



**Department for Business, Energy and Industrial Strategy  
consultation**

**Introducing a Performance-Based Policy Framework in  
large Commercial and Industrial Buildings in England and  
Wales**

**Submission from CIBSE**

9<sup>th</sup> June 2021

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## THE RESPONDENT

### The Chartered Institution of Building Services Engineers (CIBSE)

CIBSE is the primary professional body and learned society for those who design, install, operate and maintain the energy using systems, both mechanical and electrical, which are used in buildings. Our members therefore have a pervasive involvement in the use of energy in buildings in the UK with a key contribution to sustainable development. Our focus is on adopting a co-ordinated approach at all stages of the life cycle of buildings, including conception, briefing, design, procurement, construction, operation, maintenance and ultimate disposal.

CIBSE is one of the leading global professional organisations for building performance related knowledge. The Institution and its members are the primary source of professional guidance for the building services sector on the design, installation and maintenance of energy efficient building services systems to deliver healthy, comfortable and effective building performance. CIBSE has been actively involved in the EPC regime for non-domestic buildings since the original Energy Performance of Buildings (EPB) Directive was adopted in 2004.

CIBSE Certification Limited is a wholly owned subsidiary of CIBSE and was formed to provide an independent certification body for the approval of personnel, specifically Low Carbon Consultants (LCCs) and Low Carbon Energy Assessors (LCEAs). LCEAs are knowledgeable practitioners who can provide Energy Performance Certificates, Display Energy Certificates and Air Conditioning Inspections. CIBSE Certification is UKAS (United Kingdom Accreditation Service) accredited and is audited regularly. **This response is submitted on behalf of the whole CIBSE Group.**

CIBSE has over 20,000 members, with around 75% operating in the UK and many of the remainder in the Gulf, Hong Kong and Australasia. CIBSE is the sixth largest professional engineering Institution, and along with the Institution of Structural Engineers is the largest dedicated to engineering in the built environment. Our members have international experience and knowledge of life safety requirements in many other jurisdictions.

CIBSE publishes Guidance and Codes providing best practice advice and internationally recognised as authoritative. The CIBSE Knowledge Portal makes our Guidance available online to all CIBSE members, and is the leading systematic engineering resource for the building services sector. It is used regularly by our members to access the latest guidance material for the profession. Currently we have users in over 170 countries, demonstrating the world leading position of UK engineering expertise in this field.

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## CONSULTATION RESPONSE

### EXECUTIVE SUMMARY

CIBSE very much welcomes this consultation. We appreciate all the work and detail that went into it and are hugely supportive of the introduction of in-use performance ratings, including annual ratings and mandatory disclosure as first step. This is a great step forward. CIBSE has been advocating for this for many years and led industry on in-use performance by including it as a central requirement for its awards.

We agree with the statement “these ratings must improve over time. This will require clear incentives, and potentially regulation in the future”. We would welcome more detail on this. The evidence from Australia is that public procurement has an important role to play in driving the market.

CIBSE have long advocated that DECAs could be a very powerful instrument, but have suffered from lack of investment and enforcement. We recommend that the rating system for public buildings, i.e. DECAs, be upgraded and made consistent, to create a single operational rating system. This will very much reduce confusion in the market and send a clear message on what is considered good performance. Having two systems is likely to create all sorts of confusing messages, and unhelpful situations where, for example, buildings change hands between a public and private organisation, or are multi-tenanted with some public and private occupiers. In addition, a single operating system would allow public procurement to play its full role in driving the whole market: this option is very limited if the buildings occupied by public bodies are on a separate (and out of date) system.

We agree that the commercial office sector is the most appropriate to start with. However:

- We think this should include a requirement for tenancy ratings of spaces of over 1,000 m<sup>2</sup> (preferably GIA, for consistency with the thresholds for base build and whole building ratings, but NLA could be used if that is deemed easier for tenants). These uses can represent a large proportion of energy use in offices (e.g. the NABERS figures for FY2020 energy intensity are 301 for tenancy ratings, of the same order of magnitude as 373 for base buildings). While CIBSE are not 100% sure this is on the basis of the same floor area definition, clearly the magnitude of tenancy energy uses should not be ignored., so the current proposals would miss a significant opportunity. In addition, for “fairness”, it seems appropriate that if a tenant who occupies a whole building of 1,000 m<sup>2</sup> is required to obtain a rating, then so should a tenant occupying a space of similar size in a larger building (with a tenancy- rather than whole-building rating).
- This must be expanded to other sectors as soon as possible. There is little detail on this in the consultation. One of the key reasons why ratings in other sectors would be difficult at this stage is lack of shared data to establish a suitable rating scale. We therefore recommend that, as offices are required to “onboard” with the scheme from

2022/23, so other sectors should be required to start providing data on the energy performance of their buildings. This could be done by disclosure to BEIS and industry working groups possibly, without being fully public; it could also be without a rating, but an indication of performance could be provided in return, for example by comparison with a DEC rating (in sectors where these are available) or the latest CIBSE benchmarks - this could be acknowledged to be provisional but would prompt queries about what a suitable rating system could be. It really is crucial to start this data gathering process and industry-government working groups as soon as possible. The information required could be similar to that for offices and, in addition, include what is required for DECs (in sectors where they exist) and the parameters used by CIBSE benchmarks (e.g. for hotels: number of bedrooms, whether they have a pool and whether they have a restaurant).

- There must be a clear timeline to expand the requirements to smaller size thresholds, for example 500m<sup>2</sup> to match the current threshold for public EPCs, or 250m<sup>2</sup> to match the current threshold for DECs in public buildings.

Our main reservation is on the use of primary energy as metric. It is not possible to find a single metric which satisfies all policy outcomes, and different sources of energy clearly have different attributes. However, primary energy (or electricity equivalent on the basis of primary energy, as proposed in this consultation) has 2 significant drawbacks:

- It favours gas and other fossil fuels, compared to electricity. As stated in the consultation itself, currently using gas would be favourable to the rating, compared to direct electric heating. By 2030, both gas and electricity would be seen as similar. This goes counter to heat decarbonisation.
- it is at all well understood by most people, which creates a further disconnect between stakeholders and energy use. Calling the metric “electricity equivalent” will not help, without stating what the equivalence is based on: people are likely to assume it is carbon (as for non-domestic EPCs) or costs (as for domestic EPCs).

Using metered energy (allowing for central generation and distribution in the case of buildings connected to a district heating scheme) would not have this disadvantage of favouring gas and fossil fuels over electricity, and it is much more easily understood by most people. We acknowledge the choice of a single metric is a difficult issue, hence why we initiated a comparison of metrics against desired outcomes, but we strongly recommend that more thinking should be done to make sure that the rating system does support heat decarbonisation and engagement of stakeholders with energy use.

The issue of metric is also a key point when considering how EPCs and operational ratings will work together: CIBSE think that both are required, as buildings need both to have the potential to perform well **and** to be operated well, and policy needs to maximise its reach to different stakeholders. However, with non-domestic EPCs being based on carbon and

operational ratings on primary energy, currently there is a real risk of drivers pulling in different directions.

