A Display Energy Certificate (DEC) does exactly what it says, it displays the energy efficiency performance of your building in certificate format. More importantly it allows you to visualise how well you are consuming energy on a year by year basis.

In order to do this, it compares your buildings energy consumption to the consumption of a building of similar size and use. This is called the Benchmark Building. You are compared against the Benchmark Building on a scale of 1 to 150+, segmented in to A-G ratings. The rating you achieve is termed your ‘Operational Rating (OR)’. An Operational Rating (OR) is a measure of the annual \(\text{CO}_2\) emission per unit of area of the building caused by its consumption of energy. If by comparison, you produce less \(\text{CO}_2\) per unit of floor area than the Benchmark Building, you are rated below 100. If you produce more, you are rated above 100.

### What is the point?

The main benefit of a DEC is it’s use as a tool to track your annual year on year energy consumption and provide a visual tool for building management and building users to target and reduce energy consumption within your building.

For example, if in the first year you have a Rating on D:115, and the following year, your rating is F:126, you are likely to be using more energy than you did last year to heat and power your building. This discrepancy should be investigated. DEC ratings are standardised each year. E.g. Variation in external temperatures are accounted for in the rating. Therefore, a colder winter than the previous year in not a valid reason for increased energy consumption.

The DEC displays a histogram showing the Total \(\text{CO}_2\) emissions that the building emits, in tonnes per year of \(\text{CO}_2\) over the previous 3 years. This is split by \(\text{CO}_2\) emitted by heating and electricity consumption. \(\text{CO}_2\) saved by energy produced by on-site renewable source (e.g. solar panels) is also recorded and visualised in this section.

In addition to the current Operational Rating, DEC’s provide the previous 2 years ratings on the current certificate. This allows easy comparison of your annual energy consumption performance over the past 3 years. If your ratings are going up, you should look to halt and reverse this decline in energy efficiency performance, if it is going down, you should pat yourself on the back and look to see if you can reduce it further.

### Technical Information

This tells you technical information about how energy is used in this building. Consumption data based on actual meter readings.

<table>
<thead>
<tr>
<th>Main Heating fuel:</th>
<th>Natural Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building environment:</td>
<td>Heating and Natural Ventilation</td>
</tr>
<tr>
<td>Total useful floor area (m²):</td>
<td>2647.51</td>
</tr>
<tr>
<td>Asset Rating:</td>
<td>Not available</td>
</tr>
</tbody>
</table>

### Administrative Information

This is a Display Energy Certificate as defined in the Energy Performance of Buildings Regulations 2012 as amended.

- Assessment Software: ENSU, DEC, eK2
- Property Reference: 298003/96683
- Assessor Name: Paul Bleasdale
- Assessor Email: paul@bleasdale.com
- Previous Trading Name: DEC Europe Ltd
- Contact Email: paul@bleasdale.com

### Energy Performance Ratings and Emissions

This tells you how efficiently energy has been used in this building over the last three accounting periods.

- **Previous Operational Ratings**
  - A: 0-25
  - B: 26-50
  - C: 51-75
  - D: 76-100
  - E: 101-125
  - F: 126-150
  - G: Over 150

- **Total CO₂ Emissions**
  - 83-2015
  - 83-2016
  - 83-2017

### Technical Information

This tells you technical information about how energy is used in this building. Consumption data based on actual meter readings.

<table>
<thead>
<tr>
<th>Annual Energy Use (kWh/m²/year):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>57</td>
</tr>
<tr>
<td>Typical Energy Use (kWh/m²/year):</td>
</tr>
<tr>
<td>Heating</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>156</td>
</tr>
<tr>
<td>Energy from renewables:</td>
</tr>
<tr>
<td>Heating</td>
</tr>
<tr>
<td>0%</td>
</tr>
</tbody>
</table>
What is an Advisory Report?

In addition to a registered certificate, all DECs must be accompanied by a valid advisory report. The Advisory Report contains bespoke recommendations for improving the energy performance of the building. The Advisory Report may contain a range of possible improvements, including cost effective measures that may be implemented to improve the energy performance of the property.

The report includes zero and low cost operational and management improvements, possible upgrades to the building fabric or services and opportunities for the installation of low and zero carbon (LZC) technologies.

The report enables the occupier to identify what may be done to improve energy performance to reduce energy consumption and CO2 emissions.

The Advisory Report categorises the list of recommendations, by payback period as follows:

- Short term payback (up to three years), for example building energy management measures
- Medium term payback (three to seven years), for example upgrading building services
- Long term payback (more than seven years), for example low and zero carbon technologies

Each recommendation is accompanied by an estimate of how implementation of the advice will impact the buildings carbon emissions. Detailed as a High, Medium or Low impacts on carbon emissions.

Who needs them and how long are they valid for?

Since July 2015 Display Energy Certificates (DECs) need to be prominently displayed in buildings over 250m² that are occupied by public authorities or institutions providing a public service.

Display Energy Certificates (DECs)

For properties with a floor area greater than 1000m², the DEC is valid for 12 months. For properties with a floor area between 250-1000m², the DEC is valid for 10 years.

Advisory Reports (AR)

For properties with a floor area greater than 1000m², the AR is valid for 7 years. For properties with a floor area between 250-1000m², the AR is valid for 10 years.

What are the potential penalties?

An affected organisation must display a DEC in a prominent place clearly visible to the public and have in its possession or control a valid advisory report.

Failure to display a valid Display Energy Certificate, the penalty is £500

Failure to be in possession of an Advisory Report, the penalty is £1,000

This applies to every applicable building on your site!