and the carbon modelling report, to provide context and a better understanding of the current situation in Ireland.



BUILDING A ZERO CARBON IRELAND

Government Policy Scorecard

OVERALL ASSESSMENT

Progress has been made since the launch of the roadmap: Funding for the national retrofit programme has increased significantly and there is greater awareness of the need to tackle the global warming potential of buildings across their life cycle.

However, **given the scale of the challenge and the urgency to act, progress is often too slow**, with Ireland often acting as a follower at European level, e.g., on regulating embodied carbon emissions. More holistic and coordinated actions are needed to address all the emissions associated with the built environment, from operational to embodied and transport related emissions. In particular, more joined up thinking is required to

deliver on the National Development Plan without compromising Ireland's climate targets. Programmes and policies could also often be better targeted to provide more additionality. Similar challenges exist at the local authority level but are often worsened by concerns around resourcing and a perceived lack of clarity on local authorities' mandate on climate action, including energy renovation.

While we are moving in the right direction, addressing these gaps should be a priority as any delays in climate action implementation will also drive up the costs of reaching our 2030 and 2050 climate targets.





NATIONAL LEVEL

ENSURING SUPPORTING POLICIES ARE IN PLACE



Real progress has been made on better supporting energy renovation and Green Public Procurement.

Unfortunately, policies, regulations and financial incentives are still not aligned enough to fully support reuse of existing buildings. Progress on actions to transition to a more circular built environment has also been limited. Achieving real progress in these fields will most likely require further discussion on housing and climate action, to build a consensus around more contentious policies on how to meet housing need of an expanding population without increasing carbon emissions. With that regard, it's disappointing that the recommendation on a Citizens' Assembly on housing and climate action hasn't been acted on.

DEVELOP THE RIGHT REGULATORY FRAMEWORK



There is some progress in developing the right regulatory framework to reduce embodied carbon emissions and reduce waste.

However, based on current carbon modeling projections, these are too slow to reach our 2030 climate targets. With the current level of new development, simply disclosing whole life carbon emissions in 2027 is insufficient. Ireland must act as a leader at European level on this topic, whole life carbon limits must be introduced by then.

Although some work has been done on reviewing planning and buildings regulations so that they better reflect Ireland's climate objectives, progress remains too slow in this area.

INVEST IN BUILDING A ZERO CARBON IRELAND



Additional funding was allocated to better support energy renovation, regeneration, and re-use of existing buildings. Investment in building baselines for embodied carbon and in the development of a national whole life carbon methodology, as well as increased investment in research, are positive developments.

A more holistic approach is now needed to fully address carbon emissions associated with the built environment – e.g., by introducing better links between grants for energy renovation are reuse of existing buildings. Perhaps, even more importantly, there are still no consistent reviews to ensure all government expenditure and fiscal policies relating to the built environment are fully aligned with Ireland's climate targets. Existing schemes should also be reviewed on a regular basis to ensure they are well targeted and provide additionality. Furthermore, support for biobased solutions shouldn't be limited to timber. Ireland with a large agricultural sector has a strategic interest to identify, encourage, and develop other local low carbon biobased solutions.

RAISE AWARENESS AND MAKE SURE WE HAVE THE RIGHT SKILLS



Investments have been made to improve climate awareness within Ireland, and the strong focus on citizens' engagement in the Climate Action Plan 2024 is welcome. However, it remains unclear if the new National Campaign of Communication and Engagement on Climate Action will cover all emissions associated with the built environment, including embodied carbon emissions and transport - or only operational emissions.

Actions have been implemented to attract more people to the construction industry and to facilitate energy renovation upskilling, e.g., Establishment of a national network of NZEB/Retrofit Centres of Excellence. However, further actions are required to attract new workers to the energy renovation sector and to incentivise upskilling – e.g., through the introduction of a "sustainability pass".



LOCAL LEVEL

ENSURING SUPPORTING POLICIES ARE IN PLACE



There is now a greater focus on climate action at the local authority level. Besides additional funding having been made available for energy renovation, better tracking of progress towards the 2030 and 2050 targets, as well as the development of the first Local Authorities' Climate Action Plans, are all positive developments.

However, supporting policies are often not holistic enough to address whole life carbon emissions, and consistency in planning policies across local authorities remains an issue. Lack of resources at local authority level (including lack of control over their funding) also makes it difficult for them to be ambitious and to lead by example (e.g., on circularity).

INVEST IN BUILDING A ZERO CARBON IRELAND



A growing number of local authorities are now looking at higher sustainability requirements - including compliance with the EU taxonomy for sustainable activities - when developing new buildings.

However, there is a need for increased consistency across all local authorities, and the lack of resources at local authority level (including lack of control over their funding) remains a challenge to fully enforce climate policies and building control. This has also led to limited progress on the use of Green Public Procurement at local authority level and makes it challenging for local authorities to truly lead by example.

SUPPORTING ACTIONS



Although the introduction of decarbonising zones in local authorities is an important step forward, it is disappointing that they are not used yet to fully support innovation and capacity building. To date, most of them only focus on operational and transport related emissions and do so in a very siloed way. The lack of resources allocated to their implementation, and extremely limited progress on circularity, are also sources of concern.

RAISE AWARENESS AND MAKE SURE WE HAVE THE RIGHT SKILLS



Progress has been made in increasing inhouse expertise within local authorities. Government is resourcing specific roles in local authorities to support climate delivery on the ground, and training in carbon literacy has increased. However, it's unclear if these training programmes are always well targeted, and whether they cover topics such as the global warming potential of buildings across their whole life cycle, and low carbon construction and renovation.

Although in theory, local authorities could do a lot to raise awareness among citizens about the benefits and importance of tackling whole life carbon emissions and reusing buildings, this is not happening at scale. This might be partly explained by a lack of resources, and by the fact that local authorities' climate targets only relate to their own building stock and emissions.

TABLE OF CONTENTS

KEY FINDINGS	3
TABLE OF CONTENTS	5
INTRODUCTION	6
About the policy scorecard	6
Methodology	7
DETAILED ASSESSMENT	8
1. National level	8
1.1 Ensure supporting policies are in place	8
1.2 Develop the right regulatory framework	16
1.3 Invest in building a zero carbon Ireland	19
1.4 Raise awareness and make sure we have the right skills	25
2. Local level	29
2.1 Ensure supporting policies are in place	29
2.2 Invest in building a zero carbon Ireland	33
2.3 Supporting actions	35
2.4 Raise awareness and ensure we have the right skills	36
CONCLUSION	38
APPENDICES	39
Appendix 1: Key policies reviewed	39
Appendix 2: Acronyms	39

INTRODUCTION

Ireland's greenhouse gas (GHG) emissions fell by 1.9% in 2022 compared to 2021 (EPA, 2023). While the direction is positive, this reduction falls short of the level of abatement required to meet Ireland's 2030 climate targets. When only accounting for the impact of implemented and existing policies, Ireland's total emissions are expected to decrease by 11% by 2030, compared to 2018 levels. Factoring in the additional measures from the Climate Action Plan 2021 and Climate Action Plan 2023 results in a projected decrease in GHG emissions of 29% in 2030 relative to 2018 levels (EPA, Emissions Projections, 2023).

Significant efforts have been made in recent years to advance the decarbonisation of Ireland's Built Environment, most evident with the reduction of greenhouse gas emissions in the residential sector from 13.6% in 1990 to 10% in 2022 (EPA, 2023). However, the renovation rate still remains too low and fossil fuels continue to be the dominant source of energy in our homes, providing 72.6% of energy used in the residential sector (SEAI, Energy

in Ireland, 2022), hence, more effort is needed. Further, global warming potential across the whole life cycle of a building is still not fully addressed. Transport emissions are still increasing and this remains the most carbon intensive demand sector (DECC, 2024). There is a need for an increased sense of urgency and collaboration to address carbon emissions in the built environment and develop a more holistic approach towards reaching Ireland's climate targets.

It is impossible to fully predict the pace of technological, societal, and economic change over the next decade, and it may take years for some of the policies most recently implemented to have a real impact. However, this document aims at highlighting areas that should be prioritised further to reach Ireland's carbon targets, while delivering the homes and infrastructure needed.

/ ABOUT THE POLICY SCORECARD

In October 2022, the Irish Green Building Council (IGBC) launched its [Building a Zero Carbon Ireland – A Roadmap to decarbonise Ireland's built environment across its whole life cycle](#). The development of the roadmap was informed by a [detailed carbon modelling report](#) produced by the Building in a Climate Emergency (BIACE) Research Lab of UCD and by extensive stakeholder engagement. The roadmap includes a list of actions for policy makers, industry, and education providers to undertake to halve our sectors emissions by 2030, and to decarbonise Ireland's Built Environment by 2050.

The purpose of this policy scorecard is to track progress against the roadmap, highlight any gaps, and showcase the areas we need to focus efforts on in the coming years.

While the timeline of the roadmap may appear as ambitious, its development was informed by the [scientific projections of the BIACE Research Lab of UCD](#): These showed that the national retrofit programme would lead to a significant decrease in emissions from operating buildings, but that new construction outlined in the National Development Plan and the Housing for All policy would likely negate these savings unless embodied emissions were fully addressed.

The roadmap highlights necessary actions that need to be taken up to 2050, but this scorecard only focuses on actions up to 2030. First, there is a greater benefit in reducing greenhouse gas emissions now, as opposed to reducing the same amount in the future. Secondly, it's impossible to monitor the progress of recommended policy actions so far in advance.

The Building a Zero Carbon Ireland roadmap is a living document that will need to be updated on a regular basis to reflect policy development, as well as technological, societal, and economic changes. To support this, this document will be a part of a series of reports that will be published to track progress against the roadmap, highlight gaps and showcase areas that need improving as we aim to reach carbon neutrality by 2050. To ensure ongoing communication and collaboration between Government and Industry, and ensure real progress is being made, the policy scorecard will be updated every second year with the next updated version to be released in 2026, with industry progress reports to be released in 2025 and 2027.

/ METHODOLOGY






To develop this first policy scorecard, the IGBC team reviewed key policies developed at both EU and National levels since October 2022. This included a review of the Climate Action Plans 2023 and 2024, and the proposed revision of the Energy Performance of Buildings Directive (EPBD). This work was completed through extensive stakeholder engagement throughout 2023.

In particular, the IGBC has engaged with organisations from across the board, both public and private sector, through workshops that focused on energy renovation, addressing

whole life carbon emissions (e.g., [Indicate](#)), circularity (e.g., [Build Circular](#)), upskilling in the construction sector (e.g., [BUSI 2030](#)), and improving indoor environmental quality in the residential sector (e.g., [Healthy Homes Ireland](#)). More information on these initiatives can be found at www.igbc.ie.

