



# A guide to Commercial Energy Performance Certificates

heating  
Accreditation scheme  
green  
Asset rating  
Ventilation



## What is an Energy Performance Certificate?

An Energy Performance Certificate indicates the energy efficiency of the building fabric, and the installed heating, ventilation, cooling and lighting systems. It does not take into account how the present occupier uses those systems.

An official, valid certificate will include:

- a Certificate Reference Number
- the address of the property it relates to
- the Asset Rating
- brief Technical Information
- benchmarks

The certificate also provides administrative information, including:

- the Assessor's Name and Number,
- his or her Accreditation Scheme
- the issue date
- the reference number of the associated Recommendations Report

For the purposes of producing an energy rating, commercial buildings have been divided into 3 levels – 3, 4 and 5. The differences between the different levels focus on the sophistication of installed heating and ventilation systems.

An EPC will be provided with a Recommendations Report to improve the energy efficiency of the building.

## Why is an EPC important?

As a Member State of the EU, the UK was required to implement the requirements of the Energy Performance of Buildings Directive (Directive 2002/91/EC – the EPBD) in full by January 2009, this process having started on 4th January 2003.

The EPBD is intended to deal with two main issues:

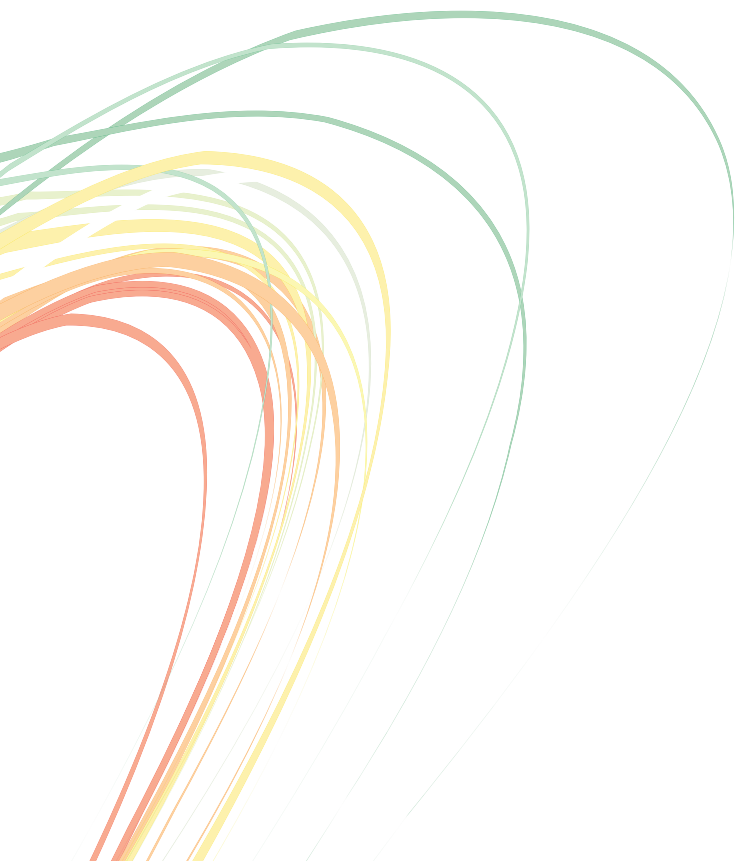
- the green issue of reducing emissions prejudicial to the planet's future - carbon dioxide (CO<sub>2</sub>) emissions are now accepted as a major cause of global climate change - 'global warming'
- and the political issue of security of energy supplies in the medium to long term

Also, consumption is expanding, with a consequent increase in CO<sub>2</sub> emissions, and better energy efficiency in buildings is intended to play an important part in the package of policies and measures needed to comply with the Kyoto Protocol.

The EPBD requires member states to:

- develop consistent methods of assessing energy performance of buildings and some installed building services
- set minimum standards for new buildings, and work on some larger existing buildings, based on those energy assessment methods
- provide certificates which state the building's energy performance, and in some circumstances have those certificates on public display
- inspect some air-conditioning systems to determine their energy performance
- give advice on improving the efficiency of some heating systems
- provide information about energy efficiency to occupiers and other building users

The main intention of the EPBD is to promote dissemination of energy efficiency information to occupiers and other building users, with a view to raising awareness of the issues involved.



