

# Financing Energy Efficiency - Green Mortgages

Workshop Report  
April 24<sup>th</sup>, 2018, Dublin, Ireland

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## SUMMARY

On 24<sup>th</sup> April, the [Irish Green Building Council \(IGBC\)](#) organised the 'Financing Energy Efficiency – Green Mortgages' event as part of the [Energy Efficiency Mortgages Action Plan \(EeMAP\) project](#). We welcomed 35 attendees representing construction and property, finance, utilities and building users to provide Irish market input into the project. The event took place in the Dublin Chamber of Commerce and was supported by EU Horizon 2020 funding.

The following bullet points sum up the workshop key learnings and outcomes.

- Most workshop participants were interested in energy efficient mortgages for renovation. For new build, nZEB standard is not sufficient as an eligibility criterion. Certifications such as the Home Performance Index or Passive House may be more appropriate.
- Delegates were concerned about the current focus on shallow retrofits: A 30% improvement (or a €10,000 mortgage) may have no impact on the value of a property and/or the cost of running it (repayment capacity).
- A €25,000 to €35,000 green mortgage is probably required to have a real impact on property value and energy use.
- If the focus remains on shallow retrofits, the introduction of building renovation passports (or something similar) is needed.
- The process must be made easier for home buyers and banks. It is perceived as too burdensome for shallow retrofits and a small loan amount.
- A strong quality assurance system is needed, but banks do not need to collect all these data. Asking home buyers to use a competent professional (Criterion 3 - 1) and to provide a revised BER post-renovation (Criterion 2 – b) may be enough.
- Workshop participants were interested in being kept informed of EeMAP developments and in supporting them.

Note: In Ireland, Energy Performance Certificates (EPCs) are known as Building Energy Rating (BER) certificates.

## PRESENTATIONS & PANEL DISCUSSION

### PRESENTATIONS

The event started with a set of presentations introducing the [EeMAP project](#) and some complementary initiatives. The objective of this session was to give participants an overview of the project and of the work completed to that date. It was also aimed at providing delegates with ideas on how energy efficient mortgages could work in Ireland. The presentations can be [downloaded here](#).



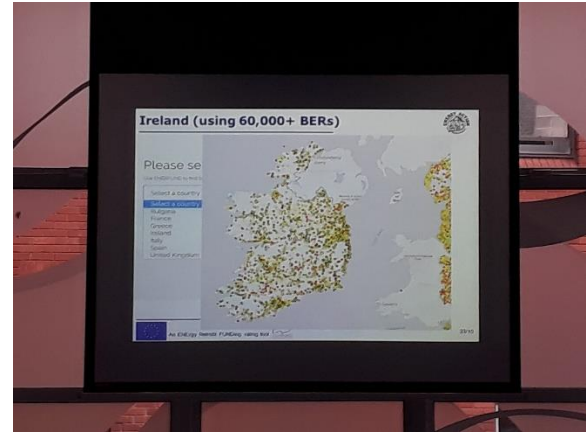
Pat Barry, CEO of the Irish Green Building Council (IGBC) opened the event quoting the [European Commission's financing sustainable growth Action plan](#) and the need to raise around €180 billion of additional investments a year to achieve the EU's 2030 climate targets.

As defining what is a green building is critical for this project and to develop green bonds, Barry gave a quick overview of the [Home Performance Index \(HPI\)](#) certification scheme. HPI is Ireland's first national certification system for quality and sustainable residential development.

His introduction was followed by a short presentation of the [EeMAP project](#) by Marie Louise Andersen, Policy Advisor at the [European Mortgage Federation \(EMF\)](#). Andersen first explained the rationale beyond the development of Energy Efficient mortgages. She highlighted that mortgages are worth 53% of the EU's GDP and that European banks are hence in a unique position to talk about energy renovation. Andersen subsequently gave an overview of the pilot phase and of the data collection process. Finally, she shared information on European banks already involved in the EeMAP project and said that new banks are committing to the pilot phase daily.



