

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



CO-CREATING
AN AMBITIOUS
NATIONAL
RENOVATION
STRATEGY FOR
IRELAND

**Mini Workshop
Deep Renovation co-
benefits**

1

*College of anesthetists of
Ireland – Dublin*

Tuesday, 11th October 2016

www.buildupon.eu/ireland
#BuildUpon



Funded by the Horizon
2020 Programme of the
European Union



Roinn Cumarsáide, Griomhaithe
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 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](#)". In particular, workshop participants stated that the co-benefits of deep renovation needed to be better promoted.

On Tuesday, 11th October 2016 the IGBC organised a follow-up event to explore how to accelerate deep renovation by putting greater emphasis on its co-benefits.

Ann Marie Aguilar from ARUP London opened the session with a presentation on health & wellbeing in commercial buildings. Mrs Aguilar first explained that people in the Western world spend over 90% of their life indoors and are more informed than ever about indoor air quality. Quality buildings are key in attracting and retaining talents, as well as in improving staff productivity. They also have a positive impact on hospital patients, occupiers' stress levels and can lead to a lower likelihood of obesity. A copy of her presentation [is available here](#).

Indoor air quality & ventilation

Productivity improvements of 8 – 11% are common as a result of better air quality



Views and integration of nature

A better view out the window **increased productivity** at a call centre 7-12%

People **performed better** on administrative tasks with a **view of nature versus a view concrete**

\$100M benefit to hospital patients **with a good view**



Following Mrs Aguilar's presentation, participants were asked to explore deep renovation co-benefits and how they could be better promoted.

Research has shown that investments in energy efficiency measures are driven not only by economic factors but also by non-economic motives and goals such as comfort and convenience. For the first part of the discussion participants were asked to accept that direct cost savings were not people main motivation to renovate and to explore other co-benefits.

Participants looked at these co-benefits from a societal, end-users and developers' point of view.

At societal level, large scale deep renovation can contribute, directly and indirectly, to Ireland's climate targets. Beyond direct energy savings, it presents an opportunity to increase urban density, thus making a more effective use of existing and new infrastructures. It also offers an educational opportunity on climate change and health & wellbeing.

From developers' point of view, complying with all best building practice have a positive impact on their reputation and can provide them with a competitive advantage. In a functioning market, deep renovation and quality buildings help in attracting both tenants and landlords.

With regard to end-users, a clear distinction has to be made between the residential and non-residential sectors. In the residential sector, comfort and health & wellbeing (e.g. removing toxic materials and mould growth) are often the main motivations. Deep renovation gives end-users a perception of autonomy and control, while providing them with an opportunity to look at factors such as daylighting and building use. Improving a building energy performance can have a positive impact on the property and rent values. Comfort, health and wellbeing and a perception of autonomy are also among the main factors in the non-residential sector. Although this is often difficult to measure, deep renovation can lead to higher productivity, less absenteeism and higher staff retention, thus improving margins. It also provides an opportunity to change a building layout, and is good from a .CSR and marketing point of view. Generally speaking protecting the environment is not among the main end-users' motivations.

According to workshop participants, deep renovation can provide an opportunity to educate end-users and to encourage behaviour changes. People can save money through deep renovation but they need to know how to operate and maintain buildings. Internet of Things and tools to measure indoor air quality can also help in raising deep renovation awareness

During the second part of the workshop, participants were asked to explore how deep renovation co-benefits could be better promoted. Promoting deep renovation is particularly challenging in the current context as most focus is on new build.

According to workshop participants, end-users, construction professionals and politicians all need to be better educated in the co-benefits of deep renovation.

When it comes to end-users, there is a need to get into their emotional side as opposed to relying purely on economic arguments. It might also make sense to change the rhetoric from “saving the planet” to “saving the people”. High quality case studies could be used to better promote health and wellbeing benefits, showing that retrofitted buildings look better and are better for their occupants. When doing so a forward thinking approach should be taken (where will people want to live in the next decades?). Traditional media and, perhaps more importantly, social media have a key role to play in promoting deep renovation among the general public. The internet of things and indoor air quality monitoring tools could also be extremely useful in connecting with the younger generation. As deep renovation awareness should be better embedded into Irish society, basic quality building and retrofitting knowledge could be part of the standard curricula. Better educated end-users will ask for high quality retrofit and drive the demand for better quality projects.

Design professionals (because they advise end-users on deep renovation on a daily basis), planners (because they oversee every development) and politicians (because they can act as leaders) should also be better educated in deep renovation co-benefits.

Finally, participants highlighted that wellness standards can to some extent contradict energy efficiency and that one solution does not fit all. While mechanical heating, ventilation and air conditioning (HVAC) systems may be required in cities like London, natural ventilation is sufficient in Ireland as long as outdoor air quality is preserved. With that regard, deep renovation and transport policies should go hand-in-hand.

COLLABORATING ON WORKSHOPS AND EVENTS:

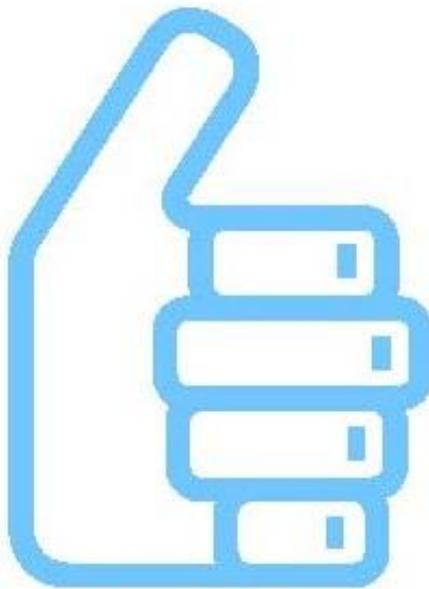
A series of over 80 events in the 13 project countries will bring stakeholders together during the project. As part of this process, six high level Building Renovation Workshops will be organized across Ireland by the Irish Green Building Council. The workshops are supported by the Department of Communications,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

Email Us: Marion@igbc.ie

Twitter: #BuildUpon

Join our LinkedIn Group

BUILD UPON



A PROJECT BY



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