

Building Energy Rating: Ready to Take Stock? February 2008

Building Energy Rating (BER) certificates are due to be implemented across EU member states via the Energy Performance of Buildings Directive (EPBD) by 2009. Many will adopt certificates ahead of this deadline, resulting in varying rules and timings across the EMEA region.

It is during the process of selling or leasing existing buildings that the main impact will be felt. With 195 million sq m of office space being over 5 years old across Europe a core challenge for the real estate industry will be how to improve the sustainability of those existing buildings.

The risks of reticence may result in a poor certificate; ultimately impacting the lettable of a building and hence its liquidity.



Introduction

There has been considerable debate both in the media and throughout the property industry about the likely future impact of sustainability issues on the commercial property sector. In particular, attention has been focused on the potential impact of the Building Energy Rating (BER) certificates required for compliance with the European Energy Performance for Buildings Directive (EPBD), due to be implemented across EU member states by 2009.

The property industry has been presented with numerous arguments to support the case for implementing 'green' initiatives, such as cost savings through energy management and potential value differential driven by occupier demand. Subsequently there have been frequent calls for the industry to respond to these initiatives in a positive manner. However, in all of the information circulated about the EPBD, the issue that is most often either ignored or glossed over is that of **industry progress, or lack thereof**, on preparing for the impending EPBD regulations.

While there is still considerable uncertainty about the timings and implementation of the EPBD, this research study addresses the current information deficit by comparing progress to date across a number of EU member states, namely France, Germany, Ireland, Sweden, the Netherlands and the UK.

This paper focuses on the office sector and highlights the current levels of preparedness in both the public and private sector for the impending energy rating certificates. It also gauges the reaction of the property industry before suggesting scenarios that owners can follow to prepare themselves. It offers advice for investors seeking either to upgrade or improve their buildings to take account of the certification regulations, and finally it assesses the implications for new and existing stock, for cross border investment and for value differential.

“for both investors and owner-occupiers there will be a requirement for strong asset management and portfolio prioritisation”

A key observation in this report is that while the main framework of the EPBD legislation is already in place, the legislation in its entirety will be implemented across the EU within a reasonably short timeframe, that is on or before January 2009. Secondly, if landlords are not already convinced of the advantages of investing to make their existing commercial property portfolios fully EPBD compliant, they will still have to consider all the issues resulting from the new legislation.

They will have to decide whether to either act or not, while taking into account future potential risks, such as lowering the liquidity and lettable of their buildings, or converse advantages as a result of their adopting either approach.

Irrespective of the stance taken by investors, we strongly recommend that all owners of office property in the EU conduct an audit of their commercial property portfolios, as poor ratings will ultimately impact the lettable and liquidity of stock. However they also pose an opportunity for strategic asset management and refurbishment.

Our findings show that while there has been much debate about the likely impact of the EPBD regulations on the construction cost of new buildings, the impact of the new legislation will be felt during the process of selling or leasing existing buildings, and the challenge for the real estate industry will be how to improve the sustainability of existing buildings.

“we strongly recommend that all owners of office property in the EU carry out an imminent audit of their commercial property portfolios.”

European market in context

The European Energy Performance for Buildings Directive (EPBD) aims to reduce emissions through increased energy efficiency (both theoretical and actual) of the EU's 160 million buildings which generate more than 40% of total EU CO₂ emissions. By implementing the Directive, the EU could potentially reduce its carbon output by 45 million tonnes by 2010. The following actions are required from all EU member states:

- A general calculation methodology framework to be designed for determining the integrated energy performance of buildings
- Minimum energy performance requirements to be applied in the construction of new buildings
- Minimum energy performance requirements to be applied in large existing buildings where major renovations are due
- All buildings to be given an 'energy certification'
- All boilers and air-conditioning systems in buildings to be inspected regularly, in addition to assessing heating installations in buildings where boilers are more than 15 years old.

This list is merely a guide and each EU member state has the option to decide how best to respond to and implement the legislation. For companies with cross-border operations, the challenge will be to ensure the delivery of consistent and measurable benchmarks in each of the member states in which those companies operate.