The final assessment was subsequently shared with a number of key organisations to ensure all relevant policies have been analysed and correctly interpreted.

The progress of each roadmap action is rated using the sequential colour scale below:

-  **Dark Green** – Policies within this area are in line with our recommendations and timeframe. The IGBC fully supports these measures taken by Government and believes they appropriately assist in reaching the country’s climate targets.
-  **Light Green** – Substantial progress has been made relating to policies in this area. However, there is still need for improvements relating to the scale and timeframe of actions to be fully aligned with IGBC’s recommendations.
-  **Grey** – Recommendations cannot be tracked against current government policies and plans as not all Government plans have been published as of February 2024.
-  **Orange** – It is recognised that, although minimal, some progress has been made in this area. However, there has been insufficient progress in relation to the milestones and actions set out by the IGBC to reach Ireland’s climate goals.
-  **Dark Red** – Government plans and policies in this area are either not in line with IGBC’s recommendations or talks on this subject have not yet begun. Any attempted progress in this area is not consistent and significant to achieve the desired outcome.

DETAILED ASSESSMENT

1. NATIONAL LEVEL

1.1 Ensure supporting policies are in place

Ensuring the right policies are in place helps the Government and industry achieve the necessary climate targets and ensure that resources are used effectively and efficiently. Whilst progress is continuing in this area with better support for energy renovation and Green Public Procurement (GPP), this often remains too slow. Furthermore, there is a need for improved coordination of policies, regulations, and financial incentives to fully support the decarbonisation of the built environment, including reuse of existing buildings.

Bigger emphasis on circularity is also needed with all recommended actions that relate to this topic being behind schedule. Achieving real progress in these fields will most likely require further discussion on housing and climate action to build a consensus around more contentious policies on how to meet housing need of an expanding population without increasing carbon emissions. With that regard, it's disappointing that the recommendation on a Citizens' Assembly on housing and climate action hasn't been acted on.

1.1.1 FRAMEWORK & GENERAL POLICIES

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
1.1 FRAMEWORK AND GENERAL POLICIES	<p>1.1.1 Give responsibility of overseeing and coordinating climate action to one Department (e.g., the Department of An Taoiseach) to ensure a holistic and efficient approach to carbon emission reductions.</p>	<p>The Department of the Taoiseach and DECC are jointly tracking progress against the climate action plan. They are also working together to deliver fully aligned and effective communications and engagement work programmes. The Climate Action Plan 2024 also mentions that the delivery taskforce approach, with cross-departmental and multi-disciplinary taskforces taking on responsibility for more actions, will be expanded on. However, anecdotal evidence gathered on the ground by the IGBC through stakeholder engagement process (e.g., renovation workshops) indicates that coordination between various departments (e.g., DECC & DHLGH) remains insufficient, and that it is sometimes difficult to know which departments are part of which task groups/working groups.</p>	<p>2024 1.1.8 Require better reporting on impact of renovation for all publicly funded projects, using reporting frameworks such as Build Upon – Energy Renovation Framework to track progress and measure impacts and benefits of renovation.</p>	<p>While the quality of data collected on the impact of energy renovation has improved in recent years (e.g., CO₂ emissions and energy consumption reduction, renewable energy production, energy renovation rate, level of investment in energy renovation), data on the health, and social and economic impacts of energy renovation (e.g., Indoor Air Quality, fuel poverty or radon) are not collected at scale, and it remains unclear if this will happen in the near future.</p>

1.1.1 FRAMEWORK & GENERAL POLICIES

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
<p>1.1 FRAMEWORK AND GENERAL POLICIES</p>	<p>1.1.2 Set up a Citizens' Assembly on housing and climate action to raise awareness about these issues and build a consensus around more contentious policies to address them, such as optimisation and re-use.</p>	<p>As of February 2024, this conversation hasn't started in Ireland.</p>	<p>2025 1.1.9 Integrate WLC as a key consideration within the next National Building Renovation Plan.</p>	<p>Based on the content of the Climate Action Plan 2024, and the proposed revision of the Energy Performance of Buildings Directive (EPBD) - which do not include lots of references to embodied carbon as part of renovation programmes/projects - this seems unlikely to happen, but as the next National Building Renovation Plan is only due by 31.12.25, it's impossible to track. The inclusion of a full section on whole life carbon in the "Improving Energy Efficiency in Traditional Buildings Guidance for Specifiers and Installers" is a positive development.</p>
	<p>1.1.3. Ensure production and consumption based GHG emissions accounts are published on a regular basis to improve baseline. Keep tracking progress towards 2050 targets on a regular basis and make this data widely available.</p>	<p>While production based GHG emissions accounts are published on an annual basis, there seems to have been little progress on consumption based GHG emissions accounts*. The Climate Action Plan 2023 mentioned "conducting a review of GHG emissions on a consumption basis" (PD/23/1). The action was also mentioned in Climate Action Plan 2021, but as of February 2024, no update on this process could be found.</p> <p><i>*The ESRI published a Working Paper (No. 740) on the Global Emissions Impact of Irish Consumption in November 2022 but this does not seem related to the action mentioned in the Climate Action Plans.</i></p>	<p>2025 1.1.10 Develop a comprehensive national circularity strategy for the reuse of material streams coming out of the retrofit programme, including glass, insulation, and timber.</p>	<p>The development of a "Circular Economy Roadmap for the Construction Sector" is mentioned in the Climate Action Plan 2024 (CE/24/4), however, it's unclear if this will include a comprehensive strategy for the reuse of material streams coming out of the retrofit programme.</p>
	<p>1.1.4. Set up a working group to ensure policies, regulations and financial incentives are fully aligned to make adaptation and reuse of existing buildings easier. These would need to be reviewed on a regular basis through the 2020s to ensure they fully support Ireland's carbon emissions reduction objectives.</p>	<p>Progress has been made in relation to better supporting reuse of existing buildings (e.g., financial support, Construct Innovate projects). However, no working groups have been set up to address this issue holistically.</p>	<p>2025 1.1.11 Develop a National Carbon Offsetting Scheme and rules of offsetting for construction, ensuring it happens at the most local level to any development and provides additionality (i.e., carbon mitigation would not otherwise have occurred).</p>	<p>As no action has been taken on 1.1.6, it's unlikely that progress could be made on this by 2025, but this could not be fully assessed.</p>

1.1.1 FRAMEWORK & GENERAL POLICIES

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
<p>1.1 FRAMEWORK AND GENERAL POLICIES</p>	<p>1.1.5. Publish guidelines under section 28 of the planning act to support low carbon planning. These should at least cover compact growth, WLC measurement, re-use and demolition, home per capita limits, as well as solar access for renewables, and highlight the importance of enforcement and consistency across local authorities to avoid unintended consequences – e.g., developments happening in counties with the lowest requirements</p>	<p>Guidelines on "Sustainable Residential Development and Compact Settlements" were published under section 28 of the Planning Act. While they cover compact growth and the importance of re-use, there is no mention of whole life carbon, home per capita limits, nor solar access for renewables.</p> <p>Similar comments could be made on the "Development Plans Guidelines for Planning Authorities" (2022).</p> <p>Although the importance of enforcement and consistency across local authorities is mentioned (see also Planning and Development Bill 2023), anecdotal evidence gathered by the IGBC as part of large stakeholder engagement processes conducted in 2023 indicates that this remains an issue.</p>		
	<p>1.1.6. Develop guidance on the practice of offsetting for construction, ensuring it happens at the most local level to any development and provides additionality.</p>	<p>As of February 2024, no progress has been made on this action.</p>		
	<p>1.1.7 Complete a full review of the existing stock to evaluate what is available for use and where, and to assess what additional space and building types may be needed.</p>	<p>Although some progress have been made (e.g., CTCHC, LDA's Report on Relevant Public Lands, Derelict Sites Register), this is not being done at scale and in a consistent manner.</p>		

1.1.2 PUBLICLY FUNDED PROJECTS

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
1.2 PUBLICLY FUNDED PROJECTS	<p>1.1.13 Require a full assessment of the carbon impact of all projects included in the National Development Plan and start prioritising them where necessary.</p>	<p>This did not happen in 2023, but the Government are adopting the International Cost Management Standard (ICMS) to enable consistent reporting of costs, life cycle costs and life cycle analysis including embodied carbon across the NDP. The first updated cost reporting templates incorporating ICMS were published in August 2023. They will be updated in 2025 to enable reporting on life cycle analysis including embodied carbon. Ireland is also committed to the implementation of a series of progressive green budgeting reforms in Budget 2019 by both the Department of Public Expenditure and Reform and the Department of Finance. Progress to date includes: Assessment of the contribution Exchequer-funded capital spending in the NDP makes to a range of climate and environmental outcomes. The Climate Action Plan 2024 also states that the "revision of the NPF can provide further opportunities to integrate specific policies that further the national climate objective". It also mentions that a commitment to review elements of the Infrastructure Guidelines produced by the OECD (over the long term) to ensure climate considerations are adequately incorporated.</p>	<p>2024 1.1.20 Mandate the use of GPP for all public notices published for procuring buildings and renovations – including social housing, as well as infrastructures, and more specifically, the Level(s) indicators 1.2 - WLC, 2.3 - Design for adaptability and renovation, 2.4 - Design for deconstruction, reuse and recycling and 6.1 - Life Cycle Costing.</p>	<p>Although the publication of the "Opportunities and approaches for Sustainable Public Procurement - A reference for public procurement practitioners and policy makers" guidance document is a positive development, the fact that the draft GPP strategy and action plan refers to using GPP "where possible" makes the achievement of this objective in 2024 unlikely. It's also worth noting that the Government adopted the International Cost Management Standard (ICMS) to enable consistent reporting of costs, life cycle costs and life cycle analysis including embodied carbon across the NDP. LCC costing will be introduced in 2024, but LCA only in 2025.</p>
	<p>1.1.14 Review the public spending code, including increasing the shadow price of carbon, eliminating differentiation between ETS and non-ETS, and replacing it with a bill of carbon, requiring a full lifecycle pricing of energy and carbon.</p>	<p>This did not happen in 2023, but the Climate Action Plan 2024 highlights that the shadow price of carbon will be updated to ensure emissions are priced appropriately in economic appraisals and that the values in the Infrastructure Guidelines align with Ireland's climate targets. It's also worth noting that the Government are adopting the International Cost Management Standard (ICMS) to enable consistent reporting of costs, life cycle costs and life cycle analysis including embodied carbon across the NDP. The first updated cost reporting templates incorporating ICMS were published in August 2023. They will be updated early in 2024 to incorporate reporting of life cycle costing.</p>	<p>2025 1.1.21 Introduce the first per square metre and per capita carbon targets for different building types in public notices for procuring new buildings and large renovation and tighten them progressively so that all new public buildings are procured to Net Zero carbon standard by 2028, and all major renovation by 2030.</p>	<p>While the proposed revision of the EPBD requires member states to introduce "limit values on the total cumulative life-cycle GWP of all new buildings and set targets for new buildings from 2030, considering a progressive downward trend, as well as maximum limit values, detailed for different climatic zones and building typologies" (Art. 7.2.C), there is no reference anywhere at national level of these targets being introduced earlier as part of public notices.</p>
	<p>1.1.15 Review the Capital Works Management Framework (CWMF) so that environmental and decarbonisation objectives are included in the project appraisal parameters. Incorporate the evaluation of carbon within Pillar 3 of the CWMF.</p>	<p>Although this did not happen in 2023, it will be reviewed by 2025 - as per previous comments.</p>		

