

# ENERGY PERFORMANCE CERTIFICATES FOR BUILDINGS - CALL FOR EVIDENCE

## Better Buildings Partnership

The BBP is a collaboration of the UK's leading commercial property owners and managers who are working together to improve the sustainability of existing commercial building stock. Our members represent over £200bn of AUM in the UK, and via the Managing Agents Partnership, property managers managing over 30,000 buildings.

The responses provided within this submission relate to non-domestic properties only and do not consider implications for domestic property. As the Call for Evidence was also jointly focussed on the use of EPCs for domestic properties, there are questions were the BBP has elected not to answer as it would not be applicable or appropriate. In terms of general themes for the improvement of EPCs within the non-domestic property sector, the BBP advocates that Government:

- Consider the "appropriateness" of EPCs for the range of uses that they are now being applied to within energy efficiency policy and consider the option of more appropriate, alternative tools. Specifically, how the use of operational energy ratings could complement the current energy efficiency policy landscape.
- Increase the access and usability of data by increasing the digitisation of underlying EPC data within the Landmark Register.
- Increase the quality of EPC assessments to reduce the discrepancies that can be witnessed between assessors. A simple option to support this challenge is the addition of a KPI on a certificate that states the percentage of default values used to generate the rating.

Should you require any further information on any aspect of this submission please contact Christopher Botten, Programme Manager on <a href="mailto:c.botten@betterbuildingspartnership.co.uk">c.botten@betterbuildingspartnership.co.uk</a>.



# Membership

### BETTER BUILDINGS PARTNERSHIP MEMBERS





























































### MANAGING AGENTS PARTNERSHIP MEMBERS

























# Call for Evidence Response

- 1. Have we captured all the current uses of EPCs? Are there any existing or emerging uses we should be aware of?
  - The Call for Evidence captures all the current uses of the EPCs. The BBP is not aware of any additional emerging uses for EPCs at this point.
- 2. Do you agree that we have identified the key attributes for EPCs? Are there other important attributes we have not listed? Please indicate how important you consider each attribute and provide details to explain your answer.
  - The BBP agrees with the list of attributes listed within the Call for Evidence and would recommend the addition of "Appropriateness". The suggested attribute would provide a measure of how appropriate and relevant an EPC is for a particular use. As noted within the Call for Evidence, EPCs are used for a variety of energy-related policies and its appropriateness varies across those uses. Assessing "Appropriateness" will help identify whether alternative tools may be more suitable. For example, an EPC is a useful tool in relation to benchmarking the energy efficiency of the fabric and plant installed within a building related to regulated loads, however, it is not a tool that is useful for predicting how much energy a building actually uses in operation and how to reduce energy consumption. For policies to drive down the amount of energy a building uses, a tool that measures and rates annual operational energy use is a much more appropriate policy tool e.g. Display Energy Certificates.
  - In relation to the importance of individual attributes:
    - Quality: The quality and reliability of the EPC is one of the most important aspects. Someone procuring an EPC assessment should be confident that any two assessors will come up with the same EPC rating. However, anecdotally, this is not the case. A significant issue is the level of default values that an assessor will use to generate an EPC and the lack of visibility regarding these input values. If EPCs clearly stated the percentage of default values used to generate the certificate, that would provide a clear, instant indication with regards to the quality and reliability of that EPC.
    - o Encouraging action: When attempting to "encourage action", Government must be very cognisant of the desired action that it wants to encourage, how a policy can be implemented and whether EPCs are the most appropriate tool to support that policy or whether another tool is required. To date, EPCs, in isolation, have been poor in incentivising energy efficiency upgrades. Based on a simple survey of our membership, only 17% believe that EPCs are useful in identifying energy efficiency upgrades (See Appendix for full survey results). This is not surprising, as this is not the original aim of EPCs. It is a compliance-related energy efficiency benchmark related to design aspects of regulated loads. In recent years, it has been a successful tool to support the introduction of Minimum Energy Efficiency Standards (MEES) requiring real estate owners to secure compliant EPC ratings of E or higher before the letting of a property. The introduction of the MEES regulations raised the importance placed on energy efficiency within the commercial real estate sector, where EPCs alone (before the introduction of MEES) were seen as a simple tick box compliance consideration.



