January 2008

# EPCs AND DECs: A GUIDE TO NEW BUILDING REQUIREMENTS



### **GUIDANCE NOTE 53**

Beginning in April 2008, all buildings over 10,000m<sup>2</sup> that are sold or rented will require an Energy Performance Certificate (EPC). In addition, all new commercial buildings - regardless of size - will require an EPC. The certificates assess the property's energy efficiency and estimated running costs. Buildings will be given an energy rating (from 'A' to 'G') and will be provided with recommendations for improving performance. EPCs are valid for ten years.

Also beginning this April, a different type of assessment - Display Energy Certificates (DECs) - will be required for all public buildings over 1,000m<sup>2</sup>. Public buildings are defined as those occupied by authorities providing services to the public. Such authorities are further defined as providing services traditionally associated with the local or national government. DECs show the energy performance of a building based on actual energy consumption as recorded over the last three years and provide advice for improvement.

# EPC schedule: England and Wales

|                | •  |
|----------------|--|
| DATE           | ACTION   |
| 6 April 2008   | <ul> <li>EPCs required for construction, sale or rent of buildings with floor area over 10,000m<sup>2</sup></li> <li>EPCs required on new construction of all dwellings</li> <li>DECs required for public buildings over 1,000m<sup>2</sup></li> </ul> |
| 1 July 2008    | • EPCs required for construction, sale or rent of buildings between 2,500m <sup>2</sup> and 10,000m <sup>2</sup>   |
| 1 October 2008 | • EPCs required for construction, sale or rent of all non-dwellings over 1,000m <sup>2</sup>   |
| 4 January 2009 | • First inspection of all existing air-conditioning systems over 250kW must have occurred by this date   |
| 4 January 2011 | <ul> <li>First inspection of air-conditioning systems between<br/>12kW and 250kW must have occurred by this date</li> </ul>  |

All buildings in Scotland must have an EPC by the beginning of January 2009. In Northern Ireland, the schedule is mid-2008 for sales and January 2009 for rentals.

### CONTENTS

| EPC schedule:              |   |
|----------------------------|---|
| England and Wales          | 1 |
| Implementation             | 2 |
| Examples 1-6               | 2 |
| Obtaining an assessment    | 3 |
| Compliance and penalties   | 3 |
| Moving ahead               | 4 |
| For additional information | 4 |





#### Implementation

The definition of a building is set out in the legislation covering the Energy Performance of Buildings Directive (EPBD). Buildings are 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."

Essentially, EPCs in shopping centres and retail parks are governed by how retail units derive their heating:

#### Example 1

Heated and/or cooled and/or mechanically ventilated, covered mall with shop units drawing air off the mall, deriving their heating source from the landlord's services.

The landlord can have one EPC for the whole building, with the retail space being assessed on its design load provided by its combined electrical and gas supplies, or can provide one EPC for each unit based on that unit's design load with a proportion of the landlord's load based on the unit's area relative to the total retail area.

#### Example 2

Untreated, covered street or open street where the landlord provides a heating connection to the shop units.

The landlord can either have one EPC for the whole building, with the retail space being assessed on its design load provided by its combined electrical and gas supplies, or can provide one EPC for each unit based on that unit's design load with a proportion of the landlord's load based on the unit's area relative to the total retail area.

#### Example 3

Heated and/or cooled and/or mechanically ventilated, covered mall with shop units not drawing air off the mall and not deriving their heating source from the landlords services.

The landlord must provide one EPC for each unit based on that unit's design load with a proportion of the landlord's load based on the unit's area relative to the total retail area.

#### Example 4

Untreated, covered street or open street where the landlord **does not** provide a heating connection to the shop units.

The landlord must provide one EPC for each unit based on that unit's design load.

#### Example 5

Retail park where the landlord provides heating to the units.

The landlord can either have one EPC for the whole building, with the retail space being assessed on its design load provided by its combined electrical and gas supplies, or can provide one EPC for each unit based on that unit's design load with a proportion of the landlord's load based on the unit's area relative to the total retail area.

#### Example 6

Retail park where the landlord **does not** provide a heating connection to the units.

The landlord must provide one EPC for each unit based on that unit's design load.

There are few anomalies that still have to be addressed by the Department of Communities and Local Government (CLG). One of these is that an underground car park, by definition, will require an EPC if it is let to a car park operator. What cannot be answered at the moment is whether the car park will be assessed with the fans in normal operation or in smoke extraction mode. The other anomaly is where a centre operator produces a separate EPC for each unit and an incoming tenant fits out by putting up a partition (thus adding a 'part' to the unit) and makes alterations to, or adds, heating, cooling or ventilation. This will trigger a new EPC being required for his unit even though the landlord may have only just had one produced as any alteration comes under the definition of a modification.