1.1.2 PUBLICLY FUNDED PROJECTS

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
1.2 PUBLICLY FUNDED PROJECTS	1.1.16 Develop a strong Green Public Procurement (GPP) policy to support innovation and build capacity within industry to decarbonise Ireland's built environment.	This did not happen in 2023, but a new GPP strategy and action plan should be implemented in Q1 2024 under the Climate Action Plan 2024 (PS/24/9). The draft strategy that was opened for public consultation in Q4 2023 seems to indicate that it could contribute to supporting innovation and build capacity within the industry, although some of the wording may not be strong enough - e.g., "where possible".		
	1.1.17 Develop high quality guidance documents for GPP to lower the perceived risks associated with GPP. These should include guidance to underpin the application of WLC within public procurement for all building types and a knowledge bank with case studies and examples of tools that can be used or piloted.	In 2023, the OGP published the "Opportunities and approaches for Sustainable Public Procurement - A reference for public procurement practitioners and policy makers" guidance document. This complements the GPP guidance documents published by the EPA in 2021, but is not fully aligned with 1.1.17 (limited focus on whole life carbon).		
	1.1.18 Update Office of Government Procurement template and contract documents to ensure all procurers are clear on the requirements.	Although this In 2023, the OGP published the "Opportunities and approaches for Sustainable Public Procurement - A reference for public procurement practitioners and policy makers" guidance document, but templates and contract documents were not updated. not happen in 2023, it will be reviewed by 2025 - as per previous comments.		
	1.1.19 Encourage public bodies to require whole life carbon measurement and indicative targets, as already done by the Grangegorman Development Agency.	Encouragement could have been stronger but the publication of the OGP's "Opportunities and approaches for Sustainable Public Procurement - A reference for public procurement practitioners and policy makers" guidance document is a step in the right direction.		

1.1.3 ADDRESSING OPERATIONAL EMISSIONS

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
1.3 ADDRESSING OPERATIONAL EMISSIONS	<p>1.1.22 Ensure funding for social housing renovation allows for best practice implementation of Government policy on ventilation, electrification of heat and achieving at minimum a BER of B2.</p>	<p>While funding for social housing renovation works has increased significantly in recent years, local authorities and AHBs cannot always prioritise the worst part of the stock. Furthermore, evidence gathered as part of extensive stakeholder engagement process indicates challenges remain around funding for mechanical ventilation and innovative technologies.</p>	<p>2024 1.1.26 Expend the role and competency of SEAI's technical advisors for all funded projects – as per recommendations of the BUNRS project, so that they provide fully independent energy renovation advice and enable the uptake of Building Renovation Passports.</p>	<p>Although the role of technical advisors might be expanded on to support energy renovation of traditionally built buildings, there is no indication that this would happen at scale as per recommendation 1.1.26.</p>
	<p>1.1.23 Develop quality assurance scheme for one-stop-shops to ensure independent advice and customer protection are provided, hence supporting high quality retrofit works. Two key steps are the expansion of the SEAI Technical Advisor scheme to all projects, and the introduction of a warranty scheme for all SEAI's retrofit schemes to better protect building owners and increase trust in the process.</p>	<p>Although funding for energy renovation increased significantly over the last few years, no progress was made on these two specific actions.</p>	<p>2024 1.1.27 Complement the existing BERs with the disclosure of verified operational energy use data; this could be achieved via the introduction of a digital logbook for residential properties and a NABERS-like rating scheme for non-residential buildings.</p>	<p>Under action 4.3. of the Public Sector Climate Action Mandate, an up-to-date Display Energy Certificate must be displayed in every public building that is open to the public to clearly show energy use. However, this is not implemented in all public buildings, and not happening at scale in the private sector either - only as part of pilot projects.</p>
	<p>1.1.24 SEAI & Met Eireann to develop free opensource Test Reference Year (TRY) and Design Summer Year (DSY) weather data sets, as well as free opensource climate change scenario weather data sets for multiple locations in Ireland. This will enable the application of more appropriate weather data for NEAP and DEAP calculations outside of Dublin; and will be important for any NABERS style "Design for Performance" rating which would help address the performance gap. Climate change scenario weather data will help design teams ensure passive design strategies, such as natural ventilation, can adequately handle warmer climate conditions.</p>	<p>In March 2023 Met Eireann released Test Reference Year (TRY) and 3 Design Summer Year (DSY) weather data sets for six locations in Ireland. This research was funded by the DHLGH as part of the project 'Climate maps and data to support building design standards in Ireland'. The work is in support of Action 203 of Ireland's Climate Action Plan 2021 and Action BE/23/36 of Ireland's Climate Action Plan 2023.</p>	<p>2024 1.1.28 Review DEAP & NEAP methodologies to improve BERs accuracy and data quality (e.g., by limiting the use of default value to a very limited number of cases).</p>	<p>Although some research have been supported on this topic, no significant progress has been made on this topic nor is expected in 2024.</p>
	<p>1.1.25 Eirgrid to develop carbon metering protocols and tariffs that adjust carbon tax applied accordingly, to enable Building Management Systems (BMS) control for load shifting linked to grid CO₂ intensity rather than time of day, and optimisation of local energy storage for lowest carbon intensity.</p>	<p>Although, this did not happen in 2023, the Climate Action Plan 2024 includes some (limited) progress - e.g., Develop a methodology to incentivise and enable industrial heating facilities to participate in flexible demand initiatives from 2024.</p>	<p>2025 1.1.29 Introduce building renovation passports (BRPs) to create a long-term renovation strategy for each building and support phased renovation. Ensure these digital BRPs are held within a central property database to support projects aggregation.</p>	<p>Under the proposed revision of the EPBD, renovation passports will be introduced on a voluntary basis (unless made mandatory by a member state) by 2026. It will need to be uploaded to the national database for the energy performance of buildings. As of February 2024, there is no indication that they will be introduced earlier in Ireland, nor on a mandatory basis.</p>

1.1.3 ADDRESSING OPERATIONAL EMISSIONS

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
1.3 ADDRESSING OPERATIONAL EMISSIONS			<p>1.1.30 Support the deployment of hydrogen within industry to aid decarbonisation where high temperature processes are required, and work with industry to identify feasible options for Carbon Capture and Storage (CCS) and support its development to deal with hard to-abate emissions for which there are no alternative mitigation options.</p>	<p>Although this is hard to fully assess, a number of actions in the Climate Action Plan 2024 relate to this. E.g., Feasibility and validation of the technology (CCS) in an Irish context will now commence, under the leadership of DECC - Carbon Capture and Removals Working Group to be set up (PW/24/4). Also, it's highlighted in the Climate Action Plan 2024 that green hydrogen can provide a decarbonisation pathway for reducing emissions arising from medium and high temperature processes, and that to facilitate investment, Government will bring forward policies and regulatory frameworks to stimulate the development of a sizeable hydrogen sector.</p>

1.1.4 ADDRESSING EMBODIED CARBON EMISSIONS

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
1.4 ADDRESSING EMBODIED CARBON EMISSIONS	<p>1.1.31 Review NSAI certification process (agrément), including time and costs, to make it easier and faster for new innovative, low embodied carbon materials, to be placed on the Irish market without lowering standards.</p>	<p>Additional resources have been allocated to NSAI, and there is a general awareness of the issue, but only limited progress was achieved in 2023.</p>	<p>2024 1.1.34 Make WLC measurement a requirement for local authorities to secure funding for social housing from the Department of Housing, Local Government and Heritage.</p>	<p>As of February 2024, no progress has been made on recommendation 1.1.34.</p>
	<p>1.1.32 To lead by example in optimising building use, an office scheduling protocol and portal should be developed to optimise public sector office space use.</p>	<p>Although no progress was made on recommendation 1.1.32, this was not included in the overall assessment as the impact would most likely be limited.</p>	<p>2024 1.1.35 Support the development of recertification and remanufacturing schemes for reuse.</p>	<p>It is the IGBC's understanding that the Circular Economy Roadmap for the construction sector (CE/24/4) may cover recertification but this won't happen in 2024.</p>
	<p>1.1.33 Develop and maintain a central database for embodied carbon, covering both asset and product level, to gather data across the industry, standardise inputs, and help set benchmarks and targets per sector. The construction product database should include product specific EPDs, generic EPDs and defaults for construction products. The building level database should focus on LCA data for new buildings.</p>	<p>Work is ongoing on this topic (see Climate Action Plan 2024), but the full dataset wasn't delivered in 2023, and won't be delivered till end of 2025.</p>	<p>2026 1.1.36 Develop building material passports to retain information on performance and ingredients to enable building products and materials to be reused in future.</p>	<p>It is the IGBC's understanding that the Circular Economy Roadmap for the construction sector (CE/24/4) may cover building materials passports but that this is unlikely to happen by 2026.</p>
			<p>2026 1.1.37 Government to support the development of physical and virtual marketplaces (e.g., Materials exchange).</p>	<p>It is the IGBC's understanding that the Circular Economy Roadmap for the construction sector (CE/24/4) may cover marketplaces but not before 2025. So far, all initiatives in that space are happening at small scale and/or as pilots.</p>
			<p>2026 1.1.38 Government to support the development of a database of Buildings As Material Banks (BAMB), including demolitions and refurbishments, creating a (geographical) map of resources suitable for reuse. Examples of these include CMEx and Madaster.com.</p>	<p>It is the IGBC's understanding that these may be mentioned in the Circular Economy Roadmap for the construction sector (CE/24/4) but that there is no clear plan for implementation at scale.</p>
			<p>2030 1.1.39 BER certificate and Building Renovation Passports to be updated to include information on WLC.</p>	<p>This should happen under the proposed revision of the EPBD.</p>

1.2 DEVELOP THE RIGHT REGULATORY FRAMEWORK

Developing the right regulatory framework is key in ensuring that our built environment is designed, built, and renovated in a sustainable manner. There is some progress in this areas, e.g., in relation to reducing embodied carbon emissions and waste. However, based on current carbon modelling projections, these are too slow to reach our 2030 climate targets. With the current level of new development, simply disclosing whole life carbon

emissions in 2027 is insufficient. Ireland must act as a leader at European level on this topic, and whole life carbon limits must be introduced by then. Although some work has been done on reviewing planning and buildings regulations so that they better reflect Ireland’s climate objectives, progress remains insufficient in this area.

