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BUILD UPON

CO-CREATING AN AMBITIOUS NATIONAL RENOVATION STRATEGY FOR IRELAND

Mini Workshop
Making Sure We Have the Right Skills
Pre-1945 Buildings

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Irish Green Building Council – Dublin

Tuesday, 29th November 2016

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Funded by the Horizon 2020 Programme of the European Union

IGBC
IRISH GREEN BUILDING COUNCIL

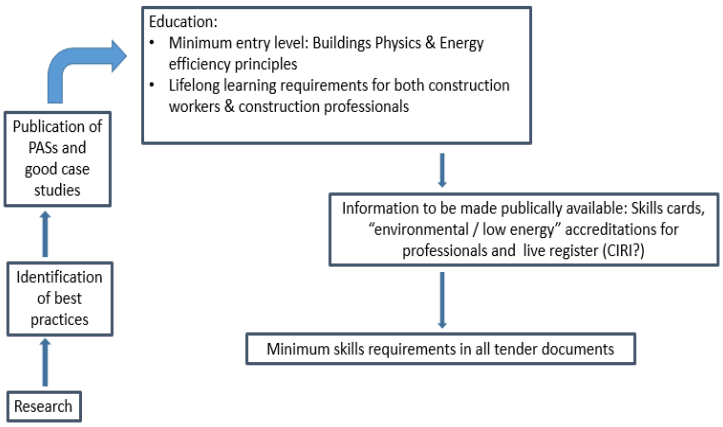
Roinn Cumarsáide, Gníomhaithe ar son na hAeráide & Comhshaoil
Department of Communications, Climate Action & Environment

SUMMARY

In early 2016, the Irish Green Building Council (IGBC), in conjunction with the department of communications, climate action and environment (DCCAE) organised a series of workshops on Ireland's National Renovation Strategy V.2. These events were attended by over 170 key stakeholders and led to the publication of a "Declaration in 10 Points for a Better National Renovation Strategy".

Since the beginning of the consultation process, workshop participants have consistently identified the lack of support and investment in skills as one of the main risks to the successful implementation of the strategy. On Thursday, 10th November the IGBC organised a first follow-up meeting to explore how to better incentivise construction workers and construction professionals to upskill in deep renovation – see full report here. A final workshop on upskilling was subsequently organised on Tuesday, 29th November. The aim of this meeting was to finalise our recommendations to the DCCAE as well as to focus on specific skills required to retrofit pre-1945 buildings.

Key suggested actions



Which key actions suggested in the first upskilling workshop, could have the highest impact? Which ones are easy/difficult to implement?

Working in small groups, participants were asked to look at the 9 recommendations made in the first upskilling workshop and to display them on a two axis graph representing impact and implementation difficulty.

Workshop participants first highlighted the importance of focusing on both fundamental education and lifelong learning. In fact, construction workers and construction professionals' training courses should all include as a minimum an introduction to energy efficiency principles. This should be complemented by lifelong learning, supported by the introduction of skills cards and a system similar to CPDs for construction workers, and by the introduction of "environmental / low energy" accreditations for construction professionals.

When it comes to fundamental education, workshop participants expressed reservations about the development of the apprenticeship model. They highlighted that apprenticeship often wasn't perceived as an attractive option by young people. Furthermore, some participants expressed concerns about adding more to the apprenticeship curriculum without really adding extra time to cover the new topics.

The idea of introducing minimum energy efficiency skills requirements for all public tenders (using skills cards and "environmental / low energy" accreditations) was overall well received by participants. Generally speaking, they felt that an approach similar to the "heritage contractors" approach could be taken. Finally, one participant stated that making CIRI registration mandatory for construction workers could have an "extraordinary impact".

To sum up, the level of support for the introduction of skills cards and "environmental / low energy" accreditations, as well as mandatory registration was high. However, participants stated that the registration system should be transparent, trusted and not too burdensome – A burdensome system could lead to a higher number of construction workers operating illegally.

The level of support for the development of a comprehensive map of all the deep renovation training courses currently available in Ireland was pretty high. One participant added that this work was completed in 2012 as part of the Build Up Skills Ireland (BUSI) project and that it would probably be easy to update the existing document.

