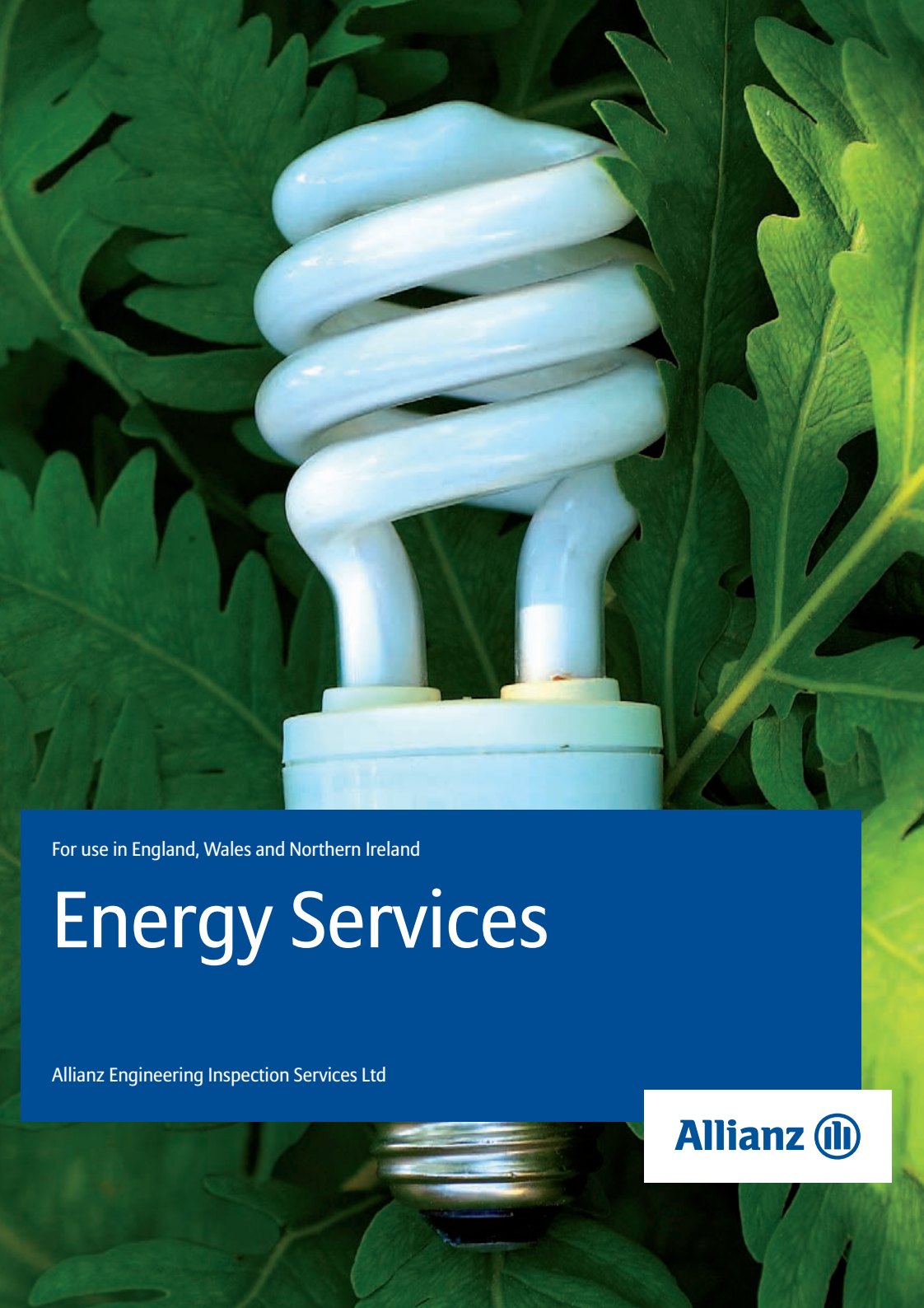


For use in England, Wales and Northern Ireland

Energy Services

Allianz Engineering Inspection Services Ltd

Allianz

Energy Services – Overview

The Energy Performance of Buildings Directive (EPBD) has been introduced into the UK. Its objective is to improve the energy efficiency of commercial and retail buildings by establishing their current energy performance and recommending cost effective solutions to reduce future energy usage. This forms part of the government's strategy to achieve a sustainable environment and meet climate change targets agreed under the Kyoto Protocol.