Estate Environmental Benchmark, collects energy data from its members' managed real estate portfolios to assess energy performance and trends, and publishes publicly available industry benchmarks. When looking at the relationship between EPC ratings and operational energy intensity, the data shows no correlation between how efficiently a building uses energy and its EPC rating. Further details can be seen within the joint BBP& JLL report <u>A Tale of Two Buildings</u>, as well as the Figure 1 & 2 below containing the latest REEB data.

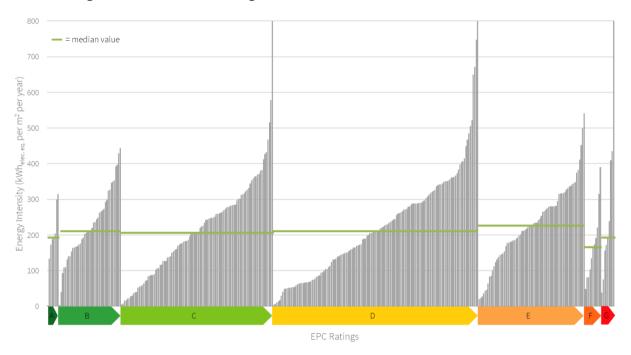


Figure 1 Office energy intensity (kWh<sub>elec. eq.</sub> per m<sup>2</sup> (NLA) per year) by EPC rating. Each grey bar represents a single office building's energy intensity over the course of a year. (Source Real Estate Environmental Benchmark 2017, Better Buildings Partnership)

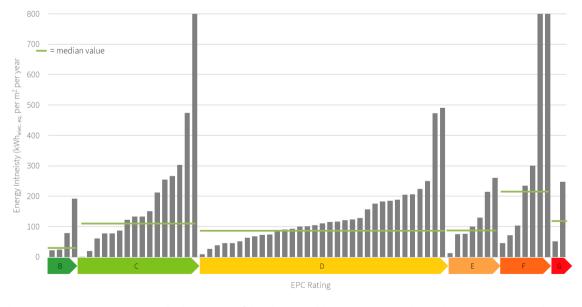


Figure 2 Shopping centre energy intensity ( $kWh_{elec.\,eq.}$  per  $m^2$  (CPA) per year) by EPC rating. Each grey bar represents a single shopping centre's energy intensity over the course of a year. (Source Real Estate Environmental Benchmark 2017, Better Buildings Partnership)

- o Figures 1 & 2 show that not only is the average energy intensity of buildings by EPC rating almost identical, but the range in energy intensity across each EPC band is also similar. This is most clearly shown in Figure 1 for offices where the data set is larger. This scenario has evolved as there has been no policy or market-based drivers that require or incentivise the disclosure or rating of operational energy performance. EPCs do not perform this role and for this issue to be overcome an operational energy rating tool such as Display Energy Certificates must be included within the Government's policy landscape.
- o **Availability:** The availability and access to EPC data is important for a number of reasons:
  - It supports enforcement efforts in confirming compliance. This is particularly important for Minimum Energy Efficiency Standards but needs combining with Valuation Office data for effective and efficient use.
  - Provides information for a variety of real estate stakeholders, including prospective owners and occupiers, financers, insurers, energy efficiency specialists etc.
  - Supports academic research.
  - Supports evidence-based policy making.

