IMAGINE A BUILT ENVIRONMENT THAT ENABLES A HIGH QUALITY OF LIFE FOR ALL

BUILD UPON

CO-CREATING AN AMBITIOUS NATIONAL RENOVATION STRATEGY FOR IRELAND

Summary of Draft Recommendations

December 2016

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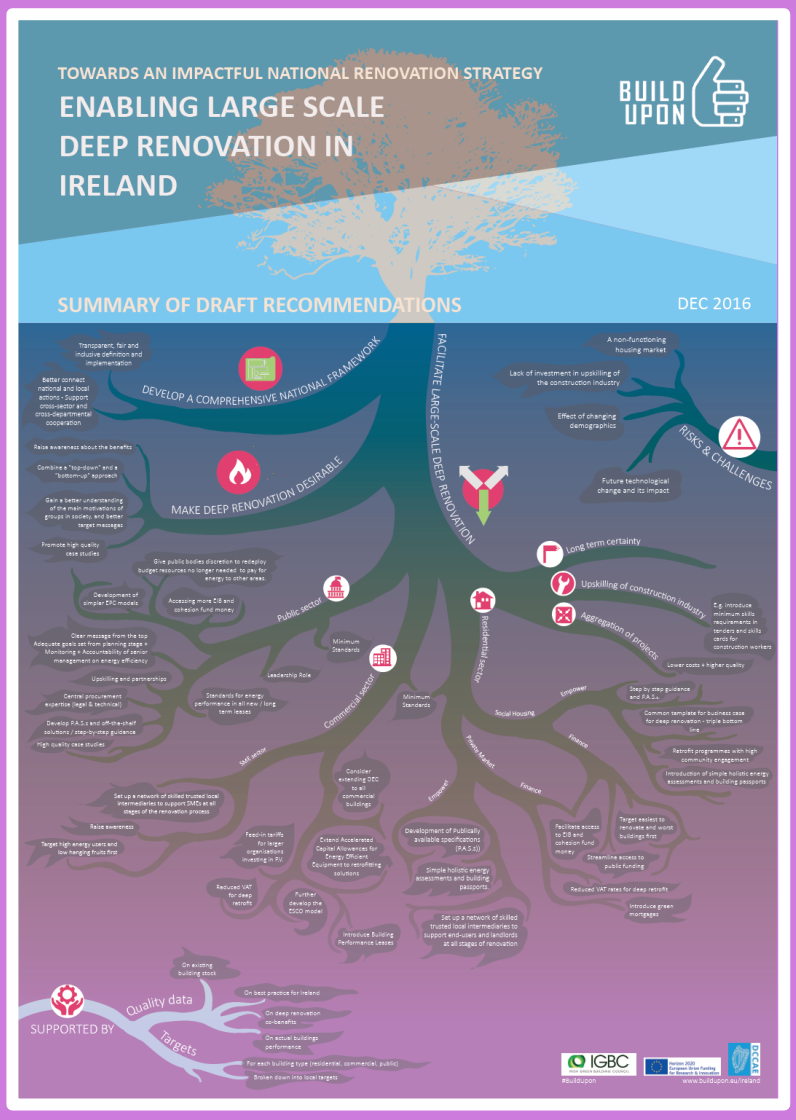

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IGBC
IRISH GREEN BUILDING COUNCIL

Roinn Cumarsáide, Gníomhaithe ar son na hAeráide & Comhshaoil
Department of Communications, Climate Action & Environment

INTRODUCTION

Over the last 18 months, the Irish Green Building Council (IGBC), has been working to build a community of experts and stakeholders to develop the V.2 National Renovation Strategy that Ireland must deliver by April 2017 under the EU Energy Efficiency Directive. The Department of Communications, Climate Action & Environment (DCCAE) is responsible for producing Ireland's national renovation strategy.

The details of the strategy are critical to deliver a "fully decarbonised built environment that delivers a better quality of life for all". How will we finance the long term investment strategy required for our building stock over the next 35 years? How will we reach our climate targets? All these questions must be answered by the strategy.

