

# Building Energy Rating (BER)

BER for the building detailed below is:

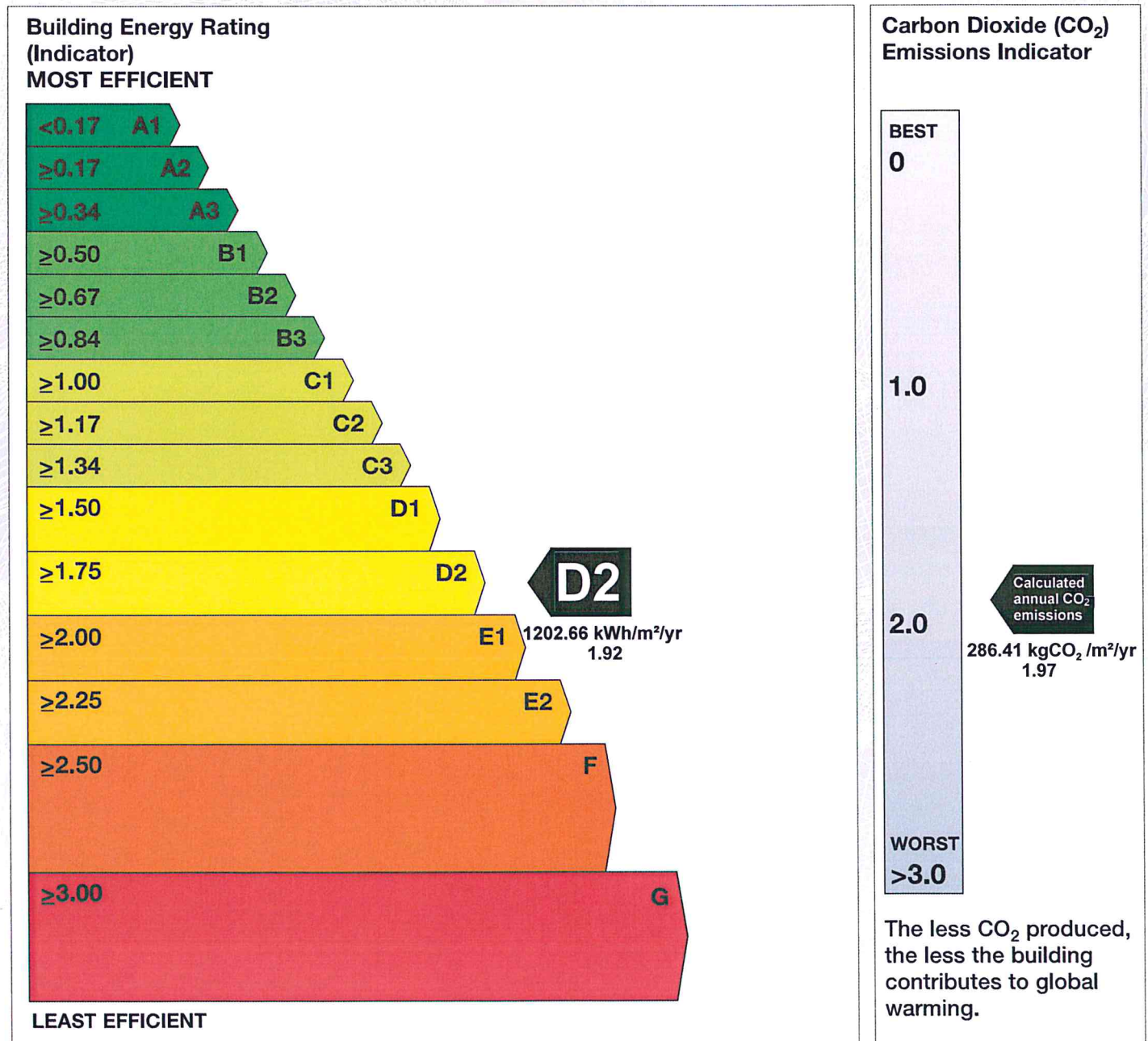
**D2**

Retail Unit  
Market Square  
Castlebar  
Co. Mayo

The Building Energy Rating (BER) is an indicator of the energy performance of this building. It covers energy use for space heating and cooling, water heating, ventilation and lighting, calculated on the basis of standard operating patterns. It is accompanied by a CO<sub>2</sub> emissions indicator. These indicators are expressed as respective ratios of primary energy use and CO<sub>2</sub> emissions, relative to what would apply for a similar building generally satisfying the Building Regulations 2005. 'A' rated properties are the most energy efficient and will tend to have the lowest energy bills.

BER Number: 800580607  
Building Type: Retail  
Useful Floor Area (m<sup>2</sup>): 100  
Main Heating Fuel: Grid Supplied Electricity  
Building Environment: Heating and Natural Ventilation

Date of Issue: 15 Aug 2017  
Valid Until: 14 Aug 2027  
BER Assessor No.: 103878  
Assessor Company No.: 102664  
Assessor Scheme: SEI Interim AS



**IMPORTANT:** This BER is calculated on the basis of data provided to and by the BER Assessor, and using the version of the assessment software quoted above. A future BER assigned to this building may be different as a result of changes to the building, its use or the assessment software.

## Advisory Report

**BER Number: 800580607****Building Energy Rating: D2**

Retail Unit  
Market Square  
Castlebar  
Co. Mayo

MPRN: 10011257988

Building Type(s): Retail

ADMINISTRATIVE INFORMATION	
Date of Issue:	15 Aug 2017 15:57
Valid Until:	14 Aug 2027(*)
Useful Floor Area (m <sup>2</sup> ):	100
Main Heating Fuel:	Grid Supplied Electricity
Building Environment:	Heating and Natural Ventilation
Calculation Tool Used:	iSBEM v3.5.b using calculation engine SBEM v3.5.b.1

(\*) Unless superseded by a later Advisory Report

ENERGY ASSESSOR DETAILS	
Assessor Name:	Paul Roddy
Assessor Company Number	102664
Assessor Number:	103878
Assessor Scheme:	SEI Interim AS