1.2.1 OVERARCHING ACTIONS

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
2.1 OVERARCHING ACTIONS	<p>1.1.40 Set up a government task group to review all buildings regulations TGDs and how they can better support the decarbonisation of the built environment across its lifecycle and reflect Ireland’s climate objectives. Specific areas and topics to consider include:</p>	<p>Progress has been made on some specific parts of the building regulations mentioned under 1.1.40, and some funded projects are (at least) partly looking at these challenges, but no task group was set up in 2023, nor holistic approach taken.</p>	<p>2024 1.1.42 Update Building Regulations based on the findings of the government task group to ensure they better support Ireland’s climate objectives.</p>	<p>Although limited progress has been made on Part B - see 1.1.40a, changes are unlikely to be implemented in 2024. Furthermore, there is no indication of progress being made on the other parts of the building regulations mentioned in 1.1.40.</p>
	<p>a. TGD B to reflect international research and developments in mass timber construction and best practice</p>	<p>A public consultation on the revision of TGD B took place in Q2 2023, and a working group on the use of timber in construction was set up by Minister Hackett in 2023. Its mandate includes looking at the building regs to see if they could better support the use of mass timber in construction.</p>	<p>2024 1.1.43 Establish a legal framework for a Digital Building Logbook and capture this information centrally to gather better quality data on buildings, support aggregation of retrofit projects and reuse of construction materials. These should be introduced alongside Building Materials Passports to facilitate reuse and the transition to a circular economy.</p>	<p>Although the introduction of Digital Building Logbooks is mentioned in the proposed revision of the EPBD this won’t happen in 2024. Furthermore, there is no mention in any policies of these logbooks being linked to Building Materials Passports.</p>
	<p>b. TGD D, and more specifically the definition of “proper materials” -section D3 subsection (c), to clarify on alternative technical specification that ‘provides in use an equivalent level of safety and suitability’ to make it easier and faster for new innovative, low embodied carbon materials, to be placed on the Irish market without lowering standards</p>	<p>Although progress has been made in terms of providing additional resources to NSAI to speed up the delivery of Irish Agreement, and SEAI are looking at ways to better support the energy renovation of traditionally built buildings, there has been no discussion on reviewing this section of TGD D.</p>		
	<p>c. TGD G to integrate water efficiency requirement for sanitary ware to reduce energy use associated with hot water consumption</p>	<p>As of February 2024, no work has been done on the revision of TGD G.</p>		

1.2 DEVELOP THE RIGHT REGULATORY FRAMEWORK

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
<p style="text-align: center;">2.1 OVERARCHING ACTIONS</p>	<p>d. TGD L in line with 5-year review</p>	<p>As of February 2024, no work has been done on the revision of TGD L beyond changes introduced by the EPBD.</p>		
	<p>e. TGD K and M to better support reuse of existing properties.</p>	<p>Although no progress was made on this topic in 2023, some funded research projects are partly looking at this challenge.</p>		
	<p>1.1.41 Set up a government task group to review planning regulations and how they can better support the decarbonisation of the built environment across its lifecycle and reflect Ireland's climate objectives. Specific areas to consider include the list of "Reasons for the Refusal of Permission which Exclude Compensation" and section 10 (Content of development plans) of the Planning and Development Act, 2000.</p>	<p>The current revision of the Planning and Development Act (Planning and Development - 2023) is a positive development. However, based on the latest version of the draft, it's insufficient to support Ireland's climate targets. Furthermore, in its current version, it does not consider whole life carbon emissions.</p>		

1.2.2 ADDRESSING OPERATIONAL AND EMBODIED EMISSIONS

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
2.2 ADDRESSING OPERATIONAL AND EMBODIED EMISSIONS	<p>1.1.44 Publish a clear implementation pathway with key dates for regulation of MEPS and Building Renovation Passports to provide certainty to the industry.</p>	<p>Although this did not happen in 2023, it will most likely happen in 2024 with the EPBD Recast.</p>	<p>2024 1.1.50 Mandate WLC measurements for all larger buildings (over 2,000m²)</p>	<p>Under the proposed revision of the EPBD, full WLC measurement will only be required for all new buildings with a useful floor area larger than 1000 square meters from 1st Jan. 2028 (Article 7). Given that there has been no additional progress on this topic at national level, this is unlikely to happen in 2024.</p>
	<p>1.1.45 Update the landlord and tenant (amendment) act 1980 to incorporate green clauses as a basic provision to raise energy efficiency and environmental awareness in the industry.</p>	<p>Green clauses are increasingly in use in commercial buildings - not in the residential sector, but this is not linked to any regulatory changes.</p>	<p>2026 1.1.51 Mandate WLC measurements for all new buildings and large renovation.</p>	<p>Under the proposed revision of the EPBD, WLC measurement will only be required for all new buildings from 1st Jan. 2030 (Article 7). No additional progress has been made at national level on this topic.</p>
	<p>1.1.46 Cut-off date for sales of gas and oil boilers for new homes</p>	<p>No cut-off date introduced yet but a commitment in the Climate Action Plan 2024 to develop "regulations and DEAP to effectively ban fossil fuel boilers in new dwellings and those undergoing major renovation where practical".</p>	<p>2026 1.1.52 Introduce the first WLC budgets per m² and per capita for larger buildings (over 2,000m²).</p>	<p>Under the proposed revision of the EPBD, member states are only required to introduce WLC targets by 2030 (Article 7). No additional progress has been made at national level on this topic.</p>
	<p>1.1.47 Publish a clear implementation pathway with key dates for regulation of EC to provide certainty to the industry.</p>	<p>This did not happen in 2023, but will most likely happen in 2024 with the EPBD Recast.</p>	<p>2027 1.1.53 First level of MEPS come into effect</p>	<p>Under the proposed revision of the EPBD, this is unlikely to happen before 2030. Furthermore, no progress has been made on the potential introduction of minimum energy performance standards in the private rental market mentioned in Housing for All.</p>
	<p>1.1.48 Review the implementation of articles 27 and 28 of the Waste Framework Directive in Ireland to better support re-use (e.g., review international best practice, explore the opportunity of regulating a new type of waste or demolition contractor role).</p>	<p>Legislations transposing Directive 2008/98/EC into Irish law haven't been reviewed in the last 18 months. However, a new National End-of-Waste Criteria for Recycled Aggregates was published by the EPA in Nov. 23 (EoW - N001/2023). National By-Product Criteria were also published for Site-Won Asphalt (BP-N001/2023) and Greenfield Soil & Stone (BP-N002/2023) in 2023. While these documents support the recovery of these materials, re-use (higher in the waste hierarchy) still needs to be better supported.</p>	<p>2030 1.1.54 Cut-off date for sales of new gas and oil boilers for all properties</p>	<p>Under the Climate Action Plan 2024, there is a commitment to develop "regulations and DEAP to effectively ban fossil fuel boilers in new dwellings and those undergoing major renovation where practical". However, there is no mention of any cut-off date for sales of new fossil fuel boilers for all properties.</p>
	<p>1.1.49 Review existing licensing process for industrial hemp production to scale up production and use in construction.</p>	<p>Although a bioeconomy action plan 2023-2025 was published in 2023, highlighting the need to support the establishment of sustainable biobased value chains, no progress has been made in relation to industrial hemp production in Ireland and licensing.</p>	<p>2030 1.1.55 Tighten up WLC budgets per m² and per capita</p>	<p>This is unlikely to happen by 2030 as 1.1.52 is behind schedule.</p>

1.3 INVEST IN BUILDING A ZERO CARBON IRELAND

Since the launch of the roadmap, significant strides have been made in this area. Additional funding was allocated to better support energy renovation, regeneration, and re-use of existing buildings. Investment in building baselines for embodied carbon and in the development of a national whole life carbon methodology, as well as increased investment in research, are also positive developments.

However, there is need for a more consistent and holistic approach to fully address carbon emissions associated with the built environment – e.g., by introducing better links between grants for energy renovation and reuse of existing buildings. Perhaps, even more importantly, there are still no consistent reviews to ensure all government’s expenditure and fiscal policies relating to the built environment are climate proofed and fully aligned

with Ireland’s climate targets. In relation to energy renovation, existing schemes should be reviewed on a regular basis to ensure they are always well targeted and provide additionality.

Finally, it would also be important to increase focus on research relating to GWP over the whole life cycle of buildings and its impact in the retrofitting of homes within the Irish context. Support for biobased solutions shouldn’t be limited either to timber, as Ireland with a large agricultural sector has a strategic interest to identify, encourage, and develop other local low carbon biobased solutions such as hemp, mycelium, and sheep’s wool.

1.3.1 GENERAL PRINCIPLES

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
<p>3.1 GENERAL PRINCIPLES</p>	<p>1.1.60 Ensure all government’s expenditure and fiscal policies are fully aligned with Ireland’s 2030 and 2050 Climate targets.</p>	<p>Ireland committed to the implementation of a series of progressive green budgeting reforms in Budget 2019 by both the Department of Public Expenditure and Reform and the Department of Finance. Progress to date includes: Assessment of the contribution Exchequer-funded capital spending in the National Development Plan (NDP) will make to a range of climate and environmental outcomes, as well as a review of fossil fuel subsidies and other potentially climate-harmful supports. It’s also worth noting that the NDP was designed to ensure that it supports the Government’s climate ambitions (Climate Action Plan 2024), and that for the first time, a climate and environmental assessment of the NDP measures was undertaken. However, there are still no consistent reviews to ensure all government’s expenditure and fiscal policies are climate proofed and fully aligned with Ireland’s climate targets.</p>		