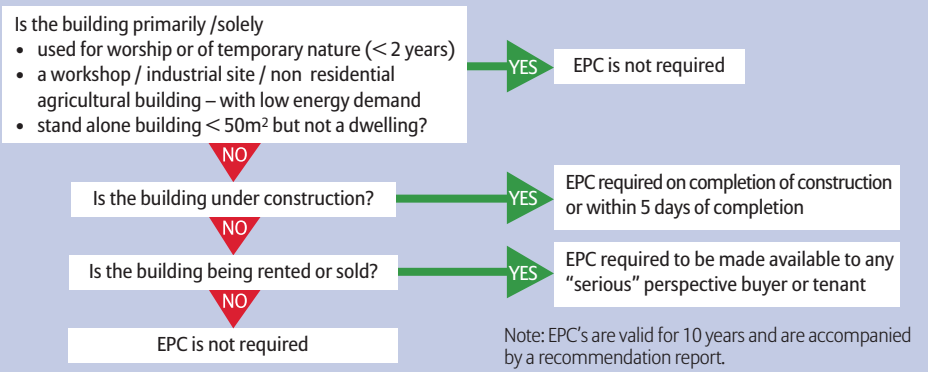
Legal Requirements and Duties

Articles 7 to 10 of the EPBD have come into force under the Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations 2007 and the Energy Performance of Buildings (Certificates and Inspections) (Northern Ireland) 2008. The regulations require property owners, operators and managers to put into place a programme of energy performance certification and energy inspections for air conditioning units.

Allianz Engineering Energy Services

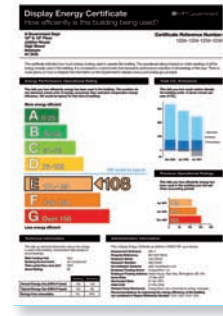
Allianz Engineering Energy Services has developed a range of services intended to directly support the property market to deliver quality solutions meeting the requirements of the Energy Performance of Buildings Regulations (EPBR) whilst simultaneously offering bespoke energy management programmes for reducing carbon emissions.

Energy Performance Certificates (EPC's) for Commercial Buildings



Note: EPC's are valid for 10 years and are accompanied by a recommendation report.

Energy Certification for Buildings



Energy Performance Certificate (EPC)

An EPC is one of two certification requirements being introduced as part of this legislation affecting the domestic and commercial sectors of the property market. An EPC will show the theoretical energy efficiency of a building, against comparative building benchmarks of a similar size, age and usage. The certificate asset rating is displayed graphically on a scale from A-G and is always accompanied by a recommendation report providing measures on how to improve the energy rating of a building. Both are valid for 10 years. The EPC and recommendation report must be compiled by an accredited energy assessor.

Display Energy Certificate (DEC)

A DEC is another certification requirement being introduced as part of this legislation. It primarily affects buildings in the public sector, or those buildings supplying services to a large number of the public.

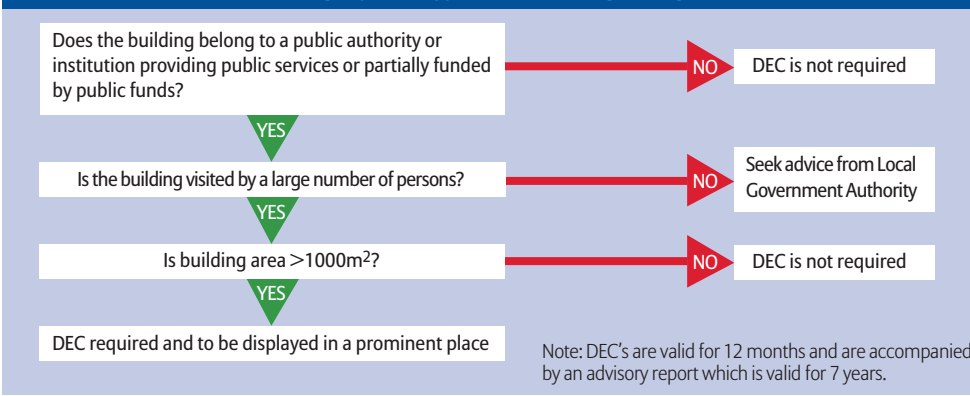
The DEC will show the actual energy usage of a building, the operational rating, and is valid for one year.

The certificate displays a graphical representation of the actual energy consumption of the building on a scale from A–G. The accompanying advisory report lists cost effective measures to improve the energy efficiency of the building and is valid for seven years.

Who is affected by the DEC section of the regulations?

Owners, operators and managers of buildings occupied by a public authority or an institution providing a public service to a large number of persons, with a total useful area greater than 1000m^2.

Display Energy Certificates (DEC's)



Inspection for Heating and Cooling Systems

Legal requirements and duties

The regulations also require property owners, operators and managers to put into place a programme of energy assessment for air conditioning systems . The requirement for inspections of air conditioning systems is being phased in according to system size. From January 2009, within England and Wales (January 2010, within N.Ireland), every system with a cooling capacity over 250kW should have had a survey completed. This threshold reduces to 12kW from 2011 (2012 N. Ireland). The "capacity" is the system total cooling capacity.

