

Response to be submitted by email to
buildingstandards@scotland.gsi.gov.uk
Phone 01506 600408

[Permission granted to submit late on 24 Jan 2012]

Michelle Williamson
Building Standards
Denholm House
Almondvale Business Park
Livingston EH54 6GA



EAUC-Scotland Office
% Queen Margaret University
by Musselburgh EH21 6UU

Dear Michelle Williamson

Consultation: Directive 2010/31/EU on Energy Performance of Buildings (Recast)

Please find attached response from the Environmental Association for Universities and Colleges – Scotland (EAUC-S) and the Scottish Association for University Directors of Estates (SAUDE) to the above consultation.

The 60 or so Universities and Colleges in Scotland manage a very substantial estate and we consider we will be impacted by how the above recast of EPBD is implemented in Scotland.

We note that in many instances “departmental” energy consumption can be many times the fabric heat losses etc which are the subject of this consultation. We question the wisdom of requiring further assessment for more buildings down to 250 sq.m on an Asset-based rating system which relies on a one-off calculation of performance based on algorithms which do not necessarily reflect energy consumption of buildings in use.

Majority respondents press for the implementation of Display Energy Certificates – and public register of Key Performance Indicators of time series data of actual energy consumption over three years – rather than an asset-based EPC – like our colleagues in England and Wales. This approach encourages organisations to establish suitable management systems to monitor and target improvements against their own measured performance rather than an abstract rating.

We have the following comments to make [page numbers refer to consultation document]:

1. Reference in bullet 5 on p.2 to the 250sq.m threshold being introduced “after five years” but 2015 date given in para 5.13 on p.17. Please clarify likely dates of implementation for both threshold changes. Extended timescales would be preferred.
2. Article 5 suggests introducing “cost-optimal” as a process. We are content with proposal to continue with “cost-effective” but ask for much clearer guidance on how to treat likely future fuel price inflation being significantly greater than retail price inflation. Especially for buildings with a long life it will militate against good decisions on energy efficiency if this was not factored into Net Present Value calculations.
3. Please also reproduce the table from the *BS ISO 15686-5:2008 Buildings and constructed assets. Service life planning. Life cycle costing* with example life spans.
4. Para 16 refers to renewable energy. Please can a more inclusive term like Low and Zero Carbon Technologies be used? This should include cogeneration or Combined Heat and Power with District Heating.

Yours sincerely,

David Somervell

David Somervell, EAUC-Scotland Branch Committee Member

Respondent Information Form

Consultation on Directive 2010/31/EU on The Energy Performance of Buildings (Recast)

NB This form **must** be returned with your response to ensure that we handle your response appropriately

Group / Organisation

1. Group / Organisation Name

EAUC-Scotland and SAUDE

2. Group/Org Type (please tick one)

Local Authority	<input type="checkbox"/>	Heritage/Historic Groups	<input type="checkbox"/>
Business Groups	<input type="checkbox"/>	Utilities Companies	<input type="checkbox"/>
Professional/ Industry Groups	<input type="checkbox"/>	Energy Advice / consultants	<input type="checkbox"/>
National Agencies	<input type="checkbox"/>	Health Sector	<input type="checkbox"/>
Further Education	<input checked="" type="checkbox"/>	Commercial Companies	<input type="checkbox"/>
Specialist Interest Groups	<input type="checkbox"/>	Other (Please specify) Public Body Estates	<input checked="" type="checkbox"/>

3. Contact Name

David Somervell

4. Postal Address

**Environmental Association for Universities and Colleges
& Scottish Association of University Directors of Estates**

c/o Queen Margaret University

by Musselburgh

Postcode **EH21 6UU**

Phone **0131 477 0000 [ask for Sarah Lee]**

Email **slee@eauc.org.uk**

5. Permissions – I am responding as a Group / Organisation

(a) The name and address of your organisation **will be** made available to the public (in the Scottish Government library and/or on the Scottish Government web site).

Are you content for your **response** to be made available?

Please tick as appropriate Yes

(b) We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?

Please tick as appropriate Yes

Consultation on Directive 2010/31/EU on The Energy Performance of Buildings (Recast)

www.scotland.gov.uk/Topics/Built-Environment/Building/Building-standards/publications/pubconsult

Consultation Questions

Consultees are encouraged to submit their views in electronic format. Please feel free to provide your views and comments on this form. To mark a 'yes/no' box, please double click on the relevant box and select 'checked'. To offer commentary on aspects of the consultation not addressed by specific questions, please respond under [Question 20](#).