The last presentation of the session was delivered by Michael Hanratty of [IHER Energy Services](#). Hanratty launched the first version of the [Enerfund app for Ireland](#). The tool will rate and score deep renovation opportunities in apartment blocks, as well as commercial and public buildings. This rating tool for deep renovation opportunities could for instance be used by funding institutes to provide targeted loans.



## PANEL DISCUSSION



Three main points were discussed during the panel discussion:

- The benefit for Irish banks of joining the pilot phase of the project
- The link between a property BER and valuation
- The current focus on shallow retrofits as part of the EeMAP project.

### **Why should an Irish bank join the EeMAP pilot phase?**

Although the pilot is voluntary, Andersen explained that only banks involved in that phase would be able to access all project data. Furthermore, joining the pilot phase would give a bank a competitive advantage from a marketing and policy points of views. In fact, banks involved in this project will have a unique opportunity to influence policy and to shape the market.

### **BER ratings and property values**

Some of the valuers attending the briefing said that there was no price premium associated with an A rated property versus a B rated property. According to them, only a significant improvement in the BER rating of a property impacts its value.

### **Shallow retrofit vs. Deep retrofit**

Some of the workshop participants who had been involved with the IGBC since the [Build Upon project](#) and who first suggested to introduce green mortgages<sup>1</sup> in Ireland expressed

<sup>1</sup> The objective of the Build Upon project was to co-design an ambitious national renovation strategy for Ireland. The introduction of Green Mortgages was one of the suggestions (3.12) made as part of the [final set of recommendations for a better national renovation strategy](#).

their concern about focusing on shallow retrofits. The current challenge in Ireland is financing deep retrofit, not shallow retrofits.

## TECHNICAL WORKSHOP

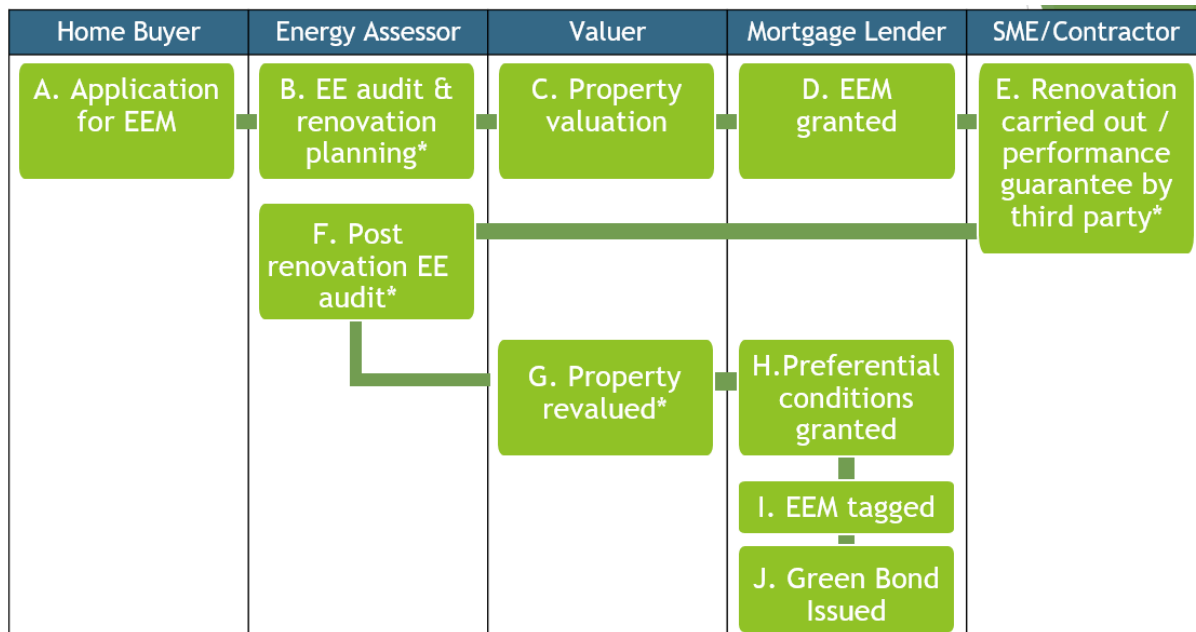
The second session of the event was the technical workshop to gather feedback on the [EeMAP proposals for building performance assessments](#) which are intended to be used during the pilot phase. Marion Jammet of the Irish Green Building Council presented the [current proposals](#) in detail, after which the delegates were given two separate tasks to complete.

