

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



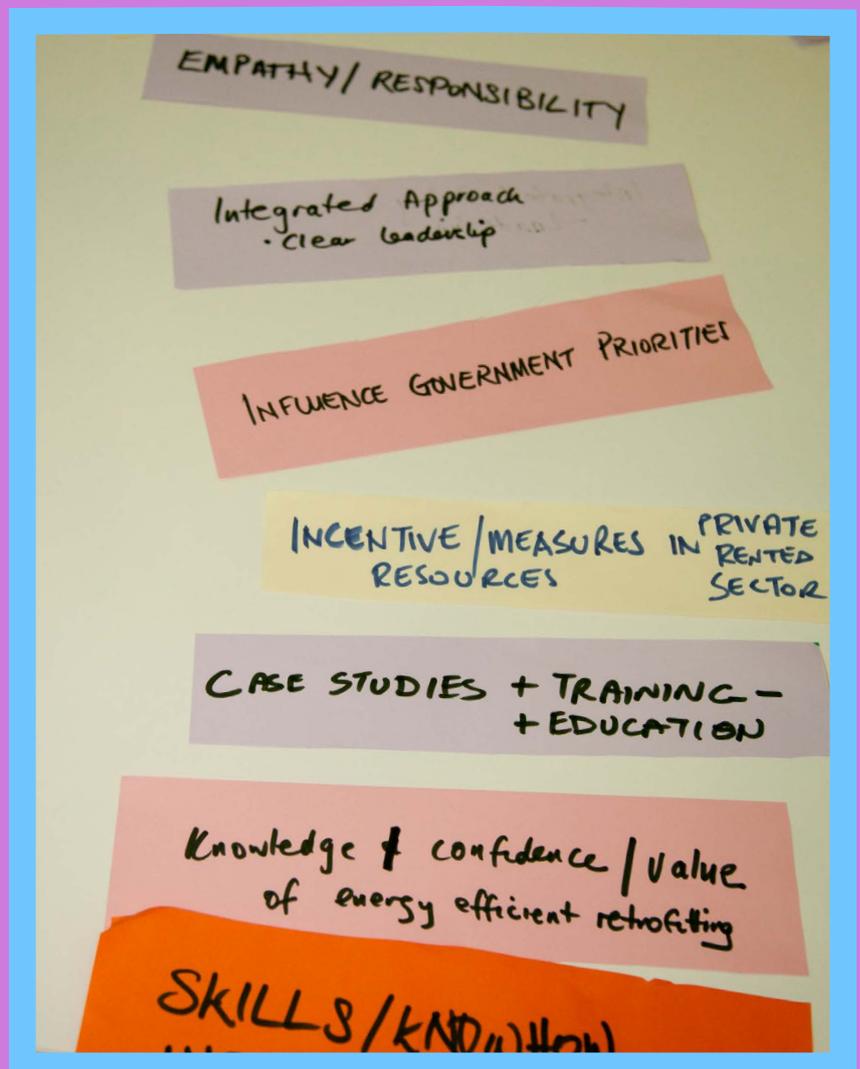
CO-CREATING AN AMBITIOUS NATIONAL RENOVATION STRATEGY FOR IRELAND

Initial Residential Buildings Sector Workshop

2

Wood Quay Venue – Dublin
Wednesday, 25th May 2016

www.buildupon.eu/ireland
#BuildUpon



Funded by the Horizon 2020 Programme of the European Union



Roinn Cumarsáide, Fuinnimh & Acmhainní Náddórtha
Department of Communications, Energy & Natural Resources

ABOUT THE IRISH GREEN BUILDING COUNCIL

The Irish Green Building Council (IGBC), is the leading authority on sustainable building in Ireland. With a network of over 80 member organisations, the IGBC is working to transform the Irish construction and property sector into a global leader in quality and sustainability.

As well as leading the Build Upon project in Ireland, the IGBC has developed the Home Performance Index (HPI) - Ireland's first national certification system for quality and sustainable residential development, provides BREEAM, LEED and other green building education programmes, and is a partner in the Qualibuild project to upskill Irish construction workers

See: www.igbc.ie

A special thanks to our partners.



Energy for generations



Acknowledgements

The IGBC team would also like to thank all the participants who attended and contributed to the workshop. These are listed page 15 In particular, we would like to thank our workshop facilitator, Chris Chapman, our visual facilitator, Eimear McNally, and all the speakers documented in this report.

ABOUT THE VENUE: WOOD QUAY VENUE – DUBLIN



The workshop took place in Wood Quay Venue, Dublin.