This report assesses progress in relation to the certification of building energy ratings (BER) in terms of government response, implementation and market sentiment. Data on this progress is supported by a number of tables (see Appendix A).

To provide cross-border comparisons, we conducted a detailed survey in France, Germany, Ireland, Sweden, the Netherlands, and the UK.

This report details the progress made by individual EU member states in implementing the Directive, and identifies similarities and differences in its interpretation.

Governments' responses to the EU Directive

All six EU members surveyed in this study applied for an extension to the Directive. As we near the end of this extended Directive timeframe, the governments concerned have adopted different frameworks by which building energy ratings will be interpreted.

Measures across our sample involve implementation between 2008 and 2009, with most countries adopting a two-stage process, whether commercial versus non-commercial or public versus private. Phasing public sector and commercial property implementation should allow governments to ensure sufficient trained assessors are in place prior to commercial implementation.

Clearly, as far as investors and owner-occupiers are concerned, a process of strong active asset management and portfolio prioritisation will be needed to ensure that both new and existing commercial/public sector building stock in their property portfolios will be benchmarked and ready for measurement prior to 2009.

All member states will be required to adhere to the energy rating standard established by the EU. The implementation of these standards may be localised, with, for example, England and Wales adopting the Energy Performance Certificate (EPC) as the most likely format (see Appendix B). The EPC allows for a graded rating to be applied to buildings; the rating is mirrored by an occupational energy measure, the Display Energy Certificate (DEC) which is necessary for some large public buildings. We anticipate it will ultimately be required for all commercial buildings.

We found that costs of an assessment are somewhat opaque across the EU member states surveyed. In the Netherlands, the costs are fluid and are based on time taken for the assessment coupled with the size and the complexity of the building being assessed. For example, it is estimated that in the Netherlands a standard office building measuring 20,000 sq m (215,000 sq ft) will cost in the region of €3,200 (£2,200). England, Wales and Scotland have taken a similar approach, with costs for a comparable office building estimated at between €3,150 and €6,300 (capped), (£2,250 to £4,500). Costs in the other four EU member states surveyed are as yet unknown.

Implementation of the Building Energy Rating (BER)

In the main, training of building energy rating assessors is being carried out by the private sector, with central governments providing a framework and/or an agreed list of suitable assessor training organisations. However, because interpretations of the Directive vary across EU member states, the implementation plans proposed by the different member states also vary. In France, for example, assessors who hold an AFNOR qualification will be entitled to issue certificates, while in Germany those who hold a degree in architecture or

engineering, or have experience in energy consulting, will be entitled.

As a result we believe that, uniquely, certified property professionals in Germany are already well placed to assess buildings in a manner that meets the various requirements of the EU Directive.

Elsewhere, i.e. in Ireland, Sweden, the Netherlands and the UK, it is estimated that between 1,000 and 2,000 assessors will be required in each country. At the time of writing, the number of suitably qualified people in each of the countries surveyed is well below those figures – a fact that has led some industry commentators to predict delays in implementing the BER.

This raises the question whether the property industry across Europe is fully prepared for the impending legislation.

We conclude that Germany’s approach to educating/training suitably qualified professionals appears ideal in terms of providing the most straightforward solution to delivering the implementation of the certification system across the EU.

“simply to install energy metering and alarms would result in a relatively easy area in which to improve an asset rating”

“the survey respondents believed that among the stakeholder groups, developers are the ‘most aware’ of the impending legislation”

How has the property industry reacted ?

Through our survey work and an assessment of market sentiment it is clear that there is a wide range of understanding of both the requirements for the certificate and the subsequent preparation for and implementation of those certificates.

Previous studies have identified a ‘circle of blame’¹ (Figure 1), which shows that developers and investors alike are waiting for occupiers to declare their demand for ‘green’ properties, and thus creating a defined market segment. Simultaneously, developers believe that there is no evidence that corporate occupiers are willing to pay increased or premium rents to compensate developers for any extra costs incurred in the construction of sustainable buildings. Through our survey work outlined in the following section, this perception would appear to be misplaced.