*Note: All participants had received a copy of the [draft proposals](#), of the [building briefing assessment document for Ireland](#) and of the [consumer research document](#) in advance of the workshop. Hard copies of these documents were also available on each table.*

### EXERCISE 1: PROCESS WALK-THROUGH

Given the level of heterogeneity across the 10 European markets and business models, a flowchart illustrating the potential process of origination was designed to provide the necessary scope for lending institution to adapt the process to their internal practices, national market and legislative context.

For the first exercise, workshop participants were asked to provide feedback on this flowchart – diagram below. More specifically, delegates were asked to comment on the process and make it more nationally specific, highlighting required data flows, missing actors and potential bottle-necks.





Workshop participants had the option to work on mortgages for new builds or renovation. However, all of them chose to work on renovation. Below are some of the key themes and comments from the discussions.

The main comment made by workshop participants is that the process must be simpler for homebuyers: "We cannot expect homebuyers to go through a long process and lots of red tape for an extra €10,000". The transaction costs would simply be too high for such a small sum. According to them, homeowners will only go through that full process if they can access higher loans (e.g. €20,000 to €40,000).

### **A. Application for EEM**

The process must be simple for homebuyers. Homebuyers should not have to apply for an EEM at that stage. They should apply for a normal mortgage, with an option to turn it into an EEM if relevant for the property they decide to buy.

Banks have a key role to play in promoting that product. However, bank managers should keep in mind that homebuyers are often more interested in building an extension and improving their quality of life (comfort) than in energy efficiency. One suggestion was to develop guidelines for bank managers. For instance, if a client mentions that he would like to build an extension, the bank manager should inform him that he could access an extra €10,000 at a lower rate if he was also looking at energy efficiency.

Finally, to make things easier for clients some delegates said that banks should provide homeowners with an approved list of energy assessors (B) and valuers (C).

### **B. EE audit & Renovation Planning**

Two main questions were raised around that point: The cost of the audit and who would the energy assessor be.

Most workshop participants felt that it was not realistic to ask homebuyers to pay for a comprehensive energy audit and renovation plan at that stage. Homebuyer could perhaps submit a preliminary assessment first and a more detailed renovation audit when they know that there is a good chance for their EEM application to be approved. Another suggestion was for banks to publish a list of approved energy assessors who would all charged a standard fee for that work.

Finally, there were lots of questions raised around who that energy assessor should be: a construction professional, a [SEAI registered technical advisor](#)? No agreement could be reached on that last point.

### **C & G: Property valuation & Property revalued**

Workshop participants highlighted that it is extremely hard to quantify improvements in asset value from a small renovation. According to them, if we are only talking about small modifications (e.g. worth €10,000), valuers may not even be needed in the process. Alternatively, one valuation may be enough if adequate technical quality assurance programmes are in place.

### **D & H: EEM Granted & Preferential conditions granted**

Some participants expressed concern at only granting preferential conditions in H. In fact,

they felt that the process seems very risky for homeowners. A homeowner could spend lots of money in the process to learn at the very end that the work performed on the building isn't eligible. If this happened, media coverage of the product could be extremely negative.

### **E & F: Renovation carried out / performance guarantee by third party & Post renovation EE audit**

Some delegates said that there is no business model for performance guarantee in Ireland and that this would need to be developed. Many of them felt that this could be difficult to implement as performance is highly impacted by users' behaviour.

Another question was who would manage the renovation project? Some workshop participants said that this should be done by the person in charge of the audit (B) but expressed concerns that this could be expensive.

Although banks need guarantees, most workshop participants felt that this process was too burdensome for a small loan amount. According to them, a strong quality assurance system – like the one currently applied for SEAI grants – is probably enough.