Wood Quay Venue is a spectacular state-of-the-art conference, meeting, and exhibition and performance facility featuring a stretch of the original Hiberno Norse (Viking) City Wall dating from 1100AD.

It is located in the heart of the city in Dublin City Council Civic Offices, Wood Quay, Dublin 8.

SUMMARY



Co-Creating Europe's National
Renovation Strategies

WE BELIEVE THAT OUR BUILDINGS CAN BE BETTER THAN THEY ARE TODAY

BUILD UPON is the world's largest collaborative project on building renovation – bringing together over 1,000 organisations, across 13 countries, at over 80 events in 2016-17. It aims to create a renovation revolution across Europe by helping countries to deliver strategies for renovating their existing buildings, by the 30 April 2017 EU deadline. These strategies are critical to cutting Europe's energy use, reducing the impacts of climate change, and creating buildings that deliver a high quality of life for everyone.

There are 1.6 million occupied permanent dwellings in Ireland - 63.7% of which are located in urban areas.

A number of potential solutions were discussed to overcome particular barriers to renovation. These include awareness and the issue of the split incentive between landlords and tenants which discourages renovation in this sector. The workshop also explored different business models to help scale up the level and ambition of residential renovation in Ireland.

[A copy of the workshop agenda is available here.](#)

KEY OUTCOMES

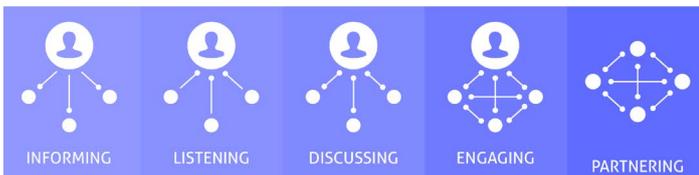
As reflected in this report, the scope of the discussion and topics covered on the day were broad. However, it's clear that substantial work on awareness and skills improvement is required.

Government leadership and local champions are key in raising retrofitting awareness. End-users need trustworthy local intermediaries that they can contact for advice throughout a renovation project. Campaigns and support mechanisms should be better targeted towards specific groups (e.g. homeowners, private landlords, local authorities).

Yet, large scale deep renovation in the residential sector can't happen without the appropriate skills in the construction sector and better quality assurance. Construction professionals and tradesmen advise end-users on renovation on a daily basis, and need to be fully aware of retrofitting options.

Good quality data on the current housing stock (energy efficiency, ownership) and the co-benefits of renovation is also key, as well as agreeing on a destination and a time for the residential buildings sector. Local authorities' housing stock could be used to conduct pilot projects that could then be scaled up. To sum up, large scale deep renovation in the residential sector is a complex issue that will require cross-sector and cross-departmental cooperation if Ireland is to reach its climate change targets.

[The workshop's presentations can be downloaded here.](#)



BUILD UPON IN IRELAND

The Irish Green Building Council, in conjunction with the Department of Energy is working to build a community of experts and stakeholders to develop the v2.0 national renovation strategy Ireland must deliver by April 2017 under the Energy Efficiency Directive.

The details of this 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 will be answered by Ireland's National Renovation Strategy.

AIMS OF THE WORKSHOP

The aim of this workshop was to explore all measures that could be taken in Ireland to move towards large-scale deep renovation in the Residential Buildings Sector. In particular, the focus of this workshop was on challenges facing urban areas.

OUR CHALLENGE

The EU requires each country to establish a ‘national renovation strategy’: a long-term strategy for renovating the nation’s homes and commercial buildings to high standards of energy efficiency.

This had to be done for the first time by 30 April 2014, with strengthened strategies to be delivered every three years thereafter, with the next by 30 April 2017. So, how are we doing?

Today, many of the individuals and organizations who have a stake in this challenge are not actively engaged in the national renovation strategy debate. The absence of large scale structured collaboration between renovation stakeholders and initiatives means countries are not currently delivering the renovation revolution Europe needs.