The EPBD requires that Energy Performance Certificates are required when buildings change hands on sale or let.

The EPBD also includes requirements designed to encourage improvements to the energy efficiency of heating and cooling systems in larger buildings. In the UK, air-conditioning systems will be inspected regularly by accredited inspectors specialising in this area, but for heating systems the requirement is covered by a system of providing advice rather than inspections.

## Benefits of 'green' properties

There is evidence suggesting that 'green' properties may offer considerable benefits to occupiers and owners, which in time could be reflected in property values. Building owners will want reassurance that the assessment of their building has been carried out in a professional manner to a high level of accuracy, especially if the actions (or failure to act) of the energy assessor may affect the future value of those premises.

Benefits that may accrue to the market value of commercial properties include:

- tenants attracted more quickly
- such properties let more readily
- reduced tenant turnover
- higher rents, higher yields and higher capital values, with some research suggesting significantly higher sale prices, up to 27%, being achieved

It is also becoming common for major occupiers to consider their 'green' credentials as part of their corporate responsibilities. It is part of the intention of EPBD that certification – 'labelling' – of buildings is the enabler for 'green' considerations to become part of the transaction value.

## When is an EPC required?

An Energy Performance Certificate (EPC) is required when a building, (including a part of a building which has been designed or altered to be used separately), is constructed, sold or let. In respect of non-dwellings, the responsibility for ensuring certificates and inspections are done is shown in the following table:

Regulation	Area of responsibility	Relevant person
5(2) and 5(5)	The EPC is made available to prospective buyers and tenants, and given to eventual buyers and tenants.	The seller or landlord
9(2)	EPCs are given to the owners of newly constructed Crown or statutory undertakers' buildings.	The builder
10	EPCs must be accompanied by recommendation reports.	The relevant person for the EPC on sale or rent, that is the seller or landlord or the builder under reg. 9(2)
21(1), 23 and 24	Certain air-conditioning systems must have inspections at least every five years, and keep a copy of the inspection report. A person taking over the system must ensure that it is inspected within three months if no inspection report is given when responsibility changes.	The system controller, usually the owner
39(4)	A valid EPC, recommendation report, advisory report or air-conditioning inspection report must be produced when required by an enforcement authority within seven days.	The seller or landlord, building occupier, or system controller

Building owners need to be aware that for enforcement purposes, it is the responsibility of the relevant person to make sure that the EPC is made available and provided to the ultimate buyer or tenant. This is the case, even if in practice this is done by someone else (e.g. an agent or building manager/ managing agent).



The certificate for a property being offered for sale or let must be made available for viewing as follows:

- as soon as a building is in the process of being offered for sale, it is the responsibility of the seller to make an EPC available and a recommendation report, free of charge, to prospective buyers
- as soon as a building is in the process of being offered to let, it is the responsibility of the prospective landlord to make available an EPC and recommendation report to prospective tenants
- when a building being constructed is physically complete, it is the responsibility of the person carrying out the construction to give an EPC and recommendation report to the building owner and to notify Building Control that this has been done
- for air-conditioning systems, the person who controls the operation of the system is the person who has the responsibility for ensuring an inspection takes place. The person who controls the operation of the system is the person who controls the technical functioning of the system, not someone who can just alter the temperature

For buildings being offered for sale or let, the requirement to provide an EPC occurs 'as soon as a building is in the process' of sale or let - this does not necessarily mean 'marketing'.

For all sales and rentals, the EPC must be made available to any prospective buyer or tenant at the earliest opportunity and in any event:

- before entering into a contract, or
- when information in writing is first given to such a person who requests information about the building, or
- when the building is first viewed by a such a person

Both the EPC and the recommendation report must be provided free of charge to prospective buyers or tenants, and be given to the person who ultimately becomes the buyer or tenant of the building.