CIBSE have worked on energy benchmarking and energy use distribution for a number of years, with our project partner UCL; our public online energy database covers a large range of sectors and regularly being added to. In addition, we have been very active in industry efforts to define best practice targets, including with the RIBA, LETI, and the UKGBC. While we agree that the experience from NABERS on scale setting is important to take into account, we also think there is a role for exemplar targets to influence the rating scale (rather than just using a total number of increments e.g. 6, and a benchmark used as median), to ensure the end point is both achievable and aspirational. We would very much appreciate the opportunity to continue to support the work of BEIS on this, including details of the rating scale for offices, and how to expand ratings to other sectors.

## **INTRODUCING A PERFORMANCE-BASED POLICY FRAMEWORK IN LARGE COMMERCIAL AND INDUSTRIAL BUILDINGS IN ENGLAND AND WALES**

### **CHAPTER 1**

***1. Do you have any evidence which supports, disputes, or could add to, the evidence presented by the Government in this chapter? In terms of the evidence presented in this chapter, do you support the Government's analysis?***

We agree with the broad lines of the analysis, including the need to monitor, disclose, and ultimately incentivise actual performance. This is something CIBSE have been advocating for many years. We agree that EPCs do not do that (and that they are not intended to). We also agree with the important point that the savings achieved “by NABERS” are not through the rating scheme on its own, but includes important contextual factors such as the role of the public sector as occupier in driving the market: see questions 12-14.

In addition to evidence from the BBP and NABERS, we would like to point out to the following studies and data sources which should be of interest to BEIS:

- Work carried out by UCL analysing actual energy use across the stock, in different non-domestic sectors. This includes their work with CIBSE on our online energy benchmarks and energy use distribution curves, but also the UCL 3DStock model, which BEIS have been made aware of by UCL (public information is here <https://www.ucl.ac.uk/bartlett/energy/research-projects/2020/nov/3dstock> but we understand UCL have presented more information to BEIS, including interim findings such as energy use distribution in a range of non-domestic building types). This is a significant piece of evidence as it covers a much broader type of buildings than the BBP database.

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- In the public sector, evidence from Display Energy Certificates: in particular, we would point to the analysis carried out by UCL and CIBSE (Hong S. et al, *Assessing the trends of energy use of public non-domestic buildings in England and Wales*, BSERT, 2019): this showed trends of reduction in energy use across all sectors, particularly in thermal energy use but also electrical (except for schools and hospitals where increases were linked to increased use of electrical equipment due to wider trends in working practices). In the office sector, between 2010 and 2016 this resulted in an average improvement of 17% in the thermal rating and 14% in the electrical rating. While lower than the savings achieved by office buildings under the NABERS scheme, this was achieved over a shorter period and, crucially, with much less of an incentive framework. Alongside the proposals in this consultation we would therefore urge a review of the DEC scheme to update the ratings, improve enforcement, and create a real incentive framework for improvements. The DEC system is some 15 years old and needs to be brought up to date, and properly supported.
  - In the arts and cultural sector, Julie's Bicycle database and their work to promote monitoring, disclosure and improvements in energy performance (in part driven by Arts Council funding requirements)

We have the following comments on the analysis of the NABERS scheme, page 21, based on the NABERS annual reports referenced in the consultation (<https://nabers.info/annual-report/2019-2020/office-energy/> and <https://nabers.info/annual-report/2016-2017/nabers-energy-for-offices.html> )

- For all buildings together, the average energy intensity figures are 639 MJ/sqm in 2000/01, 512 in 2009/10, and 406 in 2020. This equates to a 36% saving overall since the start of the scheme, or 20% in the past decade
- For base buildings, the average energy intensity figures are 569 MJ/sqm in 2000/01, 475 in 2009/10, and 373 in 2020. This equates to a 34% saving overall since the start of the scheme, or 21% in the past decade.
- For whole buildings, the average energy intensity figures are 1033 MJ/sqm in 2000/01, 1097 in 2009/10, and 862 in 2020. This equates to a 16% saving overall since the start of the scheme, or 21% in the past decade. This is only marginally higher than the improvements in office DEC ratings between 2010 and 2016 mentioned above.

We do not therefore recognise the figures quoted on page 21 of the consultation document, which are higher and closer to the figures for base buildings alone, NOT whole buildings: "*office buildings have seen their energy use per square meter reduce by 38%, including a 34% reduction over the last decade*". This does not diminish the accomplishment of NABERS, but we do stress it is important to make this distinction between whole buildings and base buildings when reviewing the impact of NABERS and extrapolating on how they may translate in the UK.

A smaller comment is the reference to 7% of buildings representing approximately 50% of total floorspace and over 53% of total energy use; this does not match Figure 1, which shows just over 60% of floor space and over 65% of energy use. This does not change the analysis nor our comments, but either the text is wrong or Figure 1 is.

The SAP11 review recently carried out for BEIS by a consortium team including CIBSE also identified a number of voluntary and regulatory schemes which have implemented energy monitoring and disclosure requirements. The review identified that in-use energy data disclosure is required in:

- Regulations in Sweden.
- The voluntary DGNB Climate Positive Award in Germany
- The Toronto Zero Emissions Buildings Framework and the Vancouver Zero Emissions Building Plan in Canada
- The City of Boulder Energy Conservation Code and ILFI Zero Energy Certification in the USA.

While the SAP review focused on the domestic sector, some of these schemes do apply to the non-domestic sector too. Many are relatively recent and with limited public data, but we recommend they should be reviewed as part of the background review of evidence and options available.

## **Chapter 2**

***2. Do you support the rationale set out in this chapter? If so, are there any changes you would make or considerations you would add to the rationale the Government has set out? If not, could you please explain why, providing evidence where possible.***

Yes, broadly. We very much agree that:

- the introduction of a rating framework based on verified meter readings is required and would improve policy effectiveness. CIBSE have been advocating this for a long time; we contributed to work on extending the DEC system to the private sector in 2011 (before it was abandoned by government) and have supported the Design for Performance / NABERS UK scheme from its early pilot stages.
- metrics should align with desired policy outcomes, so a rating should consider both energy use and carbon emissions
- a policy driven by asset ratings such as EPCs creates a high risk of discrepancy and systemic performance gap, putting at risk the UK's climate target.

Our comments and caveats are:

- We regret not seeing a reference to the Buildings Mission, which set an objective of 50% reduction in energy use for all buildings, rather than 30% for the larger buildings referenced here. We understand the broader strategy in which the Mission was included has more or less been dropped by the current government, but we hope to see an equivalent objective to the Buildings Mission in the upcoming Heat and Buildings strategy.
- Size thresholds: See question 7.

### **Chapter 3**

***3. Do you support the Government's proposal to underpin a performance-based policy framework with a rating that looks to modernise the DEC, in the ways set out above? If so, are there any changes you would make or considerations you would add to the proposal? If not, could you please explain why, providing evidence where possible.***

We support the stated ambition for a world-leading scheme. We agree that DECs are a very useful tool (see analysis and academic reference in Question 1) but also that a performance rating scheme should incorporate key upgrades, especially:

- The ability to account for base building and tenancy set-ups, as well as whole buildings
- A better reflection of occupancy patterns (DECs can already account for occupancy hours but not density).
- Updated underlying benchmark data behind the ratings. CIBSE have online energy benchmarks which are more current than the TM46 ones used for DECs, available for a wide range of sectors, and we would be happy to make this data available to BEIS for the new operational rating scheme **and** (as we strongly recommend) for an update of the DEC scheme.
- “Improved compliance and enforcement: the QA process for DECs is robust, but the issue is the DECs that are not being produced i.e. an enforcement problem. CIBSE produced a significant piece on enforcement in 2015 (see Appendix A), and we understand little has changed since.