However, access and use of the data set is not always simple. Key issues are highlighted below:

- A lack of quality assurance in lodging submissions has resulted in instances where properties contain multiple EPCs and it is not clear which is the correct and 'valid' EPC for that property. There does not appear to be a standard approach for sorting and accessing information whereby a property has multiple units e.g. shopping centres.
- The ability for EPCs to be concealed or hidden upon request poses serious issues to the implementation of Minimum Energy Efficiency Standards. A property owner is at risk if an occupier undertakes an EPC without permission and conceals the lodged EPC. The property owner could then be at risk of Minimum Energy Efficiency Standards if the property was rated below an E but would be unable to check this via the EPC Register. Transparency needs to be made available across the board. The BBP agrees with the British Property Federation's suggestion that in the first instance parties should be able to see whether an EPC exists in relation to a property, notwithstanding the ability to view the full certificate.
- o In terms of coverage, we would highlight that the guidance on EPCs still offers ambiguity in relation to the status of listed buildings and confusion over the coverage of EPCs in mixed-use buildings.



- 3. Which attributes are important for which uses and why?
  - Original EPC Purpose: Quality, encourage action and availability.
  - PRS minimum standard for rented buildings: Quality and availability.
  - Eligibility criteria for the FIT scheme on renewable electricity: Quality.
  - Eligibility criteria for the RHI scheme on low carbon heat: Quality.
  - Eligibility criteria for social housing ECO funding: NA, BBP response relates only to the non-domestic sector.
  - Forms part of the Green Deal Advice Report (GDAR): NA, BBP response relates only to the non-domestic sector.
  - Data source made available as Open Data: Quality and availability.
  - Green tagging assets for green finance: Quality and availability.
  - Goal setting in the clean growth strategy: Quality.
- 4. What evidence do you have relating to the reliability of EPC assessments? Do you have any information on how reliability varies across different properties, and/or the likely sources of variation in assessments? It would be helpful to indicate how recent this is.
  - A key component in the reliability of EPC assessments is the input data used and specifically, the extent to which detailed information or default values are used e.g. boiler efficiency, insulation type, mechanical extract rates etc. Default values are intended to be a tool of last resort and represent the worst case to discourage their use (predicated on the assumption that clients will want the best EPC for their property), however, have historically been used prevalently when EPCs were procured purely on a compliance basis (before the implementation of Minimum Energy Efficiency Standards). Use of default values can be a result of:
    - o A lack of property level information existing.
    - o A lack of relevant knowledge and experience of the assessor.
    - EPCs being procured in a hurry to facilitate sale or new lease.
  - A challenge for those procuring EPCs is the lack of visibility and transparency regarding the input values. If EPC certificates clearly stated the percentage of default values used to generate the certificate, it would provide a clear and simple indication with regards to the quality of that EPC.
  - In addition, the appropriateness of EPCs across property types is not equal. This is particularly apparent for
    heritage properties where EPCs do not take into consideration the traditional construction methods and
    try to compare a property against modern construction techniques, as well as recommend inappropriate
    improvement measures. The BBP has published the following report that highlights such risks: Minimum
    Energy Efficiency Standards and Heritage Properties.