Response from the Environmental Association for Universities and Colleges – Scotland (EAUC-S) and the Scottish Association for University Directors of Estates (SAUDE)

Question 1:

Extending the use of SAP

In addition to enhancements to improve the flexibility of RdSAP, do you consider it would be beneficial to have the facility to assess existing dwellings using full SAP?

YES NO *Please provide commentary in support of your view.*

Please provide for those that wish to undertake and record a more accurate SAP to do so – to take account of non-standard and non-traditional (or even very traditional) dwellings.

Question 2:

Primary Energy Indicator

Do you have any views on the presentation of information documenting primary energy and delivered energy in the EPC or supporting reports?

YES NO *If so, please outline your views.*

Sensible to require consistent approach across UK. Please be clear how the grid average kg CO₂e / sq.m / year is to be treated in any standard calculation. Concerned that the overall gross emissions reduction benefits of Combined Heat and Power (and Cooling where Trigenation installed) supplied to a building may not be sufficiently recognised.

Please ensure that any explanation also provides for provision of utilities by a district scheme and not as frequently implied from “renewable energy” systems mounted on the building itself.

Question 3:

Exemptions from Articles 4 & 12

Are consultees content that the scale of current exemptions is not increased?

YES NO *If not, please outline your views.*

Question 4:

Article 7 – Existing Buildings

Do you agree that ‘major renovation’ should be defined by the cost of works rather than relating it solely to renovation of the building envelope?

YES NO

If not, please outline your views.

Agree with the logic of the approach – to be based on value of works being over 25% of value of the building but you need to clarify what the value of the works refers to?

Does it include the main contractor cost of works only?

And does it include VAT – we are unable to recover VAT on such works – or is it ex-VAT?
And does it include all associated costs like fees, preliminaries, furniture and fit out?

Please ensure the resultant clarification is succinct and very clear.

Question 5:

Article 9 - Nearly zero-energy buildings

It is proposed that further development of energy standards within building regulations will deliver a practical definition, applicable to all new buildings, of what constitutes a ‘nearly zero-energy new building’.

To inform these discussions, we would welcome consultee views on what should constitute such a definition, at present and in the future.

This definition appears to be being progressively eroded in meaning in the successive stages of consultation undertaken by DCLG. Scottish guidance needs to very clearly emphasise the importance of reducing as far as economically practicable the non-renewable energy requirement to operate the building as a system. And only after that to consider how best to provide for the remaining heat, power and cooling requirement to maintain comfort conditions therein.

While there are aspirations to “decarbonise the electricity supply industry / achieve the goal of 100% of Scotland’s net electricity to be supplied annually by renewable energy systems”, it is still the case that marginal electricity consumption entails a high proportion of fossil fuelled generation. The efficiency of fossil fuelled central power stations is inherently low with consequent high CO₂e emissions associated.

Please can you ensure very careful thought is given to identifying the benefits of connection to high efficiency Combined Heat & Power / District Heating (CHP/DH) systems for overall community emissions reduction purposes and to incorporating these much more clearly in any guidance on what constitutes “Low and Zero Carbon Technologies”.

These are very significantly more environmentally and economically beneficial than micro-renewable systems on the roof / gable walls of buildings. Very doubtful if air sourced heat pumps comply with criteria for genuinely “renewable” technology – especially when system impact of peak loading factored in under extreme cold situations.

Question 6:

Requirement for an EPC - It is proposed that the EPC will continue to offer cost effective recommendations on how an assessed building might be improved. Do you agree with this proposal?

YES NO

If not, please outline your views.

Concerned that decisions on “cost effectiveness” may be taken on flawed / incomplete set of criteria – which do not sufficiently account for the very likely significant divergence in fuel price escalation against retail price escalation / value of money.

Please can you make specific reference to a requirement to apply Treasury Green Book rules to establish the Net Present Value of any energy efficiency investment taking into account Ofgem’s predicted cases for low, medium and high cost increases to 2020.

One way to factor in such a decision-making process might alternatively be to require the calculation to factor in a projected cost for CO₂e emitted by the various options under consideration. This is especially vital when decisions are being taken on fundamental infrastructure / insulation / insulation design and technical solution selection processes are being compared.