This must also be taken as opportunity to upgrade DECs and create a single operating system applying to all buildings. CIBSE have long advocated that DECs could be a very powerful instrument, but have suffered from lack of investment and enforcement. The DEC system should be upgraded, and both systems merged into a single operational rating system. This will very much reduce confusion in the market and send a clear message on what is considered good performance. Having two systems is likely to create all sorts of confusing messages, and unhelpful situations where, for example, buildings change hands between a public and private organisation, or are multi-tenanted with some public and private



occupiers. In addition, a single operating system would allow public procurement to play its full role in driving the whole market: this option is very limited if the buildings occupied by public bodies are on a separate (and out of date) system.

**4. The Government proposes that, as a first step, building owners and single tenants should be required to obtain an annual performance-based rating, and disclose that rating online. Do you support this proposition? If so, are there any changes or amendments you would make to the proposal? If not, could you please explain why, providing evidence where possible.**

Yes, we agree that:

- the rating should be annual and disclosed both online and in the building (to state the obvious, this should be prominent, as for DEC's e.g. of a certain size and in reception).
- As first step there would be no obligation to improve ratings or reach a particular rating. However, this must be introduced, and a timescale for this announced as soon as possible to drive early improvements by market leaders – see Questions 12-14.

We would however recommend consideration of the following extensions to the proposed requirements:

- For buildings with multiple tenants, the current proposals would only require a rating from the owner (i.e. a base building) even if some tenants occupy a premise above 1,000 m<sup>2</sup>. This would miss a significant part of energy use. For example, the NABERS figures for FY2020 energy intensity are 862 MJ/m<sup>2</sup> for whole buildings, 373 for base buildings, and 301 for tenancy ratings. While CIBSE are not 100% sure this is on the basis of the same floor area definition, clearly the magnitude of tenancy energy uses should not be ignored. At similar size premises, a single tenant would have to produce a (whole building) rating, so we think a tenant in a multi-tenanted building could be expected to produce a (tenancy) rating.
- As mentioned in Question 2, we also recommend reviewing the potential for considering ownership and occupancy in aggregate, for organisations which own or occupy several buildings or premises, as a way to gradually extend requirements to more organisations and a larger proportion of non-domestic energy use.

We also recommend that Government should announce as soon as possible how requirements will be extended in the future to capture a wider range of sectors, in order to give as much time to prepare as possible to the organisations that will be captured by future requirements, and to create a drive for early voluntary adopters. There is little detail on this in the consultation. One of the key reasons why ratings in other sectors would be difficult at this stage is lack of shared data. We therefore recommend that, as offices are required to “onboard” with the scheme from 2022/23, so other sectors should be required to start providing data on the performance of their buildings. This could be done without a rating, but an indication of performance could be provided, for example by comparison with a DEC rating (in sectors where these are available) or the latest CIBSE benchmarks - this could be

acknowledged to be provisional but would prompt queries about what a suitable rating system could be. It really is crucial to start this data gathering process and industry-government working groups as soon as possible. The information required could be similar to that for offices and, in addition, what is required for DECAs (in sectors where they exist) and the parameters used by CIBSE benchmarks (e.g. for hotels: number of bedrooms, whether they have a pool and whether they have a restaurant). CIBSE would be very happy to support the work of BEIS on this, including through our energy database (benchmarks and distribution curves) which covers a wide range of sectors.

**5. What is the best way to support Small and Medium Enterprises in obtaining annual performance-based ratings, where the owner of the building or the single tenant is an SME?**

We do not think that the information required for an operational rating would be overly onerous. However, if the government's own analysis identified a hurdle, a graduated approach could be introduced e.g. an entry point based on minimal information such as floor area and metered energy use alone (which should be available from bills), and options for more granular data entry such as occupancy density and hours.

**6. Should the Government:**

- ~~Allow owners of buildings above 1,000m<sup>2</sup> to use their annual performance-based rating to satisfy their existing regulatory obligation to present a valid EPC before a building is sold or let. As set out above, under this option the Government would continue to collect data about fabric and service improvements. Where prospective buyers or tenants want information about the building fabric and services, EPCs can be obtained on a voluntary basis.~~
- **Continue to require owners of buildings above 1,000m<sup>2</sup> to present a valid EPC where the building is sold or let, recognising that the EPC and a performance-based rating assess different things, and can collectively provide a better level of information about the building than either rating would in isolation.**

**Please outline your preferred option and your reasoning, providing evidence where possible. Please set out any changes or amendments you would make to the options, or if you would favour a different option. An appraisal of the benefits and risks of both options, providing evidence where possible, would help inform the Government's decision making.**

As stated in the consultation, both actual and theoretical asset performance are necessary: they provide different but useful information for buyers, tenants, and investors and, for good energy and carbon performance, buildings need both to be built well, and operated well. There is a real risk that, without an EPC, owners or tenants with a poor operational rating would simply put it down to the asset not being "good enough", without realising the potential for improvements (on the assumption that EPCs were improved and indeed gave a good indication of potential performance).

We do not think requiring both would represent an unreasonable burden:

- Sales and lettings are substantial transactions and typically receive dedicated resources.

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- Investors, insurers and other market drivers increasingly require information on annual energy use and carbon emissions, so the operational rating would not necessarily be an additional burden on owners or tenants, who may have to produce the information already anyway
  - Digitisation should further reduce the burden over time, since for example a new EPC rating could be produced by simple modification of the relevant parameters which have changed, without the need for a whole new model.

There are however important things to change to the current proposals for both the operational ratings and EPCs, in order to make sure that both do work together: at the moment, using primary energy would go counter to carbon: an EPC rating (based on carbon) could be improved by switching from gas to electricity, but it would worsen the operational rating – see question 15

There should also be efficiencies available in how the operational rating scheme would operate alongside ESOS, as this also applies to operational energy use and therefore organisations should not be asked to produce, twice, similar but different information on the same topic. It is important that the new scheme is appropriately integrated with the ESOS regime so that the energy used in buildings is measured once, and ideally also reported only once. The measurements can then be used to create the operational rating for the building, as well as being fed into the wider data required for ESOS. The systems adopted should allow building energy data collected for the operational rating to be accepted for ESOS use just as a DEC is accepted already.

***7. Recognising that the Government has committed to review the threshold for each sector, do you consider 1,000m<sup>2</sup> to be a sensible starting position for determining which buildings should be required to obtain annual performance-based ratings?***

Yes as first step. However, we stress that a commitment and timeline to review and lower thresholds should be made clear as soon as possible:

- The current threshold would leave at least 30% (possible 47% - see comment in question 1) of energy use **not** covered by the proposals. We strongly recommend that measures should be examined to target this part of the stock. For example, this could be a timeline with diminishing thresholds for buildings to be included depending on their size (e.g. 500m<sup>2</sup> to match the current threshold for public EPCs, 250m<sup>2</sup> to match the current threshold for DEC's in public buildings).
- Options should also be looked at to incorporate within the requirements the owners or occupiers of multiple buildings or premises, which individually may be below the current threshold but in aggregate over it: these organisations are likely to have more resources than the size of individual premises implies, and they should be required to address their total energy use.