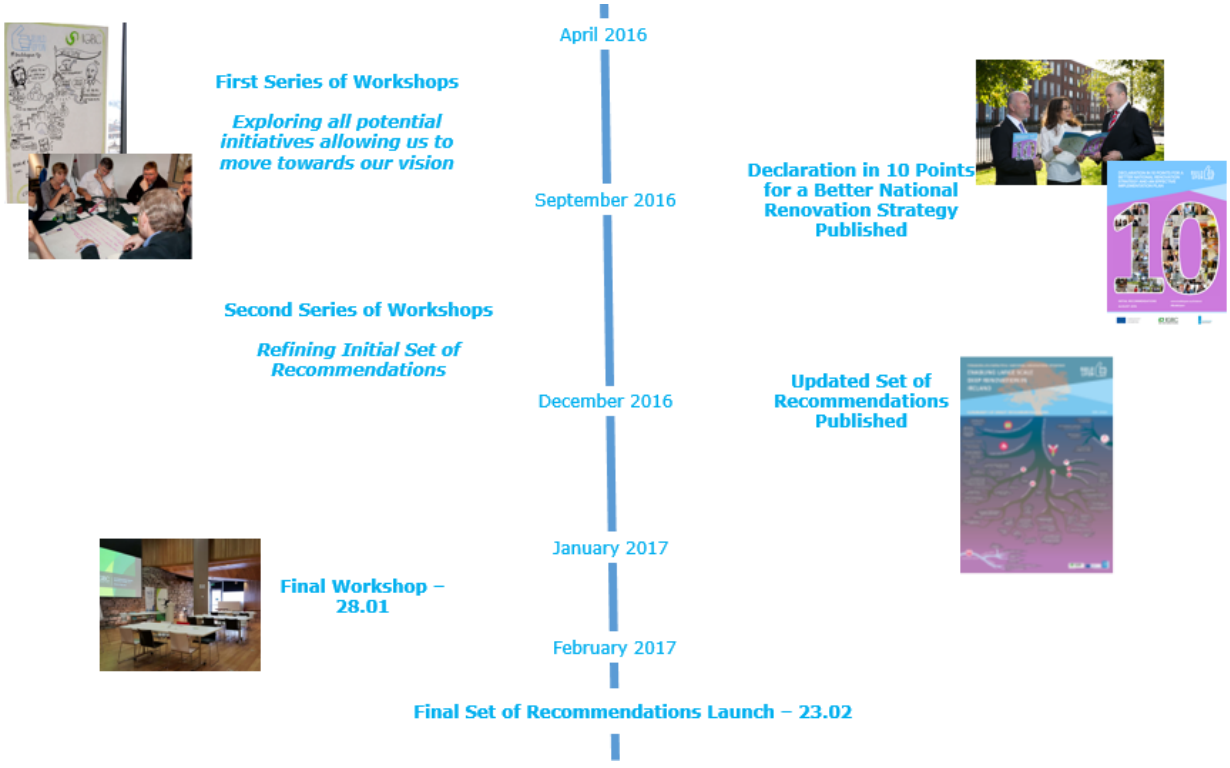
This document presents an updated list of recommendations coming from five general large-scale workshops and eight specialised workshops organised by the IGBC, in conjunction with DCCAE from April to December 2016. The present document should be read in conjunction with the "Summary of draft recommendations" infographic.

In advance of Build Upon final workshop – Wednesday, 18th January 2017, the IGBC is inviting comments from interested parties on this updated set of recommendations. The IGBC is due to submit a final, more detailed, document to DCCAE in February 2017 and your input is critical in helping us identifying areas that may require extra work. The consultation is open until Monday 16th January 2017. **For further information on the consultation process, please contact Marion@igbc.ie.**

Other useful documents

- Ireland's National Renovation Strategy V.1 (2014)
- Declaration in 10 Points for a Better National Renovation Strategy (Sept. 2016)
- Build Upon workshops reports (April – Dec. 2016)
- Infographic – Summary pf draft recommendations V.2 (Dec. 2016)

THE DIALOGUE JOURNEY



SUMMARY OF RECOMMENDATIONS

In 2015 residential sector energy-related CO2 emissions represented 25% of Ireland's total energy-related CO2 emissions. Furthermore, two-thirds of our existing properties are likely to be standing in 2050. Addressing the energy efficiency of our property stock is therefore critical if Ireland's statutory carbon targets are to be met.

This section sets out key recommendations for a better national renovation strategy V.2.

Cross-cutting Recommendations

1. A Comprehensive National Framework

1.1 Retrofitting Ireland's building stock requires a comprehensive national framework that connects national and local initiatives and better support for cross-sector engagement.