The participants of the first upskilling workshop also suggested to develop Publically Available Specifications (PASs) for internal and external wall insulation, indoor air quality, air tightness and ventilation. Although this suggestion was broadly supported by participants of the second workshop, they explained that one of the main challenges in this field is the lack of research in construction in Ireland ("*It's extremely difficult to create a curriculum if there is no agreement on what is best practice*").

Finally, some participants highlighted the importance of increasing the number of building control inspections. Although this might be difficult to implement as resources are currently limited, participants said that a roadmap for a workable system is required.

Specific considerations for deep renovation of pre-1945 buildings

Icomos representatives highlighted that 6 years ago, deep retrofit of pre-1945 buildings was very much perceived as a risk. Although this has changed, specific considerations must be taken into account when retrofitting older buildings.

First of all, a one size fits all approach does not work for these buildings. More specifically, a general understanding of building physics and a whole building approach are required. The workshop participants supported guidelines that would allow a balance between heritage and energy approaches rather than being too prescriptive. They also felt that a case study based best practice approach would work better for this building type than PASs. Furthermore, some participants said that lots could be learnt from past mistakes. According to them a greater focus on past-mistakes and performance gaps would allow to better identify best practices. However, disclosing this information is currently risky for both architects and public bodies – Decennial liability insurances covering that risk could be part of the solution. Nevertheless, workshop participants agreed on the need to increase research, as well as to increase the use of risk evaluation tools.

In particular, the publication of convincing research and upskilling should allow local authorities to better support the deep renovation of pre-1945 buildings. According to workshop participants, further research on skills gaps, indoor air quality, ventilation strategies, indoor wall insulation and U-values for solid stone / brick walled buildings is needed. Moreover, as Ireland's climate and building types are unique, locally based research is required. One participant stated that it would be helpful if Met Eireann could release Ireland's climate data to Fraunhofer Institute for building physics so that they are made available on WUFI.

When it comes to training, the roll-out of ICOMOS' Understanding Conservation module and of the Qualibuild's Foundation Energy Skills was suggested. The skills cards previously mentioned could then include information on energy efficiency and heritage related craft skills. Workshop participants also felt that further training in moisture management was needed.

Finally, workshop participants pointed out that for protected

One participant explained that "moisture connects to everything else and is a good way to see if what is being done in a building is right". The work done by the Moisture Research Centre in Sweden and the UK Centre for Moisture in Buildings was also mentioned.

From your experience, in which areas is upskilling of construction workers and construction professionals required when it comes to pre-1945 buildings?

Workshop participants re-emphasised that for pre-1945 buildings a whole building approach is key. As such, construction workers and construction professionals should all have a good understanding of building science. As a minimum, all of them should be aware of potential risks and be able to identify cases that require expert input. In that regard, risk evaluation training is key. Deconstruction, ongoing maintenance and moisture issues should all be kept in mined. Furthermore, construction professionals should be well aware of all products and technologies currently available in the market.

According to the workshop participants one of the main challenges is that many construction workers and construction professionals are simply not aware that they need to upskill in deep renovation. Raising awareness should thus be a priority. Professional bodies have a clear role to play in that field: They could deliver these training courses, making sure to take an inter-disciplinary and cross-sectors approach.

When it comes to "soft skills", communication skills are also important. Construction professionals need to interpret and simplify the information to make it accessible to home-owners and home-occupiers.

WORKSHOP'S PARTICIPANTS ANALYSIS

THANK YOU TO ALL OUR WORKSHOP'S PARTICIPANTS

COLLABORATING ON WORKSHOPS AND EVENTS:

A series of over 80 events in the 13 project countries will bring stakeholders together during the project. As part of this process, six high level Energy Efficiency Building Renovation Workshops will be organised across Ireland by the Irish Green Building Council. The workshops are supported by the Department of Communications, Climate Action and Environment and are a must for anyone who wants to ensure their voice and views are heard in Ireland's National Renovation Strategy Process.

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 649727.