**8. Should the Government consider expanding the performance-based rating to cover factors such as water, waste and indoor air quality? What do you consider would be the benefits of this approach? Would there be any drawbacks?**

Yes, provided this initial phase focused on energy performance is successfully implemented, other topics could be examined as possible extensions in the future. However, this needs to be achievable and it would be better to set out a roadmap for broadening the scope. A starting point could be to cover air quality and thermal comfort, as well as areas where building regulations requirements already apply, but are in practice rarely checked e.g. air quality performance criteria from Approved Document F. Other ratings could be available early on a voluntary basis to supplement the energy ones, before being introduced as requirements.

In particular, we would like to highlight that the past 15 months have shown very clearly that many buildings are inadequately ventilated, because although the ventilation system is capable of delivering the intended levels of ventilation, the systems have not been maintained or operated according to the design intent. Regardless of whether the rating is extended, there is a real need to make provisions in the operational performance scheme to guard against owners “gaming” their rating by reducing the ventilation levels in their buildings to reduce energy consumption.

## CHAPTER 4

**9. Has the Government identified what you consider to be the right objectives for a successful delivery model?**

Yes, we agree the two objectives of high-quality ratings and improvements over time are the right ones.

**10. Do you support the Government's proposal that the annual rating should not be accompanied by recommendations for improving the rating? If so, are there any changes you would make or considerations you would add to the proposal? If not, could you please explain why, providing evidence where possible.**

Yes, we agree, for the reasons outlined in the consultation document i.e. the complex nature of large buildings meaning that recommendations are likely to be bespoke.

This could potentially be reviewed as requirements extend and start to apply to smaller and simpler buildings where, potentially, some standardisation of recommendations may be possible and useful.

However, this can only work if there are indeed incentives to seek recommendations and improve ratings – see our response to questions 12-14.

**11. Do you support the Government’s proposal that exemptions should be limited to a relatively few buildings? Are there any grounds for an exemption that you feel are appropriate, which the Government has not considered? Ahead of the findings from the Government’s research project we also welcome views on how the requirement to obtain and disclose an annual rating could be enforced most effectively.**

**Exemptions:**

It is difficult to find justifications for exemptions. The consultation mentions security risks or data that is too sensitive to release, but even this should be considered carefully in order not to give an easy get-out clause to large numbers of buildings: as the information released would only be the rating, and potentially the energy use and occupancy patterns, but no details on activities inside the building other than their general use, what would be seen too sensitive and justify an exemption?? If there are some very sensitive defence premises that need exemption then that should require a clear case and be very limited in availability. The ideal would be no exemptions; there could also be different levels of exemptions e.g. there would be very little justification to exempt buildings from ratings to be produced, which would at least inform the building managers, but not made public.

**Enforcement:**

We agree with the statement in the consultation that *“having a credible and effective compliance and enforcement approach will be key to the success of a national performance-based policy framework”*.

Success will be very dependent on effective enforcement. But it also requires having a mindset that this framework is being brought in because climate change is a significant challenge and needs addressing, and so non-compliance needs to be seen in the context of the anti-social act that it is, and dealt with accordingly. There must be a political resolve to take enforcement seriously and enforcement needs to be seen as important and a priority. For example, there have been low regard for enforcement of the Energy Performance of Buildings Directive over its 18 years. Unless there is a robust enforcement regime this framework will be another burden and tax on the law abiding and socially responsible individuals and organisations, whilst the non-compliant gain unfair competitive advantage from flouting the law.

CIBSE provided a detailed analysis of the enforcement of the EPBD in 2015 in response to an attempt to eliminate the DEC regime by the coalition government at that time. It is included at Appendix A to this response. We understand little has changed this.

It would be helpful for the research commissioned by BEIS to be published to enable wider discussion about enforcement, and for that research to connect with the knowledge of those

with considerable experience of the non-enforcement of energy performance legislation in the UK property sector.

There is a missing and fundamental principle on page 46: penalties must be dissuasive, as required by Article 27 of the EPBD, but unfortunately never properly transposed in the UK. If they are not, then it is worth taking the risk and a small penalty. Evasion and non-compliance must be more costly than compliance, and there must be a realistic chance of being caught out.

The compliance route needs to include mandatory disclosure in the company's Annual Report and therefore the means for shareholders to see the results and to call out the non-compliant. This can help the sector regulate to a large extent at less cost to the taxpayer. In addition, if written into the accounting rules then the financial auditors can pick on it at audit time, again saving on enforcement costs.

## CHAPTER 5

***12. Are there any considerations you would like to add to the Government's analysis of the factors that are likely to drive improvements in ratings? Do you support the Government's proposals to improve ratings from day one?***

No, we think the consultation document captures the key considerations, including Figure 91 and the recognition that, in relation to NABERS, drivers were not only reputational but also through the leadership role of the public sector. We very much encourage the statement that options to play a similar role through the central government estate should be explored. This could also apply wider in the public sector e.g. government agencies, local authorities etc should also be encouraged to procure for performance. This means that a single operating system should be created, including the current DEC's – see question 3.

We understand increased asset value (as identified in Figure 91) to be a crucial driver, especially in the commercial office sector, with increasing requirements for disclosure and reductions in actual energy use and carbon emissions from influential parties such as investors and insurers (e.g. Allianz now require annual energy use to be reported).

***13. Do you consider that linking a clear financial incentive, or disincentive, to annual performance-based ratings would be an effective way to drive improvements in those ratings?***

Yes, this should be considered. In addition and as essential first step, current disincentives should be removed – in particular, CIBSE regularly receive feedback that business rates can act as counter-incentive, as improving energy efficiency may lead to increases in rateable value and therefore business rates.

***14. What do you consider would be the impact of the incentives and interventions that have been suggested? Are there ways you think those incentives or interventions could be made more effective?***

***Are there other incentives or interventions that the Government has not considered here, which you believe would be more effective at ensuring ratings improve over time?***

We strongly recommend the exploration of regulatory options, and broadly agree with the 2 options proposed i.e.:

- requirements for low carbon heating. Note that currently the chosen metric, linked to primary energy, goes AGAINST this objective, as detailed in our response to question 15.
- minimum standards, with penalty if it is not achieved by a certain date. To make this even more effective, the government's plans to introduce such standards should be announced well in advance, for adoption by market leaders which would develop market solutions and then make it easier and cheaper for the rest of the sector.

Another regulatory option could be to require disclosure by investors and insurers of the operational ratings across their portfolio.

Among the softer options, in addition to publicising buildings with a high rating, we think it would be important to publicise those which have improved most.

The setting of the scale also has a role to play: currently it is defined by the total number of ratings, and a benchmark being the median point. While we agree that the experience from NABERS on scale setting is important to take into account, we also think there is a role for exemplar projects and industry targets (e.g. RIBA 2030 Challenge, LETI, UKGBC office trajectory) to influence the rating scale, to ensure the end point is both achievable and aspirational.

As stated earlier, another key lever is through public procurement, both for new premises to be occupied by public bodies and by commitments to improve in-use performance over time. This means DEC's should be brought into a single operating system - see questions 3 and 12.

