



Impact Assessment of merger of Regulation 17 and EPC CO₂ emission calculation schemes



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Summary: Intervention & Options

Department /Agency: Communities & Local Government	Title: Impact Assessment of merger of Regulation 17 and EPC CO₂ emission calculation schemes	
Stage: Final	Version: final	Date: 4 September 2008
Related Publications:		

Available to view or download at:

<http://www.communities.gov.uk/publication/planningandbuilding/iamergerCO2cal>.

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What is the problem under consideration? Why is government intervention necessary?

Under existing building regulations there are two separate requirements to carry out CO₂ emission rate calculations. These are under (i) regulation 17C of the Building Regulations 2000 and (ii) Regulation 17E implementing Article 7 of the Energy Performance of Buildings Directive, requiring the provision of Energy Performance Certificates. The duplication is not necessary. As this is effectively a weakness of existing Government regulation, only Government has the authority to make this change.

What are the policy objectives and the intended effects?

The objective of the proposal is to eliminate the duplication of calculations and schemes as far as possible, thereby making more efficient use of resources. It is also hoped by achieving these primary objectives, compliance with this area of building regulations would be increased as a result of improved simplicity of the process.

What policy options have been considered? Please justify any preferred option.

A – Do nothing
B – Simplify CO₂ emission calculation arrangements
The preferred option is option B.

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects?

The policy will be reviewed as part of the broader review of the energy efficiency provisions of the Building Regulations

Ministerial Sign-off For final proposal/implementation stage Impact Assessments:

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:

A handwritten signature in black ink, appearing to read 'Hazel Blears', with a horizontal line underneath.

Date: 4 September 2008

Summary: Analysis & Evidence

Policy Option: **B**

Description: **Simplify CO₂ emission calculation arrangements**

COSTS	ANNUAL COSTS		Description and scale of key monetised costs by 'main affected groups'
	One-off (Transition)	Yrs	
	£		
	Average Annual Cost (excluding one-off)		
	£		Total Cost (PV) £
<p>Other key non-monetised costs by 'main affected groups'</p> <p>Additional training costs for energy assessors/inspectors that will have to collect more data than currently. Initial advertising/ guidance provision to inform builders of changes to regulations.</p>			

BENEFITS	ANNUAL BENEFITS		Description and scale of key monetised benefits by 'main affected groups'
	One-off	Yrs	
	£		
	Average Annual Benefit (excluding one-off)		
	£		Total Benefit (PV) £
<p>Other key non-monetised benefits by 'main affected groups'</p> <p>Reduced administrative burden on energy assessors/inspectors as duplication of calculations is eliminated. Overall compliance with CO₂ standards raised as a result of simplification of processes. Improved compliance with regulation in this area will improve overall environmental standards.</p>			

Key Assumptions/Sensitivities/Risks That there is scope for increased compliance (i.e. compliance is currently less than 100%).
 Note: the consultation is aimed at providing evidence to enable us to fill in these boxes further.

Price Base Year	Time Period Years	Net Benefit Range (NPV) £	NET BENEFIT (NPV Best estimate) £
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What is the geographic coverage of the policy/option?		England and Wales		
On what date will the policy be implemented?		1 October 2008		
Which organisation(s) will enforce the policy?		BCBs		
What is the total annual cost of enforcement for these organisations?		£ n/a		
Does enforcement comply with Hampton principles?		Yes		
Will implementation go beyond minimum EU requirements?		No		
What is the value of the proposed offsetting measure per year?		£ n/a		
What is the value of changes in greenhouse gas emissions?		£ n/a		
Will the proposal have a significant impact on competition?		No		
Annual cost (£-£) per organisation (excluding one-off)	Micro	Small	Medium	Large
Are any of these organisations exempt?	No	No	N/A	N/A
Impact on Admin Burdens Baseline (2005 Prices) (Increase – Decrease)				
Increase of £0		Decrease of £0		Net Impact £0
Key:	Annual costs and benefits: Constant Prices		(Net) Present Value	

Evidence Base (for summary sheets)

Summary of problem

Under the current building regulations provisions there are two types of scheme set up for the calculation of CO₂ emission rates in new buildings. One scheme allows its members to certify that the as built emission rate (commonly known as dwelling emission rate for dwellings (DER) or building emission rate for buildings other than dwellings (BER)) does not exceed the target emission rate (TER) and for building control bodies (BCBs) to accept these certificates as evidence of compliance. The other scheme allows its members to produce valid energy performance certificates (EPCs) based on the as built emission rate.

The calculations carried out under each type of scheme are essentially the same ones using the same calculation methodologies with those carrying out the calculations needing to possess the same competences. It does not seem sensible to require those carrying out the calculations to have to join different types of scheme to carry out the same task, nor to expect building owners to have to employ two different persons to do the same work.

Current position

(i) Regulation 17C

The Building and Approved Inspectors (Amendment) Regulations 2006 introduced a provision (regulation 17C) into the Building Regulations 2000 that the actual as built CO₂ emission rate for new buildings (DER/BER) should not exceed the target emission rate (TER). These emission rates must be calculated using approved methodologies – currently the Standard Assessment Procedure (SAP) for new dwellings and the Simplified Building Energy Model (SBEM) or Dynamic Simulation Modelling (DSM) for buildings other than dwellings.

