



Department for
Communities and
Local Government

Improving the energy efficiency of our buildings

A guide to display energy certificates and advisory reports for
public buildings

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Foreword

This document is not a statement of the law, but is intended to help managers, owners and occupiers of buildings occupied by a public authority that are larger than 500m² and frequently visited by the public understand how the regulations work in practice, how to apply the regulations, what their responsibilities are and when display energy certificates (DECs) and advisory reports are required.

Non-dwellings are responsible for almost 20 per cent of the UK's energy consumption and carbon emissions. This guide provides an introduction to the regulations for DECs for buildings occupied by a public authority. DECs promote the improvement of the energy performance of buildings and form part of the implementation in England and Wales of the European Directives 2002/91/EC and 2010/31/EU on the energy performance of buildings.

The original Energy Performance of Buildings Directive was implemented by the previous administration in 2008. A number of its measures were gold-plated –ie- they went beyond the minimum requirements. In implementing the recast, the current Government has taken the opportunity to remove this gold-plating where possible.

This guide describes the scope and requirements of the regulations applying to buildings occupied by a public authority and provides guidance on how these are applied. While this guidance aims to explain how the requirements will work in practice, any interpretation of the regulations is offered only as a guide, as the Department for Communities and Local Government cannot provide legal advice and only the courts can provide an authoritative interpretation of the law. Therefore, it is important to read and understand the regulations as well. In cases of doubt independent legal advice should be sought.

Chapter 1

DEC requirements

This guide describes the obligations that come into force for buildings occupied by a public authority where the total useful floor area of the building exceeds 500m² and which is frequently visited by the public.

Why DEC's are required

The purpose of introducing DEC's is to raise public awareness of energy use and to inform visitors to public buildings about the energy use of a building. DEC's provide an energy rating of the building from A to G, where A is very efficient and G is the least efficient and are based on the actual amount of metered energy used by the building over the last 12 months within the validity period of the DEC.

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. The advisory report contains recommendations for improving the energy performance of the building.

Buildings requiring a DEC

A DEC and advisory report are required for buildings with a total useful floor area (see definitions at Annex B) over 500m² that are occupied in whole or part by public authorities and frequently visited by the public.

For the purposes of the regulations, a building is defined as, 'a roofed construction having walls, for which energy is used to condition the indoor climate, and a reference to a building includes a reference to a part of a building which has been designed or altered to be used separately¹'.

For a building to fall within the requirement for a DEC it must:

- have a roof and walls; and
- use energy to condition the indoor climate. This is the case where the building has any of the following fixed services: heating, mechanical ventilation or air conditioning

A building can either be:

- the whole of a building; or

¹ A part of a building designed or altered to be used separately is where the accommodation is suitable for separate occupation. This could be indicated by the accommodation having its own access, separate provision of heating and ventilation or shared heating and ventilation but with the ability by the occupier to independently control those services. The part could be deemed to be separate even if some facilities (i.e. kitchen and toilet facilities) were shared.

- part of a building, where the part is designed or altered to be used separately

Only buildings, with a total useful floor area greater than 500m², occupied by a public authority and frequently visited by the public are affected by this legislation.

Private organisations, including those that may share a building with a relevant institution, do not need to display a DEC, but may elect to do so on a voluntary basis.

When DECs are required

From 9 January 2013, if you are an occupier of a building requiring a DEC, you will need to display a DEC showing an operational rating in a prominent place clearly visible to the public. You will also need to have in your possession or control a valid advisory report.

If you are a new occupier, or have been in occupation for less than 15 months by 9 January 2013, you may not have the previous 12 months of meter readings available that are required for an operational rating. The legislation makes provisions for calculation over the period of occupation in these cases.

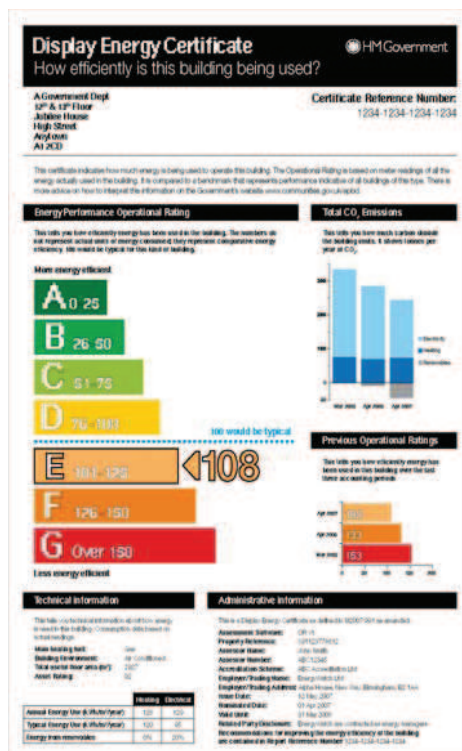
Validity period of DECs

Where the building has a total useful floor area of more than 1,000m², the DEC is valid for 12 months. The accompanying advisory report is valid for seven years. Where the building has a total useful floor area of between 500m² and 1000m², the DEC and advisory report are valid for 10 years.