- 5. Which of the suggestions provided above do you think would be effective in improving the reliability of EPC ratings? Do you have any other suggestions for improving EPC reliability? Please provide reasoning and any evidence you have to support your response.
  - Reducing sources of error: In a survey of our members (see Appendix for full details), 72% of the
    respondents agreed that increasing auditing of accredited bodies and certificates on EPC registers would
    increase the reliability of EPC assessments. We agree with the sources of discrepancies highlighted in this
    section but would highlight source errors due to the use of default values.
    - It is recommended that more guidance and tools are made available to those procuring EPCs including commercial property owners and managing agents. To support our own members in this process BBP published a blog post on 'How to reduce risk through EPC quality checks'.
    - In terms of apps and such other technologies, 56% of BBP members agreed that this would be helpful in increasing reliability, 6% disagreed, while 39% had no opinion on the matter.
  - **Better data inputs:** BBP strongly supports both improving data available to assessors through survey information (94% of respondents agreed this would be helpful), as well as through information held by Land Registry, Building Control and Planning Authorities (100% agreed this would be helpful). It was felt that such information would reduce the number of default values used, especially where it is no longer available at the property level and may not be easily accessible to assessors. Making such data available would also reduce the time and cost of the assessment, however, it is also acknowledged that there is a risk of past mistakes being repeated that would need to be managed.
    - In addition to the above, it would also be helpful to have access to any previous DSM models or SBEM files used to produce the EPC which would reduce time and cost of reproduction as well allow for a better interrogation of the EPC.
- 7. Are you developing any kind of tool for measuring the energy performance of buildings (controlling for the effects of occupant behaviour) using smart meter data or other data, which could be relevant for EPCs?
  - Via the industry-backed Design for Performance initiative, the Better Buildings Partnership is currently working with the Office of Environment and Heritage for New South Wales to assess the applicability of introducing a NABERS-type scheme in the UK. The project is aiming to overcome the 'performance gap' by linking design intent to operational performance in-use via a process of enhanced modelling and the requirement to monitor operational performance via an investment grade audit post-construction. It is recommended the Government consider how the findings of the project could inform the future development of Building Regulations Part L. Further detail is provided within the response to Question 8 below, and the Better Buildings Partnership would be very happy to discuss in further detail on request.



- 8. What evidence do you have on how the accuracy of EPCs could be improved using the tools and data sources outlined above, or through any other means? Do you have any views as to how these approaches could best be incorporated into the current EPC framework?
  - The Call for Evidence references the issue of the 'Performance Gap' between design intent and actual performance. The government has the opportunity to overcome this industry challenge by adopting two principles within new energy efficiency policy:
    - o The public disclosure of operational energy data.
    - The use of rating tools that focus on performance outcomes i.e. operational energy performance ratings.

However, this should be very much be viewed as separate and complementary to EPCs, rather than an attempt to combine with EPCs. The BBP does not believe operational data should be combined with EPCs as operational data must be monitored on at least an annual basis, but EPCs are valid for 10 years. However, lessons may also be learned from the RT 2012 Energy Performance Certificate (DPE) system implemented in France, through which certificates can be produced on the basis of either predicted energy use or actual performance/consumption (based on past energy bills).

- When looking at opportunities to encourage the disclosure of operational energy data, international examples include the trend seen within the US where major cities and States have introduced mandatory disclosure policies. Such policies have resulted in the energy performance of commercial buildings being made publicly available online. The BBP strongly endorses an approach by Government in creating an online accessible database similar to the US-based Portfolio Manager, whereby utility companies are required to make energy consumption data available online for use by property owners, managers and occupiers. This idea is very much aligned with the concept of a Building Passport referenced within the Call for Evidence.
- The BBP's own experience has highlighted that measuring energy performance and benchmarking against industry peers can help drive energy efficiency improvements. It provides an improved understanding of how efficiently a building is being run and helps identify energy efficiency measures and changes to management practices. When monitoring performance via the Real Estate Environmental Benchmark, over the past 6 years our members have reduced the energy intensity of their real estate portfolios by 18%, and over the past 4 years, the 146 properties that have remained consistent within the database have reduced like-for-like consumption by 16% (see Real Estate Environmental Benchmark Update: 2017 Snapshot).
- The use of publicly disclosed operational energy performance can then also be used by rating tools to benchmark and compare buildings. The BBP, along with many others in the industry, has been a long proponent of the mandatory roll-out of the Government's own operational rating tool, Display Energy Certificates.
- The BBP strongly recommends the introduction of operational ratings for commercial properties. A tool that is currently missing from Government policy. Such an approach will provide greater transparency around how buildings use energy and shift the industry from a design-for-compliance culture to a design-for-performance culture. The continual feedback by annually reviewing performance encourages improvements and identifies poor performance, as well as providing a feedback loop to inform future



- design decisions. Such an approach can complement minimum standards by providing the review process to ensure that the design actually performs as it was intended.
- When looking at operational ratings, the BBP views the NABERS scheme as the most successful international example of how an operational rating can improve energy efficiency of commercial buildings on a national scale. Since it's mandatory introduction in 2010/11 it has brought about significant improvements in energy efficiency, improving average energy intensity of Australian rated offices by 28% and increasing the average Star Rating from 3.2 to 4.4. It has also created a culture change in the approach to designing new buildings – fostering one of design-for-performance as oppose to one of design-forcompliance.

