

## **Ireland's Long-Term Renovation Strategy 2020**

### **Additional feedback**

#### **SECTION 3 – OVERVIEW OF THE NATIONAL BUILDING STOCK**

Long-term quality data are vital in dynamically informing the strategy. Although this should not lead to “analysis paralysis”, better data on the housing stock, including on empty and underutilised buildings is needed.

The introduction of Building Renovation Passport, and more specifically of digital logbooks – as suggested in the EU’s Renovation Wave, could support the development of quality data on Ireland’s building stock and on its (calculated and actual) energy use. In future, logbooks could also improve circularity in the construction sector - owners and building professionals being able to see in one click which materials were used and where.

Finally, non-residential BER research tool should be published.

#### **SECTION 8 – ENERGY SAVINGS & WIDER BENEFITS**

Ireland’s LTRs V.2 and V.3 both underline the importance of gathering good quality data on the multiple benefits of energy renovation to market it more effectively. Some new funding schemes, such as the Warmth and Wellbeing programme, have allowed the state to gather better quality data on some of the co-benefits of energy renovation. Yet, to make a better business case for energy renovation and to better promote it, data on a wider set of co-benefits is needed. These should be measured and communicated in a more consistent and transparent way.

The IGBC as part of the [Horizon 2020 Build Upon 2 project](#) has developed a multi-level energy renovation framework which allows local authorities to capture data on the multiple benefits of their energy renovation initiatives – See draft framework in figure 1. The draft framework is currently piloted by Dublin City Council and will be piloted by Cork City Council and two more local authorities in 2021. It has been designed to be used by local authorities as part of their reporting to the Covenant of Mayors.

If widely used by Irish local authorities the framework will allow the Department to access a large-scale of data on the wider benefits of energy renovation. In future, it may also be used by local authorities to evaluate renovation projects based on the three aspects of sustainability, environmental, social and economic impacts.

**Fig.1: Draft Build Upon 2 Framework as piloted by Dublin City Council**

GOALS			INDICATOR	UNITS OF MEASURE
<b>which contribute to EU target</b>	<b>national</b>	<b>municipal</b>		
Greenhouse gas emission reduction: 50-55% by 2030 compared with 1990 level and carbon neutrality by 2050 <i>Source: Targets mentioned in the EU Green Deal - Final EU's 2030 emission reduction target to be confirmed and updated in September 2020.</i>	<a href="#">Non-ETS sector greenhouse gas emissions to reduce by 30% by 2030, relative to 2005 levels. Carbon neutrality by 2050.</a> <i>Source: All Government Climate Action Plan - 2019</i>	<a href="#">A 40% reduction in the Council's greenhouse gas emissions by 2030 compared to DCC's CoM reporting baseline year. DCC will apply this target to its own operations but will also influence a reduction in GHGs throughout the City.</a> <i>Source: DCC's Climate Change Action Plan</i>	<b>Env.1</b> - Reduction in direct annual CO2 emissions from energy renovation - P - T - R	> Ton CO2/ year (total building stock) > Breakdown by type from total number (% P - T - R)
At least 32.5% improvement in energy efficiency by 2030 - relative to the 2007 modelling projections for 2030. <i>Source: Energy Efficiency Directive (2018/2002)</i>	<a href="#">All Government's Climate Action Plan: Improve the energy efficiency of public sector buildings by 50% by 2030.</a>	<a href="#">&gt; In line with the National Energy Efficiency Action Plan (NEEAP), DCC is committed to achieving a 33% improvement in energy efficiency by 2020.</a> <a href="#">&gt; As part of the Climate Action Charter for Local Authorities, Dublin City Council has committed to deliver a 50% improvement.</a>	<b>Env.2</b> - Final annual energy consumption reduction from energy renovation - P - T - R	kWh/m <sup>2</sup> /year
> <i>Source: EU Green Deal</i> 3 % of the total floor area of heated and/or cooled buildings owned and occupied by its central government is renovated each year > <i>Source: Article 7 of Directive 2010/31/EU</i>	<a href="#">Under the All Government's Climate Action Plan, the Government has set a target of renovating 2.49% of the dwellings annually</a>	<a href="#">Under the All Government's Climate Action Plan, local authorities must bring 30% of their social housing stock to a B2 equivalent BER by 2030.</a>	<b>Env. 3</b> - Total annual energy renovation rate % - P - T - R > Of which <b>light renovation</b> > of which <b>medium renovation</b> > of which <b>deep renovation</b>	% based on dwellings - R % of total m <sup>2</sup> net floor area - T - P
<b>ENVIRONMENTAL</b> At least 32% share of renewable energy by 2030 > <i>Source: Renewable Energy Directive (2018/2001)</i>	<a href="#">Besides EU targets, there is a commitment in the All Government's Climate Action Plan that 70% of Ireland's electricity will come from renewable sources by 2030.</a>	<a href="#">No specific targets in DCC's Climate Action Plan, but "Our vision is for a zero carbon City with all energy coming from renewable sources" and "DCC will increase its renewable energy uptake".</a>	<b>Env. 4</b> - Total additional energy produced from renewable resources on site or nearby as a result of renovation - P - T - R <i>Source: EPBD 2010, Article 2 Definitions (2) - NZEB</i> Member states will provide their own methodology for incorporating the EPBD requirements	kWh/year