Regulation 20D of the Building Regulations 2000 (regulation 12D in the Building (Approved Inspectors) Regulations 2000) (AI Reg's) requires the person carrying out the construction of a new building to give the building control body (BCB) a notice specifying the TER and the DER to demonstrate compliance with regulation 17C.

Regulation 20D (12D in the AI Reg's) also authorises BCB's to accept as evidence of compliance with Regulation 17C a certificate that the building will be compliant if built according to the listed specifications from persons registered with named bodies, which are commonly known as Regulation 17C competent person schemes. Only two bodies are named in the regulations – FAERO Limited (which has now ceased trading) and BRE Certification Limited.

There is no requirement that only members of those bodies named in regulation 20D can carry out the calculations needed to demonstrate compliance with regulations 17C. There are relatively few members of the BRE Certification scheme which means that BCBs are receiving notices of TER's and DER's/BER's from persons who are not members of the BRE Certification scheme and which they cannot automatically treat as sufficient evidence of compliance. They can only take account of them in deciding whether there has been compliance. This places an extra burden on the BCBs in checking the notices. It may also result in some new buildings not complying with regulation 17C as BCBs would not have the time, expertise or all the information to do the necessary calculations themselves.

The above provisions implement Articles 3 to 5 of the Energy Performance of Buildings Directive (2002/91/EC) (EPBD).

(ii) Energy Performance Certificates

Article 7 of the EPBD requires that an energy performance certificate (EPC) must be provided on all buildings on construction, sale and rental. This Impact Assessment concerns only EPCs on construction of new buildings. This Article in respect of new buildings is implemented in England and Wales by amendments made to the Building Regulations 2000 and the Building (Approved Inspectors etc) Regulations 2000 by the Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations 2007, principally regulations 17E and 17F in the Building Regulations and regulation 12 in the Approved Inspectors Regulations.

In brief, the CO₂ emission rate calculated needed to give a new building an asset rating are calculated using the same approved national methodologies and the same software as are used to undertake the calculations used to demonstrate compliance with regulation 17C of the Building Regulations. Regulation 17F requires that all those producing EPCs must be members of an approved accreditation scheme.

The provisions for EPCs for new buildings will come into force in stages (depending on the type of building) only from 6 April 2008.

Proposals

The principal proposal is to allow BCB's to accept as evidence of compliance the information demonstrating compliance with regulation 17C from anyone accredited for the category of building concerned under an approved EPC accreditation scheme. This will greatly broaden the numbers of those in schemes adjudged as competent to carry out regulation 17C calculations, creating greater certainty for building owners, those carrying out building work and BCB's.

There are a number of subsidiary proposals which are considered desirable to make the principal proposal better achieve its aim:

- All members of EPC accreditation schemes must be able to carry out regulation 17C calculations for the category of building for which they are accredited
- Amendments to the accreditation and National Occupational Standards to encompass regulation 17C requirements
- More flexible last date on which regulation 17C calculations and EPCs must be produced
- More robust arrangements for BCB's to check on the issue of an EPC
- Six month transitional period for existing Energy Assessors to demonstrate competence to carry out regulation 17C calculations.

Effect of proposals on stakeholders

(i) BCB's

As mentioned above there is currently only one authorised body (BRE Certification Limited) from which BCB's can accept certificates of compliance for regulation 17C as sufficient evidence of compliance without further consideration. This scheme has relatively few members (160 as at 30.9.08 who at that date had certified only a handful of buildings for compliance with regulation 17C).

This means that BCB's are receiving notices of TER's and DER's/BER's which they cannot simply accept as evidence of compliance. For each they should be examining the information given and coming to a conclusion on whether the information does demonstrate compliance with regulation 17C. There is a risk that BCB's may accept notices without further checking because of lack of time, availability of the necessary software, competence to use the software or all the information that would be needed. This would likely mean in some cases that compliance with regulation 17C would not be achieved and buildings would not be as energy efficient as the Regulations require.

There are a limited number of people who have the competences needed to carry out CO₂ emission calculations. Most will wish to join an approved EPC accreditation scheme as scheme membership is a requirement to produce recognised EPCs. If all EPC scheme members are also competent to carry out regulation 17C compliance calculations BCB's would receive certificates which they could rely on for most new buildings, relieving them of much of the need for checking and increasing the likelihood of buildings' compliance with the energy efficiency requirements.

(ii) EPC scheme operators

EPC scheme operators would need to make sure that the energy assessors (EAs) in their schemes are competent to carry out regulation 17C compliance calculations and monitor through quality assurance measures. Most currently developed systems by EPC scheme operators for checking competences and monitoring performance would encompass these additional tasks with at most marginal extra cost and effort.

(iii) Energy assessors

As mentioned above, the calculations for regulation 17C compliance and for an EPC use the same approved methodologies and software and are based on the same information on the building. The National Occupational Standards (NOS) for EAs are being amended to reflect the competences required for regulation 17C compliance but it is likely that most current and prospective EAs already possess the competences needed or would acquire them through the appropriate training, the cost and length of which would not increase.