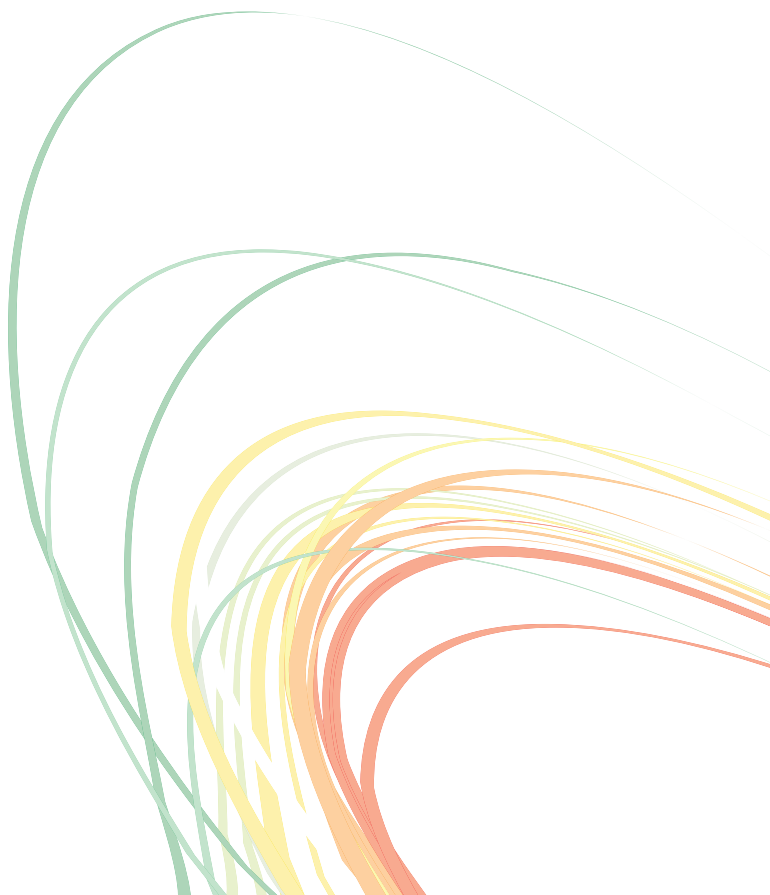
The EPC for a non domestic building is valid for 10 years, although if a newer EPC is produced, only the latter will be the valid EPC for the building. There may be a requirement to produce a new certificate earlier than this if certain work is carried out on the building

The following buildings do not need EPCs:

- buildings used primarily or solely as places of worship
- temporary buildings with a planned time of use of two years or less
- industrial sites, workshops and non-residential agricultural buildings with low energy demand (but note, removal of existing heating systems to take advantage of this exemption is likely to be seen as an attempt to avoid regulation and not tolerated)
- standalone buildings with a total floor area of less than 50m<sup>2</sup> which are not dwellings

Historic and listed buildings are not exempt, and Crown and statutory undertakers' buildings are also included in the requirements.

Although an EPC is normally valid for 10 years, in some cases of conversion to buildings a pre-existing EPC will not be valid for use for the conversion, even if it is within its validity period. This will be the case when the building is modified to create more or fewer separate parts than previously, and there is provision or extension of any fixed services for heating and/or mechanical ventilation systems. This may happen if a building taken over as empty shell and core is then fitted out. Even if an EPC was provided with the original transaction, if the adaptations to the premises are as described, the responsible person will be required to obtain a new EPC consistent with the modifications.



Note: Buildings are divided into 3 categories for the purposes of issuing EPCs:

- Level 3
- Level 4
- Level 5

All new build properties will be Level 4 or above. Therefore, if the building is recently constructed shell and core, i.e. it has not been occupied since construction was complete, there may be a pre-existing calculation based on the building's design. In this case the EPC should be produced by a Level 4 Assessor, who is competent to produce an EPC based on the new build assessment, using the same assumptions made in that calculation.

## What happens if an EPC is not produced when required?

Local weights and measures authorities (or specifically for EPCs on construction of new buildings, local building control officers or approved inspectors) are responsible for ensuring that where appropriate, valid EPCs are provided. Local weights and measures authorities are also responsible for ensuring that owners of air-conditioning systems (over 12kW) are in possession of an inspection report - systems will have to be inspected at least once every five years.

Enforcement agencies have new powers to investigate, require the production of EPCs serve penalty notices for failure to comply with duties in respect of certificates or air-conditioning inspection reports for buildings. The Regulations give trading standards officers the power to require that the responsible person produces an EPC and recommendation report for inspection within seven days of the request.