Figure 1: The Circle of Blame



¹ Originally conceived and published by Environmental Governance, now Upstream

Professional Bodies

Recent years have seen a large increase in the volume of commentary released by property professional bodies regarding the implementation of the energy efficiency of buildings directive.

Information from the construction sector on BER often provides examples of how to retrofit a building and explanations of ways to improve buildings. Recommendations to improve the asset rating of buildings can often include (but are not limited to) a review of the following:

- Fan efficiency
- Average seasonal efficiency of chillers & boilers
- Glazing U Value
- Wall U Value
- Air permeability for each building

These are concerned with the fabric of the building and are relatively complex to implement: however, our analysis indicates that making some small changes as well as larger ones (such as installing energy metering and alarms) may offer a relatively easy way to improve the sustainable nature of a building.

Some professional bodies such as UKGBC, RICS and BPF (including their work on LES-Ter), are undertaking a more formal and structured response to sustainability issues. These property professional bodies advocate that the industry should work together to create and share best practice and drive the industry response forward, rather than wait to be led. The RICS in particular has launched a European Sustainable Energy Campaign and in a recent press release stated that it has become a media ally with the European Commission "in its challenge to encourage consumers, business, industry and governments to opt for energy efficiency".

However, most of the current literature in relation to the BER fails to compare progress or otherwise in terms of implementation, particularly on a pan-European basis, a gap this paper seeks to address. We invited the country survey participants to assess the level of BER awareness among selected stakeholder groups, including investors, developers and occupiers within their own countries and form a research house view. The full tabled results can be found in Appendix A, table 3.

Occupiers

A recent global survey of corporate occupiers by Jones Lang LaSalle and the CoreNet Summits has discovered that many tenants would be willing to pay higher rental costs to occupy a 'green' building with a higher level of energy efficiency. This is a highly favourable indicator for sustainable property going forward that we believe should help encourage developers to accommodate any potential additional development costs resulting from energy efficient design initiatives.

Many large international occupiers now have a sustainability programme embedded in their overall corporate strategy and it can be a key factor corporate occupiers adhere to when choosing an office location. However, among the stakeholder groups assessed for our house view, occupiers were regarded as 'least aware of the BER'. We expect that the exception to this finding will be those occupiers who are actively managing owner-occupied property portfolios.

The above summations are perhaps not surprising because, as of January 2008, the main focal point of the BER is on the asset rating of the building, and not on the actual energy performance of the building when occupied. Accordingly, as occupational ratings move up the agenda, we anticipate a greater level of occupier knowledge and focus.

Much of the occupational market is currently in its infancy regarding the use of sustainable buildings, although in the medium term we predict that occupiers will increasingly want to occupy such buildings and that sustainability will move up the location criterion.

Developers

The survey respondents thought that among the stakeholder groups, developers are the 'most aware' of the impending legislation, no doubt due to the imminent requirement to provide authenticated BER certification for new buildings.

On the whole, the general message from many developers in relation to the BER rating is that they are willing to fund more energy efficient buildings if it can be shown there is market demand and that tenants would be willing to pay a higher rent for such buildings.

Findings from our research indicate that within the development process the responsibility for adhering to and meeting energy efficient guidelines is often passed by the developers onto the architect to be dealt with at the design stage. However, it is clear that a core of developers have adopted a very proactive hands-on approach in relation to building energy efficient property and are arguably gaining market advantage as a result.

Investors

For many investors the whole issue of energy efficiency rating is a question for later, when the directive has been fully implemented. This viewpoint is based on the argument that there is no real evidence that a building with a low BER will achieve a lower value than one with a higher BER. However, many industry spokespeople have suggested that a value differential will happen and that property investors need to review the rate of their portfolio obsolescence accordingly. It is thought that the real impact of having a poor energy efficient building will be only be realised when it comes to the transfer of the asset through sale or leasing.

