

ERN Position Paper on Energy Performance of Buildings Directive

Introduction

This paper sets out the key messages from the Europe Regional Network (ERN) of the World Green Building Council (WGBC) on the key elements of the Clean Energy Package impacting Green Building Councils (GBCs) and the regional network.

The ERN support a strong investment signal for building renovation by 2030 and support the better integration of the Energy Efficiency First principle in climate and energy policies at both EU and national levels. **We note that tackling the challenge of building renovation, namely accelerating the depth and rate of renovation, have become indispensable for the EU to keep on track with its 2030 and 2050 climate and energy ambition.** The ERN therefore welcome the ambition to double the rate of building renovation at EU level in the period 2020-2030 - particularly given the enormous potential for efficiency in our buildings which is currently 75% inefficient.

However, there are several areas where we think provisions in the EPBD can be further strengthened to realise the enormous potential of buildings in tackling climate change.

Key Messages from the ERN

1. Leverage National Renovation Strategies to Deliver Long Term Goals

Between March 2015 and February 2017, the ERN have run the Build Upon project which has seen 13 GBCs work in a collaborative manner with key partner organisations to deliver meaningful renovation strategies. This process has given us clear insight into what activities are needed to drive change and overcome barriers to renovation, in at least 3 respects:

Preparation in a collaborative manner: It is our view that the national renovation strategies should be prepared in a collaborative manner with all stakeholders engaged in their definition and implementation. The implementation of these strategies should become a priority and they must be leveraged to deliver more on the long-term goals for 2050, including dedicated transparent monitoring mechanisms at national level.

It is equally important that the design of the strategies helps overcome natural “silo attitudes” in policy-making, notably by requiring the participation of the various governmental departments involved - from energy to building & infrastructure, through health & finance.

Measuring progress to enable real impact: he strategies must be leveraged to deliver more on the long-term goals for 2050 and contain appropriate **targets, milestones, initiatives and impact indicators** to track collective progress across renovation activities. All initiatives working towards

these targets establish a collective impact framework to begin systematically tracking and reporting on collective progress.

Such an approach will deliver real impact by framing and triggering multiple opportunities at a national, regional and municipal level opportunities. In support of this, Member States should be required to develop, nationally relevant key performance indicators within this collective impact framework.

Enabling renovation to hit the ground: This more consistent reporting framework will focus Member State policy makers' minds on providing the right regulatory triggers and incentives, creating opportunities for market actors to aggregate local projects into investment ready portfolios of refurbishment activities which can be de-risked where necessary by EFSI funds and offered to private financiers.

2. Clarification on the contribution of building renovation to a Decarbonised Building Stock and to the energy efficiency target

National renovation strategies can deliver on long-term goals for 2050. **It is essential that the proposed 2050 vision for 'decarbonised' building stock is clarified to ensure the role of energy efficiency in buildings is recognised and prioritised.** A highly efficiency building stock, coupled with low energy demand, should be a pre-requisite to the sector's overall decarbonisation. High ambition is needed for both energy efficiency and renewable supply.

As stated by the Commission in the accompanying Impact Assessment, the building stock should be decarbonized up to a nearly zero energy level.

The contribution of building renovation to the 2030 energy efficiency target is clearly recognised in the Commission's impact assessment: the lion's share of energy savings should come from building renovation, which requires to double the rate of renovation and increase the depth of each renovation. This important contribution of building renovation to the energy efficiency target needs to be secured in the legislative proposal. This can be achieved via a specific quantification of energy savings expected from building renovation, in line with the impact assessment. **The 2030 milestone of the renovation strategies shall be aligned with the 2030 energy efficiency target.**

3. Ensuring Exemplary Role of Public Buildings

Public buildings should play a more exemplary role in the renovation strategies and article 5 of the directive should be clarified so that it leads to actual renovation of the building. As a first step, the ambition to renovate central government buildings should be extended to cover all public buildings.

