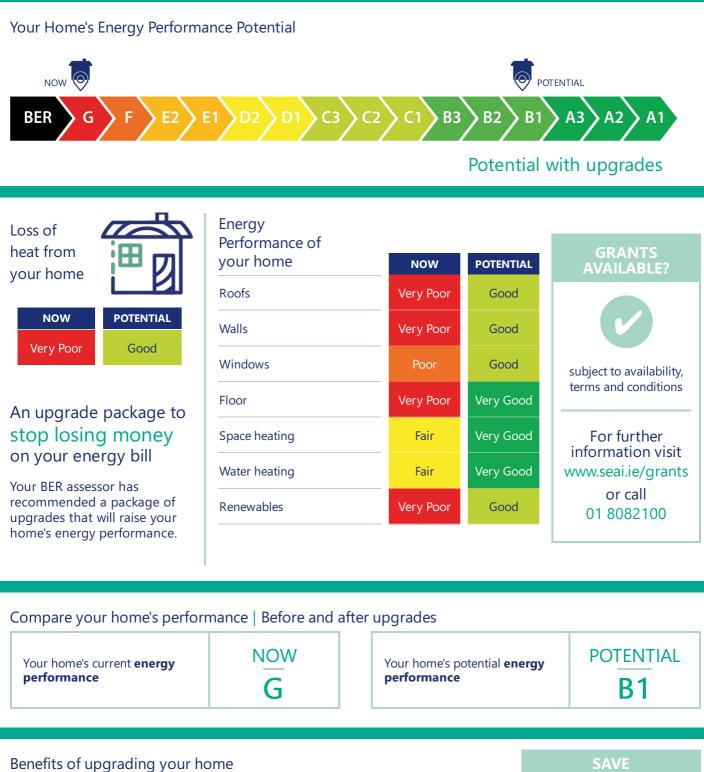
## Home Energy Upgrade Advisory Report



INCREASE your home's value INCREASE your home comfort

INCREASE your home's comfort REDUCE your energy bills

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CO<sub>2</sub> TONNES tonnes 12.8 = the same as planting 914 tree(s) each year



Your journey from







Your BER assessor has recommended a package of energy upgrades that maximise the energy performance of your home. The recommendations are for guidance only and can be completed at your own discretion. The recommendations are just one potential pathway to an improved BER and it is open to you to discuss alternative packages with your professional advisors.

### Package of energy upgrades to save money, make your home more comfortable and protect the environment

| Recommended Package of Energy Upgrades  | Cost<br>(Approx.) <sup>5</sup> | Grant Available <sup>6</sup> | Comfort          |
|---|--------------------------------|------------------------------|------------------|
| External doors 1.4 W/m <sup>2</sup> K average U-Value <sup>1, 2</sup>   | €€€€                           | ~                            | ★★★☆☆            |
| Roof insulation; pitched (at ceiling) 0.16 W/m <sup>2</sup> K,<br>pitched (on slope) 0.20 W/m <sup>2</sup> K, room in roof (on side)<br>0.20 W/m <sup>2</sup> K, flat 0.22 W/m <sup>2</sup> K average U-Value <sup>1, 2</sup> | €€€€                           | ~                            | ★★★☆☆            |
| Wall insulation 0.35 W/m <sup>2</sup> K average U-Value <sup>1, 2, 3</sup>  | €€€€                           | <ul> <li>✓</li> </ul>        | ★★★★☆            |
| Windows double glazing 1.4 W/m <sup>2</sup> K average U-Value $^{\rm 1,\ 2}$  | €€€€                           | ~                            | <b>★ ★ ★ ★</b> ☆ |
| Floor insulation 0.18 W/m <sup>2</sup> K average U-Value <sup>1, 2</sup>  | €€€€                           | N/A                          | ★★★☆☆            |
| Air-to-Water or Ground-to-Water or Water-to-Water heat pump with fully integrated heating controls <sup>4</sup>   | €€€€                           | ~                            | <b>★ ★ ★ ★</b> ☆ |

1. Major Renovation is defined in the Building Regulations Part L Technical Guidance Document and means the renovation of a dwelling where more than 25 % of the surface of the dwelling envelope undergoes renovation. Where a dwelling undergoes a major renovation, the energy performance of the whole dwelling should be improved to the cost optimal level by achieving a B2 or by implementing the energy performance improvements as set out in the Building Regulations Part L Technical Guidance Document.