## How is an EPC produced?

The EPC is an Asset Rating based on the asset (the building's fabric and installed building services) and not on how much the present occupiers use those services. A building with a poor energy rating may currently have reasonably low fuel bills, just because the current occupiers do not heat the premises. Conversely, a high energy rating may not be matched by low fuel bills if the current occupiers heat and light the premises overnight, when they are unoccupied.

All member states must have a national calculation methodology (NCM) which makes consistent comparisons between buildings. National calculation methodologies may differ from state to state, and are allowed to involve more than one calculation method or tool. In the UK, a number of NCM compliant tools are available, which differ between dwellings and non dwellings, and vary in complexity.

In the UK the National Calculation Methodologies are:

- Standard Assessment Procedure (SAP) - dwellings
- Reduced Data SAP (RDSAP) - dwellings
- Simplified Building Energy Model (SBEM) - the majority of non-domestic buildings
- Approved Dynamic Simulation Models (DSM) - may be used for all non-domestic buildings, but are complex and so they tend to be used only for non-domestic buildings that have specific features that cannot be assessed using SBEM

To produce the EPC the assessor will need:

- data about the building construction
- any alterations to the building fabric since it was built
- the building services
- the "activities" taking place (or allowed to take place by the planning class)

To collect the relevant data the assessor will undertake a full visual inspection and measured survey. In some instances a full data set may be impossible to collect by visual inspection alone and the assessor will refer to any additional information provided by the building owner/ occupier.

If no additional information is made available to the assessor, the assessment will proceed on the basis of the default values built into the official energy rating methodology, SBEM. These defaults are pessimistic, so if evidence is available to allow the Assessor to override them, a better rating usually results. If you are able to provide any written information of this type, the more accurate assessment is likely to produce an improved energy rating.



The process is complex and time consuming, because before the data may be input, the Assessor must reflect on the data gathered and collate it in a form which suits the SBEM methodology. Even for a straightforward building this may take a full day, and longer for more complex buildings.

This is particularly so for buildings containing large numbers of 'zones' (zones can be separate rooms, or separate areas within open plan rooms that have to be individually considered in SBEM); for such buildings, this can take several days.

When the SBEM analysis is complete the Assessor can produce the EPC and Recommendations Report and lodge them on the Central Register of EPCs. Whilst the EPC is produced automatically by the approved software, the Assessor must use his or her own knowledge to collate the Recommendations Report, which you will receive alongside the EPC. An NHER accredited Assessor will also provide a Client Report, informing you about the process undertaken, assumptions made, and any limitations of the inspection undertaken.

Assessors can only produce EPCs and Recommendation Reports on buildings within their competency and Accreditation Schemes are required to identify the level of competence of Assessors (levels 3, 4 or 5). Most commercial buildings are well within the capability of a level 3 Assessor. You should note that only Level 4 and 5 Assessors are deemed competent to assess new buildings prior to completion.

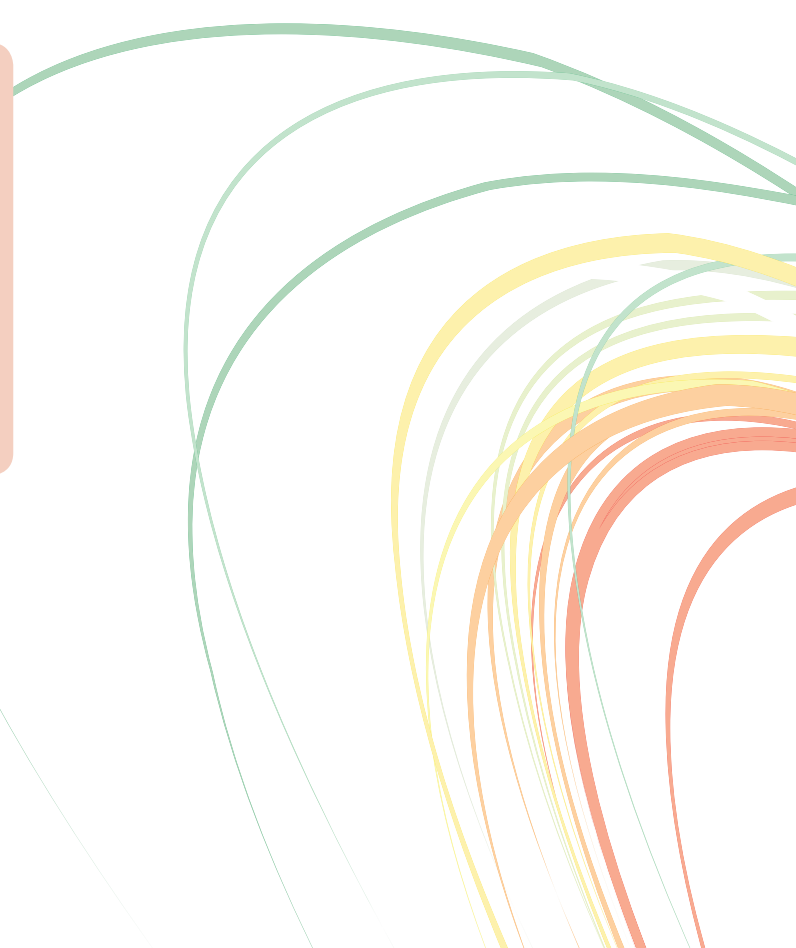
### The Recommendations Report:

- is a valuable document giving advice on how to improve the energy performance of the premises
- no mandatory requirement to implement any of the recommendations provided
- doing so will improve the premises, save on energy costs for the occupier, and reduce carbon dioxide emissions from the building
- over time, improving the energy performance of the building is expected to improve its asset value, achieve higher rents and make the property easier to let

All valid EPCs and Recommendations Reports are lodged with the Central Register. The register provides an independent means for potential buyers or renters (and those acting on their behalf) to check that certificates are authentic via the unique RRN – the report reference number - which can be found on the top right hand side of the certificate.

Access to the register of certificates is allowed to any person who has the RRN, but only authorised enforcement officers are able to search by address, postcode or other means. The Regulations protect EPCs from unauthorised disclosure to a third party e.g. by a company using the EPC without permission to market their products.

Unauthorised disclosure is an offence punishable by a fine, so if you know the unique RRN for an EPC you should only disclose it to persons who have an interest in the property, e.g. the current or prospective owner or tenant, enforcement officers and accreditation schemes. Access to the register is also allowed for some other purposes, such as preventing or detecting crime or complying with a court order.



## Who can produce the EPC?

### All Energy Assessors must:

- demonstrate that they are competent and possess the appropriate skills to conduct energy assessments to produce the EPC in the appropriate National Calculation Method
- belong to a government approved accreditation scheme that meet published statutory criteria. Several different approved accreditation schemes exist
- have in place appropriate procedures to address complaints
- have appropriate Public Indemnity and Professional Liability insurance

While these requirements are common to all assessors and the Government approves accreditation schemes to monitor those assessors to ensure these requirements and upheld, there will be practical differences between schemes, and you are free to only offer commissions to Assessors who are accredited with particular schemes, as you prefer.

Accreditation Schemes make checks on work undertaken by Assessor to confirm they are working to quality standards. Accreditation schemes do not have the power to enforce the regulations - these powers lie with the authorities named earlier in this fact sheet.

If you need to check the authenticity of an EPC, or verify that the person who produced the assessment is properly qualified and accredited, go to [www.ndepcregister.com](http://www.ndepcregister.com). [This is the address for non-domestic properties there is a separate register for dwellings]. You can verify the credentials of your energy assessor online, by searching on the energy assessor's name or accreditation scheme membership number.

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

### Recommendations report

The recommendation report is included with the EPC to improve the energy efficiency of the building. The recommendations only include those improvements that are appropriate for the building. For each recommendation indicative paybacks are noted.

Recommendations are provided in four categories, of which the first three are identified by the SBEM software based on the Assessor's inspection:

- with a short term payback – less than three years
- with a medium term payback – between three and seven years
- with a long term payback – greater than seven years
- other recommendations (based on the energy assessor's knowledge)

Your assessor is well placed to assist you in deciding the best course of action to take if you wish to make improvements to the energy performance of the building. Any services the Assessor offers in this respect will be covered by a separate instruction from the preparation of the EPC.





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