Question 7:

EPC validity period - It is further proposed that maximum validity for an EPC be retained at ten years. Do you agree with this proposal?

YES NO

If not, please outline your views.

-

Question 8: (applicable from 31 October 2011)

Format of EPC

We would welcome views on the revised format of both EPCs and recommendations report. In particular, is presentation, language and the level of information clear and informative? (Note in responding, that presentation of information specific to other UK initiatives within recommendation reports are not the subject of this consultation).

Significant improvement – thanks. Specific suggestions [from the top]:

Heading **Energy Performance Certificate** be increased in size and **(EPC)** added. This is because practically everyone refers to them as EPCs.

Remove the subtitle and instead place this in lower black box heading after **Building Energy Performance Rating – Non-domestic building**

No need to also say “and buildings other than dwellings”.

Recommend the two most important pieces of numerical data be aligned so that the label “**Approximate Energy Use:**” be right aligned beneath the right hand end of the red bar with “**Approximate Carbon Dioxide Emissions:**” right aligned below it – and the two calculated figures left aligned under the left hand corner of the pale grey box framing the Current and Potential ratings.

Suggest following adjustments to explanatory para to shorten / simplify:

~~The~~ **B**uilding **E**nergy **P**erformance **R**ating is a measure of the ~~effect~~ **impact** of a building on the environment in terms of carbon dioxide (CO₂) emissions – **with A having** ~~The higher* the rating, the less impact on the environment than G. The~~ Current rating is based upon an ~~assessor's survey~~ **assessment** of the building. ~~The~~ **P**otential rating shows ~~the~~ effect of undertaking all of the recommended measures listed below. ~~The~~ **full EPC Recommendations Report attached** to this certificate** explains how this rating is calculated and gives further information on the performance of this building and how to improve it.”

Suggest the heading of the very last main section using the word Summary in front of “Recommendations” – may fit in if you delete the redundant “the”.

Lastly much better not have the body text in bottom right hand box in capitals and even better if not in reversed out. Both type styles contravene good practice text which is for accessible to partially sighted etc people. Put in plain upper and lower case text black on white for improved legibility.

*Potentially very confusing to use the term “higher” [or even lower] because it could mean a greater number [i.e. 92 is better than 38?!] or it could mean spatially further up the page?!

**Potentially confusing to speak of an “attached” report when most viewers will only see the EPC on the wall?

Question 9:

Representative sampling

Subject to robust checking by assessors, should we allow the production of an EPC for any single family dwelling the basis of assessment of another representative building?

YES NO

Please include an explanation of any view you may have.

-

Question 10:

Article 12 - Issue of energy performance certificates

Do you agree with both the level of information that should be presented in commercial media and also with the proposed description of commercial media in this respect?

YES NO

Please include an explanation of any view you may have.

Suggest prescribing wording “**Building Energy Performance Rating / EPC = A**” or at least “**EPC Rating = B**”.

Question 11:

Article 13 - Display of Energy Performance Certificates

From experience to date, do you consider guidance on what constitutes a public building needs any refinement? YES NO

Please outline any specific views you may have.

-

Question 12:

Extension of the need to display EPCs

Do you agree that guidance on “frequently visited by the public” should be based upon the description given above? YES NO

Please include an explanation of any view you may have.

The requirement to even undertake an asset-based EPC at all should only “apply to non domestic buildings where access to all or part of the building by members of the public is integral to the daily operation of the building AND where members of the public would expect to be able to enter due to the function of that building. Examples include shops, cinemas, health centres, etc.” [Text copied forward from para 5.24 with emphasis added.]

This definitional clarification should NOT in our view include laboratories, specialist teaching facilities etc EXCEPT where these are used for public performances / require Public Performance License - even though this may not be their primary purpose.

Question 13:

Article 15 - Inspection of Air-Conditioning Systems

We would welcome your views on how to promote and encourage the benefits of joint inspection (e.g. air-conditioning & 'f-gas').

-

Question 14:

Article 16 - Reports on the inspection of heating and air-conditioning systems

Do you consider that, in future, it would be beneficial to record these inspections in a standard electronic format and require lodgement on a central register?

YES NO Please include an explanation of any view you may have.