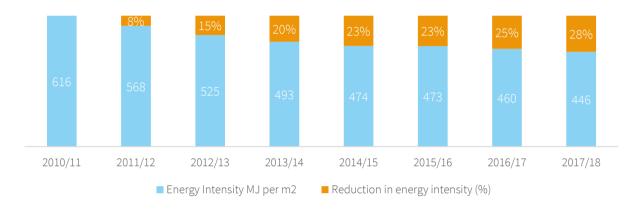


Figure 3 Average energy intensity over Australian office buildings and the respective % reduction over time. Source NABERS 2018.

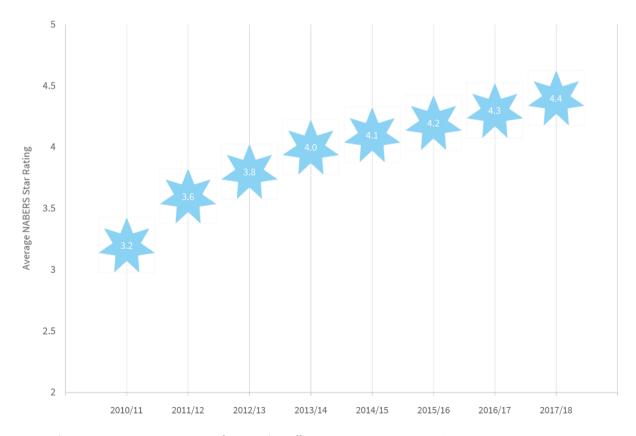


Figure 4 Change in average NABERS ratings for Australian offices overtime. Source NABERS 2018.

- Via the industry-backed Design for Performance initiative, the BBP is currently working with the Office of Environment and Heritage for New South Wales to assess the applicability of introducing a NABERS-type scheme in the UK. The project is aiming to overcome the 'performance gap' by linking design intent to operational performance in-use via a process of enhanced modelling and requirement to monitor operational performance via an investment grade audit post-construction. It is recommended the Government consider how the findings of the project could inform the future development of Building Regulations Part L. The BBP would be very happy to explain the opportunities in further detail.
- A policy that focuses on performance-based outcomes, as opposed to design standards, has many wider benefits:
  - It overcomes needing to consider the nuanced detail of how blanket minimum standards affect the complex variety of building types and uses, as focus is on the performance outcomes rather than the specific method to achieve it. This approach provides industry with greater flexibility, scope and potential for innovation to meet a performance outcome.
  - o It provides greater transparency to those actors that drive market change. For the case of real estate investment, this centres on the occupiers that use space and the investors that invest in commercial property companies and funds.
  - o It provides a platform for specific industry initiatives to use the operational performance data to build on. E.g. additional benchmarking or rating tools, technology providers, additional government reporting policies.
- 9. What evidence do you have on how frequently people are likely to make updates to their properties which would change the EPC score?
  - As previously noted, Minimum Energy Efficiency Standards has been a key piece of legislation to raise awareness of EPCs and their use as a tool to assess the energy efficiency of the commercial real estate. As a result of the introduction of the policy, commercial property owners now more regularly monitor, reassess and certify properties at key intervention points (i.e. lettings and transactions). However, it should be noted that generally speaking, the decisions in terms of the choice of upgrades are based on more thorough energy audits and associated cost analysis that focusses on operational performance rather than the EPC recommendations.
  - A specific issue exists that relates to when EPCs are required and when the opportunity for works presents itself. This issue is most apparent for retail properties due to the short-term nature of leasing agreements and the extensive works undertaken as part of individual retail unit fit-outs. Retail leases tend to be shortterm and a unit will be offered to the retailer as a 'shell' that is then fitted out with the retailer's own equipment. The use of EPCs as a policy tool to set a Minimum Energy Efficiency Standard produces specific challenges as EPCs will typically be undertaken when the unit is a 'shell', and therefore fails to capture the equipment installed unless a new EPC is commissioned following fit-out. There is currently no policy in place that requires the retailer to consider the energy efficiency of equipment it installs within the retail unit, or a requirement to monitor ongoing in-use operational performance once the retailer is operating within the unit. The government should consider how a trigger point could be introduced that requires retailers to reassess an EPC of a retail unit where HVAC plant and new lighting systems have been installed.