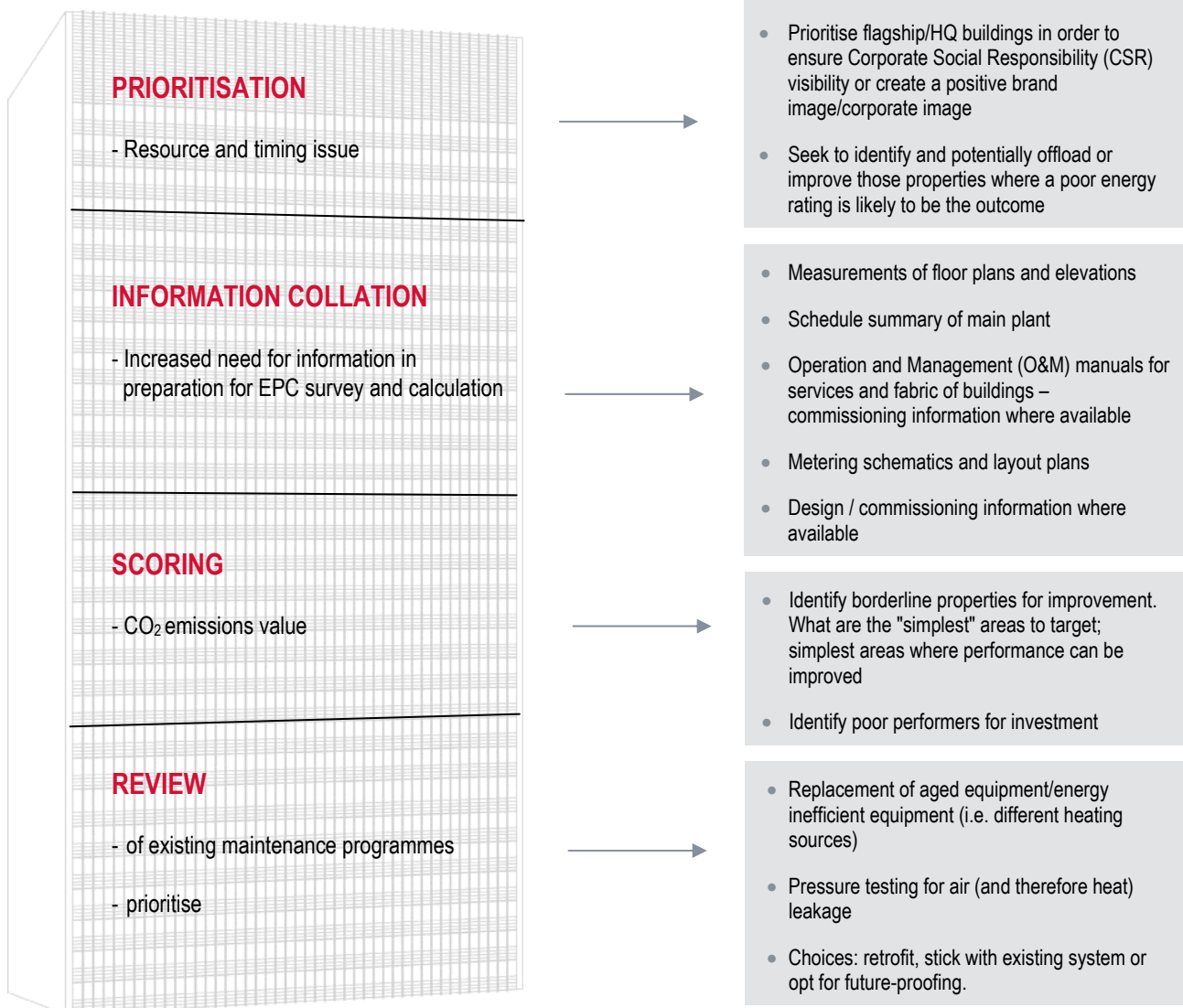
Some large property investors clearly understand the benefits of retrofitting or implementing sustainable practices. Our research shows that there are two distinct schools of investor-developers operating in the property market: while some just want to meet regulation, others, for example PRUPIM and Hermes in the UK, are leading the way. In their 2007 annual RPI report Hermes state that “By identifying those properties with less efficient characteristics now, we are able to prioritise improvement works to be carried out before the [EPBD] legislation comes into force, thus giving us the best possible advantage in selling and leasing high quality buildings to high quality occupiers”.