Statutory Air Conditioning Efficiency Inspection – Level 1

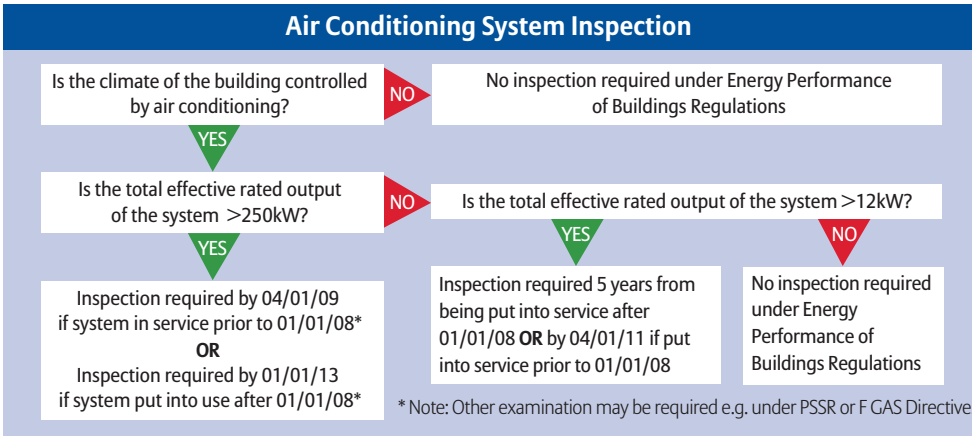
Part 4 of the regulations (Section 9 of the EPBD) calls for the efficiency of air conditioning systems to be assessed. It is a legal requirement that this survey is completed at least every five years. Once produced, the survey report will provide an assessment of the efficiency of the system, a review of the system sizing compared with the cooling requirements of the building and recommendations on improvements or replacements and alternative solutions.

Who is affected by this section of the regulations?

Owners, operators and managers of all buildings with an air conditioning or HVAC system. The principle benefit of air conditioning inspections will arise from the improved efficiency and reduced electricity consumption of new and existing systems.

Non-statutory Air Conditioning Efficiency Inspection – Level 2

This is an additional service offered by Allianz Engineering. Although not a legislative requirement, these more comprehensive surveys offer additional benefits in energy usage reductions and running costs which often outweigh the initial cost of the survey (this survey can also be used to cover the statutory requirements of these regulations).



Heating Plant Efficiency Inspection– Non-statutory

Although the European Directive does not stipulate actual efficiency inspections of boilers, it does recommend an assessment by a competent person at periodical intervals.

These assessment intervals are recommended as detailed below:

- Assessment every two years for solid fuel or oil fired boilers and space heaters with a heating capacity of more than 100kW
- Assessment every four years for gas fired boilers and space heaters
- Regular inspection and assessment of boilers with a heating capacity of between 20kW and 100kW.

Energy Audit & Report – Non-statutory

Approximately 50% of the UK's energy consumption arises from the way in which its 25million buildings are lit, heated and used*. European Commission research (2004) suggests that by improving energy efficiency, carbon emissions from buildings could be reduced by 22%.

This service involves a detailed assessment of the building, its energy supply and usage. It will enable a detailed report to be produced which recommends both immediate and economically feasible longer term energy performance improvements. By following the recommendations detailed in these reports improvements on the buildings rating can be achieved.

The benefits of an Energy Audit and Report:

- Reduced running costs of the building through increased efficiency and lower energy usage
- Improved efficiency of building stock
- Increased marketability of existing buildings, through reduced running costs
- Possible improvements on the rating of an Energy Performance Certificate
- Corporate and Social Responsibility policy; improving energy efficiency and reducing carbon footprint.

* European research

How Allianz Engineering Energy Services can help you

Through Allianz Engineering Energy Services, we have the expertise to deliver energy services together with information on legislative requirements.

Energy Service offered	Statutory / Non-statutory
Energy Performance Certification	Statutory
Display Energy Certification	Statutory
Level 1 Air Conditioning Efficiency Inspection	Statutory
Level 2 Air Conditioning Efficiency Inspection	Non-statutory
Energy Audit and Report	Non-statutory
Heating Plant (Boiler) Efficiency Inspection	Non-statutory

Contacting Us

Allianz Engineering Energy Services

Tel: 0845 0760 146

Fax: 01483 529 778

Email: energy@allianz.co.uk

Web: www.allianzengineering.co.uk/energy

www.allianzengineering.co.uk

Allianz Engineering Inspection Services Ltd. Registered in England number: 5441840.
Registered Office: 57 Ladymead, Guildford, Surrey, GU1 1DB, UK.

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