- 10. Which of the suggestions provided above do you think would be effective in ensuring that the information on EPCs is up to date? Do you have any other suggestions for ensuring EPCs remain up to date? Please provide reasoning and any evidence you have to support your response.
  - A simple survey was undertaken with our membership to assess their views on options to ensure EPC information is up to date (See Appendix for full details).
    - 95% believed 'Introducing a trigger point during major refurbishments' would be either 'Very Effective' or 'Effective'.
    - o 83% believed 'Improvements during less major refurbishments' would be either 'Very Effective' or 'Effective'.
    - Reducing the validity period of the EPC was seen as the least favourable option with only 50% believing it would be effective. When asked what a reasonable frequency to reduce the validity period would be, it was clear the longest term was most preferable. 56% of the respondents believed 5 years to be reasonable, 11% believed 3 years to be reasonable and 33% believed the EPC validity period should not be reduced.
  - Simply increasing the frequency of when EPC assessments are undertaken will not be an efficient way for the industry to ensure EPC information is updated. It will simply add compliance costs. EPCs should only be updated at major transactional points in a building's history when it makes economic sense for the EPC to be up to date. The real estate industry is taking this approach now with sale and letting. Many major property owners also update their EPC when undertaking upgrades to the building as best-practice. Setting a legal requirement for EPC upgrades to be recertified and lodged when certain major building works are undertaken if implemented correctly, could be a useful measure to help property owners and their occupiers engage on the installation of energy efficiency fit-outs. Particularly in multi-let offices and shopping centres.
  - In the instances of 'shell and core' buildings, which are common for retail and industrial uses, the current structure of Minimum Energy Efficiency Standards result in a scenario in which some property owners are effectively required to obtain two EPCs, one to market the given property – which is likely to result in a poor EPC rating due to the use of default/worst case values – and another to allow for a lawful lease to be granted once the occupier has completed their bespoke fit-out. As referenced in response to Question 9, this problem is particularly acute for existing shopping centres where EPCs exist for individual units and rotation of retailers within units are frequent. In such instances, EPC assessments are not necessarily required after a tenant fit-out and therefore the new equipment installed is not captured within any form of energy efficiency assessment. In such instances, MEES compliance becomes a strategic assessment based on most appropriate times to undertake a new EPC assessment as opposed to encouraging retailers to install energy efficient equipment, particularly in relation to HVAC and lighting.
- 11. Would you support introducing new EPC trigger points at any of the stages listed above (or any other stages)? What evidence do you have relating to the advantages and disadvantages of any of these trigger points?
  - Please refer to the answer provided in Question 10.