- 2. This energy upgrade will reduce your home's heat loss and is an important first step to improving the energy efficiency of your home.
- 3. For some wall types it may not be appropriate to install the amount of insulation recommended here, particularly in the case of solid walls such as stone and brick built prior to 1950. Please seek the advice of a professional.
- 4. A dwelling should have low heat loss to ensure the heat pump runs efficiently. An ideal heat loss indicator (HLI) is less than 2.0 W/(K·m<sup>2</sup>). An upper HLI limit applies to SEAI grants. Where the HLI is between 2 and 2.3 W/(K·m<sup>2</sup>), additional heat pump grant eligibility criteria apply.
- 5. Investment Cost Legend:
  - € < 5,000
  - €€ 5,000 < 15,000
  - €€€ 15,000 < 30,000
  - €€€€ 30,000 50,000

6. A grant for this type of upgrade is available at the time of publication of this report. Grant availability is subject to eligibility criteria and should be checked to see if the works to your own home meet the eligibility criteria. Eligibility criteria are subject to change.



www.seai.ie/grants or call 01 8082100

# Start your journey to upgrade your home

If you're not ready for the maximum SEAI grant, consider picking one or two energy upgrades, selecting areas with the poorest performance.



#### GRANT APPLICATION

To start your application today visit www.seai.ie/grants

#### Simple energy upgrades - quick, cheap, easy

#### Draughtproofing

Draughtproofing, fitted to windows, doors and loft or attic hatches, improves airtightness and thermal comfort, reduces heat loss, improves noise insulation and reduces dust ingress.

#### Potential impact of the recommended energy upgrades

| Francisco  | Now                         |                   | Potential                   |                   |
|--|-----------------------------|-------------------|-----------------------------|-------------------|
| Energy upgrade   | Value                       | Energy Efficiency | Value                       | Energy Efficiency |
| Home Heat Loss Indicator (HLI) <sup>1</sup>  | 6.440 W/(K·m <sup>2</sup> ) | Very Poor         | 2.144 W/(K⋅m <sup>2</sup> ) | Good              |
| External doors (average U-Value <sup>2</sup> )   | 2.432 W/m <sup>2</sup> K    | Fair              | 1.537 W/m <sup>2</sup> K    | Very Good         |
| Floor insulation (average U-Value <sup>2</sup> )   | 1.020 W/m <sup>2</sup> K    | Very Poor         | 0.180 W/m <sup>2</sup> K    | Very Good         |
| Roof insulation (average U-Value <sup>2</sup> )  | 2.300 W/m <sup>2</sup> K    | Very Poor         | 0.184 W/m <sup>2</sup> K    | Good              |
| Wall insulation (average U-Value <sup>2</sup> )  | 1.974 W/m <sup>2</sup> K    | Very Poor         | 0.350 W/m <sup>2</sup> K    | Good              |
| Windows double glazing (average U-Value <sup>2</sup> )   | 2.736 W/m <sup>2</sup> K    | Poor              | 1.392 W/m <sup>2</sup> K    | Good              |
| Air-to-Water or Ground-to-Water or Water-to-Water heat pump with fully integrated heating controls (Primary Energy Efficiency <sup>3</sup> ) | 78%                         | Fair              | 200%                        | Very Good         |
| Renewable Energy Ratio (RER)   | 0%                          | Very Poor         | 10%                         | Good              |

1. The Home Heat Loss Indicator (HLI) is a summary of the overall performance of the home. It includes all the fabric and ventilation upgrades listed in the table

2. A U-value is a measure of the heat loss through the building fabric. The higher the U-value, the greater the heat loss

3. Primary energy efficiency is the efficiency divided by the primary energy conversion factor

4. Indicators are based on the average elemental U-values in the BER and where partial upgrades occur, average U-values may remain above the optimum U-value.