First of all we challenge the current Scottish Government interpretation on “Article 14 – Inspection of **heating** systems”. Current practice – provision of guidance leaflet – may be quite satisfactory for domestic boilers serving single dwellings; BUT – as with the requirement to inspect and make recommendation report on air-conditioning systems over a threshold size – we suggest that non-domestic heating systems over a certain size threshold [probably best to use the more commonly quoted heat output capacity rating] – it would be helpful to prompt review of big old inefficient boilers too? Consequently we support a central register of both heating and cooling plant over determined threshold size – along with recommendations.

Question 15:

Energy Performance Certificates (EPC) and Air Conditioning Inspection reports for Existing Buildings

Do you have any views on the development and standardisation of requirements for Approved Organisations and Protocol Organisations in Scotland?

YES NO *If yes, please provide your comments.*

We only ask that the accreditation for such organisations is kept at a practicable level – ideally as a component of GasSafe registration for gas-fired boilers, OFTEC registration for oil fired boilers etc and if at all possible delivered through existing trade bodies which are charged with ensuring enhanced skill levels are achieved in the heating, ventilating and air-conditioning industry.

Question 16:

Energy Performance Certificates (EPC) - New Buildings

We recognise that change to the process of EPC production and lodgement for new buildings will affect all those currently submitting applications through the building warrant system. We welcome your views on this proposal.

-

Question 17:

Article 18 - Independent control system

We welcome your views on these proposals and on how you consider the quality assurance regime asserted by the Directive might best be delivered.

We accept that local authority Building Control offices may not have the requisite skill levels / time to adequately check all EPCs and that at some date in the future – with sufficient notice given to all parties to gear up – that an independent check process be instituted. Again we ask if at all possible this be delivered by alignment with existing accreditation protocols and not as a wholly new system.

We suggest that the required random sampling process be formally commissioned by Building Standards Division or Audit Scotland and published annually and formally announced on the same website which hosts the planned national listing of certificates.

Question 18:

Article 27 - Penalties

Do you consider the current fiscal penalties are appropriate?

YES NO

Please provide commentary in support of your views.

Just out of interest – please can you advise if ANY civil or criminal cases have been brought for non-compliance? Who is checking?

Question 19:

Article 27 - Penalties

Do you agree that penalties/sanctions applicable to assessors should be consistently and clearly defined within the operating requirements of all assessor Schemes?

YES NO *Please provide commentary in support of your views.*

We observe that the management of the checking procedures by private agencies lays the whole system open for potential abuse / non-compliance and urge that care be taken to ensure adequate overall oversight and auditing of the whole process is undertaken to instil confidence in the entire procedure.

Question 20:

Views and comments on the proposed transposition of the recast Directive.

Whilst we have identified a number of specific questions in relation to proposals under the recast, we also welcome your general views and comments on the proposals contained within this document. We also welcome comment on any further issues you feel should be highlighted to the Scottish Government in taking forward this work. Please provide commentary in support of your views.

The 60 or so Universities and Colleges in Scotland manage a very substantial estate and we consider we will be impacted by how the above recast of EPBD is implemented in Scotland.

We note that in many instances “departmental” energy consumption can be many times the fabric heat losses etc which are the subject of this consultation. We question the wisdom of requiring further assessment for more buildings down to 250 sq.m on an Asset-based rating system which relies on a one-off calculation of performance based on algorithms which do not necessarily reflect energy consumption of buildings in use.

Majority respondents press for the implementation of Display Energy Certificates – and public register of Key Performance Indicators of time series data of actual energy consumption over three years – rather than an asset-based EPC – like our colleagues in England and Wales. This approach encourages organisations to establish suitable management systems to monitor and target improvements against their own measured performance rather than an abstract rating.

We have the following comments to make [page numbers refer to consultation document]:

1. Reference in bullet 5 on p.2 to the 250sq.m threshold being introduced “after five years” but 2015 date given in para 5.13 on p.17. Please clarify likely dates of implementation for both threshold changes. Extended timescales would be preferred.
2. Article 5 suggests introducing “cost-optimal” as a process. We are content with proposal to continue with “cost-effective” but ask for much clearer guidance on how to treat likely future fuel price inflation being significantly greater than retail price inflation. Especially for buildings with a long life it will militate against good decisions on energy efficiency if this was not factored into Net Present Value calculations.
3. Please also reproduce the table from the *BS ISO 15686-5:2008 Buildings and constructed assets. Service life planning. Life cycle costing* with example life spans.
4. Para 16 refers to renewable energy. Please can a more inclusive term like Low and Zero Carbon Technologies be used? This should include cogeneration or Combined Heat and Power with District Heating.