## EXERCISE 2: TRAFFIC LIGHTS

The second task for delegates was reviewing the [building performance assessment proposals for the EeMAP pilot phase](#). Workshop participants worked in 3 groups to assign a traffic light rating to each proposal and provide further comments. The ratings below are taken as averages across the 3 groups, along with some of the key points of feedback.

Red = This principle will not work in Ireland

Amber = This principle could work but it needs further clarification or small amendments

Green = This principle can work in Ireland

### CRITERION 1 - ENERGY PERFORMANCE THRESHOLD FOR ENERGY EFFICIENT MORTGAGES

*A building will qualify for an EEM if its energy performance is either: a. compliant with the relevant national definition of nearly zero energy buildings (NZEBS) or b. 20% better than required by current applicable national building regulations (for example, where NZEB definitions have not been finalized); or c. improved by a minimum of 30% in the case of*

renovations. The lending institution may offer a scale of improved loan conditions for greater improvements, for example if a 40, 50 or 60% improvement is achieved.

### a & b - New Build



- This should be easy to implement as nZEB standard is now in place in Ireland
- However, some concerns were raised around this criterion
  - Is an extra €10,000 enough to meet criterion b (20% better than required by current applicable national building regulations)?
  - Is nZEB going far enough? "Not all buildings that reach nZEB standard in Ireland are "green" buildings". Shouldn't we ask for Home Performance Index (HPI) or Passive House certification for new builds?

### c. Renovation



- Most workshop participants expressed concerns that for most properties a 30% improvement is only a shallow retrofit.
- A 30% improvement may have no impact on the value of a property and/or the cost of running it - mainly due to the rebound effect in very energy inefficient properties.
- The following alternative suggestions were made:
  - Asking for a minimum BER A rating to create a clear distinction in cost savings.
  - Taking a fabric first approach. This would be simpler and would limit lock-ins risks.

## CRITERION 2: ONGOING PERFORMANCE MONITORING

*The borrower, or the borrower's nominated third party, shall report the following to the lending institution or their nominated third party: a. The building's measured energy consumption, according to each energy carrier (e.g. electricity or fuel), at least once per year. b. A revised Energy Performance Certificate after renovation, where applicable.*

### a. Measured Energy Consumption



- Energy suppliers have the information and it will become even easier to collect it in future with the smart-meters roll-out starting in 2019.
- It may be challenging to desegregate data, especially in properties where oil boilers are used.
- There might be some issues around data sharing and users' consent (GDPR).
- Two groups said that banks won't be interested in collecting this data. They are not the right entities to collect it. Perhaps, an intermediate body capable of analysing these data is needed. This should be an organisation with the technical capacity to provide general overview and feedback on success back to the bank to allow corrections to the scheme.





## **b. A revised Energy Performance Certificate after renovation**

### **CRITERION 3: QUALITY ASSURANCE**

*All works that impact on the energy performance of the building shall be:*

- 1. Planned by a competent person with an appropriate, nationally recognised qualification or accreditation; and*
- 2. planned and implemented in such a way as to ensure that the cost or technical feasibility of future energy efficiency improvements needed to bring the building's performance up to the equivalent of the top national EPC band rating at the time are not adversely affected; and*
- 3. undertaken by a competent contractor with the appropriate, nationally recognised qualifications or accreditations, and approved by the lender; and*
- 4. evidence of all works undertaken, including product performance levels and manufacturer warranties, shall be collected and submitted to the lender or the lender's nominated third party.*

#### **1. Planned by a competent person**



This was generally well received, although some workshop participants expressed concerns that it may be too burdensome if we are only talking about a small loan amount.

This would be easy to implement if an agreement can be reached on a list of competent professionals. [SEAI registered technical advisors](#) is an option, but not all people on the register may have the required knowledge and experience. [ECCoPro accredited professionals](#) may be a better option, but this register is unlikely to be available for another 18 months.

#### **2. No lock-ins**



This is critical, but perhaps too complicated. It is difficult for homeowners and banks won't be interested in it. One suggestion was to simply say that a fabric first principle should be applied.