1.2 Beyond climate targets, large-scale deep renovation can have a positive impact on job creation and a myriad of social benefits. An integrated cross-departmental approach is thus needed to develop and implement an ambitious national renovation strategy.

In particular, the departments of housing, finance, education, health and jobs should all be involved in designing and implementing the strategy.

2. Predictability & Confidence

A stable and long-term framework is required to provide all players with certainty - There is no time for ambiguity. Certainty on standards and support would generate confidence to invest in deep retrofit products and services.

3. Collaboration & Engagement

To reach its full potential, the national renovation strategy must be defined and implemented in a transparent, fair and inclusive way. The publication of the strategy by DCCAE in April 2017 should mark the beginning, not the end of the process. We recommend that an open and collaborative approach is taken for the implementation of the strategy to provide all key stakeholders with opportunities to engage. As continuous improvements will be needed to keep up with best practices or new technologies, we believe the ongoing strategy process should be smart and adaptive.

4. Raise Awareness

4.1 Deep retrofit awareness, and more specifically awareness of specific interventions and deep renovation co-benefits, remain low at all levels of Irish society. Awareness raising campaigns are required at both national and local levels.

4.2 However, simple financial messages around energy bill savings are not appropriate for all end-users. Better targeted messages and higher emotional engagement are needed. A prerequisite to this is a better understanding of various groups' motivations and behaviours – **See 8**.

4.2 To achieve the highest impact, we suggest a combined top-down and a bottom-up approach. While one clear message should be sent from the top, local champions (e.g. local authorities and energy agencies) have a key role to play too in show-casing good high-quality solutions. Renovating schools to high quality standards could for instance have a multiplier effect on the level of deep retrofits in Ireland.

5. Skills & Training

The lack of investment in skills represents one of the main risks to the successful implementation of the strategy.

5.1 Based on skills gaps identified during workshops, we recommend to embed basic building physics, risk evaluation and consumer interaction into all relevant professional and vocational pathways. Better trained construction workers and professionals will be able to better advise end-users at key trigger points.

5.2 Publicly Available Specifications (PASs) for internal and external wall insulation, indoor air quality, air tightness and ventilation should be published. This would allow for the development of appropriate training programmes. However, locally based research and the better identification of best practice for the Irish market are a prerequisite.

5.3 Clients' insistence for high quality work could act as a driver for upskilling. Yet, this could only be achieved if deep renovation awareness is raised – **See 4**. Public bodies and larger private organisations should first include minimum skills requirements in their deep retrofit tender documents as they already do for heritage contractors.

5.4 The identification of construction workers and professionals who have upskilled in deep renovation should be made easy through the introduction of skills cards and "environmental / low energy" accreditation, as well as a mandatory live register (CIRI?).

5.5 These measures will in turn incentivise construction workers and construction professionals to upskill in deep renovation.

6. Quality & Standards

Poor quality retrofits can cause bigger issues than the problems they seek to solve – E.g. They can potentially have a detrimental impact on a property and the health of its occupants, thus damaging the industry's reputation. High standards and robust quality assurance for projects (from start to finish) are key in building consumer confidence.

6.1 Minimum statutory standards for construction workers and construction professionals' qualifications are recommended – **see 5.**

6.2 The introduction of elementary standards and deep retrofit overall performance standards, including statutory minimum standards for indoor air quality, is proposed. Existing legislation and guidance should be consolidated to remove any contradictions **– See Sector Specific Recommendations for further details**.

7. Clear Targets

7.1 Clear and concise goals can help visualising the scale of the task ahead, hence helping the debate with key stakeholders. The strategy should include metrics and milestones to allow regular tracking of progress.

7.2 In particular, we recommend the introduction of targets (and interim performance targets) for each building type (commercial, residential and public).

7.3 While high level targets are critical, we suggest to articulate them in terms of local action plans, benefits and communication to better connect with people.

8. Quality Data & Information Sharing

8.1 Comprehensive data is key for accurate baselining and planning, hence the need to collect good quality data on the existing building stock in terms of buildings' age, energy efficiency and ownership.