## **CHAPTER 6**

***15. Do you agree with the Government's assessment and preferred approach? Please provide evidence or case studies, where possible, in your response.***

No. We agree with the priorities, including reflecting the performance of buildings themselves, and encouraging heat decarbonisation. However, we disagree with the assessment of metrics: we think the choice of primary energy presents real risks to heat decarbonisation, which are not made clear in the consultation; and we think the assessment and comparison should include metered energy.

CIBSE, as an engineering institution, very much understand that a unit of energy has different qualities, impacts, and degrees of usefulness. This is why we initiated the comparison of metrics used in this consultation which assesses them on the basis of how well they can help

deliver policy objectives. We do not think that “simple” metered energy use is an ideal metric, but we also think that no single metric is ideal to meet all objectives on its own. On balance metered energy use has a number of advantages, and should be seriously considered, while primary energy has a number of drawbacks which must be accounted for; we are concerned it may drive perverse outcomes.

**Heat decarbonisation:** The main problem with primary energy, and **it is a really important one**, is that gas has a lower primary energy content than electricity. So do fuels which are even more problematic to carbon and air quality, such as oil and diesel. This would clearly go COUNTER TO the aim of decarbonising heat.

As a result, the statement in the consultation that primary energy (or electricity equivalent on the basis of primary energy) will “*encourage the move away from gas to electricity*” is clearly not correct:

- As stated in the consultation, “*electricity is 1 kWhe per kWh, and natural gas is approximately 0.75 kWhe per kWh*”. even accounting for, say, a boiler of 85% efficiency, a unit of heat delivered by gas would have a primary energy content of 0.88, lower than one delivered electric heating. The rating will therefore favour gas heating; this would not be the case with metered energy, since one unit of heat would be delivered by 1.17 units of gas, higher than 1 unit of electricity by direct heating. Only in the case of a heat pump would this be true, but then it would also be with metered energy as a metric.
- By 2030, the consultation states that gas would be attributed a factor of 0.86 kWhe per kWh; even by then therefore, almost 10 years ahead, when the UK should have much progress in heat decarbonisation, a unit of heat would be attributed a factor of 1.01, just about that of direct electric heating.

**Consumer engagement:** this is less critical than in the domestic sector, since most non-domestic buildings and especially those of a size captured by this consultation, are expected to have some sort of professional or trained individual involved. However, it is still true that primary energy and, even more so, “electricity equivalent on the basis of primary energy” are much less straightforward than metered energy. This introduces an additional step for stakeholders to understand and engage with energy use. However, evidence of user behaviour in response to the COVID-19 pandemic strongly suggests that as the threshold is reduced to bring smaller premises in scope and it is extended to other types of building, this assumption will break down. Many building owners know little about energy. They understand kilowatts and kilowatt hours because they are billed for them. They do not understand primary energy. Without that understanding they will struggle to engage with the scheme and will seek to minimise any impact it has on them.

**Working together with EPCs:** CIBSE have several recommendations to improve EPCs, and we are aware that EPCs may change in the future. However, at the moment and under the current MEES consultation, they are expected to continue to use carbon as a metric. This



could create serious problems and confusion, with one instrument (EPCs) calling for the move away from gas, and another favouring gas (and other fossil fuels). This would be problematic in the case of owner occupier, but create even more difficult situations in situations of multiple stakeholders, some prioritising EPC ratings and others operational ratings e.g. a landlord may manage their stock on the basis of EPCs, while their single tenant may use operational ratings. This clearly goes against policy effectiveness and against providing clear signals to the market.

**Stability:** the proposed metric introduces stability for electricity, by keeping it to 1. It doesn't for the other fuels. Other options to introduce stability are:

- Using metered energy: this does not change, and allows year-on-year comparisons of performance regardless of the system
- Basing conversion factors on long-term averages. Factors can still be reviewed regularly, but they will then change less significantly. This should be relatively reliable given the relative agreement on grid decarbonisation scenarios up to 2050; it is also what the CCC recommend for carbon factors in Building Regulations, to reflect the actual likely impact of heating system selection rather than a short-term outlook which is soon outdated.

**“Electricity equivalent”:** We do not agree with the assessment of this metric:

- This introduces one further type of metric for users to understand, and one which includes one further step, or factor.
- The basis of the equivalence should be clear: the metric should be named in an unambiguous way (e.g. “electricity equivalent on the basis of primary energy”), otherwise portions of the market are likely to be make different assumptions e.g. equivalence on the basis of carbon or costs. For example, the REEB “electricity equivalent” has changed over the years.
- Ultimately it is just a weighted primary energy metric, so the assessment of factors such as whether it will or not influence the move away from gas should be the same as for primary energy. The only differences are that 1) it is a straightforward metric to use when talking about an all-electric building, since one unit is a well understood metered unit (this simplicity in an all-electric building is exactly the same if using metered energy); 2) as a metric it is even less familiar to most users than primary energy.

## Comparison table

We agree with a number of conclusions in the table, and indeed recognise original material provided by CIBSE for this comparison, however **there is no rationale for excluding metered energy use from this comparison, without carrying out an assessment of its**

value as a metric against the same objectives. We strongly recommend a full appraisal of all options, to make sure that implications and risks are understood, and have therefore provided that assessment in the table below.

Metrics: Policy objectives	BEIS assessment with CIBSE comments			CIBSE addition: Energy use *
	Carbon emissions	Primary energy	kWh electricity equivalent – primary energy basis	
Energy reduction	<b>Partial</b> - but not always e.g. biomass is low carbon	<b>Linked</b> - Conversion factors needed for all fuel types but ultimately linked to direct energy usage	<b>Linked</b> - Conversion factors needed for all fuel types but ultimately linked to direct energy usage	Strong – clear link
Low carbon / fuel switching	<b>Strong</b> – clear link	<b>Weak</b> - Reflected in trends for a given fuel/source but not in comparisons between them (Natural gas has a lower primary energy and higher carbon compared to electricity).	<b>Strong</b> - Reflected in trends for a given fuel or source but would incentivise change from natural gas to electricity. <b>CIBSE comment:</b> We do not agree with this assessment. We think this should be weak. The equivalence is on the basis of primary energy, so it has the same drawbacks as primary energy: natural gas would count better / lower than electricity, so the switch from gas would be DIScouraged, unless with a heat pump	<b>Linked</b> – the switch from gas to electricity would be encouraged as 1 unit of heat requires more than one unit of gas, but it requires 1 unit of electricity with direct electric heating, or much less with heat pumps i.e. the rating could improve when switching from gas to direct electric, and would improve much more when switching from gas to heat pumps. The main exception is with biomass, which is a low carbon fuel would not be encouraged (nor discouraged) under this metric. We think this is reasonable given the relatively low expected contribution of biomass to the overall heat strategy for buildings.
Engagement with customers	<b>Linked</b> – limited understanding for some; high for others (e.g. ESG reporting)	<b>Partial</b> - Reasonable awareness with a common definition. However, the final rating will be the primary customer engagement. <b>CIBSE comment:</b> We do not agree with this assessment. It doesn't mean it cannot improve in the future, but current understanding is low, so we would assess this as weak.	<b>Partial</b> - Limited awareness and understanding. No common definition. However, the final rating will be the primary customer engagement. <b>CIBSE comment:</b> We do not agree with this assessment. It doesn't mean it cannot improve in the future, but current understanding is low, so we would assess this as weak. It requires the	<b>Strong:</b> easiest to understand and directly to relate to meter readings and bills