The factors driving the interest and awareness of the various stakeholder groups are closely linked to the perception of demand. Investors and developers, see the need to create energy-efficient buildings as driven by tenant-occupiers, coupled with developers’ perception that creating such buildings offers the potential to increase the liquidity of their property portfolios. For tenant-occupiers, the main incentives are the opportunity to reduce running costs and improve their brand image, their image as good corporate citizens, or both.

What can the industry do?

We estimate that approximately 195 million sq m (2,098 million sq ft) of office space across Europe is more than five years old. The physical status of most of these office buildings will have to be reviewed at some point, especially following the implementation of the BER regulations. In addition, it will be essential to carry out a review of office buildings as they come up for sale or lease because an energy efficiency certificate will be legally required as part of the due diligence process. The status of that certificate will have the potential to impact either positively or negatively on the final price paid by the purchaser/lessor. We therefore strongly recommend that all owners of office property in the EU carry out an audit of their commercial property portfolios.

Figure 2: Measures for portfolio assessment



Ongoing, strategic decisions will need to be made about the balance of the portfolio – should buildings with low ratings be avoided, or purchased and viewed as an “up-labelling” opportunity? Ultimately the BER legislation will require specific skills and have a dual impact on the technical expertise and manpower resources necessary to secure building energy ratings on properties, coupled with the technical expertise and manpower resources needed to re-evaluate property portfolios and their potential for increased depreciation, marketability and, ultimately, liquidity.

The process of determining the likely value of a property portfolio post-BER implementation will also require higher levels of knowledge, benchmarking and metrics. Investors/owner-occupiers will have to either generate this data in-house or with the help of their asset management service providers.

Scenarios and implications

The implementation of BER through the EPBD is a fact and should not be ignored by property users and owners without full consideration of the potential risks.

Existing office stock

We have identified a number of possible positions that investors and owner-occupiers can adopt, ranging from a “do nothing” approach to refurbishing entire portfolios, as outlined in Table 1 below. The ultimate path followed or chosen will most likely depend on attitudes to sustainability issues, financial strength and the size and activity levels of respective property portfolios.

New office stock

There is 9.6 million sq m (103 million sq ft) of office space currently under construction across Europe. All new stock will be affected by EPBD regulations and therefore a series of immediate actions are required for developers and owners of this property category. Without appropriate metrics in place developers will be less able to measure, price and potentially improve their BER. Ultimately this may result in buildings receiving a poor rating and being less marketable.

Cross-border investment

Companies with cross-border operations must be aware of the progress in relation to, or the application of, the Directive in each EU member state. While in theory the Directive should be applied equally across all member states, Jones Lang LaSalle’s research indicates that progress in relation to implementation differs greatly across the EU². Different approaches may also potentially be compounded by differences in the approach to the measurement of energy efficiency. This is a potential risk for all firms actively involved in cross-border investment. To minimise this risk we urge that cross-border investors arm themselves with as much information as possible about the BER system (methodology and progress) in force in each country targeted for investment.

Value Differential

If time shows that the BER system will create a value difference between properties with low and high energy efficiency ratings there is the very real likelihood that a two-tier commercial property market will be created. This gives the well prepared investor the opportunity to prioritise their portfolios and actively promote high-rated property.

Prioritisation will allow investors with older stock (which could either achieve a poor rating or where obsolescence may be fast tracked) to strategically manage the sale, retrofitting or redevelopment of these properties in advance of the implementation of the directive.

For owners with good covenants and long leases the impact of the rating is lower today. However in the medium term, occupier demand coupled with leases breaks and expiries may result in buildings becoming void at which point the need to address asset ratings will become key.