8.2 The government and members of the supply chain collect significant amounts data. However, these are not always captured in a useful way. While we acknowledge the need to protect consumers' privacy, we believe energy, education and health data, as well as national and local data, should be married and studied in a more comprehensive way. If properly captured and used, this data could provide useful information to end-users and policy decision-makers. This would also increase trust and confidence in the sector.

8.3 Although data limitations should not lead to "analysis paralysis", further research is required to gain a better understanding of deep renovation co-benefits, Irish end-users' behaviours and preferences, as well as technologies and processes best suited to Ireland's needs.

Sector Specific Recommendations

RESIDENTIAL SECTOR

- **Private Market**

9.1 Householders, tenants and landlords interested in retrofitting properties need clear and comprehensive information, advice and guidance. Beyond the publication of impartial information and guidance, we suggest setting up a network of skilled, trusted local intermediaries to support end-users at all stages of the renovation process. Read more.

9.2 Introducing simple holistic energy assessments and/or building passports (allowing for a step-by-step approach to deep renovation) would further empower homeowners, tenants and landlords.

9.3 With regard to funding mechanisms and financial support, we believe the aggregation of projects should be encouraged as a way to reduce cost and improve quality.

9.4 In order to enhance the impact of existing grants in the residential sector, more funding should be allocated to deep retrofits as opposed to "shallow" measures. This could be initially achieved through more composite grants for homeowners and landlords, and multi-annual funding agreements. The introduction of building passports would also support a move in that direction.

Strong signals regarding fossil fuel systems must be sent and we suggest SEAI stop supporting fossil fuel boilers installation.

9.5 As the worst energy performing buildings are in the private rental market, a gradual ban on leasing of residential properties that do not meet minimum energy efficiency requirements should be considered. This should be complemented by extra support for landlords - grants and/or tax incentives. The extension of the Accelerated Capital Allowance to landlords might be an option.

9.6 To ensure past mistakes are not replicated, we suggest to tie the grants and tax incentives to buildings (as opposed to people) and to increase quality monitoring. When it comes to rented properties, building location should also be taken into consideration.

9.7 Other suggested actions include the introduction of green mortgages (potentially covering buy-to-rent and top-up mortgages), as well as reduced VAT rates for deep retrofit interventions (e.g. triple glazing).

- **Social Housing**

Social housing offers a unique opportunity to deliver deep retrofit at scale, as well as to showcase its potential.

10.1 However, in order to make large scale deep renovation a reality in this sector, access to public funding for local authorities and other social housing providers should be streamlined.

In particular, a common template for making the business case for deep renovation as part of funding applications should be developed. This template should cover all the benefits associated with deep renovation: social, economic and environmental. The publication of step-by-step guidance (a methodology) would also be helpful.

10.2 With regard to funding mechanisms, opportunities to access EIB and EU cohesion funds should be explored further.

10.3 Finally, all social housing retrofit programmes should be designed with high community engagement. E.g. with local facilitators acting as trusted contact points.

COMMERCIAL PROPERTIES

11.1 Retrofitting awareness among SMEs is low and they may not have the right skills internally. While awareness campaigns have a role to play – **see 4**, the provision of clear and comprehensive information, advice and guidance are also vital. In particular, SMEs will benefit from the setup of a network of skilled, trusted local intermediaries to support them at all stages of the renovation process.

11.2 Energy is often perceived as a fixed cost by SMEs and deep retrofit payback as too long. One suggestion is to target high energy users first and the low hanging fruit first. This would also contribute to awareness raising as organisations that have, for instance, changed their lights to LED are more likely to consider other energy efficiency actions.

11.3 Extending DEC to all commercial buildings and making this information widely available online, including for small lets, could lead to an increase in deep renovation in that sector.

11.4 Beyond minimum elementary standards and overall performance standards – **See 6**, S.R. 54 should be extended to cover non-residential buildings.

11.5 Putting accurate monetary values against asset appreciation, health and wellbeing, productivity increase, as well as energy savings would help in building the business case for deep renovation in this sector – **See 8**.

11.6 Where there is not enough data or where it does not make financial sense yet (e.g. due to the cost of the technology), deep retrofit uptake should be supported through tax incentives. In particular, the following actions may be considered: Introducing reduced VAT rates for deep retrofit interventions (e.g. triple glazing), extending the Accelerated Capital Allowance for Energy Efficient Equipment to retrofitting solutions and supporting feed-in tariffs for organisations investing in PV.

