

This report is associated with a Display Energy Certificate.

Report Reference Number: 0540-0528-5079-4207-0002

**Building Occupier Address** 

> Liskeard & District Museum Foresters Hall, 1 Pike Street Liskeard **PL14 3JE**

Building Type(s): Cultural Activities

ADMINISTRATIVE INFORMATION	
Issue Date:	2018-03-12
Valid Until:	2028-03-11
Total Useful Floor Area (m²):	359.87
Assessment Software	DCLG, ORCalc, v3.6.3
Property Reference	447005250000
Type of Inspection	Physical

ENERGY ASSESSOR DETAILS	
Assessor Name:	Mr. Matthew Morris
Employer/Trading Name:	East Rose Energy Assessments Limited
Employer/Trading Address:	East Rose, St Breward, Bodmin, PL30 4NL
Assessor Number	EES/009021
Accreditation Scheme:	Elmhurst Energy Systems

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### 1. Background

This is a Recommendation Report as defined in the Energy Performance of Buildings (England and Wales) Regulations 2012 as amended. This Recommendation Report accompanies the relevant Display Energy Certificate.

This section provides general information regarding the building:

Total Useful Floor Area (m²):	359.87
Building Description:	Liskeard Museum arranged over two floors with research room and Visitor Information Centre.
Building Environment:	Heating and Natural Ventilation
On-site renewable energy sources:	Not applicable
Separable energy uses discounted:	Not applicable

Fuel Types:	Quantity Used (kWh)
Natural Gas	29980
Electricity	11143
Not used	0

#### 2. Introduction

This Recommendation Report was developed based on an inspection of the building. It was produced in line with the Government's approved methodology.

In accordance with Government's current guidance, the Energy Assessor is required to use plans or undertake a building inspection in order to gather information to produce this Recommendation Report.

#### 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
Consider with building users ways in which people can be encouraged to use lifts and escalators less.	LOW
Consider a programme of fitting energy meters to lifts and escalators as part of the service and maintenance regime.	LOW
Enable power save settings and power down management on computers and associated equipment.	LOW
Consider engaging with building users to economise equipment energy consumption with targets, guidance on their achievement and incentives.	LOW
It is recommended that energy management techniques are introduced. These could include efforts to gain building users commitment to save energy, allocating responsibility for energy to a specific person (champion), setting targets and monitoring.	LOW
Consider with experts implementation of an energy efficient equipment procurement regime that will upgrade existing equipment and renew in a planned cost-effective programme.	LOW
Consider introducing or improving loft insulation.	MEDIUM
Consider how building fabric air tightness could be improved, for example sealing, draught stripping and closing off unused ventilation openings, chimneys.	LOW
Consider implementing a programme of planned lighting systems maintenance to maintain effectiveness and energy efficiency.	LOW
Clean windows and roof lights to maximise daylight entering building and reduce the need for artificial lighting.	LOW
Boiler plant should be regularly tested and adjusted by experts for optimum operating efficiency.	LOW
Consider introducing a system of regular checks of Heating, Ventilation and Air Conditioning (HVAC) time and temperature settings and provisions to prevent unauthorised adjustment.	LOW
Consider installing weather compensator controls on heating and cooling systems.	LOW

Recommendation	Potential Impact
If stratification occurs consider re-circulating the air during heating.	LOW
Ensure natural ventilation flow is operating as designed, i.e. ensure window, vents and grilles are operable and free from obstructions and partitions do not prevent cross flow.	

## b) Recommendations with a medium payback

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

Recommendation	Potential Impact
Consider engaging experts to review the condition of the building fabric and propose measures to improve energy performance. This might include building pressure tests for air tightness and thermography tests for insulation continuity.	LOW
Consider fitting secondary glazing and/or under glaze sky lights where appropriate.	MEDIUM
Consider applying reflective coating to windows and/or fit shading devices to reduce unwanted solar gain.	LOW
Consider introducing orimproving cavity wall insulation.	LOW
Consider introducing or improving wall insulation (internal lining) to solid single skin structures.	MEDIUM
Consider implementing regular inspections of the building fabric to check on the condition of insulation and sealing measures and removal of accidental ventilation paths.	LOW
Engage experts to propose specific measures to reduce hot water wastage and plan to carry this out.	LOW