			understanding of primary energy AND relative factors between fuels.	
Stability of performance over time	<b>Partial</b> – very dependent on variations in grid fuel mix	<b>Linked</b> – very dependent on variations in grid fuel mix. Linked with current Part L standards.  <b>CIBSE comment:</b> We do not agree, since this WILL change with decarbonisation, as illustrated in appendix. We would assess this as “partial”	<b>Strong</b> – stable for electricity but not for other energy uses. Linked with current Part L standards.  <b>CIBSE comment:</b> We do not agree, since this WILL change with decarbonisation. We would assess this as “linked”	<b>Strong:</b> does not change
Incentivising flexible demand	<b>Weak</b> - Possibly in the future and would need time dependent factors. Infrastructure not widespread.	<b>Weak</b> - Possibly in the future and would need time dependent factors. Infrastructure not widespread	<b>Weak</b> - Possibly in the future and would need time dependent factors. Infrastructure not widespread	<b>Weak</b> - Possibly in the future and would need time dependent factors. Infrastructure not widespread.

\* In most buildings this would be metered energy, but in district heating schemes would take account of energy use for heat generation and distribution.

**16. Do you agree that flexible energy use should be a core component of the rating? What is the best way, technically, to reflect flexible energy use in the rating structure?**

We agree it is an important component to support the transition to net zero, but we are not sure how this would be best incorporated into a rating:

- The first and most important reason is that there is not yet a clear way to quantify what is “good” performance in this regard: CIBSE and the wider SAP11 project team reviewed options as part of the SAP11 study for BEIS, and found a number of possible approaches (e.g. peak demand, peak demand and time of peak, proportion of the demand that can be shifted, Smart Readiness Indicator ...). The best performance indicator is not yet determined, nor what constitutes average / good / best performance under that indicator.
- The second reason is that it is not clear how this could be incorporated into the rating. One option could be a rating cap, but it could be complicated and arbitrary to incorporate and create undesirable threshold effects. Another would be some sort of weighting or rating bonus/penalty to account for both annual energy use and peak demand / time of peak / demand flexibility. However, both options would necessarily incorporate an arbitrary element and could be difficult to establish “fairly”, for all sectors.
- Another option would be to use the same single metric, but with time-dependent factors (carbon or primary), since, at least on a broad basis, those reflect the availability of renewable energy (the lower carbon or primary energy, the more

renewable energy into the mix) – as noted in the consultation, this would only be available with a certain level of metering.

We do not mean that these options should not be looked at, but clearly they need careful consideration. In the meantime, buildings could be encouraged to report information such as their peak demand and time of peak (where available through metering), and data gathering from utilities should also be explored. CIBSE are considering options for expanding our energy database in the future, from annual energy use currently to also include performance indicators related to demand management, such as peak demand and time of peak. We would be happy to discuss opportunities to support the work of BEIS on this.

In parallel, we recommend that options should be reviewed to incentivise peak demand reduction and management through other means, including through energy tariffs as currently done to some extent.

***17. Do you agree with the Government's preferred option to use a star rating format? Are there any formats which the Government has not considered that you believe could be more effective?***

We do not have a strong opinion on this. Both colour & letter scales and star scales are relatively easy to understand, and in either case it is a new rating which business will have to learn. It will need to be supported by investment in information and awareness raising whether it is stars, colours and letters, or anything else. On the one hand, the letter & colour scale is reasonably familiar to industry and beyond (thanks to DEC's and similar formats for white goods etc), which is an advantage. On the other hand, that format is similar to the one used in EPC's and can get confused with it. A star rating would have the advantage of clearly being visually different, and it would give the option of adding stars to create new top ratings and differentiate the best buildings to keep driving improvements, if many buildings in the future found themselves in the "6 star" band. An additional option is to create half stars, which we agree could be explored – this is more a sector-specific question, based on the whole scale and whether it offers sufficient differentiation.

We agree that the format MUST prominently show the type of rating i.e. base, tenancy, whole building, as illustrated in Figure 13 of the consultation.

***18. The Government welcomes feedback on the considerations outlined above. What are the key factors that the Government should consider in determining fair and effective rating benchmarks and a fair and effective rating scale? Where possible, please provide evidence, or case studies, to support your feedback.***

We have the following comments on setting the scale and benchmarks:

- CIBSE, with their project contractor UCL, have been doing work for many years on energy benchmarks. Our online platform is publicly available and covers most sectors. In the latest revision, in 2019, for sectors with sufficient data such as offices, the

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benchmarks moved from their previous form (typical and good practice) to distribution curves. The database can be updated regularly as data is collected; in addition, we plan in the future to populate the “best performing” end of the scale, for example with projects submitted to the CIBSE awards. This is all very relevant to setting benchmarks and scales for the rating scheme, and we would be very happy to support the work of BEIS on this.

- We think the scale should be as linear as possible. We recommend AGAINST a scale that would help poorly performing buildings increase their ratings more easily: this is not fair for the better performing buildings which already have made efforts in building performance, and in practice these poor performing buildings are the ones where energy savings will be the easiest and cheapest to identify and implement, starting with energy management and replacement of old inefficient plant.
- We recommend doing more thinking on whether setting the middle of the scale (rating of 3) to the median energy performance is the most suitable approach: this would mean that reasonably quickly the majority of buildings would be rated “better than average”, which may require frequent updates and affect the stability of the rating (e.g. changing the mid-point or adding ratings), or send the signal to many that it is sufficient (even if some would still aim for the highest rating and more aspirational end of the scale). For example, it may be useful to set the median point at, say, 2 or 2.5 instead of 3, to indicate that the majority of buildings are currently not well performing and that there is a lot of scope for improvement.
- We think one additional element to consider when setting the whole scale is best possible performance: currently the end point is only defined by the total number of ratings, and by the benchmark used as median point. This means that, because there are few well-performing buildings, the top rating bands need to be quite broad, which makes it difficult for well-performing to show improvements. While we agree that the experience from NABERS on scale setting is important to take into account, we also think there is a role for exemplar projects and industry targets (e.g. RIBA 2030 Challenge, LETI, UKGBC office trajectory) to influence the rating scale and in particular the end point, to ensure the end point is both achievable and aspirational.

We also have the following comments on the consultation text about the rating scale:

- The text states that K is defined so that a rating of 3 is the median, but Figure 14 shows many more buildings rated lower than 3 than higher (as a median point, there should be as many buildings on each side – as a rough estimate, this seems to be more around a 60:40 split)
- The formula indicates that the higher the energy intensity E of the rated building (i.e. the worse its performance), the higher the rating... Is there a typo, with the formula meant to be  $R = L - K \cdot (E/B)$ , not  $R = L - K / (E/B)$  ?

**19. Subject to the outcome of this consultation, the government will work with the ratings administrator, and with industry experts, to tailor the framework appropriately to each sector. At this stage, the Government welcomes any additional feedback on the high-level technical considerations outlined in this chapter, especially where there may be key considerations that we may have not addressed, or not been able to cover. Where possible, it would be helpful if you could provide evidence and case studies to support your response.**

As stated elsewhere in this consultation, CIBSE would be very happy to support the work of BEIS on this, including through the use of our database. CIBSE have worked on energy benchmarking and energy use distribution for a number of years, with our project partner UCL; our public online energy database covers a large range of sectors and regularly being added to.

