# Home Energy Upgrade Advisory Report

Your Home's Energy Performance Potential



Potential with upgrades

**POTENTIAL** 

Loss of heat from your home



NOW Fair



An upgrade package to stop losing money on your energy bill

Your BER assessor has recommended a package of upgrades that will raise your home's energy performance. Energy Performance of your home

Roofs	Good	Good	
Walls	Fair	Very Good	
Windows	Fair	Good	
Floor	Good	No Upgrade	
Space heating	Fair	Good	
Water heating	Fair	Good	
Renewables	Very Poor	Very Good	

NOW

GRANTS AVAILABLE?



subject to availability, terms and conditions

For further information visit www.seai.ie/grants or call 01 8082100

Compare your home's performance | Before and after upgrades

Your home's current **energy performance** 



Your home's potential **energy performance** 

POTENTIAL **B1** 

Benefits of upgrading your home

INCREASE your home's value



INCREASE your home's comfort



REDUCE your energy bills



SAVE

TONNES

= the same as planting 169 tree(s) each year



## Your journey from



to



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 (Approx.) <sup>4</sup>	Grant Available <sup>5</sup>	Comfort
External doors 1.4 W/m <sup>2</sup> K average U-Value <sup>1, 2</sup>	€€€€	<b>✓</b>	<b>★★★☆☆</b>
Roof insulation; pitched (at ceiling) 0.16 W/m <sup>2</sup> K, pitched (on slope) 0.20 W/m <sup>2</sup> K, room in roof (on side) 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 0.18 W/m <sup>2</sup> K average U-Value <sup>1, 2</sup>	€€€€	<b>✓</b>	****
Windows double glazing 1.4 W/m <sup>2</sup> K average U-Value <sup>1, 2</sup>	€€€€	<b>✓</b>	***
New boiler with heating controls <sup>3</sup>	€€€€	N/A	****
Install closed room heater or stove with flue. Min 60% efficiency	€€€€	N/A	** \( \alpha \) \( \alpha \)
Solar Photovoltaic (PV) electricity System 2kWp.	€€€€	V	N/A

- 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. Where the heat loss indictor (HLI) is less than 2.3 W/Km2, a heat pump should be considered as an alternative to a fossil fuel boiler. A dwelling should have low heat loss to ensure the heat pump runs efficiently. An ideal HLI is less than 2.0 W/K/m2. An upper HLI limit applies to SEAI grants. Where the HLI is between 2 and 2.3 W/Km2, additional heat pump grant eligibility criteria apply.
- 4. Investment Cost Legend:

≤ < 5,000</li>
€ €
5,000 - < 15,000</li>
€ € €
30,000 - 50,000

5. 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.

# GRANTS



subject to availability, terms and conditions

For further information visit www.seai.ie/grants or call 01 8082100

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# 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.

#### **Cylinder thermostat**

Space heating and hot water systems should have separate and independent time and temperature controls. The cylinder thermostat controls the hot water cylinder temperature.

#### Lighting

Correct lighting levels are essential for visual comfort, safety and for aesthetic effects. Fit efficient electric lighting and maximise the use of daylight.

# Potential impact of the recommended energy upgrades

Energy upgrade	Now		Potential	
	Value	Energy Efficiency	Value	Energy Efficiency
Home Heat Loss Indicator (HLI) <sup>1</sup>	2.475 W/(K·m <sup>2</sup> )	Fair	1.738 W/(K·m <sup>2</sup> )	Good
External doors (average U-Value <sup>2</sup> )	2.859 W/m <sup>2</sup> K	Poor	1.400 W/m <sup>2</sup> K	Very Good
Roof insulation (average U-Value <sup>2</sup> )	0.273 W/m <sup>2</sup> K	Good	0.160 W/m <sup>2</sup> K	Good
Wall insulation (average U-Value <sup>2</sup> )	0.550 W/m <sup>2</sup> K	Fair	0.180 W/m <sup>2</sup> K	Very Good
Windows double glazing (average U-Value <sup>2</sup> )	2.200 W/m <sup>2</sup> K	Fair	1.400 W/m <sup>2</sup> K	Good
New boiler with heating controls (Primary Energy Efficiency <sup>3</sup> )	77%	Fair	82%	Good
Install closed room heater or stove with flue. Min 60% efficiency (Primary Energy Efficiency <sup>3</sup> )	27%	Fair	55%	Good
Solar Photovoltaic (PV) electricity System 2kWp.	N/A	N/A	1,718 kWh/y	N/A
Lighting	51.71 Lm/W	Good	66.90 Lm/W	Very Good
Renewable Energy Ratio (RER)	0%	Very Poor	26%	Very 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
- ${\it 3. \ Primary energy efficiency is the efficiency divided by the primary energy conversion factor}$
- 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.

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# Home Energy Upgrade Advisory Report

Your Home's Details

Home Address

10 PAULSTOWN CO. KILKENNY, R95NW88

#### **House Details**

**Year of construction:** 2003 **Dwelling type:** Detached house

**Total floor area:** 94.64 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 <a href="https://www.nsai.ie">www.nsai.ie</a>.

## **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 <a href="https://www.housing.gov.ie">www.housing.gov.ie</a>.

#### 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 <a href="https://www.epa.ie">www.epa.ie</a>.

#### 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: <a href="www.carbonmonoxide.ie">www.carbonmonoxide.ie</a>. 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 <a href="https://www.seai.ie/home-energy/building-energy-rating-ber/">https://www.seai.ie/home-energy/building-energy-rating-ber/</a>.

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