Moreover, it should be underlined the importance that these "exemplary" interventions should be, as far as possible, characterized as "deep renovation". Given the exemplary role of the building stock, a shorter timeline for renovation should be encouraged in this sector.

Investment in public building renovation will be facilitated by the initiatives on financing. **It should take a key place in the national renovation strategies and be addressed by a strong collaboration between central and local authorities, and stakeholders.** Governments must take an active role in highlighting the societal benefits of renovation such as reduced fuel poverty, better health and increased energy security. Green Building Councils are keen to take an active role in it.

4. Digitalisation of Energy Performance Certificates (EPCs), evolution towards building renovation passports and integration of smart readiness

Proposals to make EPCs more reliable and link them to public funding schemes are very welcome but more is needed to fully realise the potential of EPCs in transforming the building stock. Although EPCs include recommendations to improve the building, they are of little use for guiding owners towards undertaking energy renovation works.

EPCs should evolve towards a tool, a Building Renovation Passport (BRP), that can support owners in the complex renovation journey. A BRP will make it easier for owners to embrace renovation because it will articulate the typical measures, their combination, order, and typically what benefits each step can bring. As people renovate due to multiple reasons including savings and comfort, building renovation passports such as the EPC should dynamically present the expected savings and comfort gains resulting from different improvement steps, in a very clear manner. This will facilitate the implementation of step by step renovation projects where both the owner's expectations and the long-term ambition are factored in.

The digitalisation of EPCs could serve as a means of facilitating the development of these Building Renovation Passports, and enable additional data management, such as actual consumption data gathering. Therefore, the ERN advocates for EPCs to be transformed into an electronic tool that can be connected to smart meters and other consumption and demand indicators allowing for continuous improvement of energy efficiency levels. The smartness indicator can complement the EPCs by providing an indication for smart grid readiness and ability of the building for integrating smart controlling devices.

This provision would require EPC providers to be obliged to make data about each certified building available. This will enable building owners to model and project the impact of building improvements on the EPC rating and thereby better judge the right course of action for them.

This would also represent a critical enabler for unlocking private finance for renovation and aid the development and scaling of energy efficient finance offerings, such as green mortgages etc.

Towards a Renovation Strategy Impact Framework

‘Strategy’ is often defined as a plan of action designed to achieve a long-term goal or vision. The challenge of good strategy is coordinating and aligning the many pieces of a complex puzzle that are required in order to turn visions into realities.

Europe has done much work over the past decade to tackle one of its most complex social, economic and environmental challenges - the renovation of its existing buildings - which account for around 36 per cent of the region’s greenhouse gas emissions.

Today, there are thousands of initiatives across the public, private and third sectors, aimed at supporting a transformation in the energy performance of the building stock: from raising awareness about the benefits of renovation, to building the capacity of industry to deliver - from new innovative forms of finance for renovation projects, to government policy aimed at improving construction standards.

However, Europe has now set itself the challenge of moving from many individual efforts towards **strategy**. The EU requires all Member States to set out long-term national renovation strategies: strategies to renovate entire nations of buildings. This task requires a shift to action on a scale we have not seen before, and tools for coordination that we do not have today.

BUILD UPON (www.buildupon.eu) is an EU Horizon 2020 funded project, aimed at leading the shift towards strategy, and building the tools that we need for coordination. Since 2015, Green Building Councils across Europe have set themselves the task of understanding the complex web of organisations and initiatives that are currently supporting renovation efforts, and started to coordinate their visions and actions into strategy.

One of BUILD UPON’s central findings is that whilst there are often as many as 50-100 different initiatives in a single country aimed at renovating the existing building stock, only a small fraction of these currently take a strategic approach to tracking and communicating their impact over time. Moreover, to date no national renovation strategy is taking on the role of coordinating and aligning all those initiatives and resource - setting out the collective targets, milestones and indicators that can be used to track collective progress.

In autumn 2016, BUILD UPON’s [Madrid Leaders’ Summit](#) convened over 160 experts from 25 countries to explore this problem. We asked those leading deep renovation projects, awareness raising campaigns, skills programmes, finance initiatives and public policy design, two simple questions:

1. What are some shared outcomes or milestones you believe we collectively need to achieve; and
2. How could you start to collectively track your impact in progressing towards these?

