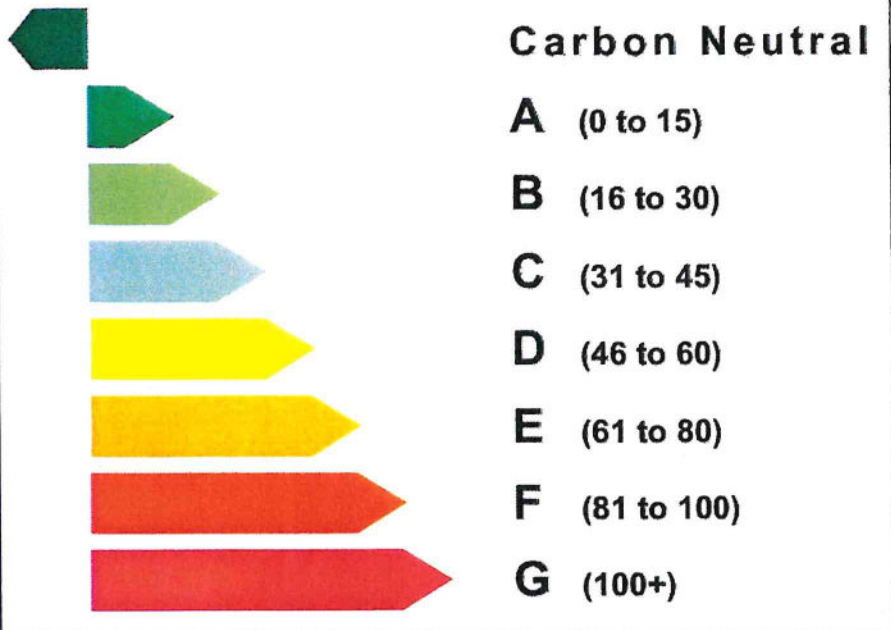




Building Energy Performance		Scotland
Calculated asset rating using iSBEM v4.1.d [SBEM]	Building type Retail/Financial and Professional services	Current rating
 <p>Carbon Neutral</p> <p>A (0 to 15)</p> <p>B (16 to 30)</p> <p>C (31 to 45)</p> <p>D (46 to 60)</p> <p>E (61 to 80)</p> <p>F (81 to 100)</p> <p>G (100+)</p>		Excellent
Carbon Dioxide Emissions		
The number refers to the calculated carbon dioxide emissions in terms of kg per m ² of floor area per year		144
Approximate current energy use per m ² of floor area:		278 kWh/m²
Main heating fuel: Grid Supplied Electricity		Building Services: Heating with Nat. Vent.
Renewable energy source: None		Electricity: Grid supplied
<p>Carbon Dioxide is a greenhouse gas which contributes to climate change.</p> <p>Less Carbon Dioxide emissions from buildings helps the environment.</p>		
Benchmarks		
A building of this type built to building regulations standards current at the date of issue of this certificate would have a rating:		55  D
Where the accompanying recommendations for the cost effective improvement of energy performance are applied, this building would have a rating:		0  ??
Recommendations for the cost-effective improvement (lower cost measures) of the energy performance		
1. Consider installing PV.	4. Some walls have uninsulated cavities - introduce cavity wall insulation.	
2. Consider replacing T8 lamps with retrofit T5 conversion kit.	5. Some windows have high U-values - consider installing secondary glazing.	
3. 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.	6. Some loft spaces are poorly insulated - install/improve insulation.	