1.3.2 GRANTS AND TAX INCENTIVES

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
3.2 GRANTS AND TAX INCENTIVES	1.1.61 Ensure sufficient resources are allocated to enforce policies and regulation to fully decarbonise Ireland's built environment.	This is hard to assess in an 18 months timeframe, but feedback gathered as part of workshops organised by the IGBC on energy renovation between April and December 2023, as well as research papers - see ESRI papers on fuel poverty - indicate a need for more feedback mechanisms and stakeholder engagement to address any issues as they arise.		
	1.1.62 Review financial support for energy efficiency on a regular basis to ensure it provides additionality and supports a just transition.	This is hard to assess in an 18 months timeframe, but feedback gathered as part of workshops organised by the IGBC on energy renovation between April and December 2023, as well as research papers - see ESRI papers on fuel poverty - indicate a need for more feedback mechanisms and stakeholder engagement to address any issues as they arise.		
	1.1.63 Where government invests in buildings, including housing through grant aid or procurement, ensure that these developments adhere to higher sustainability requirements – e.g., through green building certifications. More specifically, from 2023, public sector should demonstrate alignment with the Taxonomy for all investment in new build and major renovations.	While Green Public Procurement is still not the norm, the IGBC is seeing a growing interest from local authorities and the LDA in going beyond minimum building standards, and in adhering to higher sustainability requirements. A number of state bodies have also started looking at the EU Taxonomy as a minimum requirement for their construction.		
	1.1.64 Review existing retrofit grants and tax incentives to ensure they are fully aligned with overall carbon reduction goals, including regeneration objectives. This would involve taking into account operational emissions, embodied carbon and location-based indicators that impact transport emissions.	Although funding for urban regeneration increased in the last 18 months, operational emissions, embodied carbon emissions and transport related emissions are still not incorporated in a consistent way as part of a holistic approach to climate action.	2024 1.1.77 Replace the property tax by a site value tax charged on the value of the land to disincentivise under-use of properties and sites.	Although this hasn't been introduced actions have been taken to disincentivise under use of properties and sites. In particular, a Residential Zoned Land Tax will replace the vacant sites levy in 2024, the derelict sites levy now amounts to 7% of the market value of the land concerned, and it was announced under Budget 2024 that the rate of the Vacant Homes Tax would increase to 5 times the basic rate of Local Property Tax for the chargeable period 1 November 2023 to 31 October 2024. There are however concerns that these changes remain insufficient to incentivise action.
	1.1.65 Reform the Free Energy Upgrades scheme to ensure low-income households (e.g., based on P60) living in low BER homes are eligible – regardless of home ownership status and/or welfare payment eligibility	Although this issue has been highlighted in a number of research papers (e.g., ESRI and SVP research), there was no progress on how to better support households at risk of fuel poverty in the private rental sector. Further research on this topic is being conducted by ESRI.	2025 1.1.78 Introduce reduced or zero VAT rate for low embodied carbon construction products as demonstrated by EPDs, including biobased and recertified products.	This is difficult to assess but will most likely be off track as not enough progress made on rating low embodied carbon construction materials and recertification of products.

1.3.2 GRANTS AND TAX INCENTIVES

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
3.2 GRANTS AND TAX INCENTIVES	1.1.66 Reduce VAT to 9% on professional services for retrofits. Too often, homeowners do not know what to do and where to start in relation to energy renovation. Independent high-quality advice is key, especially to support phased renovation and retrofit of traditionally built buildings.	Although access to professional services might be better supported in future to retrofit traditionally built properties - See Improving Energy Efficiency in Traditional Buildings Guidance for Specifiers and Installers Prepared by the Department of Housing, Local Government and Heritage - 2023, no significant progress was made in this field in 2023.	2025 1.1.79 Extend the Accelerated Capital Allowance scheme to renovation products that have at least 50% lower than average GWP in their product category as demonstrated in their EPDs.	This is difficult to assess but will most likely be off track as not enough progress made on rating low embodied carbon construction materials and recertification of products.
	1.1.67 Introduce reduced or zero VAT rate for all construction products which contribute to the decarbonisation of the building stock in its operational phase, signalling that by 2025, the reduced rate would only apply to products with low embodied carbon as demonstrated by EPDs.	Although the Government reduced the VAT rate on the supply and installation of solar panels to 0 for private dwellings from 1st May 2023, this does not cover all construction products which contribute to the decarbonisation of the building stock in its operational phase. Furthermore, it does not signal that in future the reduced rate would only apply to products with low embodied carbon as demonstrated by EPDs.	2026 1.1.80 All public grants and tax incentives to be fully aligned with the EU Taxonomy.	This is impossible to assess as of February 2024, but the reference to the taxonomy in the Climate Action Plan 2024 is loose, and given that all government's expenditure and fiscal policies are not currently fully aligned with Ireland's 2030 and 2050 Climate targets (1.1.60), this seems unlikely to happen.
	1.1.68 Review grants currently available for renewables and ensure funding is available for a wider range of renewable, e.g., connections to district heating.	Although some changes were introduced in relation to solar panels (e.g., zero interest VAT rate and support scheme for medically vulnerable), and the Climate Action Plan 2024 mentions a number of actions to support the deployment of alternative renewables (e.g., district heating and geothermal), no significant progress was made in this field.	2030 1.1.81 Ensure financial and technical support is available for the "unable to pay" who have to change their fossil fuel boilers.	This is impossible to assess as of February 2024.
	1.1.69 Use grants and the Accelerated Capital Allowance (ACA) scheme to encourage the use of the best performing heat pumps in the market (e.g., working with natural refrigerants with global warming potential below 5) to deliver higher climate benefits.	No progress was made on this recommendation but under the Climate Action Plan 2024, the Government is committing to support the EU proposal to raise ambition regarding the phase-down in the use of F-gases and to promote the early implementation of the measures contained in the new regulation - see current revision of Regulation (EU) No 517/2014.		
	1.1.70 Introduce a capital allowance scheme for small landlords and developers to convert empty/ underused space above the shop to apartments.	Although this specific scheme was not introduced, a number of schemes to better support urban regeneration have been introduced in the last 18 months. Furthermore, a tax deduction of up to €10,000 per property, against rental income, for certain retrofitting expenses incurred by the landlord on rented residential properties, for a maximum of two rental properties was introduced under budget 2023. This could potentially be used as a template to support conversion of underused/ empty spaces.		

1.3.2 GRANTS AND TAX INCENTIVES

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
3.2 GRANTS AND TAX INCENTIVES	1.1.71 Introduce a tax relief for money spent on refurbishing or converting commercial and residential properties in all Irish towns and cities centre.	Additional financial support mechanisms and funding (e.g., Vacant Property Refurbishment Grant, Historic Town Initiative) have been introduced to better support urban regeneration.		
	1.1.72 Provide financial incentives or directly fund research and production facilities for biobased construction materials (e.g., CLT, sheep's wool, hemp, mycelium, and straw), e.g., through an accelerator scheme.	Support for biobased materials has increased in recent years (see Bioeconomy Action Plan 2023-2025, Climate Action Plan 2024 and the newly set up working group on timber in construction) but this remains insufficient and overly focused on one material: timber.		
	1.1.73 Review SEAI grants criteria for insulation materials to accept alternative methodologies as per TDG D to encourage best practice and a greater use of biobased construction materials.	Although this did not happen in 2023, the publication of "Improving Energy Efficiency in Traditional Buildings Guidance for Specifiers and Installers - Prepared by the Department of Housing, Local Government and Heritage" (2023) may support changes in this field.		
	1.1.74 Introduce a design and capital grants scheme (similar to SEAI's EXEED programme) for project developers engaged in innovative, measurable low carbon construction.	Although such a design and capital grants scheme does not exist, the launch of Construct Innovate should support (more indirectly) innovation in low carbon construction.		
	1.1.75 Increase financial support for small manufacturers to develop EPDs, reduce the carbon impact of their products, and to facilitate safety testing and certification of low carbon construction products.	Funding hasn't increased but remains available through Enterprise Ireland. Safety testing and certification remains a significant challenge which might be addressed over time through Construct Innovate (feasibility study ongoing).		
	1.1.76 Create a Green Skills Fund to channel low cost, long-term loans to SMEs specifically for investment in formal, sustainability focussed R&D. A similar fund exists in Holland, where the MKB+ (Innovation Fund for SMEs) gives construction firms access to finance to embed innovative new products, services, and processes in their business.	A Growth and Sustainability Loan Scheme was launched by the Strategic Banking Corporation of Ireland (SBCI).		

1.3.3 FUNDING FOR SUPPORT ACTIONS

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
3.3 FUNDING FOR SUPPORT ACTIONS	1.1.82 Support the development of a generic database of products and a national WLC assessment methodology, aligned with the Level(s) framework.	As detailed in the Climate Action Plan 2024, work on the national WLC assessment methodology is ongoing.	2024 1.1.85 Invest in a large-scale training programme in carbon accounting and WLC assessment for public procurers.	Ireland's Climate Action Plan 2024 includes a number of actions to upskill civil servants of all grades in climate literacy (e.g., PS/24/7). Furthermore, the draft GPP strategy (Nov. 23) highlights the need to train staff with a procurement role to facilitate better understanding of GPP and its benefits, and to provide the tools and know how when setting out to include GPP criteria in procurement. The EPA has also funded GPP training to over 200 public sector procurers from a hundred different organisations over the last three years, and the Climate Action Plan 2023 commits that GPP training will be provided for public sector bodies including local authorities. However, it was impossible for the IGBC to evaluate if WLC assessment was fully covered as part of this training programme, as information on the training content was not provided.
	1.1.83 Allocate funding to the development of a warranty scheme for all SEAI's retrofit programmes to better protect building owners and increase trust in the process.	As of February 2024, no progress has been made on this specific recommendation.	2025 1.1.86 Allocate funding to develop an independent, accredited Building Level WLC assessor and auditor scheme modelled on the ECO Platform EPD verification process to ensure the quality and repeatability of WLC assessments.	Although this cannot be fully assess as of February 2024, progress on WLC measurement in the proposed revision of the EPBD, and mention in the Climate Action Plan 2024 that funding will be allocated to the development of a national database system comprising building (and other construction) materials, an official embodied carbon calculation methodology with associated software, and a resultant embodied carbon rating system for buildings, indicate that this is likely to happen in the next 2-3 years.
	1.1.84 Allocate funding for research initiatives to support Ireland's transition to a fully decarbonised built environment. More specifically,	Additional funding for innovation in construction has been provided through Construct Innovate but this does not cover all the actions recommended in the roadmap and listed below.		
	a. Increase support for innovative methods of construction and materials, e.g., increase funding for Enterprise Ireland's Built to Innovate programme to further support MMC.	Although still insufficient, and probably focusing too much on a limited number of technologies, funding for innovative methods of construction and materials has increased. E.g., a MMC Demonstration Park will be established in Mount Lucas, and further support for companies undertaking high-risk research and development in relation to novel cementitious materials and innovative products and technologies will be introduced - Climate Action Plan 2024.		