For those EAs already accredited to produce EPCs for new buildings we are proposing a six month transitional period for them to demonstrate any additional regulation 17C competences not already demonstrated. This period would mean that the existing businesses of any affected energy assessors would not be affected as any extra training etc needed would be marginal.

A significant benefit to energy assessors would be the need to join only one scheme to carry out both regulation 17C and EPC calculations. For those who wished to join both types of scheme this would represent a significant cost saving in registration fees of the order of £350 per year.

(iv) Building owners and those carrying out building work

The proposals will be of benefit to both. They mean that they will have to employ only one energy assessor who has demonstrated competence to carry out both tasks with a saving of one the fees if two different EAs had been employed to carry out the two tasks. Building owners would also have the added assurance that the BCB concerned could accept the regulation 17C calculations as evidence of compliance.

Consultation on the proposals

The Department consulted the Building Regulations Advisory Committee (BRAC) on the proposals and issued a public consultation document. BRAC were content with the proposals.

There was a very low level of response to the public consultation, which is available at <http://www.communities.gov.uk/publications/planningandbuilding/co2calculationsconsultaton>. More than four-fifths of the respondents supported each of the proposals. A number of helpful comments were made which will help with the drafting of the implementing legislation and in clarifying the wording in the accreditation and national Occupational Standards.

The consultation document requested respondents where they were in a position to do so to give the Department quantitative information on the costs and benefits arising from the proposals. Unfortunately none of the respondents did so to help refine the Impact Assessment.

Monetisation of costs and benefits

Regulation 17C of the Building Regulations came into force on 6 April 2006. However, there were extensive transitional provisions in the Building and Approved Inspectors (Amendment) Regulations 2006 which meant that buildings already started or those where full plans, a building notice or initial notice had been given did not have to fulfil the regulation 17C requirement. This means that the need to fulfil the requirement has proceeded relatively slowly and incrementally. It has therefore not been possible to collect any meaningful data on the cost of this requirement to building owners, those carrying out building work and BCB's, or on the benefits that might accrue.

Savings arise from having both the regulation 17C calculations and EPC calculations carried out by the same energy assessor. As we have no information on who has been carrying out the regulation 17C calculations as there is no requirement to be a scheme member to do so, nor on how many buildings regulation 17C calculations have been carried out it is not possible to quantify possible savings. Nevertheless, as mentioned above, there are significant non-monetised benefits to be gained from the proposals for all with only marginal extra costs.

Implementation, enforcement and monitoring

The proposals will be implemented by amendments to the Building Regulations 2000, the Building (Approved Inspectors etc) Regulations 2000 and Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations 2007.

Enforcement of the assessment standards and competence standards will be for the operators of approved EPC accreditation schemes. Enforcement of the building regulations requirements will reside, as now, with local authorities using the existing enforcement powers in the Building Act 1984.

The changes made by the proposals are to procedural arrangements rather than to technical standards and no discrete monitoring of their effect is proposed. However, the Department is in the process of reviewing all the energy efficiency provisions in the Building Regulations, both the technical standards and how these are complied with. The changes made through these proposals will be included in that review.

Specific Impact tests

Competition Assessment

The proposals will make it considerably easier for more energy assessment schemes and energy assessors to undertake the calculations required by regulation 17C and in that respect will lead to an increase in competition.

Small firms impact test

The proposed changes will affect directly only the approximately 500 energy assessors, some of which work for large firms, some for small. The proposals will not alter this balance and, as the competition assessment states, open the market for more work for both small and large assessors without a bias towards one or the other.

Carbon Assessment

The current arrangements for regulation 17C calculations mean that some buildings may not be as energy efficient as required because of the inability of BCB's to fully check all calculations. The proposals will mean that fewer buildings will fail to meet the energy efficiency requirements. There will thus be a saving in CO₂ emissions although it is not possible to quantify such savings.

Equality Impact Assessment

An equality Impact assessment has been considered and it has been decided that none is required as the proposed technical changes to the Building Regulations would not impact on equality issues.

Other impact tests

These are not relevant as the proposed changes are purely technical ones.

Specific Impact Tests: Checklist

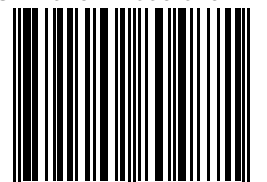
Use the table below to demonstrate how broadly you have considered the potential impacts of your policy options.

Ensure that the results of any tests that impact on the cost-benefit analysis are contained within the main evidence base; other results may be annexed.

Type of testing undertaken	Results in Evidence Base?	Results annexed?
Competition Assessment	Yes	No
Small Firms Impact Test	No	No
Legal Aid	No	No
Sustainable Development	No	No
Carbon Assessment	Yes	No
Other Environment	No	No
Health Impact Assessment	No	No
Race Equality	Yes	No
Disability Equality	Yes	No
Gender Equality	Yes	No
Human Rights	No	No
Rural Proofing	No	No

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