The result is presented below, in our first ‘Renovation Strategy Impact Framework’, and is aimed at illustrating how a more integrated set of targets, milestones and indicators could be used to frame the national renovation strategies. It is not an attempt to set out a best practice set of targets and impact indicators, which is something that will require further work, but simply aims to frame the concept.

To move forwards with this work, we see two central challenges;

1. If only a small number of current renovation initiatives are tracking their impact over time, how could a large number be persuaded to do this in a more joined-up way under such a framework; and
2. If multiple initiatives in a country could be persuaded to align and report impact under a framework, what would a robust and integrated best practice set of milestones and impact indicators look like?

This first draft of the framework is released for further consultation with the BUILD UPON community, and we would warmly welcome your views on both its content and the challenges we see.

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A. 2030 Milestones

Example Targets / Milestones	Example Impact Indicators
National socio-economic targets (e.g. health, wellbeing, affordable housing, growth, jobs, innovation, culture) from other areas of public policy are integrated within the renovation strategies - and are being measurably supported by building energy renovation projects.	<i>Insert macro-level socio-economic indicators from other areas of national public policy that building renovation contributes towards - based on country specific indicators.</i>
The value of higher performance buildings is significantly outperforming low performance buildings.	Energy Performance Certificate (EPC) rating to value correlation.
National environmental targets (e.g. GHG reductions, primary/final energy use reduction, resource efficiency) are integrated within the renovation strategies - and are being measurably supported by building energy renovation projects.	GHG Emissions Reductions, Primary / Final Energy Savings, Energy Cost Savings, Resource Efficiency etc.
3% annual rate of building energy renovation.	# of projects with recorded EPC improvements.

B. Renovation Projects

Example Targets / Milestones	Example Impact Indicators
Socio-economic outcomes are being measured on building energy renovation projects - and being fed into tracking progress on 2030/50 targets/milestones.	<i>Insert project-level health, wellbeing affordability, employment KPIs - e.g. # employment opportunities generated / % short vs long-term employment.</i>
Exemplary occupant / community engagement processes are part of projects from planning to post-work monitoring, to help secure positive socio-economic outcomes and high occupant satisfaction.	# Projects with exemplary engagement processes / % occupant satisfaction levels.
Increase in organisational commitments to ambitious building energy renovation programmes across property portfolios (public, commercial, residential).	# of organisational commitments and depth of targeted environmental savings.
Public project tenders/procurements require construction teams with recognised skills/CDP in building energy renovation and integrated, multi-disciplinary team working.	# projects including these requirements.

C. Awareness Raising Initiatives

Example Targets / Milestones	Example Impact Indicators
Awareness is being raised across all major target groups (civil society, public sector, private sector) and is leading to concrete actions by members of these target groups.	(i) # Awareness raising initiatives targeting each group; (ii) # target audience reached; (iii) # of target audience that can be shown to go on to take concrete action (i.e. citizen taking up a financial initiative, public actor supporting a policy initiative, private sector employee enrolling in a skills initiative - tracked from awareness raising initiatives across into initiatives in these areas).
Occupants/communities are fully engaged and awareness raised as part of all building energy renovation projects.	(i) # occupant & community engagement initiatives supplying resources for projects; (ii) # projects with engagement processes; (iii) # occupants who agree to become community 'ambassadors' for building energy renovation, to amplify awareness.
Occupants/communities are engaged with the end socio-economic impacts of projects (health, wellbeing affordability, employment etc.).	(i) # projects sharing socio-economic with occupants/communities.
Occupants/communities trust in their local construction supply chain.	(i) # Skills & Capacity Building Initiatives aimed at increasing quality of works and customer trust; (ii) national consumer perceptions survey data.
Industry awareness raising initiatives are effectively engaging those not already engaged in building energy renovation - in particular, raising awareness of the employment opportunities in building energy renovation.	(i) # initiatives primarily targeting those who are not already engaged; (ii) # this target audience reached; (ii) # enrolling in a skills initiative.