Project Overview



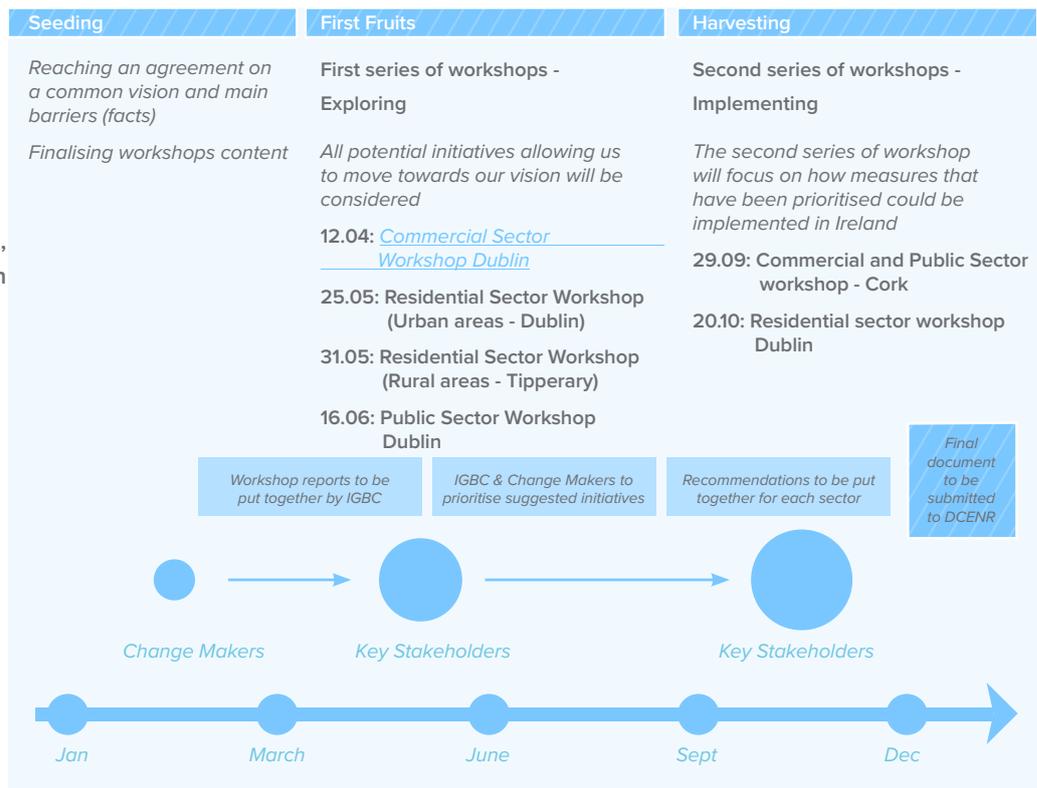
The European Commission in its Roadmap for moving to a competitive low carbon economy in 2050 (2011), established a long-term objective of decreasing the CO₂-emission levels for the building sector by 88%-91% in 2050, compared to 1990 levels.

Since the publication of this document and the adoption of the first version of Ireland’s National Renovation Strategy in April 2014, significant changes have occurred. Most notably, urban areas are now facing housing shortages and a landmark agreement to fight climate change was reached at COP21. In May 2015, the EPA highlighted that Ireland was not on track to reach its 2020 emissions’ target. The goal set in Paris of limiting global warming to 1.5C puts even more pressure on the country. The construction sector is expected to compensate for the projected increases in emissions from agriculture and transport. This represents both enormous opportunities and challenges.

THE DIALOGUE JOURNEY

Ireland will host a series of workshops in 2016-17 focused on the design and delivery of the national renovation strategy. These will be a mixture of national events, local events and European events connecting national leaders with other European leaders working on their national renovation strategies.

[A copy of the workshop agenda is available here.](#)



SESSION 1: SETTING THE SCENE

Pat Barry, executive director at the IGBC opened the workshop with a quote from Councillor Andrea Reimer of the City of Vancouver: “Some is not a number and soon is not a time”.

The first session very much focused on the importance of data and targets. In particular, [Michael Hanratty](#), Managing Director at IHER Energy Services explained that to bridge the gap to achieve 80% CO2 reduction by 2050 will require, in addition to the current trend, a DEEP retrofit of 75% of the residential stock (i.e. to primary energy value of circa 43kWh/m2/year) and a 60% decarbonisation of the electricity grid.



Marion Jammet from the IGBC closed the session with a presentation on the Build Upon project and an overview of the first results of a survey on deep renovation in the residential building sectors.

What do we need to make large scale deep renovation happen in the residential buildings sector?

Awareness... at individual, industry and governmental levels

- Governmental leadership
- Local leaders / champions

Better Communication

- One clear message from government (e.g. €300,000,000 fine in 2021!)
- Multiple strategies and communication tools to better target various groups of society
- Good high quality case studies

Knowledge & Skills

- Improving skills and knowhow in the construction sector
- Robust quality assurance from projects start to finish
- Knowledge and confidence in the value of energy efficiency retrofit, including co-benefits
- Centres of excellence to provide independent advises to end-users
- Quality data on existing housing stock and ownership

Incentives

- Better financial incentives (grants and/or tax incentives) including in the private rental sector

An integrated cross-departmental approach

It would be excellent today, if we could...