Table 1: Scenarios for investors / owner-occupiers

Scenario	Potential Positive Outcomes	Potential Negative Outcomes
Do Nothing	<ul style="list-style-type: none"> The property market simply absorbs the impact of the BER rating and there are only minor financial penalties incurred through the decision not to act. The money that you saved by not refurbishing the building can be utilised elsewhere. 	<ul style="list-style-type: none"> The capital and rental value of your building decreases due to receiving a low energy efficiency rating. The building is less attractive to occupiers and is difficult to sell or lease due to its lack of energy efficiency. Building has no certificate and is illegal to sell or rent
Retrofit/Redevelop	<ul style="list-style-type: none"> Your building receives an improved energy efficiency rating due to refurbishment and you are in a stronger position when it comes to re-letting or selling. Your building is more attractive to tenants than it may have been without retrofitting. The capital or rental value of your building improves due to its improved energy efficiency. Your building is more comparable with newer energy efficient buildings. 	<ul style="list-style-type: none"> The rental value of the improved building is less than or does not equate to the capital outlay spent on refurbishing the building.
Sell	<ul style="list-style-type: none"> You receive a better price for your building than you would have done after the BER ratings became effective. 	<ul style="list-style-type: none"> The property market simply absorbs the impact of the BER rating and the decision to sell based solely on the energy efficiency factor was unnecessary.

² For further information see the EU Buildings Platform <http://www.buildingsplatform.eu/cms/index.php?id=178>

Conclusions

While the implementation of the EPBD will certainly prove challenging for all stakeholders in the property industry, the BER should not prove a major headache for the prepared investor. However, for those with less well developed strategies for measurement and recording of the performance of their buildings' design, materials, construction and plant, the directive may have long term financial consequences for older existing office stock, particularly when it comes to selling or leasing these buildings.

There are many paths that office owners or owner occupiers may choose to follow in relation to ratings. The risks of these options will be determined by the covenant strength of the tenant, the length of lease and/or the strategic wish to "up-label". We therefore advise that none of these paths should be adopted without due consideration of their potential impact.

The progress of the application of the EPDB varies greatly across Europe. It is vital that cross-border investors are aware of this and help to reduce their exposure to risk by educating themselves to the differences in the BER process and costs from country to country.

“the Building Energy Rating should not prove a major headache for the prepared investor”



APPENDIX A

Table 1: Member States' Response to EU Directive

Country	Date that energy ratings for commercial property come into effect	government guidelines relating to commercial property grading	Likely grading method	Availability of government produced methodologies for the energy ratings in different asset types		
				Public	Commercial	Residential
France	Prompted by law in 2005, the BER driven by existing building regulations RT2000 and RT2005, and the RT2008 due out this year.	None	ISO / CEN Standard	Available	Available	None
Ireland	1 July 2008 - new Commercial buildings 1 Jan 2009 - existing buildings when sold / let	Guidelines available	CEN Standard (likely)	Not yet finalised	Not yet finalised	Available – Dwellings Energy Assessment Procedure (DEAP)
Netherlands	1 Jan 2008 - depending on the availability of certified advisors	Guidelines available	BRL 9500	Available	Available	Available
England & Wales	6 April 2008 – all construction. Plus sale / rent of buildings >10,000 sq m. 1 July – all buildings >2,500 sq m 1 October – all remaining buildings	Draft guidelines produced	EPC (Energy Performance Certificate)	Still waiting – will be based on Part L compliance	As before	SAP or RdSAP software available for dwellings.
Scotland	1 Jan 2009 – all commercial property	None	Unknown	Not yet finalised	Not yet finalised	None
Sweden	1 Jan 2009 – special-purpose property e.g. hospitals (>1000 sq m) all new buildings and all apartment buildings 1 Jan 2009 - existing buildings when sold / let	Guidelines available	ISO/IEC Standard	Available	Available	Available
Germany	1 July 2009 – all commercial property 1 July 2008 - residential built before 1965 1 Jan 2009 - residential built after 1965	Guidelines available	Two options: 1) projected energy use 2) actual energy use*	Available	Available	Available