### 3. Competent contractor



This is key and could be easy to implement. However, no high-quality usable registers are currently available in Ireland.

### 4. Evidence of work undertaken



Most workshop participants felt that this would be too burdensome for banks and that banks are not interested in this data. According to delegates, quality assurance is critical but if you use a competent professional to plan the work (Criterion 3 - 1) and ask for a revised BER (Criterion 2 - b) this should be enough.





## APPENDIXES

### RUNNING ORDER

#### **09.00 Registration & Networking**

09.25 Welcome Address – Pat Barry, CEO, IGBC

09.30 Energy Efficient Mortgages: The Story So Far - Marie-Louise Andersen, EMF

09.50 Rating and scoring deep renovation opportunities in Ireland – Michael Hanratty, IHER

10.05 Panel Discussion

10.25 Coffee Break

10.45 Workshop: Developing Energy Efficient Mortgages

10h45 Session I – Walk Through Exercise

11h50 Session II: Traffic light Exercise

12h30 Closing remarks and light lunch

## ATTENDEE LIST

<b>Company</b>	<b>First Name</b>	<b>Last Name</b>
3 Counties Energy Agency	Fergal	Cantwell
AIB	Maurice	Murphy
Ballycoe Services	Philip	Beck
Bank of Ireland	Conor	McCarthy
Bank of Ireland	Shane	Quinlan
Banking and Payment Federation Ireland	Louise	O'Mahony
BER Assessor	Aongus	O'Dowd
Colliers	John	Coleman
Department of Communications, Climate Action and Environment	Tomas	Murray
Department of Housing	Sean	Armstrong
Department of Public Expenditure and Reform	Laura	Kevany
EMF	Marie Louis	Andersen
Energy Elephant	Joe	Borza
ESB	Brian	Montayne
ESB	Clive	Bowers
IGBC	Pat	Barry
IGBC	Marion	Jammet
IHER	Michael	Hanratty
IPAV	Pat	Davitt
IPOA	Margaret	McCormick
KSN	Michael	Slevin
Olt Construction Donegal	Tara	Connaghan
Philip Lee Solicitors	Simon	O'Neill
Saint-Gobain	Fintan	Smyth
SAVVI	Simon	Dunne
SCSI	Brian	Meldon
SCSI	Declan	Ryan
SEAI	Josephine	Maguire
SEAI	Brian	O'Mahony
SEAI	Conor	Hanniffy
Sustainable Nation	Che	McGann
Tipperary Energy Agency	Paul	Kenny
Ulster Bank	John	Casey
	George	Mongey

The below organisations registered for the event but did not attend on the day.

Company	First Name	Last Name
Bank of Ireland	Paul	Dillon
BER Assessor	Niall	Mc Gonigle
Cork Institute of Technology	Marc	O'Riain
Department of Communications, Climate Action and Environment	Albert	Jordan
Department of Communications, Climate Action and Environment	Maurice	Healy
Department of Finance	Lynda	Conlon
Department of Housing	Alan	Smyth
Donovan Low Energy	David	Donovan
Energy Communities Tipperary Cooperative	Marcella	Maher Keogh
KBC	Conor	McGowan
MITIE	James	Nolan
ORS	Paul	O'Reilly
Passive House Plus	Jeff	Colley
Reddy Charlton	Andrew	Thorne
SAVVI	Karen	Mulligan
Self Build	Astrid	Madsen
Varming Engineering	Declan	Alcock

## ACKNOWLEDGEMENTS

A special thanks to Brian Montayne (ESB), Fintan Smyth (Saint-Gobain) and Josephine Maguire (SEAI) for their support in facilitating the workshop discussions.

## DISCLAIMER

The views expressed in this report are the Irish Green Building Council staff's interpretation of the workshop's outcomes. For further information on the EeMAP project in Ireland, please contact Marion Jammet, Business Development Manager at the IGBC ([marion@igbc.ie](mailto:marion@igbc.ie) – 016815862).