Set the foundations of a clear strategy

Create actionable recommendations

Influence our government to prioritise retrofits and develop productive legislation, i.e. spend the fines now, instead of waiting for 2021!

Agree on a destination (including interim targets) and a time

See how to sell the case for deep renovation as a way to improve end-users' quality of life



SESSION 2: TACKLING THE AWARENESS ISSUE... PUTTING THE END-USER CENTRE STAGE

In session two, participants looked at how to better engage with end-users to create long-term changes. The session kicked off with a presentation from [Ruth Mourik from DuneWorks](#) on citizen engagement strategies, which was followed by a world café discussion.

From your experience, when deep renovations happen in residential buildings what are the main motivations?

Homeowners

Homeowners' motivations are diverse, but primarily relate to comfort and quality of life, as well as money. Homeowners who retrofit their house hope to make some savings and/or see it as a long-term investment that can increase rental and property values. Peer pressure, and to a lesser extend environmental concerns also influence their decision.

Private Landlords

The main motivations for private landlords are financial: When they retrofit a house, their hope is to increase property and rent values. They are more likely to do it when financial incentives are in place or in a highly competitive market. Legislation and to a lesser extend peer pressure also provide strong motivations.

Tenants

Their main motivations are comfort (improving their wellbeing and health) and financial savings.

Local authorities

Subsidies availability, legislation (e.g. climate change targets), as well as the comfort and quality of life of tenants are the main sources of motivation for local authorities.

Other social housing providers

Their motivations are very similar to those of local authorities. They usually relate to finance (subsidies availability and cost-benefits analysis), as well as comfort and well-being of tenants.

Deep retrofitting often happen during dual renovations ("a once in a life time upgrade"). Funding availability and professional advises are crucial at that time. A better understanding of the main motivations for promoting deep renovations among professionals and developers could thus be useful (regulation, market competition?).



WHAT CAN OUR SECTOR DO TO MAKE LARGE SCALE DEEP RENOVATION HAPPEN?

Attendees were subsequently asked to gather by sector to see what they could bring to the strategy and what support they need to make large scale deep renovation happen in the residential buildings sector.

Construction Professionals

Construction professionals are at the interface with end-users and can act as ambassadors for deep renovation. They are a source of professional advice, and can influence end-users at key decision points. However, to perform that role they need good technical and communication skills. Changes in legislation (e.g. introducing BCAR type process for all deep retrofit projects) and buildings passport information could help them in delivering the strategy.

Local Authorities

Local authorities have a large stock of housing suitable for renovation and experience of citizens' engagement. The housing stock could be retrofitted and used to showcase best practises, and local authorities act as champions at local level. However, full governmental support and good communication skills would be required.

Social Housing

Social Housing Associations also have a large portfolio of properties and extensive knowledge of the landlord-tenant dilemma. However, to retrofit that stock they need additional incentives (e.g. streamlining of public funding, tax breaks) and clearer legislation on standards.

Research & Academia

Researchers can provide independent data, and bring a broader (multi-disciplinary and cross-cultural) perspective on the strategy. Furthermore, they have a key role to play in training qualified professionals. According to some participants, there is still a lack of adequate technical training in Architectural education in Ireland. To fully support the development and implementation of the strategy, they need sustainable sources of funding, more partnerships with industry and access to data and case studies.

Energy

Energy providers have extensive data and regular contacts with end-users. To fully contribute to the strategy, they need government to support them in raising public awareness.

Construction Product Manufacturers

Manufacturers have strong expertise in the area and good case studies that could be further promoted. Yet, tradesmen' skills are key in fully delivering products' potential. Other attendees suggested that the quantity and quality of post-occupancy data could be improved.

Public Sector

The public sector should facilitate policy action and provide leadership. They need to introduce legislation and guidelines that would allow Ireland to implement large scale deep renovation. To do so, they need sustained community engagement, better cross-departmental collaboration and clear leadership at government level.

SESSION 3: MAKING DEEP RENOVATION PAINLESS

Disruptions and intrusiveness are often mentioned as barriers to deep renovation in the residential buildings sector. In this session, participants looked at how to make deep renovation as painless as possible for end-users. [Dr. Ivo Opstelten delivered a presentation](#) on the Dutch EnergieSprong Scheme which was followed by a world café discussion.