Your Home's Details Home Address FEAMORE CLAREMORRIS CO. MAYO, F12N9T0

#### House Details

Year of construction: 1887 Dwelling type: Detached house Total floor area: 101.62 m<sup>2</sup>

#### About the Home Energy Upgrade Advisory Report

This document is a first step to assist you in engaging with a professional to determine suitable energy upgrades for your home.

It was prepared by a BER assessor using general assumptions and information from your BER assessment. The improvement in the BER has been estimated based on the assumption of certain values for energy upgrades and is provided as an indicator only.

This document is for information only and does not constitute professional or legal advice. The homeowner waives and releases any and all claims against SEAI and/or the BER assessor arising from the contents of this advisory report.

#### Use this document to:

Better understand how your home performs and how to make it more comfortable and affordable to run.

Provide information on home energy upgrades to discuss further with a professional or contractor.

Identify small simple steps you can take to improve the comfort of your home, if grant supported works aren't suitable for you right now.

Start the grant application process with SEAI, who may have substantial support available.

#### Recommended Energy Upgrades

The recommendations contained within your advisory report have been generated based on the data inputs contained within your BER assessment. SEAI recommends you seek professional advice and use suitably qualified installers to assess the suitability of the recommendations for your own particular home.

SEAI and the BER assessor accept no responsibility for and give no guarantees, undertakings or warranties concerning the accuracy, completeness or fitness-for-purpose of the information contained herein and do not accept any liability whatsoever arising from the contents hereof.

Further information on upgrading your home is available in **S.R. 54:2014 Code of Practice for the Energy Efficient Retrofit of Dwellings**, available from <u>www.nsai.ie</u>.

#### **Building Regulations**

The aim of the building regulations is to provide for the safety and welfare of people in and about buildings. Where applicable, works should be completed in accordance with the relevant Building Regulations. The primary responsibility for compliance with the requirements of the Building Regulations rests with the designers, builders and owners of buildings. Technical Guidance Documents for the Building Regulations and other supporting documents are available from the Department of Housing, Local Government and Heritage website at <u>www.housing.gov.ie</u>.

#### Costs

The investment cost indicators are guidelines only. Actual costs will vary depending on house size, specification and market conditions. Cost indicators may be calculated based on a partial upgrade if some sections of the building element are already adequately insulated.

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#### Ventilation

Care should always be taken to ensure sufficient levels of ventilation in each room. Signs of inadequate ventilation are persistent condensation and mould growth and should be addressed in the first instance. It is important not to permanently close or cover over air vents as they are required to provide ventilation. Further guidance on ventilation provision when carrying out retrofit works is available in Section 10 Ventilation of S.R. 54:2014 Code of Practice for the Energy Efficient Retrofit of Dwellings.

#### Radon

Radon gas at high concentration causes lung cancer and is estimated to be responsible for 300 cases per annum in Ireland. Retrofitting provides an opportunity to test for, and remediate for, radon, where indicated. A radon test is low cost and non-disruptive. The only way to know if a home has a radon issue is to test. Further information on radon, including testing, is available on the EPA website <u>www.epa.ie</u>.

#### Heat producing Appliances

It is important to ensure that there is an adequate air supply to all heat producing appliances e.g. any fixed appliance (including a cooker or an open fire) which is designed to burn solid fuel, oil, bio-fuel or gas and to provide permanent ventilation for all non-room sealed combustion appliances. Useful health and safety information can be found on the Carbon Monoxide safety website: <u>www.carbonmonoxide.ie</u>. Further guidance on air supply for heat producing appliances is available in Section 7 and Section 10 Ventilation of S.R. 54:2014 Code of Practice for the Energy Efficient Retrofit of Dwellings.

#### **Evidence for BER**

Documentary evidence of energy upgrades is required for your BER and should be retained and provided to your BER assessor to ensure the energy performance uplift is captured in your BER. Your BER Assessor can advise you on documentary evidence requirements. Further information is available on <u>https://www.seai.ie/homeenergy/building-energy-rating-ber/</u>.