D. Skills & Capacity Building Initiatives

Example Targets / Milestones	Example Impact Indicators
Peer to peer learning/resource platforms are established for property owners (residential, commercial, public) and leading to more organisational commitments to ambitious building energy renovation projects.	(i) # of organisations participating; (ii) # organisations committing to deep renovation projects.
Complete construction sector is highly skilled in building energy renovation.	# and % of construction sector professionals/workers participating in building energy renovation skills initiatives.
Increased/improved employment opportunities in building energy renovation.	# skills initiatives tracking conversion of training into concrete employment benefits (e.g. new job, greater job security / client satisfaction etc.).
Construction skills initiatives are producing integrated, multi-disciplinary project teams for building energy renovation projects.	# initiatives aimed at integrated, multi-disciplinary working.

Continuous Professional Development (CPD) in building energy renovation is mandatory, and integrates relevant soft-skills (i.e. occupant/community engagement processes).	# CPD programmes mandating EE/RES renovation and relevant soft-skills (particularly occupant/community engagement).
Valuation professionals can factor in building energy performance to value.	(i) # building energy renovation skills initiatives aimed at valuers; (ii) # valuers participating in building energy renovation skills initiatives.

E. Financial & Economic Initiatives

Example Targets / Milestones	Example Impact Indicators
Total annual investment in building energy renovation reaches €[insert national figure] billion.	€ invested by (i) public (ii) private funds.
Building energy renovation is part of public infrastructure spending, and infrastructure budget implements an EE first policy.	% of national infrastructure budget that supports building energy renovations.
Mortgage lenders are able to offer preferential interest rates/more capital for energy renovated properties.	# and € of building energy renovation mortgages issued.
All renovation projects should use a standardized project development, contracting and measurement and verification process to attract investment, allow for aggregation and make measurement of savings possible.	(i) # projects developed using standardized processes; (ii) increase in € invested in areas that adopt standardized process.
Energy management systems are in place for all publicly funded efficiency projects.	# projects that have energy management systems.
Public funding is supporting technical assistance for projects.	(i) # project development funds; (ii) # projects supported by these funds.

F. Policy & Regulatory Initiatives

Example Targets / Milestones	Example Impact Indicators
Public policy supports building energy renovation and is built on cross-party consensus.	(i) # policies supporting building energy renovation; (ii) % that have cross-party support.
Coherence of national building energy renovation policy.	Public authority/industry perception survey on policy coherence.
Continuous improvement in regulatory minimum building energy renovation standards.	<i>Insert national construction standard KPIs.</i>
Regulatory disincentives to building energy renovation are removed.	(i) # rent regulation changes; (ii) # public accounting rule changes.

G. Administrative & Organisational Initiatives

Example Targets / Milestones	Example Impact Indicators
City level renovation strategies and cross-sector implementation platforms are set up and integrated with regional/national renovation strategy impact frameworks.	(i) # City level cross-sector implementation platforms set up; (ii) # of these platforms integrating with national renovation strategy frameworks.
<i>[Regional level renovation strategies and cross-sector implementation platforms are set up and integrated with city level / national renovation strategy impact frameworks]</i>	(i) # Regional level cross-sector implementation platforms set up; (ii) # of these platforms integrating with national renovation strategy frameworks.
National cross-sector implementation platforms set up, coordinating with city and regional level renovation strategies.	(i) Platform set up; (ii) # cities and regions in coordination with it; (iii) # other national platforms (EU) being coordinated with.
A collaborative rather than competitive market.	(i) # organisations involved with implementation platforms; (ii) % of initiatives using and reporting renovation strategy impact framework metrics.
Peer to peer learning platforms are established for property owners (residential, commercial, public).	# of peer to peer learning platforms established.

Note: Work on example milestones and indicators for ‘Innovation Initiatives’ is currently underway.



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