Participants analysed the pros and cons of this model and its potential for replicability in Ireland.

On the positive side, EnergieSprong allows for fast, efficient, high quality and attractive makeovers with minimum disruption. The energy performance is guaranteed by the contractor and an innovative financing model – involving all key players - is in place, meaning it has a huge potential for scale up.

While using social housing as entry points allows for pilot projects, some participants expressed their concerns that it might lead to some kinds of stigma. The variability of Ireland's housing stock could also make its implementation more difficult and more expensive. This challenge may be further enhanced by planning constraints, limited manufacturing capacity and skills deficiency in the sector.

In brief, participants agreed that there is a lot to learn from this scheme, but that significant adjustments would be required if it were to be implemented in Ireland.

HOW COULD ENERGIESPRONG WORK IN IRELAND?

According to our experts, the first step in setting-up an “EnergieSprong” programme in Ireland is to talk to local authorities, social housing associations and industry. Local authorities and housing associations have a substantial buildings stock that could be used to leverage the process. However, this would require buy-in from industry and end-users.

A pilot programme taking into account the Irish context (e.g. skills set) and key learnings from the Netherlands should be run. Collected data on energy usage, comfort and health could then be used to define a clear timelines and approach financial institutions.

Key suppliers, trainers and industry associations should also be involved and the whole process streamlined. Intense cooperation with both utility providers and governmental bodies would be required to ensure the programme is compatible with 1. Building regulations (and/or introduce necessary standards and guidelines) and 2. The Irish grid.

Based on the outcomes of the pilot programme, a decision would be taken on launching Energiesprong Ireland.



SESSION 3: TACKLING THE TENANTS – OWNERS DILEMMA

The last session focused on the split incentive between tenants and landlords in the private rented sector. Michael McCarthy from Threshold first delivered a presentation on the scale of the issue from an end-user's point of view. [David McKechnie from McDowell-Purcell](#) then described the situation from a legal perspective. The presentations were followed by a world café discussion around key topics identified by participants.

Participants split into working groups to discuss the following topics: The private rented sector (1), fuel poverty (2), social housing (3) and the Better Energy Communities Scheme (4).

1. Private Rented Sector

Low-end rental accommodations often coincides with low standard energy performance. While significant work is required in this sector, this should be done without accentuating the current housing shortage.

More specifically, different strategies are required to address different building stocks, scale of landlords and tenants' situations. It be also be worth considering enhancing grants and tax treatments for landlords undertaking deep retrofits.

Finally, participants highlighted that the exemption of conservation and listed buildings from BER is problematic for retrofit.

2. Fuel Poverty

28% of households in Ireland could be in energy poverty ¹. There is a clear need for a specific section in the strategy on this issue and adequate funding mechanisms. Engagement with those in energy poverty (one size doesn't suit all) to better understand their needs (e.g. comfort, light) and choose the right appliances is critical. From a financial point of view, some participants suggested to use part of the fuel allowance budget to fund deep retrofit.

¹ <http://www.dcenr.gov.ie/energy/SiteCollectionDocuments/Energy-Efficiency/A%20Strategy%20to%20Combat%20Energy%20Poverty.pdf>

3. Social Housing – Case Study: The Airey Neighbourhood

Ruth Mourik from DuneWorks chaired a group discussion on how housing corporations can initiate and inspire neighbourhood improvements, through the Airey Neighbourhood's case study (hyperlink to page 13).

According to participants, Social Housing Programmes should offer flexible options, guarantee net zero costs and be designed with community engagement. With that regards, well trained local facilitators with good negotiation skills and excellent listening capacities are key. Trusted contact points should also be available throughout the project.

4. Better Energy Communities Scheme

Ruth Buggie from SEAI chaired a discussion on the Better Energy Communities Scheme and how it could be improved.

On the positive side, participants said that the programme often fills the voids left by energy agencies. It's also a highly flexible scheme that covers both energy efficiency and renewables, and is suitable for a broad variety of small groups of citizens and can thus facilitate various forms of cooperation.

Nevertheless, introducing multi-annual funding agreements could significantly improve the impact of this scheme. According to our participants, an increase in the number of local energy agencies would also make it more successful” Is this a phrase that will be understood. Should it be simply provision of multi annual funding instead of forcing work to be completed within an unrealistic time frame to meet SEAI s budget requirement.





“For Ireland to meet its stretching climate change objectives, decarbonisation of our housing stock is of critical importance. To facilitate a step change in our approach to this

challenge we need a robust Renovation Strategy that will facilitate proactive engagement by all stakeholders, in particular our homeowners.”