## c) Recommendations with a long payback

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

Recommendation	Potential Impact
Engage experts to review the building lighting strategies and propose alterations and/or upgrades to daylighting provisions, luminaires and their control systems and an implementation plan.	LOW
Engage experts to review overall ventilation strategy and propose an investment programme for upgrading and/or switching to alternative solutions to improve effectiveness and energy efficiency.	
Consider installing building mounted photovoltaic electricity generating panels.	HIGH
Consider heating the building using biomass boiler(s).	HIGH

Recommendation	Potential Impact
Consider replacing or improving glazing.	MEDIUM

# d) Other Recommendations

Recommendation	Potential Impact
Consider installing automatic occupancy sensors for lighting to low transient zones.	LOW

This section lists other recommendations selected by the energy assessor, based on an energy performance assessment of the building. It may take into account other reliable relevant evidence that has been provided by the building owner or occupier.

#### 4. Next Steps

#### a) Your Recommendation Report

As the building occupier requiring a Display Energy Certificate under Energy Performance of Buildings Regulations 2012 as amended, it is a regulatory requirement that you have in your possession or control a valid Recommendation Report relating to the building unless there is no reasonable potential for energy performance improvements compared to the energy performance requirements in force.

You must be able to produce a copy of this Recommendation Report within seven days if required by an Enforcement Authority.

This Recommendation Report has also been lodged on the Government's central 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 through the Non-Domestic Register (www.ndepcregister.com) using the report reference number of this document.

DEC Recommendation Reports are valid for seven years from the date of issue for buildings with useful floor area above 1000m² or for ten years from the date of issue for buildings with useful floor area between 250m² and 1000m². You must commission a new Recommendation Report when the validity of this report expires, however, a new Recommendation Report may be commissioned earlier.

#### b) Implementing recommendations

The recommendations provided within this Recommendation Report have been selected by the accredited assessor from a central list of recommendations, based on his / her knowledge of the building fabric, building services, the operation of plant and equipment within the curtilage of the building, and the general management of the building.

The building has been identified as being: one of special architectural or historical interest, in a conservation area, in a designated area of special character or appearance (e.g. a national park, an AoNB), or of traditional construction. Some of the recommendations provided with this report may not be suitable for such a building, some may need special consents, and other measures may be available. Further information and guidance is available on national building heritage and conservation websites such as www.english-heritage.org.uk and www.cadw.wales.gov.uk.

The accredited assessor may have inserted additional measures in section 3d (Other Recommendations). The recommendations are provided as an indication of opportunities that appear to exist to improve the buildings energy efficiency.

#### c) 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.

#### d) About this document and the data in it

This document has been produced following an energy assessment undertaken by a qualified Energy Assessor, accredited by Elmhurst Energy Systems. You can obtain contact details of the Accreditation Scheme at www.elmhurstenergy.co.uk.

A copy of this report has been lodged on a national register as a requirement under the Energy Performance of Buildings Regulations 2012 as amended. It will be made available via the online search function at www.ndepcregister.com. The report (including the building address) and other data about the building collected during the energy assessment but not shown on the report, for instance heating system data, will be made publicly available at www.opendatacommunities.org.

This report and other data about the building may be shared with other bodies (including government departments and enforcement agencies) for research, statistical and enforcement purposes. For further information about how data about the property are used, please visit www.ndepcregister.com.

There is more information in the guidance document *Display Energy Certificates* and advisory reports for public buildings available on the Government's website at: www.gov.uk/government/collections/energy-performance-certificates. It explains the content and use of this document, advises on how to identify the authenticity of a report and how to make a complaint.

#### 5. Glossary

#### a) Payback

The payback periods are based on data collated through Carbon Trust energy survey reports. They provide a range of typical payback periods for different types of measures. They are likely payback periods, 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 most effectively reduce carbon emissions from the building. The carbon impact indicators are determined by the assessor based on the energy assessment of the building.

#### c) Valid report

A valid existing report is defined at the Energy Assessor's discretion.