Address: Duffus Village Shop & Post Office, Hopeman Road, Duffus, Elgin, Moray
Conditioned area (m²): 37
Name of protocol organisation: Stroma Accreditation, [STRO005421]
Date of issue of certificate: 13 May 2012 (Valid for a period not exceeding 10 years)
 This certificate is a requirement of EU Directive 2002/91/EC on the energy performance of buildings.
NB THIS CERTIFICATE MUST BE AFFIXED TO THE BUILDING AND NOT REMOVED UNLESS REPLACED WITH AN UPDATED VERSION AND FOR PUBLIC BUILDINGS DISPLAYED IN A PROMINENT PLACE

Building Address:

Duffus Village Shop & Post Office
Hopeman Road
Duffus
Elgin
Moray
IV30 5RR

Building Type(s): Retail/Financial and Professional services

ADMINISTRATIVE INFORMATION

Issue Date:	13 May 2012
Valid Until:	12 May 2022 (*)
Total Useful Floor Area (m ²):	37
Calculation Tool Used:	iSBEM v4.1.d using calculation engine SBEM v4.1.d.0

QUALIFIED/ACCREDITED PERSON DETAILS

Person Name:	Sue Tagg
Employer/Trading Address:	1, Wharburton Close, Sandiway, Cheshire CW8 2ZE
Protocol Organisation:	Stroma Accreditation
Membership Number:	STRO005421

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1. Background

Building (Scotland) Act 2003 and Statutory Instrument 2007 No. 534, *The Building (Scotland) Amendment Regulations 2006*, transposes the requirements of Articles 7.2 and 7.3 of the Energy Performance of Buildings Directive 2002/91/EC.

This Recommendation Report is the Additional advice in clause 6.9.3 of the Scottish Building Standards Non-domestic Technical Handbook which may be provided. Cost effective improvements should be inserted into the Recommendations section of the Energy Performance Certificate.

This section provides general information regarding the building:

Total Useful Floor Area (m ²):	37
Building services:	Heating and Natural Ventilation

2. Introduction

This Recommendation Report was produced in line with the Government's approved methodology and is based on calculation tool iSBEM v4.1.d using calculation engine SBEM v4.1.d.0 .

In accordance with Government's current guidance, the Qualified / Accredited Person did undertake a walk around survey of the building prior to producing this Recommendation Report.

3. Recommendations

The following sections list recommendations selected by the Qualified / Accredited Person 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
Consider replacing T8 lamps with retrofit T5 conversion kit.	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
Some windows have high U-values - consider installing secondary glazing.	MEDIUM
Some loft spaces are poorly insulated - install/improve insulation.	MEDIUM

b) Recommendations with a medium payback

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

Recommendation	Potential impact
Some glazing is poorly insulated. Replace/improve glazing and/or frames.	MEDIUM
Consider installing an air source heat pump.	HIGH

c) Recommendations with a long payback

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

Recommendation	Potential impact
Consider installing solar water heating.	LOW

d) Other recommendations

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

Recommendation	Potential impact
Consider installing PV.	LOW

4. Next steps

a) Implementing recommendations

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

The calculation tool has automatically produced a set of recommendations, which the Qualified / Accredited Person has reviewed in the light of his / her knowledge of the building and its use. The Qualified / Accredited Person may have comments on the recommendations based on his / her knowledge of the building and its use.

The Qualified / Accredited Person may have inserted additional measures in section 3d (Other Recommendations). He / she may have removed some automatically generated recommendations or added additional recommendations.

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

b) Legal disclaimer

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

c) Complaints

Details of the Qualified / Accredited Person and the relevant protocol organisation are on this report and the energy performance certificate. You can get contact details of the protocol organisation from our website at www.sbsa.gov.uk/european_issues/epcprotocols.

5. Glossary

a) Payback

The payback periods are based on data provided by 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.

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) Carbon impact

The High / Medium / Low carbon impact indicators against each recommendation are provided to distinguish, between the suggested recommendations, those that would have most impact on carbon emissions from the building. For automatically generated recommendations, the carbon impact indicators are determined by software, but may have been adjusted by the Qualified / Accredited Person based on his / her knowledge of the building. The impact of other recommendations are determined by the assessor.

c) Valid report

A valid report is a report that has been:

- Produced within the past 10 years
- For an existing building, produced by a Qualified / Accredited Person who is accredited to produce Recommendation Reports through a Government Approved protocol agreement