Chapter 2

What are DEC's?

What is a DEC?



A DEC shows the energy performance of a building based on actual energy consumption as recorded over the last 12 months within the validity period of the DEC (the operational rating).

The operational rating is a numerical indicator of the actual annual carbon dioxide emissions from the building. The various types of energy consumption from occupying a building must be brought together on a common basis so that the performance of one building can be compared with that of another. The UK has decided that the common unit should be CO₂ emissions, since this is a key driver for energy policy.

This rating is shown on a scale from A to G, where A is the lowest CO₂ emissions (best) and G is the highest CO₂ emissions (worst).

DECs for buildings larger than 1,000m² also show the operational ratings for the previous two years, where available.

The operational rating is based on the amount of energy consumed during the occupation of the building over a period of 12 months from meter readings and is compared to a hypothetical building with performance equal to one typical of its type (the benchmark). Typical performance for that type of building would have an operational rating of 100. A building that resulted in zero CO₂ emissions would have an operational rating of zero, and a building that resulted in twice the typical CO₂ emissions would have an operational rating of 200. If the building is a net energy generator, it would still be given an operational rating of zero.

The operational rating must be calculated according to the methodology approved by the Secretary of State. This is done by an accredited energy assessor using a software tool for the calculation which has been approved by the Secretary of State.

This is available here

www.gov.uk/government/uploads/system/uploads/attachment_data/file/9414/software_specification.doc

The DEC should be displayed in a prominent place that is clearly visible to members of the public. A sample certificate is shown. To enable members of the public to view the document easily, it should be no smaller than A3 in size.

A DEC must be accompanied by an advisory report and the owner of the building must have a valid one available. The advisory report highlights recommendations to improve the energy performance of the building (i.e. its fabric and associated services such as heating, ventilation and lighting).

What a DEC contains

A DEC must contain, by law, the following information:

- the operational rating as determined by the government approved operational rating methodology
- a reference value such as a current legal standard or benchmark

For buildings with a total useful floor area greater than 1000m² only, the DEC must also contain:

- the operational ratings for the building expressed in any certificates displayed by the occupier during the last two years before the nominated date. In buildings where no historic energy consumption data are available, this information will not be complete until the third year of occupation after the introduction of DEC's for that type of building as it will be derived from previous DEC's

The DEC will also show the unique certificate reference number under which the DEC has been registered, the address of the building, the total useful floor area of the building, the name and address of the energy assessor, the name of their accreditation scheme and the date when the DEC was issued.

What an advisory report contains

The advisory report accompanies the DEC and contains 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, for example, building energy management, building services, etc. therefore reducing 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 category includes the energy assessor's selection of the most suitable improvement measures for the building, generally between five and 10 measures. The advisory report also includes the energy assessor's recommendations which may include additional improvement measures, for example measures recommended by a previous energy audit
- the advice provided in the advisory report is intended to be for information only. Occupiers receiving an advisory report are advised to seek further detailed professional advice before reaching any decision on how to improve the energy performance of the building

Chapter 3

Obtaining and producing DEC's

Responsibilities for displaying a DEC

Under this legislation it is the responsibility of every occupier of a building affected by these regulations to:

- display a valid DEC in a prominent place clearly visible to the public at all times
- have in their possession or control a valid advisory report which conveys recommendations to improve the building's energy performance

This must be done for each of the buildings affected

Producing DEC's

An energy assessor, accredited to produce DEC's, is the only person who can produce a DEC and advisory report for your building. It is acceptable for employees to produce DEC's provided they meet the standards of and are accepted by an accreditation scheme.

Firstly the energy consumption data provided will be reviewed by the energy assessor in line with the approved methodology. Under certain conditions, the methodology allows adjustments to be made for longer hours of occupation, variations to weather and climate and allows certain activities to be separated if they are not typical of the type of building (separable energy uses).

The carbon dioxide emissions for the certificate are based on the adjusted energy consumption and adjusted total useful floor area and building type to give a measured CO₂ emission per square metre.