Table 2: Implementation of BER

Country	Expected costs for an assessment of a commercial building	Are there government trained assessors to grade commercial property?	What, if any, tiered grades exist for assessors?	Availability of g'ment established training courses for BER assessors	How many assessors are trained in your country?
France	Unknown	No	None	Assessors currently dependant on the AFNOR certification	
Ireland	SEI expects BER fees will vary according to whether new or existing, and according to building size and complexity. Expected to range widely.	No –current register of BER assessors listed as being trained for the assessment of new dwellings only.	unknown	Ten recognised training courses	As at Oct '07 approximately 195. All registered for the assessment of new dwellings only (it is estimated that 2000 are required by 2009)
Netherlands	Based on time taken i.e. asset size and complexity. 1 day = € 800, office of 20,000 m²: € 3,200	Training ongoing	Do exist	Do exist	80
England & Wales	Based on the information to date the costs expected to be between £2250 to £4500 for most properties up to 160,000 sq ft	No	Do exist. ENTRY level for small and less complex buildings. INTERMEDIATE for those qualified with energy and building surveying background. ADVANCED for complex buildings such as the Gherkin, i.e. many central London buildings.	BESCA/HVCA, BRE, Chartered Institute of Building Services Engineers, Elmhurst, EPC Limited, National Energy Services, Northgate, Quidos, Royal Institution of Chartered Surveyors, Stroma	Unknown
Scotland	Originally based on asset value and between £500 and £2,000 (capped). Likely to now follow England & Wales above	No	Unknown	None	Unknown
Sweden	Unknown	No	Do exist. NORMAL level for simple buildings. QUALIFIED for complex buildings and AIRCONDITIONING for air conditioning system.	Do exist - courses being held by private educational companies	None. Courses available from May 2007. Approximately 2000 required by 2009 if buildings to be inspected before the end of that year.
Germany	Estimate based on building size: € 200 - 400 for midsized office buildings; up to € 1000 for high-rise buildings	No. Requirement for government certification not needed. A degree in architecture or engineering, or experience in energy consulting able to issue certificates. Need to register with the German energy agency as an assessor - currently about 5400 companies registered as eligible to issue an energy pass.	Unknown	Do exist - courses not mandatory. Several private bodies offer training courses.	250 public and private service providers currently registered to provide energy consulting services.

Table 3: Sentiment towards BER based on research house view

Country	The level of awareness of the BER in each country amongst stakeholder groups ³ 5= very high, 1= low			Factors that are driving interest of the BER amongst stakeholders		
	Investors	Developers	Occupiers	Investors	Developers	Occupiers
France	2	3	2	sustainability of buildings	return and construction cost	image and communication
Ireland	2	3	2	potential influence of energy efficiency on capital value	consumer demand	internal sustainability policies
Netherlands	2	2	1	law, demand from occupiers	law, demand from investors/occupiers	law, costs
England & Wales	4	4	4	occupier demand, building and portfolio management, own CSR policy	occupier demand, regulation, market liquidity	CSR , brand and marketing, effective management pf costs
Scotland	2	2	1	demand	cost	demand
Sweden	2	3	2	opportunity to offer tenants environmentally sound buildings with decrease in running costs etc	opportunity to offer tenants environmentally sound buildings, opportunity to gain a higher price when selling to investors	environment given greater media coverage, tenants consider it important the buildings they live and/or work in environmentally sound.
Germany	4	5	3	-consumer demand (i.e. occupiers asking for energy efficient office space and willing to pay higher rent in return for energy savings) - increased transaction costs, especially in large portfolio transactions - influence of energy efficiency on capital value	consumer demand, regulatory requirements for new buildings, development cost implications due to energy efficient technology	supply of available energy efficient office space, offset of higher rent and lower energy costs

³ Based on Jones Lang LaSalle research house view

APPENDIX B Examples of the Building Energy Rating Certificate

1. England and Wales

Energy Performance Certificate
Non-Domestic Building

HM Government

Jubilee House
High Street
Aylesbury
A1 1SD

Certificate Reference Number:
1234-1234-1234-1234

This certificate shows the energy rating of this building. It indicates the energy efficiency of the building fabric and the heating, ventilation, cooling and lighting system. The rating is compared to two benchmarks for this type of building: one that is newly constructed and one that is indicative of the existing stock. There is more advice on how to interpret this information on the Government's website www.communities.gov.uk/epcr.