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## 1. Background

Statutory Instrument No. 666 of 2006, European Communities (Energy Performance of Buildings), gives effect to certain provisions of Directive 2002/91/EC of the European Parliament and of the Council of 16 December 2002 on the energy performance of buildings.

A Building Energy Rating (BER) and Advisory Report is to be supplied by the owner to a prospective buyer or tenant when constructed, sold or rented. The objective of the rating is twofold:

To give prospective buyers and tenants information about the energy performance of buildings.

To give builders/developers and vendors/landlords, an incentive to upgrade the energy performance of the building by giving visible credit to superior standards.

The BER must be accompanied by an "Advisory Report" setting out recommendations for cost-effective improvements to the energy performance of the building. However there will be no legal obligation on vendors or prospective purchasers to carry out the recommended improvements. This provision of the EPBD has been transposed into Irish legislation by S.I. No. 666 of 2006.

## 2. Introduction

This Advisory Report was produced in line with the approved methodology and is based on calculation tool iSBEM v3.5.b using calculation engine SBEM v3.5.b.1.

The BER and Advisory Report for new buildings are based upon the design drawings and building specifications taking account of amendments during the construction phase. The focus of the Advisory Report for new buildings is to provide occupants with advice on how to maximise the energy efficiency of their new building through best use of features and services installed.

For existing buildings the BER and Advisory Report will also be based on a survey of the building.

### 3. Recommendations

The following sections list recommendations selected by the energy assessor for the improvement of the energy performance of the building. The recommendations are listed under four headings: short payback, medium payback, long payback, and other measures.