1.3.3 FUNDING FOR SUPPORT ACTIONS

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
3.3 FUNDING FOR SUPPORT ACTIONS	<p>b. Research on the WLC impact of deep and shallow retrofits on different building typologies in an Irish context. This should then inform research into opportunities to standardise retrofit of Ireland's existing building stock, including the potential for off-site manufacturing of certain elements, the potential to standardise heat pumps, and the potential to use economy of scale to make retrofit cheaper.</p>	<p>As of February 2024, limited research completed on this topic.</p>		
	<p>c. Research suitability, affordability and efficiency of heat pumps, district heating and solar PVs for different building typologies in Ireland, taking a WLC approach. This would support the development of guidance on when heat pumps are most appropriate.</p>	<p>While some work is being done on this topic, as of February 2024, no whole life carbon approach has been taken.</p>		
	<p>d. LCA of traditional vs off-site manufacturing in the built environment in an Irish context to create baseline database.</p>	<p>As of February 2024, limited research completed on this topic.</p>		
	<p>e. Fund a comprehensive study on the impact on WLC emissions caused by different zoning decisions (e.g., considering ground conditions, carbon sequestration, infrastructure, and parking requirements).</p>	<p>As of February 2024, limited research completed on this topic.</p>		
	<p>f. Fund pilot projects showcasing alternatives to current methods of construction/retrofit and their benefits (e.g., through the Construction Technology Centre).</p>	<p>Although this did not happen in 2023, it should happen as part of Construct Innovate.</p>		

1.4 RAISE AWARENESS AND MAKE SURE WE HAVE THE RIGHT SKILLS

Investments have been made to improve climate awareness within Ireland, and the strong focus on citizens' engagement in the Climate Action Plan 2024 is welcome. However, it remains unclear if the new National Campaign of Communication and Engagement on Climate Action will cover all emissions associated with the built environment, including embodied carbon emissions and transport - or only operational emissions.

Actions have been implemented to attract more people to the construction industry and to facilitate energy renovation upskilling, e.g., Establishment of a national network of

NZEB/Retrofit Centres of Excellence. Recruitment campaigns could however focus more on energy renovation and green skills. Likewise, mechanisms such as the introduction of a "sustainability pass" should be considered to further incentivise upskilling of construction workers – and increase trust in the outcomes of energy renovation works. Finally, while significant efforts have been made to further upskill people working in the public sector on climate literacy, it's unclear if LCA and low carbon construction/renovation are fully covered as part of these initiatives.

RAISE AWARENESS AND ENSURE WE HAVE THE RIGHT SKILLS

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
<p>RAISE AWARENESS AND ENSURE WE HAVE THE RIGHT SKILLS</p>	<p>1.1.87 Run a large-scale awareness raising campaign to ensure all citizens understand the benefits and importance of tackling WLC emissions and reusing buildings. The campaign should also address the perception that reused materials and timber frame buildings are of lower quality and may compromise safety.</p>	<p>Although this did not happen in 2023, the Climate Action Plan 2024 acknowledges that delivering on "our climate ambition requires that the Government and the people of Ireland come together in a strengthened social contract for climate action and the co-creation of real solutions to these challenges". More specifically, it mentions a campaign led by the Department of the Environment, Climate and Communications (DECC) in collaboration with the Department of An Taoiseach to be launched in February 2024. However, given the limited focus on addressing whole life carbon emissions in the Climate Action Plan 2024, and the lack of coordination between grants for energy renovation and regeneration/reuse, it remains unclear if the campaign will focus/highlight the importance of addressing WLC emissions in the built environment and reusing buildings.</p>		

RAISE AWARENESS AND ENSURE WE HAVE THE RIGHT SKILLS

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
<p>RAISE AWARENESS AND ENSURE WE HAVE THE RIGHT SKILLS</p>	<p>1.1.88 The Broadcasting Authority of Ireland (BAI) should extend the Sound and vision scheme – Climate Action Climate action round, and ring fence funding for programmes on the built environment and climate change.</p>	<p>In December 2022, the BAI announced funding of 5 million to support the production and broadcast of content which raises awareness of climate change and promotes action and behavioural change to combat it. However, recent funding decisions (rounds 48/47) have little focus on programmes on the Built Environment and climate change.</p>		
	<p>1.1.89 Develop comprehensive policies to facilitate and incentivise energy renovation upskilling of building professionals and construction workers, and to attract more people to the industry. More specifically, run targeted communication campaigns to inspire, recruit and upskill in energy renovation school leavers, those working in declining sectors and construction workers.</p>	<p>A number of actions have been taken to facilitate and (to a lesser extent) incentivise energy renovation upskilling of building professionals and construction workers. E.g., Roll out of the NZEB training programme to 5 ETBs across the country as well as flexible and blended learning programmes. However, actions to incentivise upskilling remain insufficient, and there hasn't been any large scale programme to attract more people to the energy renovation industry. E.g., While funding has recently been secured for a Careers in Construction Action Plan, this does not focus on energy renovation, nor green skills.</p>		
	<p>1.1.90 Incentivise and support construction companies to take on new apprentices</p>	<p>Although the Climate Action Plan 2024 stresses that the Government will continue to support and accelerate the design, development and implementation of apprenticeships meeting green skills needs for the future in relation to residential retrofit (BE/24/8), the impact of these actions to date has been limited. It is our understanding that a small amount of companies are setting up graduate programmes but that there is a need for greater supports and incentives.</p>		

RAISE AWARENESS AND ENSURE WE HAVE THE RIGHT SKILLS

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
<p>RAISE AWARENESS AND ENSURE WE HAVE THE RIGHT SKILLS</p>	<p>1.1.91 Ensure primary, secondary and third level curriculum is infused with environmental education to increase carbon literacy. More specifically, WLC could be covered at secondary school level as part of STEM subjects, construction studies, geography, or home economics.</p>	<p>Although this did not happen in 2023, and it's unclear if WLC will be covered, it's encouraging that the Climate Action Plan 2024 includes actions to further embed learning for sustainability within curricula in schools and Further and Higher Education Institutions, supporting the development of green skills and climate literacy among learners.</p>		
	<p>1.1.92 Explore potential mechanisms to incentivise upskilling in the industry. E.g., Launch a "sustainability pass" similar to "Safe Pass", make "energy efficiency training clauses" the norm in all public contracts and/or place the Construction Industry Register of Ireland (CIRI) on a statutory footing and integrate minimum upskilling requirements in WLC and circularity.</p>	<p>Very limited progress was made on further incentivising upskilling in the industry, i.e., no progress was made on a "sustainability pass", nor a greater use of public procurement to incentivise upskilling. CIRI will really only come into force in 2024, and mainly for larger organisations.</p>		
	<p>1.1.93 Upskill public bodies in WLC and low carbon materials. More specifically, develop and deliver carbon literacy training programmes for local authorities and regional authorities' staff. These should cover WLC requirement, LCA, low carbon construction and renovation, as well as policy tools and procurement of low carbon products, and circular use of buildings and materials.</p>	<p>As highlighted in 1.1.85, progress has been made in relation to climate literacy upskilling of civil servants. DECC funds the Local Authority Climate Action Training Programme which is delivered by the Eastern and Midlands CARO through the Local Authority Services National Training Group. The programme commenced in January 2021 and by October 2023 circa 23,000 training places had been provided to approximately 20,600 people. Training is delivered in areas such as climate science, the translation of international and national policy to local requirements, practical adaptation and mitigation measures, leadership, local innovation and behavioural change. Specific training has also been rolled out to support local authorities with their local climate action plans. It wasn't possible for the IGBC to fully assess the content of the programme, but it is our understanding that WLC requirement, LCA and low carbon construction are not fully covered as part of these programmes.</p>		

RAISE AWARENESS AND ENSURE WE HAVE THE RIGHT SKILLS

NATIONAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
<p>RAISE AWARENESS AND ENSURE WE HAVE THE RIGHT SKILLS</p>	<p>1.1.94 Run awareness level training on climate policies, WLC, low carbon solutions and the circular economy for local Councillors.</p>	<p>The Climate Action Plan 2024 highlights that climate training and capacity building is being rolled out for local authority staff and elected members to ensure greater climate awareness and expertise. It stresses that 35% of elected members have received training on this topic since the programme commenced in January 2021. In a climate emergency, increasing this percentage should be a priority. Furthermore, it's unclear if this training programme fully covers WLC and low carbon solutions.</p>		
	<p>1.1.95 Develop guidance documents for the industry, including:</p>			
	<p>a. Guidance for planners and local authorities on the optimal relationship between design, density, building height, land use and infrastructure to minimise WLC emissions.</p>	<p>Although this did not happen in 2023, and these are not being developed by Government, a number of projects funded by Construct Innovate and SEAI are looking at this specific topic.</p>		
	<p>b. Guidance on the reusability potential for different building typologies, including adaptive reuse of different existing building typologies (e.g., office to residential) and future reuse of new built and building elements. – An interactive construction material pyramid such as the Danish Materiale Pyramiden to allow designers and all key stakeholders to quickly identify construction materials with lower embodied carbon.</p>			

2. LOCAL LEVEL

2.1 Ensure supporting policies are in place

There is now a greater focus on climate action at the local authority level. Besides additional funding having been made available for energy renovation, better tracking of progress towards the 2030 and 2050 targets, as well as the development of the first Local Authorities' Climate Action Plans, are all positive developments.

However, supporting policies are often not holistic enough to address whole life carbon emissions, and consistency in planning policies across local authorities remains an issue. Although some actions may be taken by certain local authorities, it is often not being implemented across the board. Lack of resources at local authority level (including lack of control over their funding) also makes it difficult for them to be ambitious and to lead by example (e.g., on circularity).