The energy assessor will then use an approved tool to calculate the operational rating and produce a DEC and advisory report from the information gathered in line with the approved methodology.

To produce the first DEC and advisory report, the energy assessor must visit the site. In subsequent years the DEC and advisory report can be based on previous knowledge of the building, provided that:

- they are being produced by the same assessor; and
- a declaration that nothing has changed has been provided by the building occupant

The DEC and advisory report must be lodged on the national register and given a unique certificate reference number. The national register is operated by Landmark

Information Group Limited on behalf of the Secretary of State and can be found at www.ndepcregister.com

Energy assessors must act in an independent manner – this is ensured by their membership of an approved accreditation scheme. Energy assessors are responsible for conducting an energy assessment, producing a DEC and advisory report and lodging the DEC and advisory report with their accreditation scheme.

The accreditation scheme is responsible for checking and lodging certificates on the national register. Accreditation schemes are also responsible for monitoring the quality of the certificates energy assessors produce.

Once an energy assessor has been commissioned to produce a DEC and advisory report, there are three main steps to performing the assessment, which are:

- gathering the relevant information (dimensions, energy meter readings and building energy services)
- entering the information into an approved software (operational rating methodology) program
- the software producing the certificate and the advisory report for the building

The energy assessor then submits the certificate and advisory report to their accreditation body for lodgement on the Government's register and provides the building occupier with a copy.

Collecting the information required for a DEC

The occupier, in collaboration with the energy assessor, will need to obtain actual meter readings or consignment notes for all fuels used in the buildings that are affected by this legislation. This may include gas fuels, oil fuels, solid fuels, district heating and cooling, grid electricity and electricity generated on site or obtained by private distribution systems from other sites.

For district heating and cooling and electricity generated on site, or obtained by private distribution systems from other sites, the average carbon factor for the fuel over the accounting period will need to be obtained e.g. in kg of carbon dioxide per kWh delivered.

You can obtain the information required to produce a DEC from a number of sources:

- on-site energy meters
- the building landlord or representative²
- the utility supplier

² A completed landlord's energy statement would be an appropriate method for the landlord to collect and provide the necessary data. See www.bpf.org.uk or www.les-ter.org.

- the district heating/cooling provider

The calculation of the operational rating is based on annual energy consumption, which means the energy consumed over the period of one calendar year (365 days). Ideally all energies are metered over the same one-year period.

For more information on assessment and measurement periods, please see the document *The Government methodology for the production of Operational Ratings* which may be found here www.gov.uk/government/publications/government-methodology-for-producing-operational-ratings-display-energy-certificates-and-advisory-reports

A team of people can work on gathering the information for an energy assessment as long as they are working under the direction of an accredited energy assessor. The accredited energy assessor must ensure that anyone visiting a property or gathering information on their behalf is both fit and proper and suitably qualified to gather the information. Only accredited energy assessors can produce and lodge DEC's.

An accredited energy assessor may use data previously collected about a building. They must, however, be satisfied that any data about a building has been properly collected and accurately reflects the building as they will be responsible for any data used to produce a DEC.

Chapter 4

Consumer protection and enforcement

Checking the authenticity of a DEC

A DEC must be lodged, by an accredited energy assessor, in the central register for non-dwellings which contains all DEC's and advisory reports. It is not possible to opt out of this process.

If you have commissioned a DEC for your building you will receive a copy of the certificate to display as required by the regulations.

A DEC is identified by a unique reference number. If you have been given a DEC and wish to check its authenticity, you can access the register by entering the reference number on the certificate. You can also search the register by entering the address of the property.

If you cannot find your certificate in the register or have any concerns regarding the authenticity of the information contained within the certificate, you should contact the accreditation body of the energy assessor who produced the DEC. The energy assessor details, their accreditation scheme and their membership number should be on the certificate.

A lodged DEC becomes legal when the accompanying advisory report has been lodged, and vice versa.

Checking the authenticity of your energy assessor

All energy assessors must be accredited. If you want to find a suitably accredited energy assessor in your area to provide you with a DEC, use www.ndepcregister.com to find the list of approved assessors for your area.