Brian Montayne, Business Development Manager, ESB Innovation



“A renovation strategy is vital because many of the people we visit and help are in cold homes. Many families struggle to heat their house because of poor energy efficiency

standards. This means respiratory infections, children going without warmth, impacts on mental health and mothers choosing between heating and eating. Much of this is in the private rented sector, where tenants are already under pressure with rising rents. Renovating houses means warmer homes. Warmer homes means healthier and better lives. It’s that simple.”

John-Mark McCafferty, Head of Social Justice, Society of St. Vincent de Paul



“The workshop was very well prepared by the organisers, the facilitation was excellent, the groups worked very well together with highly productive outcomes.”

Emer Burton, Programme Manager, SEAI



The methodology was excellent, particularly the use of artwork. ‘A picture tells a thousand tales’- maybe we need to embrace this method more when trying to engage end users.”

Kevin Curtin, Managing Director, Survey By Design Services



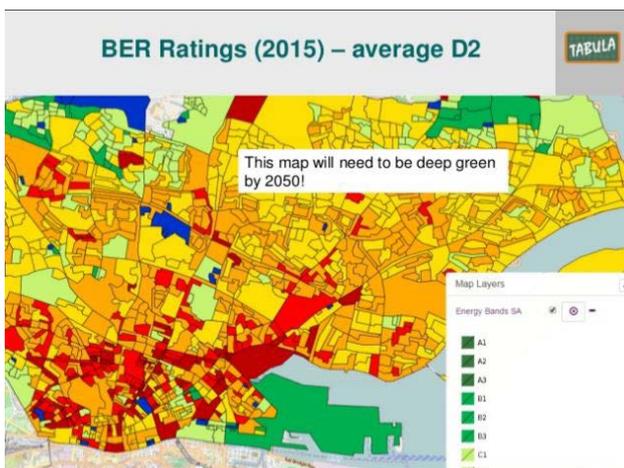
“... lots to think about!”

Isoilde Dillon, Housing Agency



TOWARDS LARGE SCALE DEEP RENOVATION IN THE RESIDENTIAL BUILDINGS SECTOR

Michael Hanratty, Managing Director IHER Energy Services opened the workshop with a presentation of the challenge ahead in the residential buildings sector in urban areas. In brief, he explained that to bridge the gap to achieve 80% CO₂ reduction by 2050 would require, in addition to the current trend, a DEEP retrofit of 75% of the residential stock (i.e. to primary energy value of circa 43kWh/m²/year) and a 60% decarbonisation of the electricity grid.



MAKING DEEP RENOVATION PAINLESS

Dr. Ivo Opstelten, Programme Director, EnergieSprong presented on this retrofitting programme.

The EnergieSprong scheme was launched in 2009 to help create market conditions for an energy neutral built environment in the Netherlands. To do so, the “Energy Leap” programme acted on both the demand and supply sides simultaneously.

In particular, EnergieSprong delivers whole house retrofits to net zero energy levels via off-site manufactured building envelopes. The programme has four central elements:

1. An insurer backed energy performance guarantee by the contractor
2. 10 day delivery timetable of all work
3. Affordability, the investment is financed by the resulting guaranteed energy cost savings
4. Attractiveness - the refurbishment package must be attractive to occupants, both improving residents' quality of life and the appearance of the house.





DuneWorks

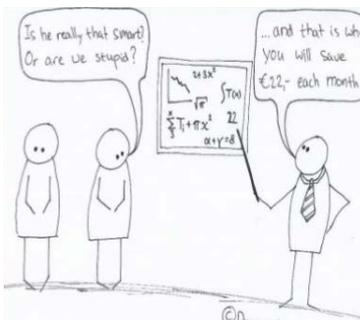
research & advice
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CHALLENGE OR OPPORTUNITY: ENGAGED END-USERS

Ruth Mourik, founder of Duneworks presented on how to better engage with end-users and to tackle apathy towards renovation.

[First, Mrs Mourik insisted on the importance of understanding the end-users, as nothing can be done without their "buy-in". In fact, it is estimated that 30% of energy demand is locked in behavioural "end-user" wedge. According to Mrs Mourik, most policies implemented so far to promote retrofitting are overly technocratic, lack meaningful monitoring and evaluation, and suffer from homo economicus bias. People do not live according to sectors or disciplines or government departments and systemic focus work best in practise. In brief, diversity needs to be recognised to drive engagement.](#)





McDOWELL

PURCELL

IMPROVING ENERGY EFFICIENCY IN THE PRIVATE RENTED SECTOR

Michael McCarthy, political officer in Threshold presented the issue from a tenant in the private rented sector perspective.