Energy Performance Asset Rating

More energy efficient

Net zero CO₂ emissions

Least energy efficient

Technical Information

Main heating fuel: Gas
Type of installation: Air Conditioned
Total useful floor area (m²): 257
Building level: 4

Standards

Buildings similar to this one could have ratings as follows:

51 7 (new build)
100 7 (existing in the existing stock)

Administrative Information

This is an Energy Performance Certificate as defined in SI2007/991 as amended

Calculation Tool: BEM 2.1.4
Property Reference: 8013277412
Assessor Name: John Smith
Assessor Number: ABC12345
Accreditation Scheme: AEC Accreditation Ltd
Employer/Trading Name: EnergyWatch Ltd
Employer/Trading address: Alpha House, New Way, Birmingham, B2 1AA
Issue Date: 08 Dec 2008
Valid Until: 07 Dec 2018
Related Party Disclosure:
Recommendations for improving the property are contained in Report Reference Number 1234-1234-1234-1234

If you have a complaint or wish to confirm that the certificate is genuine

Details of the assessor and the relevant accreditation scheme are on the certificate. You can get contact details of the accreditation scheme from our website at www.communities.gov.uk/epcr, together with details of their processes for confirming authenticity of a certificate and for making a complaint.

CARBON TRUST
Helping homes, schools and businesses save energy

For advice on how to take action and to find out about technical and financial assistance schemes to help make buildings more energy efficient visit www.carbontrust.co.uk

Source: Department for Communities and Local Government, January 2008

2. German Certificate

Anlage 7 (zu § 16)
Muster Energieausweis Nichtwohngebäude

ENERGIEAUSWEIS für Nichtwohngebäude
gemäß den §§ 16 ff. Energieeinsparverordnung (EnEV)

Gültig bis: 1

<p>Gebäude</p> <p>Hauptnutzung / Gebäudekategorie: _____</p> <p>Adresse: _____</p> <p>Gebäude(n): _____</p> <p>Baujahr Gebäude: _____</p> <p>Baujahr Wärmeerzeuger: _____</p> <p>Baujahr Klimaanlage: _____</p> <p>Nettogrundfläche: _____</p> <p>Anlass der Ausstellung des Energieausweises: <input type="checkbox"/> Neubau <input type="checkbox"/> Modernisierung <input type="checkbox"/> Ausbau b. off. Gebäuden <input type="checkbox"/> Vererbung / Verkauf <input type="checkbox"/> (Änderung / Erweiterung) <input type="checkbox"/> Sonstiges (freiwillig)</p>	<p>Gebäudefoto (freiwillig)</p>
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Hinweise zu den Angaben über die energetische Qualität des Gebäudes

Die energetische Qualität eines Gebäudes kann durch die Berechnung des Energiebedarfs unter standardisierten Randbedingungen oder durch die Auswertung des Energieverbrauchs ermittelt werden. Als Bezugsfläche dient die Nettogrundfläche.

- = Der Energieausweis wurde auf der Grundlage von Berechnungen des Energiebedarfs erstellt. Die Ergebnisse sind auf Seite 2 dargestellt. Zusätzliche Informationen zum Verbrauch sind freiwillig. Diese Art der Ausstellung ist Pflicht bei Neubauten und bestimmten Modernisierungen. Die angegebenen Vergleichswerte sind die Anforderungen der EnEV zum Zeitpunkt der Erstellung des Energieausweises (Erfüllungen – siehe Seite 4).
- = Der Energieausweis wurde auf der Grundlage von Auswertungen des Energieverbrauchs erstellt. Die Ergebnisse sind auf Seite 3 dargestellt. Die Vergleichswerte beruhen auf statistischen Auswertungen.

Datenerhebung Bedarf/Verbrauch durch: Eigentümer Aussteller

= Dem Energieausweis sind zusätzliche Informationen zur energetischen Qualität beigefügt (freiwillige Angabe).

Hinweise zur Verwendung des Energieausweises

Der Energieausweis dient lediglich der Information. Die Angaben im Energieausweis beziehen sich auf das gesamte Gebäude oder den darin beschriebenen Gebäudeteil. Der Energieausweis ist lediglich dafür gedacht, einen übersichtlichen Vergleich von Gebäuden zu ermöglichen.

Aussteller: _____ Datum: _____ Unterschrift des Ausstellers: _____

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