Contractors and building operators are responsible for ensuring that EPCs are in place. In the event of construction, the current suggestion is that the contractors will provide the EPC and that Building Control will not certify completion without an EPC. For new leases, the building operators will need to gather the information; a lease renewal does not require an EPC. In no case is information required from the tenant. EPCs must be shown to a prospective buyer or tenant, but not to the general public.

DECs, which are the responsibility of the occupier and need to be updated each year, must be located where the public can view them. Although there has been speculation that DECs may eventually be extended to private buildings, there is currently no information on when and if that will happen. A private entity may obtain and display a DEC.

#### Obtaining an assessment

The CLG has developed a programme for training and regulating the energy assessors. The CLG has invited applications from companies wishing to operate the accreditation schemes that will train and regulate the assessors. The accreditation schemes will be operational in January 2008.

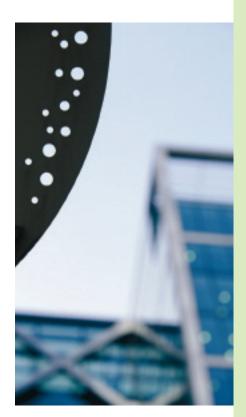
Companies will want to consider whether to have one EPC for the entire building or several for individual units as described in the examples above. An EPC for a typical shop unit will cost around £500, whereas one for a medium-sized shopping centre would be closer to £5,000. To produce 50 individual EPCs would be considerably more expensive than to produce one EPC for the whole building. Individual EPCs, however, would need to be prepared only as each unit was offered for rent, whereas an EPC for the whole centre would be required as soon as the first unit was marketed.

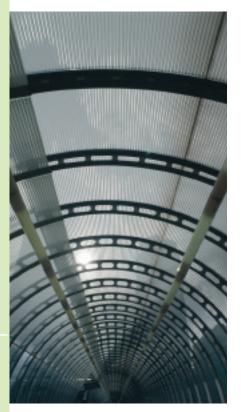
A method of procuring an EPC that may be of interest is that of selfcertification. An employee of a company can carry out an assessment on the company's property as long as that person is properly registered with an accreditation scheme.

The software required for an EPC varies according to the complexity of the project. Large, diverse buildings will need dynamic modelling packages, but smaller, simpler units may be satisfied using SBEM modelling. One advantage to producing several EPCs is that the software required to obtain an EPC on smaller units (SBEM) is easier to use and requires less training. This may well be of interest to companies choosing between obtaining one or several EPCs.

#### **Compliance and penalties**

Local authorities, via their Trading Standards Officers, will be responsible for enforcing the requirement to have an EPC in the event of sale or lease. The Building Control Officers will be responsible for enforcement for new





construction and have been briefed not to sign off the completion unless the necessary EPCs are produced. Currently, the level of penalty being suggested is 12.5% of the rateable value of the building (shop unit) being leased or sold. This is subject to a minimum of £500 and a maximum of £5,000. There is not a proposed period of grace unless a company can prove that it commissioned an EPC at least 14 days before it was required and despite all reasonable efforts it has not received a valid EPC.

#### Moving ahead

The programme has had stops and starts. Whatever delays may ensue, there will be a legal requirement under the Energy Performance of Buildings Regulations 2007 for any centre offering a unit to a prospective tenant to provide information on a centre's energy usage by means of an EPC. As this will be applicable to almost every shopping centre from April 2008 onwards, there will be a huge demand for certification in a short space of time.

Shopping centre owners/operators would be wise to appoint a company that plans to offer an assessment service with the immediate objective of carrying out the preparatory work. This should be done as quickly as possible so that the formal assessments can be undertaken as soon as the first assessors are trained.

However, not all of the work needed to issue a certificate will have to be done by a registered assessor. Companies wishing to get a jump on the process should gather information on the following: floorplans, area use, building construction and refurbishment dates, and letting arrangements. Gathering this information ahead of time and thinking strategically about how to go forward with EPC procurement will allow companies to work effectively in the brief time period needed for implementation.

#### For additional information, please see:

European Union Directive Implementation Advisory Group http://www.diag.org.uk/

UK Communities & Local Government www.communities.gov.uk

Royal Institute of Chartered Surveyors www.rics.org/epbd

Building Research Establishment - SBEM Model www.bre.co uk (search for SBEM)

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Guidance notes prepared and issued by BCSC are intended as aide memoires to good practice in the design, construction and management of shopping places. They do not replace the need for specific and individual research.

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