	GOALS		INDICATOR	UNITS OF MEASURE	
	which contribute to EU target	national			municipal
SOCIAL: HEALTH & WELLBEING	Reduction of energy poverty - R - SH	<a href="#">Ireland's Strategy to combat energy poverty - 2016: Everyone should be able to afford to adequately heat and power their home.</a>	<p><b>Soc.1</b> - # households affected by energy poverty - R - SH (as per national definition)</p> <p>R - SH (as per alternative definition: Energy poverty is defined as when a household's required fuel costs are above the median level, and if they were to spend what is required, then the household would be left with a residual income below the official</p> <p>or % of households having arrears on utility bills + one of the alternative indicators listed in the methodology - R - SH</p>	# households	
		<a href="#">Ireland's UTRS 2017-2020 highlights that energy renovation presents Ireland with a clear opportunity to not only reduce carbon emissions but also to improve air quality.</a>	<p><b>Soc. 2</b> - # households living in renovated dwellings with commissioned ventilation system</p> <p>or/and actual on site IAQ monitoring - R - SH</p> <p><b>Soc. 3</b> - # non-residential renovated buildings with a commissioned ventilation system or/and actual on site IAQ</p>	# households or/and # onsite IAQ monitoring	
			<p><b>Soc. 4</b> - # households living in renovated dwellings where calculations demonstrates that post renovation condition will satisfy heating requirements or that the percentage of the annual occupied hours out of comfort conditions is below a certain</p> <p><b>Soc. 5</b> - # non-residential renovated buildings where calculations demonstrates that post renovation condition will satisfy heating requirements or that the percentage of the annual occupied hours out of</p>	# households	
			<p><b>Soc. 6</b> - # households living in renovated dwellings where actions have been taken to minimise summer overheating risk - R - SH</p> <p><b>Soc. 7</b> - # non-residential renovated buildings where actions have been taken to minimise summer overheating risk - T - P</p>	# households living in renovated dwellings where actions have been taken to minimise summer overheating risk	
		<a href="#">In its Programme for Government - 2020, the Irish Government has committed to emphasising and building capacity for green apprenticeships through a Green Further Education and Skills Development Plan, as tackling the climate crisis will require a broad range of skills across the construction, energy, and natural heritage sectors.</a>		<p><b>Soc. 8</b> - # graduates from 3rd level courses and technical training courses with focus on energy renovation - T - R - P</p> <p><i>This data should be collected at national level</i></p>	# graduates
		<a href="#">In the Programme for Government - 2020, the Irish Government has committed to launch "initiatives to assist in upskilling those who are seeking new employment opportunities after the crisis".</a>		<p><b>Soc. 9</b> - a. # building professionals and construction workers taking part in energy renovation upskilling - T - P - R - <i>This data should be collected at national level.</i></p> <p>&gt; b. of which # Municipality staff upskilling in energy renovation</p>	# building professionals and construction workers
		<a href="#">Ireland's UTRS 2017-2020 highlights that energy renovation presents Ireland with a clear opportunity to not only reduce carbon emissions but also to improve air quality.</a>		<p><b>Soc. 10</b> - #energy renovation projects leading to reduction in radon levels - R - T - P</p>	# pre and post energy renovation assessments
		<a href="#">section on "Built environment and spatial planning". It states that deepening of adaptation considerations in the planning and building standards processes is considered the most appropriate way of increasing the resilience of the built environment.</a>	<a href="#">The Local Authority Adaptation Strategy Development Guidelines - 2018. Includes a number of actions that could be taken by local authorities to improve climate resilience. These include "increasing the resilience of council owned building stock to climate change impacts".</a>	<p><b>Soc. 11</b> - # energy renovation projects supporting climate resilience - R - T - P</p>	# projects complying with climate resilience guidance documents
		Provide safe buildings to people			

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	which contribute to EU target	national	municipal		
ECONOMIC	Increasing investment in energy renovation	<a href="#">In its Programme for Government, the Irish Government commits to provide €5 billion to part fund a socially progressive national retrofitting programme targeting all homes.</a>	Eco. 1 - Total annual investment in energy renovation - R - P - T	€	
			Eco. 2 - Total annual public investment in energy renovation - R - P - T	€	
			Eco. 3 - Total annual private investment in energy renovation - R - P - T	€	
	Developing and maintaining a highly innovative and competitive energy renovation sector			Eco. 4 - Theoretical (energy) efficiency of investment - R - T - P	kWh/m <sup>2</sup> saved per year per € invested
	Supporting energy renovation jobs creation			Eco. 5 - Increase in total energy renovation jobs - R - T - P	#FTE
				Eco. 6 - # companies involved in energy renovation - T - R - P	# companies
	Ensuring the financial value of energy renovation is communicated			Eco. 7 - Direct savings associated to energy renovation - R - T - P	€