2.1.1 FRAMEWORK & GENERAL POLICIES

LOCAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
1.1 FRAMEWORK AND GENERAL POLICIES	<p>1.2.1 Ensure all local authorities' policies are fully aligned with Ireland's 2030 and 2050 carbon reduction targets. i.e.,</p> <ul style="list-style-type: none"> • Development plans to support a transition to more compact development by encouraging a reduction in form factor leading to lower heat loss and greater material efficiency. • Development plans to promote higher building density to support more cost-effective and sustainable development of infrastructure (e.g., heat networks and transport infrastructure). 	<p>All local authorities are due to publish their Climate Action Plan by Q1 2024. These must demonstrate alignment with the key principles of the national Climate Action Plan - not Ireland's 2030 carbon reduction targets. Furthermore, climate action is a mandatory objective to be included in all Development Plans, and local authority Development Plans shall include objectives for the promotion of sustainable settlement and transport strategies including the promotion of measures to reduce emissions and address climate adaption. Development Plans are also required to be consistent with higher tier national and regional planning strategies. However, as highlighted by the EPA, actions included in the Climate Action Plan remain insufficient to achieve Ireland's 2030 carbon reduction targets. Furthermore, as of 2023, very few local authorities' policies supported a holistic approach to the decarbonisation of the built environment, covering operational, embodied and transport related emissions simultaneously.</p>		

2.1.1 FRAMEWORK & GENERAL POLICIES

LOCAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
1.1 FRAMEWORK AND GENERAL POLICIES	<p>1.2.2 Track progress towards 2030 and 2050 targets on a regular basis and make this data widely available to contribute to awareness raising. e.g., using a live dashboard. Gather and share comprehensive data on the impact of local authorities' energy renovation programme, e.g., using the Build Upon Energy Renovation Framework.</p>	<p>Progress is being tracked as part of the SEAI's Monitoring & Reporting Programme. However, this focuses exclusively on energy and carbon, and the results are not being widely communicated through live, engaging dashboards. This might change in future with the commitment in the Climate Action Plan to devise an approach for the annual implementation of actions, track progress through KPIs, and report on progress at local and national levels.</p>		
	<p>1.2.3 Liaise with adjacent local authorities to ensure consistency in planning policies, including embodied carbon emissions, to avoid buildings being constructed in local authorities with the least strict planning standards.</p>	<p>Although progress has been made (e.g., under the Climate Action Plan 2024 CAROs should facilitate coordination and engagement between local authorities), consistency remains an issue, and the wording of the Planning and Development Bill 2023 remains weak on this point: "In making or varying a development plan, a planning authority shall have regard to the development plans of adjoining planning authorities and shall, insofar as is practicable, coordinate the objectives in the development plan with the objectives in the plans of those authorities". "Shall have regard" and "insofar as is practicable" don't amount to much of an obligation.</p>		
	<p>1.2.4 Review and adjust planning policies and financial incentives on a regular basis to ensure they fully support Ireland's carbon emissions reduction objectives.</p>	<p>These are reviewed on a regular basis, but as of February 2024 do not fully support Ireland's carbon emissions reduction objectives. One of the challenges is that they must be aligned with the principles of the national Climate Action Plan - which as previously highlighted is not 100% aligned with Ireland's 2030 carbon reduction targets.</p>		

2.1.2 PUBLICLY FUNDED PROJECTS

LOCAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
1.2 PUBLICLY FUNDED PROJECTS	1.2.5 Require a full assessment of the carbon impact of all projects included in Local Development Plans across their life cycle and start prioritising where necessary.	This did not happen in 2023, but it's encouraging that some draft local authorities' Climate Action Plans cover embodied carbon emissions.	2024 1.2.6 Mandate the use of GPP for all public notices published for procuring buildings and renovations – including social housing, and more specifically, the Level(s) indicators 1.2 – WLC, 2.3 – Design for adaptability and renovation, 2.4 – Design for deconstruction, reuse and recycling and 6.1 – Life Cycle Costing.	Although the publication of the "Opportunities and approaches for Sustainable Public Procurement - A reference for public procurement practitioners and policy makers" guidance document is a positive development, the fact that the draft GPP strategy and action plan refers to using GPP "where possible", and limited progress in recent years, make the achievement of this objective in 2024 unlikely.

2.1.3 ADDRESSING OPERATIONAL EMISSIONS

LOCAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
1.3 ADDRESSING OPERATIONAL ADMISSIONS	1.2.7 Develop and implement local-level energy plans with clear pathways and long-term commitments to a low-carbon future.	While this is being done in parts of the country (e.g., Dublin and the Midlands Region), it is not being done in a consistent way across the country.	2024 1.2.9 Implement evidence-based zoning for district heating based on (1.1.84e) and requirements for buildings in these areas.	This cannot happen in 2024 as no progress has been made on 1.1.84e.
	1.2.8 Liaise with building users from the very beginning of any renovation works and ensure the handover process forms an integral part of all retrofits, with users receiving clear and reliable information about the building, particularly for new, less familiar technologies.	Although additional funding has been allocated to achieve this objective, anecdotal evidence gathered by the IGBC as part of extensive stakeholder engagement process on energy renovation conducted in 2023 indicates this remains a challenge in many local authorities and is not happening at scale.		

2.1.4 ADDRESSING EMBODIED CARBON EMISSIONS

LOCAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
1.4 ADDRESSING EMBODIED CARBON EMISSIONS	<p>1.2.10 Request pre-demolition assessments, presenting the environmental and economic case for repair or replacement. In cases where demolition is an appropriate course of action, request waste audits conducted by external auditors ahead of demolition to further support the mitigation of Construction & Development Waste (CDW).</p>	<p>Although this is being done by some local authorities, it is not being implemented across the board.</p>	<p>2025 1.2.12 Support the development of physical and virtual marketplaces (e.g., Materials exchange).</p>	<p>While it is our understanding that the Circular Economy Roadmap for the construction sector (CE/24/4) may cover marketplaces, the fact that no progress on this has been made at local level to date, and issues around the lack of resources at local authority level, means this is unlikely to happen by 2025.</p>
	<p>1.2.11 To lead by example in optimising building use, an office scheduling protocol and portal should be developed to optimise local authorities' office space use.</p>	<p>Although this hasn't been implemented, it is not perceived as an impact action and was not rated as part of the development of the policy scorecard.</p>		

2.2 INVEST IN BUILDING A ZERO CARBON IRELAND

A growing number of local authorities are now looking at higher sustainability requirements - including compliance with the EU taxonomy for sustainable activities - when developing new buildings. However, there is a need for increased consistency across all local authorities, and the lack of resources at local authority level (including

lack of control over their funding) remains a challenge to fully enforce climate policies and building control. This has also led to limited progress on the use of Green Public Procurement at local authority level and makes it challenging for local authorities to truly lead by example.

2.2.1 GENERAL PRINCIPLES

LOCAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
2.1 GENERAL PRINCIPLES	1.2.13 Ensure all local authorities' expenditure and fiscal policies are fully aligned with Ireland's 2030 and 2050 Climate targets. A first step is to review existing policies and financing mechanisms to ensure they are aligned with overall carbon reduction goals, including regeneration objectives. This would involve taking into account actual operational emissions, embodied carbon and location-based indicators that impact transport emissions.	Irish Government expenditure is one of the most centralised in Europe, with 77% of expenditure undertaken by Central Government. While this can limit a local authority in being able to respond directly and orientates much of its actions towards taking on a partner and champion role, local authorities' expenditure and fiscal policies remain to a large extent un-aligned with Ireland's 2030 Climate targets.		
	1.2.14 Ensure sufficient funding is allocated to enforce climate policies and building control.	Anecdotal evidence gathered by IGBC through extensive stakeholder engagement conducted as part of several projects in 2023 shows that lack of resources remains a significant challenge when it comes to enforcing climate policies and building control.		
	1.2.15 Where local authorities invest in buildings, ensure that these developments adhere to higher sustainability requirements – e.g., through green building certifications.	While this is not happening across the board, a number of local authorities have been trying to adhere to higher sustainability requirements for new social housing projects, etc.		
	1.2.16 More specifically, from 2023, local authorities should demonstrate alignment with the Taxonomy for all investment in new build and major renovations.	Although this did not happen in 2023, and this is still not happening across the board, a growing number of local authorities are looking at aligning some of their investments with the Taxonomy.		

2.2.2 GREEN PUBLIC PROCUREMENT

LOCAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
2.2 GREEN PUBLIC PROCUREMENT	1.2.17 Use GPP to support innovation and build capacity within industry to decarbonise Ireland's built environment. More specifically, use the Level(s) macro-objectives, including WLC (Level(s) indicator 1.2), Design for adaptability and renovation (Level(s) 2.3), Design for deconstruction, reuse and recycling (Level(s) 2.4), and Life Cycle Costing (Level(s) 6.1) for all procured buildings and renovations – including social housing.	Although the publication of the "Opportunities and approaches for Sustainable Public Procurement - A reference for public procurement practitioners and policy makers" guidance document is a positive development, the fact that the draft GPP strategy and action plan refers to using GPP "where possible", and limited progress on this topic to date, makes the achievement of this objective in 2024 unlikely.		

2.2.3 FISCAL POLICIES

LOCAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
2.3 FISCAL POLICIES	1.2.18 Introduce financial incentives to support reuse and low carbon developments. This may include increasing levies on vacant properties, applying an additional planning levy (or increased rates) to new construction where major demolition is involved, or reducing planning levies for buildings of low carbon intensity (i.e., with 3rd party validated low carbon intensity as defined by benchmarks in RIAI Climate Challenge).	Although a number of policies have been introduced to support reuse at national level, no such financial incentives were introduced at the local level to support reuse and low carbon developments.		

2.3 SUPPORTING ACTIONS

The supporting actions outlined in the roadmap have not been progressing in a way that was deemed necessary to support a full decarbonisation of the built environment. Although the introduction of decarbonising zones in local authorities is an important step forward, it is disappointing that they are not used yet to fully support innovation

and capacity building. To date, most of them only focus on operational and transport related emissions and do so in a very siloed way. The lack of resources allocated to their implementation, and extremely limited progress on circularity, are also sources of concern.

LOCAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
SUPPORTING ACTIONS	1.2.19 Get involved in pilot projects to support the decarbonisation of the built environment, e.g., CTCHC programme or housing condition surveys.	This could not be fully assessed as while some local authorities are involved in this type of project, others aren't. The introduction of the Decarbonising Zones (LG/24/2) could provide an opportunity to pilot innovative projects, but the lack of resources allocated to them remains a challenge.	2025 1.2.22 Develop Urban Metabolism (Buildings As Material Banks) mapping for all non-protected buildings as already implemented in several Dutch cities. Urban metabolism (describing and analysing material flows using digital technologies such as GIS, BIM and databases of digital logbooks, materials passports and EPDs) is an important pillar in working towards a decarbonised built environment.	While Buildings As Material Banks may be covered in the Circular Economy Roadmap for the construction sector (CE/24/4), it is our understanding that no progress /discussions have taken place on urban metabolism mapping. It is hence extremely unlikely that this will happen across the board by 2025.
	1.2.20 Use the Decarbonising Zones to support innovation and capacity building, through low WLC innovative projects.	The Decarbonising Zones could in theory support low carbon innovative projects, but to date there has been no focus on addressing WLC emissions, and the lack of resources allocated to them remains a challenge.	2026 1.2.23 Support the development of a database of Buildings As Material Banks (BAMB), including demolitions and refurbishments, creating a (geographical) map of resources suitable for reuse. Examples of these include CMEx and Madaster.com.	Although this is impossible to assess in early 2024, based on extremely limited progress made on other actions on Buildings As Material Banks, this is unlikely to happen by 2026.
	1.2.21 Review the impact on WLC emissions caused by different zoning decisions (e.g., considering ground conditions, carbon sequestration, infrastructure, and parking requirements), so that it can be considered as part of zoning and planning permission decisions.	Although limited research is being conducted on this topic, no significant progress was made on 1.2.21 in 2023.		