11.7 As in other sectors, the aggregation of projects should be encouraged as a way to lower cost and improve quality – This should have a positive impact on the development of the ESCO model in Ireland.

11.8 Many private organisations do not own the building they are in. Building Performance Leases could thus provide an opportunity to tackle the split incentive issue between tenants and landlords in the commercial building sector.

PUBLIC SECTOR

12.1 The public sector have a leadership role to play in promoting deep renovation in Ireland. In fact, it should play an exemplary role in show-casing good high-quality solutions in public buildings and social housing.

12.2 Perhaps more than in any other sectors, clear leadership from the top is needed. This would allow for adequate energy efficiency goals to be set from planning stage, better post-occupancy performance monitoring and higher accountability in terms of energy targets. More specifically, we suggest to set long-term targets at entity level (e.g. at a university level) to increase accountability.

12.3 Like in the residential and commercial building sectors, high standards are needed. In particular, we support the introduction of minimum overall performance standards, including specified standards for energy performance in all new / long term leases. It is also suggested to make ISO 50001 compulsory for all public offices over a certain number of sq. metres.

12.4 The publication of PASs, high quality case studies and step-by-step guidance for various building types is also recommended.

12.5 Further training in the administrative and technical part of procurement, but also in the technical aspects of it is required. Staff that understand both construction and how public procurement works are needed. This could potentially be achieved through higher cooperation with the private sector and / or the creation of a centre of excellence in deep renovation and public procurement (i.e. a through a more centralised process).

12.6 Large public sector buildings including hospitals, prisons, universities and commercial buildings require a long term investment strategy for deep renovation. The aggregation of projects should be supported as a way to lower costs and improve quality. This should be complemented by the development of simpler EPC models.

12.7 In terms of funding, ways of accessing more EIB and cohesion fund money should be considered.

12.8 Finally we propose to give public bodies' discretion to re-deploy budget resources no longer needed within their annual budget allocation to pay for energy to other areas of their operating budget.

RISKS & CHALLENGES

13.1 A non-functioning housing market could have a negative impact on the implementation of the strategy. While new builds are important, we should not forget that two-thirds of our existing properties are likely to be standing in 2050. Furthermore, quantity must not be pursued at the expense of quality.

13.2 The lack of support and investment in skills is also one of the main risks to the successful implementation of the strategy.

13.3 The intersection between housing, planning, and demography is complex. Future demographic changes need to be considered to ensure past mistakes are not repeated.

13.4 The speed of change of technology advances also presents specific challenges. We must ensure that standards, guidance and advice are able to stay current and relevant.

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THANK YOU TO ALL OUR WORKSHOP'S PARTICIPANTS

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- BNP Paribas Real Estate
- Bolection
- Bord na Mona
- Bord Gais Energy
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- Carlow Kilkenny Energy Agency
- Carr Architects
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- Clancy
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- Colliers International
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- Limerick City & County Council
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- Marchena Management Services
- MCO Projects
- McDowell Purcell
- Meath County Council
- Meehan Green
- Merrion Capital Group
- Murphy Muhall
- National Insulation Association of Ireland
- NSAI
- National Treasury Management Agency
- NUI Galway
- NUI Maynooth
- Office of Government Procurement
- The Office of Public Works – OPW
- ORS
- Offaly County Council
- Passive House Association
- PassiveSills
- Philip Lee
- PV Generation
- Qualibuild
- Reddy Charlton Solicitors
- Respond!
- Retrofit Energy
- RIAI
- SE Systems
- SIRUS
- Society of Chartered Surveyors Ireland
- South Dublin County Council

- SEAI
- Skillnets
- SMN – Scott + MacNeill
- Society of Saint Vincent de Paul
- Saint-Gobain
- STW
- Survey & Design
- Threshold
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- University College Cork
- University College Dublin
- University of Limerick
- Ulster Bank
- Veolia
- Varming Engineering
- Wain Morehead Architects
- Waterford Institute of Technology
- XD Consulting
- ZESCO

COLLABORATING ON WORKSHOPS AND EVENTS:

A series of over 80 events in the 13 project countries have brought stakeholders together during the project. As part of this process, six high level Energy Efficiency Building Renovation Workshops have been organised across Ireland by the Irish Green Building Council. The workshops have been supported by the Department of Communications, Climate Action and Environment.

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