#### a) Recommendations with a short payback

This section lists recommendations with a payback of less than 3 years:

Recommendation	Potential Impact
Replace tungsten GLS lamps with CFLs: Payback period dependent on hours of use.	LOW
Consider replacing T8 lamps with retrofit T5 conversion kit.	HIGH
Introduce HF (high frequency) ballasts for fluorescent tubes: Reduced number of fittings required.	LOW
Some spaces have a significant risk of overheating. Consider solar control measures such as the application of reflective coating or shading devices to windows.	MEDIUM
Add time control to heating system.	MEDIUM

#### b) Recommendations with a medium payback

This section lists recommendations with a payback of between 3 and 7 years:

Recommendation	Potential Impact
Add optimum start/stop to the heating system.	MEDIUM
The default heat generator efficiency is chosen. It is recommended that the heat generator system be investigated to gain an understanding of its efficiency and possible improvements.	LOW
Some walls have uninsulated cavities - introduce cavity wall insulation.	MEDIUM

#### c) Recommendations with a long payback

This section lists recommendations with a payback of more than 7 years:

Recommendation	Potential Impact
Some windows have high U-values - consider installing secondary glazing.	MEDIUM
Add local temperature control to the heating system.	MEDIUM
Add weather compensation controls to heating system.	MEDIUM
Add local time control to heating system.	MEDIUM
Carry out a pressure test, identify and treat identified air leakage. Enter result in EPC calculation.	MEDIUM

**d) Other recommendations**

This section lists other recommendations selected by the energy assessor, based on an understanding of the building, and / or based on a valid existing energy report.

No recommendations defined by the energy assessor have been identified

## **4. Next Steps**

### **a) Your Advisory Report**

Statutory Instrument No. 666 of 2006 requires that the Building Energy Rating (BER) Certificate must be accompanied by an "Advisory Report" setting out recommendations for cost-effective improvements to the energy performance of the building.

This Advisory Report has been lodged on the BER register. Access to the report, to the data used to compile the report, and to previous similar documents relating to the same building can be obtained via a registered assessor.

### **b) Implementing recommendations**

The recommendations are provided as an indication of opportunities that appear to exist to improve the building's energy efficiency.

The recommendations are derived from a set of recommendations automatically produced by the calculation tool, reviewed, commented on and amended by the BER assessor as he / she found appropriate in the light of his / her knowledge of the building and its current or intended use. Any recommendations in Section 3d (Other recommendations) have been inserted by the BER assessor.

These recommendations do not include matters relating to operation and maintenance which cannot be identified from the calculation procedure.

### **c) Legal disclaimer**

The advice provided in this Advisory Report is intended to be for information only. Recipients of this Advisory Report are advised to seek further detailed professional advice before reaching any decision on how to improve the energy performance of the building.



## 5. Glossary

### a) Payback

The payback periods are based primarily on data provided by the UK Good Practice Guides and Carbon Trust energy survey reports and are average figures calculated using a simple payback method. It is assumed that the source data is correct and accurate using up to date information and that these data are applicable to Ireland.

The figures have been calculated as an average across a range of buildings and may differ from the actual payback period for the building being assessed. Therefore, it is recommended that each suggested measure be further investigated before reaching any decision on how to improve the energy efficiency of the building.

### b) Primary Energy and Carbon Dioxide Emissions Impact

The High / Medium / Low potential impact indicators against each recommendation are provided to distinguish, between the suggested recommendations, those that would have the most impact on primary energy and carbon dioxide emissions from the building. For automatically generated recommendations, the potential impact indicators are determined by the software, but may have been adjusted by the Energy Assessor based on his / her knowledge of this building. The potential impact of other recommendations is determined by the assessor.

### c) Valid Advisory Report

A valid report is a report that has been:

- Produced within the past 10 years
- Produced by a registered Building Energy Rating Assessor
- Lodged on the register managed by the Sustainable Energy Authority of Ireland
- Not superceded by a later report

A provisional BER certificate and related Advisory Report, where applicable, shall be valid for a period not exceeding 24 months from the date of its issue.