This work on other sectors must start as soon as possible. One of the key reasons why ratings in other sectors would be difficult at this stage is lack of shared data. We therefore recommend that, as offices are required to “onboard” with the scheme from 2022/23, so other sectors should be required to start providing data on the performance of their buildings. This could be done without a rating, but an indication of performance could be provided, for example by comparison with a DEC rating (in sectors where these are available) or the latest CIBSE benchmarks - this could be acknowledged to be provisional but would prompt queries about what a suitable rating system could be. It really is crucial to start this data gathering process and industry-government working groups as soon as possible. The information required could be similar to that for offices and, in addition, what is required for DECs (in sectors where they exist) and the parameters used by CIBSE benchmarks (e.g. for hotels: number of bedrooms, whether they have a pool and whether they have a restaurant).

BEIS may also benefit from liaising with CIBSE on training, and with CIBSE Certification Ltd, a subsidiary company owned CIBSE, on assessor schemes. **For the avoidance of doubt, this response is submitted on behalf of the whole CIBSE Group.**

## ***Introducing Performance-Based Ratings in Commercial and Industrial Offices above 1,000m<sup>2</sup> in England and Wales Phase one of the introduction of a national performance-based policy framework:***

### ***Chapter 1***

**20. The Government’s approach for implementing annual performance-based ratings in commercial offices over 1,000m<sup>2</sup> follows the approach outlined in the Strategy Paper. Are there any considerations specific to the office sector, that are not covered elsewhere in this paper, that the Government should be taking into account? Please provide evidence where possible.**

As stated in our response to Question 4, we think that tenants occupying more than 1,000 m<sup>2</sup> should be required to provide a tenancy rating (with the threshold of 1,000m<sup>2</sup> preferably GIA, for consistency with the thresholds for base build and whole building ratings, but NLA could be used if that is deemed easier for tenants). Also detailed in Question 4, evidence from NABERS shows that energy intensity in tenancy rating is comparable to that of base building ratings: excluding this would ignore a very large proportion of energy use.

**21. To resolve instances where the Private Rented Sector (PRS) Minimum Energy Efficiency Standards (MEES) overlap with the requirement to obtain and disclose annual performance-based ratings, do you favour:**

- ***The 'hybrid option' as has been set out by the Government***
- ***The 'hybrid option' with amendments. If so, please state the amendments you like to see made***
- ***The 'do nothing' option***
- ***A different option to resolve this issue.***

A different option: as stated in our response to Question 6, we think that both asset ratings and operational ratings are important. In order to deliver outcomes, buildings must both have the ability to perform well AND be operated and managed well in practice. Both are also needed to target the maximum number of stakeholders in the market, as some will have different drivers and levels of controls. The real problem we currently see with requiring both is serious but not mentioned here, but which we have mentioned in our response to Question 15: it is that EPCs and operational ratings could pull in different directions, if operational ratings are based on primary energy (or electricity equivalent on the basis of primary energy), as currently proposed. Changing this to metered energy would very significantly reduce the risk of such conflict.

**22. Do you consider that there should be any other exemptions applied specifically to the office sector? You may wish to combine your answer to this question with question 10 in the Strategy Paper.**

No. As stated in response to question 11 on exemptions, these should be kept to the absolute minimum and very few office buildings are likely to fall within the criteria. Also, as noted earlier, the regime could allow exemption from public disclosure for sensitive buildings, not exemption from measuring and addressing operational energy use.

## **Chapter 2**

**23. The Government's objective is to deliver an investment grade performance-based rating at the lowest possible cost. Do you consider that the proposals outlined above, and in Chapter 3, strike the right balance between cost and quality?**

There is a significant risk of cost in the proposals for running the scheme: there is already a system of registered and regulated energy assessors for EPCs, DECAs and air conditioning

inspectors. These are registered by schemes that are licensed by the government through MHCLG and operate to stringent QA procedures. Many are UKAS accredited. There are also ESOS assessors, overseen by the Environment Agency. The consultation clearly implies that a new body will be appointed to manage the performance based rating scheme, which would add a fifth assessment scheme working for a third arm of government. This carries real risks of additional costs, co-ordination challenges and market confusion. Given that the government already operates a system of energy assessors, it is very hard to understand the rationale for creating a further scheme. It would be far better to extend the capability of the existing schemes to cover the new requirements, with further training of assessors where that is needed.

The importance to avoid confusion between different regimes is even higher if, as proposed, the operational rating introduces another metric (electricity equivalent on the basis of primary energy) , which will introduce costs of learning, and conflicts against heat decarbonisation and EPC rating objectives.

We do recommend a site visit when the building is first onboarded. Subsequent to this they may not be required every year but could be carried out on a random basis by the scheme administrator and at trigger points such as change in EPC rating, which would imply works carried out to the building and possibly changes to occupancy etc.

*24. Do you consider the estimated cost of the rating to be realistic?*

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*25. Do you consider the estimated cost of the rating to be affordable?*

If the question refers to the overall costs of setting up the scheme and infrastructure, probably not: the costs of this, without co-ordinating with the existing EPBD and ESOS arrangements will add significantly to the costs of the proposed approach.

If the question refers to the costs to scheme participants, we cannot comment on the cost itself, but expect them to be affordable on the basis of the work required to produce the rating, and information already available (e.g. from energy bills and other reporting requirements) and resources available (especially for building types in that first phase).

## **Chapter 3**

*26. Do you favour:*

• ***Option one as set out by the Government, or option one with amendments. If the latter, please state the amendments you would like to see made***



- ***Option two as set out by the Government, or option two with amendments. If the latter, please state the amendments you would like to see made***
- ***A different option to resolve this issue.***

We agree that Option 2 is the preferred option. It is pragmatic and has fewer risks of loopholes. For example, many commercial office buildings will have small retail units on the ground floor – this should most definitely not exempt them from requiring a base building rating. We would also recommend examining how this is approached in NABERS.

***27. Is the approach taken to define the energy associated with a base building rating, including the interpretation of additional services added by a tenant, suitable to achieve an accurate and fair base rating?***

Broad principles: Yes, we think it is suitable, but would defer to the BBP on this, due to their detailed understanding of arrangements in this sector and of NABERS and NABERS UK. In particular, we note that occupant density is not mentioned as a list of required information – we expect this is because 1) it is expected to be difficult for landlords to access to in many cases and 2) while influential on rated energy uses such as heating and cooling, it will not be as directly as on, say IT and lighting. We recommend following the advice of BBP on this.

Additional services added by a tenant: we believe that the BBP may have data to assist the evidence base on this. We agree that localised air conditioning to specialist areas such as IT rooms should probably fall within a tenant rating, however items such as air conditioning to meeting rooms is more questionable, since most offices would have meeting rooms; similarly, most offices will require some provision of hot water (unless there are shared kitchenettes/tea points and WCs in common areas).