Mr McCarthy opened his presentation with two key figures: 1. The highest proportion of E, F and G building ratings are found in the Private Rented Sector (20%) 2. 55% of the private rented dwellings are likely to be considered to have poor energy efficiency, with BERs between D and G.

He subsequently described options that according to him could be explored further to tackle this issue:

- Introducing a Grant scheme similar to better energy warmer homes, with conditions around tenancy lengths
- Reviewing take up and issues with Better Homes Grant's extension to landlords in 2015
- Introducing legislation on Minimum Standards post 2020 and for new leases



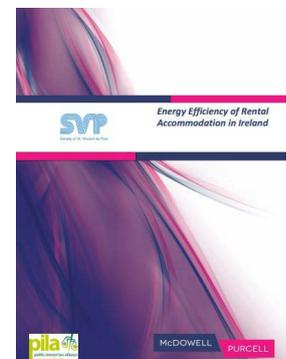
 **Threshold** Solving housing problems... preventing homelessness

IMPROVING ENERGY EFFICIENCY IN THE PRIVATE RENTED SECTOR

David McKechnie from McDowell Purcell delivered a presentation on current energy efficiency and related legislation for rental accommodation in Ireland.

In particular, Mr. McKechnie highlighted that despite significant improvements there is no specific provision in Irish legislation for the energy efficiency of rental accommodation.

[The presentation was largely based on the "Energy Efficiency of Rental Accommodation in Ireland" publication released in 2015 by the Public Interest Law Alliance \(PILA\) for the Society of Saint-Vincent de Paul.](#)



CASE STUDY

Airey Neighbourhood - the Netherlands

The majority of the lowest-income households in the Netherlands live in social housing provided by housing corporations. In their efforts to improve neighbourhoods, housing corporations are increasingly looking for innovative ways to trigger bottom-up participation and commitment so that residents themselves take a more active role and responsibility in improving their neighbourhood.

The Airey neighbourhood is a small post-war neighbourhood located in Eindhoven. The Aireys can be regarded as exemplary in terms of the types of challenges that many deprived neighbourhoods are facing: degraded housing stocks characterised by high energy bills, low comfort levels due to low energy efficiency, socio-economic decline, and little social cohesion. It was recently targeted by the housing corporation Woonbedrijf and municipality to become a textbook example of sustainable neighbourhood transformation and local self-governance.

However, this proved hard to materialise in practice: Tensions increased quickly between the intention to work in a demand driven manner and the top-down pressures and expectations that had built up. Tensions also arose between the ambitions of Woonbedrijf (and the municipality) and the actual needs of the Airey neighbourhood and its tenants.

The Airey's case study is useful in understanding how housing corporations can initiate and inspire neighbourhood improvements

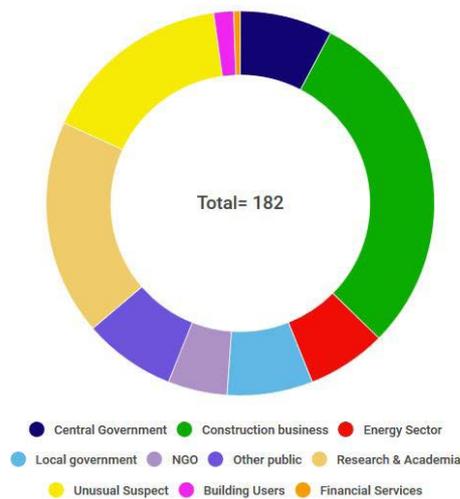
Read more:



WORKSHOP PARTICIPANT ANALYSIS

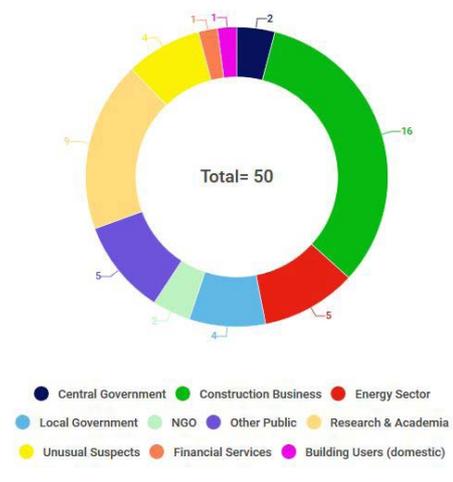
BUILD UPON aims to reach all the key stakeholder audience that need to be collaborating on the national renovation strategies. The breakdown of invitees and participants to the workshop 2 by key target audience was as follows:

WS 2 Invitees



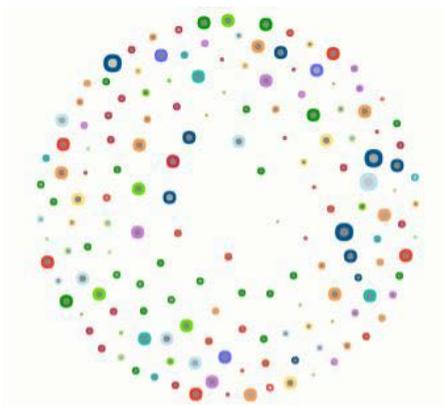
Construction Businesses and Public Bodies were the strongest represented community on the day, followed by Research & Academia, Energy Providers and Domestic Building Users.

WS 2 Attendees



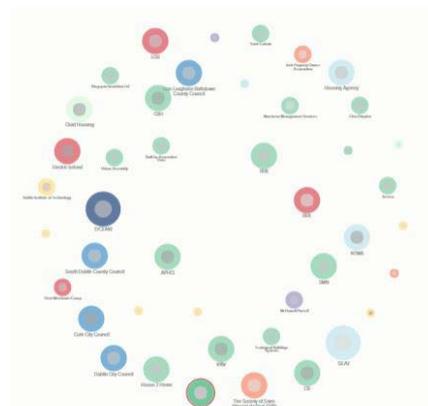
STAKEHOLDERS

Check out who's who in our interactive renovation stakeholder map.



PARTICIPANTS

Discover who attended our workshop on large scale deep renovation in the residential buildings sector in urban areas with our interactive map.



WORKSHOP PARTICIPANT ANALYSIS

PRIOR TO BEING CONTACTED BY THE IRISH GREEN BUILDING COUNCIL:

- Approximately 60% of participants knew Ireland had a National Renovation Strategy
- Approximately 50% of them knew the strategy had to be updated
- 2/3 believe they have a moderate level of influence on their organisation's involvement in the strategy

The following missing stakeholders were identified by our attendees as key to the development of the strategy



HOW CAN YOU ENGAGE?

Key areas where stakeholders are able to engage and input during the BUILD UPON process include:

Renovation stakeholder systems maps: Over 1,000 individual key stakeholder organisations have been mapped across the project countries. Your input is welcome to help ensure they are a representative picture of the key organisations that need to collaborate on Ireland's National Renovation Strategy V.2.

"RenoWiki" is a groundbreaking online portal which allows individuals to upload real-life initiatives on building renovations in Europe in order to share best practice and successful initiatives. To date, there are more than 550 initiatives (including 59 Irish initiatives) on the RenoWiki. Examples include Latvia's 'Lets Live Warmer', an award-winning awareness raising campaign that has led to greater uptake of housing insulation, and Ireland's "QualiBuild", a training programme to ensure a construction force capable of delivering quality energy efficient renovation.

COLLABORATING ON WORKSHOPS AND EVENTS:

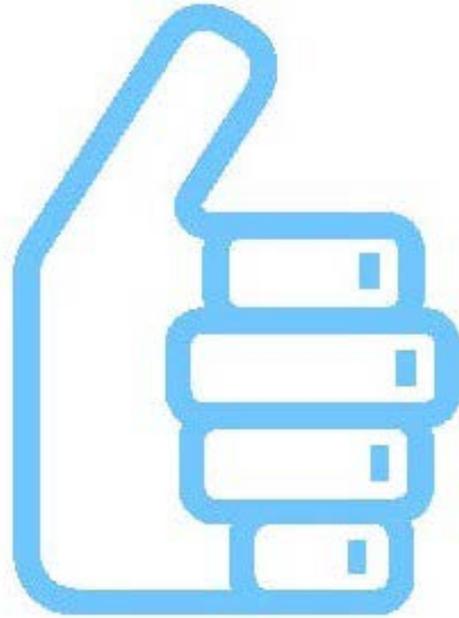
A series of over 80 events in the 13 project countries will bring stakeholders together during the project. As part of this process, six high level Building Renovation Workshops will be organized across Ireland by the Irish Green Building Council. The workshops are supported by the Department of Communications Energy and Natural 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

 [#BuildUpon](https://twitter.com/BuildUpon)

 Join our LinkedIn Group

BUILD UPON



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