2.4 RAISE AWARENESS AND ENSURE WE HAVE THE RIGHT SKILLS

Progress has been made in increasing inhouse expertise within local authorities. Government is resourcing specific roles in local authorities to support climate delivery on the ground, and training in carbon literacy has increased. However, it's unclear if these training programmes are always well targeted, and whether they cover topics such as the global warming potential of buildings across their whole life cycle, and low carbon construction and renovation.

Although in theory, local authorities could do a lot to raise awareness among citizens about the benefits and importance of tackling whole life carbon emissions and reusing buildings, this is not happening at scale. This might be partly explained by a lack of resources, and by the fact that local authorities' climate targets only relate to their own building stock and emissions.

LOCAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
RAISE AWARENESS AND ENSURE WE HAVE THE RIGHT SKILLS	1.2.24 Run awareness raising campaigns to ensure all citizens understand the benefits and importance of tackling WLC emissions and reusing buildings. The work could involve organising "open house" type events to showcase low carbon buildings, working in close cooperation with libraries, etc.	This did not happen in 2023, and while local authorities will do more in the next few months to engage with citizens on climate action, etc. - see local authority Climate Action Plans - there is no indication that whole life carbon emissions would be addressed as part of these initiatives.		
	1.2.25 Use "energy efficiency training clauses" as part of all publicly funded projects to incentivise upskilling.	Although some local authorities, regional agencies have shown an interest in better using public procurement to incentivise upskilling, the clause hasn't been used in Ireland since the completion of the H2020 BUSLeague project.		

2.4 RAISE AWARENESS AND ENSURE WE HAVE THE RIGHT SKILLS

LOCAL RECOMMENDED POLICY MEASURE	BY 2023	EXISTING POLICIES & JUSTIFICATIONS	BY 2030	EXISTING POLICIES & JUSTIFICATIONS
<p>RAISE AWARENESS AND ENSURE WE HAVE THE RIGHT SKILLS</p>	<p>1.2.26 Increase inhouse expertise through training in carbon literacy, circularity and green public procurement to support implementation of the roadmap. Training programmes should cover WLC requirement, LCA, low carbon construction and renovation, as well as policy tools and procurement of low carbon products and circular use of buildings and materials.</p>	<p>As highlighted in 1.1.85, progress has been made in relation to climate literacy upskilling of civil servants. DECC funds the Local Authority Climate Action Training Programme which is delivered by the Eastern and Midlands CARO through the Local Authority Services National Training Group. The programme commenced in January 2021 and by October 2023 circa 23,000 training places had been provided to approximately 20,600 people. Training is delivered in areas such as climate science, the translation of international and national policy to local requirements, practical adaptation and mitigation measures, leadership, local innovation and behavioural change. Specific training has also been rolled out to support local authorities with their local climate action plans. While, it wasn't possible for the IGBC to fully assess the content of the programme, it is our understanding that WLC requirement, LCA and low carbon construction are not fully covered as part of these programmes.</p> <p>It is also worth noting that DECC is supporting the LA Climate Action Plan process and broader climate delivery by funding Climate Action Coordinators and Officers in each local authority, and that DHLGH is supporting capacity building in local authorities by funding two dedicated staff in each non-city local authority to lead implementation of the Government's Town Centre First policy, with a focus on tackling vacancy, promoting compact growth and urban regeneration, in line with the principles of sustainable development. The Department of Transport also provides funding to local authorities for an Active Travel Programme via the National Transport Authority.</p>		
	<p>1.2.27 Run awareness level training on climate policies, WLC, low carbon solutions and the circular economy for local Councillors.</p>	<p>The Climate Action Plan 2024 highlights that climate training and capacity building is being rolled out for local authority staff and elected members to ensure greater climate awareness and expertise. It stresses that 35% of elected members have received training on this topic since the programme commenced in January 2021. In a climate emergency, increasing this percentage should be a priority. Furthermore, it's unclear if this training programme fully covers WLC and low carbon solutions.</p>		

CONCLUSION

Progress has been made since the launch of the **Building a Zero Carbon Ireland – A Roadmap to Decarbonise Ireland’s Built Environment** in October 2022. Ambition for energy renovation and Green Public Procurement has increased. Although more needs to be done, the implementation of the National Retrofit Programme has led to an increase in energy retrofit works with the SEAI reporting that 27,199 property upgrades were completed in 2022, up from 15,246 the year before (SEAI, 2023). The Government also adopted the International Cost Management Standard (ICMS) to enable consistent reporting of life cycle costs¹ and life cycle analysis² including embodied carbon across the National Development Plan. There is also a greater awareness of the importance of addressing the global warming potential (GWP) of buildings across their full life cycle.

However, given the scale of the challenge and the urgency to act³, progress is often too slow. With a growing population and at least 400,000 homes to be delivered by 2031, not to mention related infrastructure, addressing the GWP of buildings across their whole life cycle is urgent. As highlighted in the **detailed carbon modelling report** produced by the Building in a Climate Emergency (BIACE) Research Lab of UCD, Ireland cannot reach its 2030 climate targets without addressing both operational and embodied carbon emissions. The National Development Plan review should be seized as an opportunity to prioritise projects based on environmental and social needs. Ireland cannot afford to wait until 2030 to introduce limit values on the total cumulative life cycle GWP of new buildings. Given all the work that has already been done by Government and industry on this topic, limit values should be introduced alongside measurement requirements, and by 2027 at the latest. Limited progress on low carbon construction and renovation is another area of concern. Ireland with a large agricultural sector has a strategic interest to identify, encourage, and develop local low carbon biobased solutions from agriculture and forestry, and to encourage solutions from the circular economy.

Perhaps more importantly, tackling emissions associated with our built environment requires a more holistic approach that encompasses operational, embodied and transport related emissions. Policies, regulations, and financial incentives should be better aligned to support a greater reuse of existing buildings, as well as low carbon developments. For instance, focusing on bringing back properties into use in our village, town and city centres through high quality renovations would cut Ireland’s buildings⁴ and transport related emissions - as people living in central locations are usually less reliant on cars. Likewise, supporting infill compact developments could lead to significant carbon emissions savings. Greenfield housing developments outside towns and cities contribute up to 30% more embodied carbon per home than equivalent infill developments that use existing infrastructure (Viable Homes, 2024). This approach is not only good for the environment, but also for people and the economy. It represents a unique opportunity to make our city, town, and village centres more vibrant, to enhance people’s health and wellbeing, and to make better use of limited resources.

As highlighted in the Climate Action Plan 2024, “delivering on our climate ambition requires that the Government and the people of Ireland come together in a strengthened social contract for climate action and the co-creation of real solutions to these challenges”. This is particularly key in the built environment where achieving real progress will most likely require further discussion on housing and climate action, to build a consensus around more contentious policies on how to meet housing need of an expanding population without increasing carbon emissions. The National Dialogue on Climate Action Engagement and other actions listed under the “Citizens Engagement” part of the Climate Action Plan could be used as mechanisms to achieve this, but further communication on whole life carbon emissions associated with the built environment would also be required from Government.

¹ To be introduced in 2024.

² To be introduced in 2025.

³ Average global temperatures in the 12 months to the end of January 2024 have, for the first time in human history, breached the 1.5C danger line. Furthermore, delaying ambitious actions will make achieving carbon neutrality more costly.

⁴ It is estimated that the embodied carbon emissions of a deep residential retrofit represent a quarter of the emissions of a similar new built (O’Hegarty, 2022).

APPENDICES

APPENDIX 1: KEY POLICIES AND GUIDANCE REVIEWED

- Bioeconomy Action plan 2023-2025
- Climate Action Plan 2021
- Climate Action Plan 2023
- Climate Action Plan 2024
- Development Plans – Guidelines for Planning Authorities, 2022
- Draft Green Public Procurement Strategy and Action Plan 2023-2027
- Proposed revision of the Energy Performance of Buildings Directive, 2023
- Green Public Procurement – Guidance for the Public Sector, 2021
- Improving Energy Efficiency in Traditional Buildings, Guidance for Specifiers, and Installers, 2023
- National Development Plan 2021-2030
- Opportunities and approaches for Sustainable Public Procurement, 2023
- Planning and Development Bill 2023
- Roadmap for increased adoption of Modern Methods of Construction in Public Housing delivery, 2023
- Sustainable Residential Development and Compact Settlements – Guidelines for Planning Authorities, 2024

APPENDIX 2: ACRONYMS

- ACA – Accelerated Capital Allowance
- AHBs – Approved Housing Bodies
- BAI – Broadcasting Authority of Ireland
- BAMB – Buildings as Material Banks
- BER – Building Energy Rating
- BIACE - Building in a Climate Emergency
- BIM – Building Information Modelling
- BMS – Building Management Systems
- BRP – Building Renovation Passport
- CAP – Climate Action Plan
- CARO – Climate Action Regional Offices
- CCS – Carbon Capture and Storage
- CDW – Construction and Demolition Waste
- CIRI – Construction Industry Register of Ireland
- CLT – Cross-Laminated Timber
- CMEx – Construction Materials Exchange
- CO₂ – Carbon Dioxide
- CTCHC – Collaborative Town Centre Health Check
- CWMF – Capital Works Management Framework
- DEAP – Domestic Energy Assessment Procedure
- DECC – Department of the Environment, Climate and Communications
- DHLGH – Department of Housing, Local Government and Heritage
- DSY – Design Summer Year
- EC – Embodied Carbon
- EPA – Environmental Protection Agency
- EPBD - Energy Performance of Buildings Directive
- EPD – Environmental Product Declaration
- ESRI – Economic and Social Research Institute
- ETB – Enterprise and Training Board
- ETS – Emission Trading Schemes
- GHG – Green House Gas
- GIS – Geographical Information System
- GPP – Green Public Procurement
- GWP – Global Warming Potential
- ICMS - International Cost Management Standard
- IGBC – Irish Green Building Council
- KPI – Key Performance Indicator
- LA – Local Authority
- LCA – Life Cycle Assessment
- LCC – Life Cycle Cost
- LDA – Land Development Agency
- MEPS – Minimum Energy Performance Standards
- MMC – Modern Methods of Construction
- NABERS – National Australian Built Environment Rating Systems
- NDP – National Development Plan
- NEAP – Non-Domestic Energy Assessment Procedure
- NPF – National Planning Framework
- NSAI – National Standards Authority of Ireland
- NZEB – Nearly Zero Energy Building
- OECD – Organisation for Economic Co-operation and Development
- OGP – Office of Government Procurement
- RIAI – Royal Institute of the Architects in Ireland
- SEAI – Sustainable Energy Authority of Ireland
- STEM – Science, Technology, Engineering, Mathematics
- SVP – Society of St. Vincent De Paul
- TGD – Building Regulations Technical Guidance Documents
- TRY – Test Reference Year
- UCD – University College Dublin

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