***28. Is the approach taken to define the energy associated with a whole building rating suitable to achieve an accurate and fair rating?***

Yes, however we question the statement that the rating framework is based on “energy consumed by the building and its required surrounding services such as external and car park lights”: we would welcome more explanation on how this will be accounted for in the ratings, including benchmark per sqm, and how this could differently affect city centre vs, say, business park offices with extensive external areas.

***29. Do you support the Government’s proposal for resolving boundary disputes? If so, are there any additional considerations or amendments you would make to the proposal? If not, do you consider that a different approach would be more effective? Please provide evidence and case studies to support your reasoning, where possible.***

Probably, yes, on the basis that the standardised allocations should incentivise onsite metering if it's not already in place.

**30. At this stage the Government welcomes views on how to deal fairly with situations where metering arrangements in offices are not ideal, and how to incentivise upgrades in the metering arrangements where that is the case.**

As per question 29

**31. Which of the options above is your preferred option for addressing situations where offices are in buildings with non-office areas? Are there other options that have not been considered? Please provide evidence, where possible.**

Option 3 is probably best, as long as this covers genuinely additional functions.

**32. Subject to the outcome of this consultation, the Government will work with the ratings administrator, and with industry experts, to tailor the framework appropriately to the office sector. At this stage, the Government welcomes any additional feedback on the high-level technical considerations outlined in this chapter, especially where there may be key considerations that we may have not addressed, or not been able to cover. Where possible, it would be helpful if you could provide evidence and case studies to support your response.**

As stated in several places in our response, CIBSE would be very happy to keep supporting the work of BEIS on this, in particular on the details of the rating scale, through our work on energy benchmarks and energy distribution. Our database includes offices which, while many are from the public sector, do have findings relevant to the office sector in general.

See also our point on ventilation provision and risks of “gaming” the system, in question 8.

**END**

Please do not hesitate to contact us for more information on this response.

## **APPENDIX A - CIBSE Response to DCLG Display Energy Certificate Consultation. 11 March 2015**

### **Question 1 -How could the existing enforcement regime be improved?**

There are a number of ways in which the existing regime could be improved. One regime and enforcement body currently covers all of the Energy Performance of Building Regulations

(EPBR), including Energy Performance Certificates (EPCs), Display Energy Certificates (DECs) and Air conditioning inspection reports.

There is a considerable divergence in the requirements for the three types of document. This divergence means that it would be sensible to consider alternative enforcement regimes for each. Our answer to Question 3 addresses compliance with the DEC regime in some detail.

For EPCs there may also be another approach. An EPC is triggered by a transaction, either a sale or a rental, or by construction. For EPCs on sale or rent an alternative to Trading Standards is for those transactions that require registering with the Land Registry to also include either the EPC itself, or to register the UPRN of the EPC related to the transaction as part of the Stamp Duty registration process. Whilst there would be some work involved in setting this up with the Land Registry, and some transactions are not within the scope of this process, it would remove the duty from Weights and Measures, who often have no way of knowing that a transaction has occurred, and so no reason to seek to enforce.

This approach might also have potential in the domestic sector, although it is understood that is outside the scope of this consultation. This approach has the advantage that if set up correctly, then the transaction would simply not be legally valid without the EPC, and that would be very dissuasive to avoiding EPCs. The cost of this approach would be very low indeed, other than the set up costs, and it would therefore satisfy the requirements to be effective, proportionate and dissuasive set out in Article 27.

Another advantage of this approach is that other policies which depend upon EPCs would also benefit. CIBSE has set out at some length its concerns in relation to the lack of data from DCLG on compliance levels with the EPC regime, in its response to the consultation on Minimum Energy Efficiency Standards (MEES). CIBSE still considers that without an effective compliance regime for EPCs the MEES proposals will be seriously undermined.

### **Question 2 – How may the barriers to enforcement be overcome?**

We suggest that if the route proposed for DECs in the answer to Q3 is adopted, then there will not be a barrier in the education sector, it will be seen as essential to produce DECs.

### **Question 3 - Who should be the enforcement body for the display of energy certificates in public buildings regime, and why?**

Display Energy Certificates are intended to be produced by public sector building operators. Over half of the buildings in scope at present are in schools. The largest other groups are hospitals and healthcare buildings, government offices, and universities. There is something odd about the idea of one part of government having a duty to enforce a regime of sanctions on another part of government, which is the current position. There is also something defeatist about public sector bodies needing to be enforced.

DECs are intended to identify energy use, to benchmark it, to publicise it, and to motivate improvement. This is very similar to school league tables, where exams measure performance, proportions of grades in certain brackets benchmark the performance of

schools, league tables publicise performance, and the existence of the system motivates improvement, with Ofsted in the background to encourage action. There is no regulated enforcement regime in a Statutory Instrument for state schools supplying league table data: they would not think of doing otherwise.

So perhaps the simple answer for schools is that they supply their DEC with the league table entry. If the government wanted to really set an example and demonstrate leadership, then they could include the details of a school's DEC or DECs as a column in the league tables, to show how well energy use is managed. However, given the approach being proposed that does not currently seem a priority. The idea that DECs are managed by the current education administration, and perhaps that Ofsted include requirement for DECs in their routine checks, would provide a robust, effective, proportionate and, certainly with Ofsted involvement, a dissuasive regime for this aspect of the Directive, fully compliant with Article 27, and would relieve Weights and Measures of this duty.

The new Priority Schools Building Programme run by the Education Funding Agency already requires the new designs being submitted to comply with the iSERVcmb methodology. There is also an argument that if the public sector is truly to lead by example, then state schools should be taking responsibility for using their resources wisely. If a school bought 100 text books, and promptly threw 10 of them in the bin, they would be rightly castigated for wasting taxpayers resources. DECs identify schools that are wasting energy. A G-rated DEC indicates a far more wasteful state of affairs than 10 books in a bin. In austere times it is very hard to understand why DCLG is so keen to let energy wasting schools off the hook.

Schools should also be teaching resource efficiency, and DECs are part of practicing that within the school estate, and can also be a practical teaching tool, showing how the school is improving (or not) from year to year. It is a practical teaching resource relevant to several subjects on the curriculum. Giving DECs greater profile will drive compliance without such a need for enforcement.

A similar approach, working with sectoral or service regulators such as NHS England, HEFCE for universities, and Departmental Annual Reports and auditing by the NAO would cover the other major areas which are in scope for DECs. Again, these approaches, with the NAO having a backstop role across all Departments, would be more appropriate than the current use of Weights and Measures to enforce this policy. As with schools, it is arguably far more compliant with Article 27 than the present regime. In any public body, requiring accounting officers to sign off that the buildings for which they have responsibility have up to date compliant DECs would also serve to focus the minds of responsible officials, and provide the potential for them to be marked down on appraisals for not being fully compliant, thereby giving them an incentive to ensure compliance and obviate enforcement.

Finally, there is a role for "big data" here, or perhaps more correctly, there is a role for the register of DECs to be used. DECs are public documents, intended for public display. There can be no rationale for not treating the register of DECs as an open database, fully accessible to all. Making the register open, so that interested parties can search for DECs online, and if

they consider that they are lacking can challenge public building occupiers, would instantly increase the motivation for public bodies to have up to date DEC's, to avoid such challenges. Where these are ignored, then those same parties would be able to register their concerns with the relevant management structures, thereby bringing voluntary consumer action into play to help with enforcement. But the first step is to get the register into the public domain.