If you wish to check that an energy assessor is a member of an accreditation scheme, you can do this in two ways:

- verify the credentials of your energy assessor online via www.ndepcregister.com which provides a national register of accredited energy assessors. This will allow you to search by the energy assessor's name or accreditation scheme membership number
- ask your energy assessor which accreditation scheme he/she is a member of (and his/her membership number). The accreditation scheme can confirm that your energy assessor is accredited to practise as a DEC energy assessor for your particular type of building

Complaints

Complaints about the availability or quality of a DEC or about an energy assessor or energy assessment should be directed to the following:

Display of DECs. For complaints regarding the display or validity of a DEC for a public building, contact the building occupier or an authorised officer of the local weights and measures authority (usually the person in that authority is known as a trading standards officer). The authorised officers have the power to act on your complaints.

Quality or accuracy of the DEC and its recommendations. For complaints regarding the quality and accuracy of the DEC and the advisory report, contact the energy assessor in the first instance and if the matter is not resolved, contact the accreditation body of the energy assessor who produced the DEC. Contact details can be found on the DEC.

Complaints regarding an energy assessor or any aspects of the energy assessment. For complaints regarding the energy assessor or the energy assessment, contact the energy assessor in the first instance and if the matter is not resolved, contact the accreditation body of the energy assessor who produced the DEC. Contact details can be found on the DEC.

Penalties for not having a DEC

A local authority can issue a penalty charge notice of £500 for failing to display a DEC at all times in a prominent place clearly visible to the public, and £1,000 for failing to possess or have in their control a valid advisory report. In addition to these penalties, it will still be necessary to commission the documents, otherwise further offences will be committed.

If you can demonstrate that you have taken all reasonable steps to avoid breaching the regulations, then the penalty charge notice must be withdrawn.

If you believe the penalty charge notice should not have been given you can request a review. If you are not satisfied with the outcome of the review you may appeal to the county court within 28 days after you received notice confirming the penalty charge notice.

Annex A

Frequently asked questions

- Q. I am a public authority and let a building I own to a private company to undertake business that is not a public service. Is a DEC required?**
- A. No. The requirement is on the occupier to provide a DEC and as the occupier is a private company there is no requirement to display a DEC for the building.
- Q. I need to display a DEC – do I also need an EPC for my building?**
- A. You will only need to have an EPC if you construct (including certain modifications), sell or let your building. If you do have an EPC for your building, the rating must be displayed on your DEC.
- Q. Do I have to act on the recommendations in the advisory report?**
- A. You are under no obligation to act on the recommendations for energy improvements to the building. However, taking action on the recommendations is likely to improve the energy efficiency of your building, reduce your fuel bills, cut its carbon emissions and could improve public perception of your building.
- Q. Where can I find an energy assessor?**
- A. The accreditation schemes will maintain a list of their members and should be able to provide contact details of assessors local to your area. An energy assessor should always be able to provide details of the accreditation scheme (see the list in Annex B) of which they are a member and their membership number.
- Q. What software can be used to produce DEC's?**
- A. Only software approved by the Department for Communities and Local Government can be used to produce DEC's.

Annex B

Definitions

A building is defined as “a roofed construction having walls, for which energy is used to condition the indoor climate; a building may refer to the building as a whole or parts thereof that have been designed or altered to be used separately”.

The total useful floor area is the total area of all enclosed spaces measured to the internal face of the external walls, that is to say it is the gross floor area as measured in accordance with the Building Regulations. In this convention:

- a) the area of sloping surfaces such as staircases, galleries, raked auditoria, and tiered terraces should be taken as their area on the plan
- b) areas that are not enclosed such as open floors, covered ways and balconies are excluded

Annex C

Saving energy in your building

You can save up to 20 per cent on your energy bills by managing energy successfully (source: Carbon Trust). The simple steps recommended by the Carbon Trust include:

Heating

- are thermostats working and set at the lowest comfortable temperature?
- are there any cold draughts from windows or doors?
- are windows and doors open when heating or air conditioning is on?

Lighting

- are you still using traditional tungsten light bulbs?
- are lamps, fittings and roof lights clean?
- are lights switched off if there's sufficient daylight or rooms are not in use?
- do you have any old large diameter fluorescent tube lights?

In the office

- are computers left on overnight?
- are monitors switched off when not in use, such as during lunch breaks?

In the factory

- are pumps, fans or compressed air switched off when the equipment they serve is not in use?
- can you hear compressed air leaks?

Metering and monitoring are at the heart of energy management. Gain actual figures from meters, rather than relying on estimated bills. Look for trends to find out how your energy is being used.

Cut down. Turning off lights and equipment can save around 15 per cent of energy costs. Reducing the temperature by just 1°C can save eight per cent.

Maintain well. Maximise energy efficiency by regularly servicing plant and equipment.

Stay snug. Heating uses half your office's energy; draught proofing and pipe insulation can reduce heat loss significantly.