- 12. What evidence do you have on how useful the EPC recommendations are to consumers when they are considering making changes to a property? How effective are they at encouraging consumers to take action?
  - The recommendations in the EPC report are generated from a generic list held within the NCM database, filtered based on the data entered by the assessor. The recommendations are not based on any calculations of actual buildings, how systems and services are running in practice and operational performance, instead, they provide a general indication of potential savings based on theoretical efficiencies. Additionally, understanding that some of the data entered might be default values and other errors may also be made in the data entry, there is low confidence in the recommendations provided in the report.
  - In a simple survey undertaken with our membership, 67% of respondents either "Disagreed" or "Strongly disagreed" with the statement that "EPC recommendations are useful when considering energy efficiency improvements for a property" and only 17% "Agreed" with the statement.
  - Feedback from members is that recommendations are generic and not a sound basis for decision making on investment opportunities. For most members, standard practice would be to carry out an energy audit and base decisions on the operational performance of the building.
  - The issue with EPC recommendations is exacerbated in particular commercial building types, where specific considerations are necessary either due to the nature of the property type or their leasing arrangements. For instance:
    - o For heritage buildings, the EPC recommendations are not always suitable and may have a detrimental impact on the property. This issue is acknowledged within the Call for Evidence and is also highlighted in BBP's Industry Insight 'Minimum Energy Efficiency Standards and Heritage Properties: Mitigating risks through the procurement and interpretation of Energy Performance Certificates'
    - A referenced in response to Questions 9 and 10, in the retail sector leases tend to be short-term and a unit is offered to the retailer as a 'shell-only' that is then fitted out by the tenant/occupier. The EPC carried out by the owner as a result relates to the shell and does not take account of the fitouts which may often include regulated loads. As a result, any recommendations do not reflect the whole picture and are thus ineffective. Sometimes, however a new EPC may be voluntarily commissioned after the fit-out. It is also to be noted that in such cases where recommendations relate to the tenants' demise, the landlord even though ultimately responsible for meeting the Minimum Energy Efficiency Standards for the property, would not have the authority to implement recommendations in such areas.
    - o In industrial and logistics building types where the performance gap is significantly high, whereby operational activities that can be particularly energy intensive are not captured within the EPC assessments. Focusing on the EPC recommendations for such properties can incentivise improvement measures that may not be the most appropriate for the operational activities that are occurring, as in-use performance is not reflected in the decision making.



- 13. Which of the suggestions provided above do you think would be effective in encouraging building owners to make appropriate energy performance improvements to their property? Do you have any other suggestions? Please provide reasoning and any evidence you have to support your response.
  - The current regulatory framework which mandates the use of design ratings and predicted performance has led to a design-for-compliance culture, whereby buildings are designed to meet the required compliance standard, but no attention is paid to how the building actually performs in operation. The lack of a feedback loop in the process of building design has led to the creation of a 'performance gap' between how much energy a building is theoretically envisaged to use and how much energy a building actually uses. Actual buildings use is very much influenced by factors such as the commissioning and control of building management system and occupier activities which are not captured within design based ratings.
  - There is strong evidence to show that the continued use and ratcheting up of design ratings will not deliver the full energy efficiency potential available for UK commercial buildings. As noted in the response to Question 2 above, each year, the Better Buildings Partnership, through its Real Estate Environmental Benchmark (REEB), collects energy data from its members managed real estate portfolios to assess energy performance and trends, and publish publicly available industry benchmarks. When looking at the relationship between EPC ratings and operational energy intensity, the data shows no correlation between how efficiently a building uses energy and its EPC rating. Further details can be seen within the joint Better Buildings Partnership & JLL report <u>A Tale of Two Buildings</u>, as well as Figures 1 & 2 containing the latest REEB data (See response to Question 2).
  - The BBP strongly recommends the introduction of operational ratings for commercial properties as the most appropriate tool to drive energy performance improvements. It is a tool that is currently missing from Government policy. Such an approach will provide greater transparency around how buildings use energy and shift the industry from a design-for-compliance culture to a design-for-performance culture. The continual feedback by annually reviewing performance encourages improvements and identifies poor performance, as well as providing a feedback loop to inform future design decisions. Such an approach can complement minimum standards by providing the review process to ensure that the design actually performs as it was intended.
- 14. What are your views on introducing operational performance ratings for nondomestic buildings, either on the EPC or separately?
  - The Better Buildings Partnership strongly recommends the introduction of operational ratings for commercial properties. A tool that is currently missing from Government policy. Such an approach will provide greater transparency around how buildings use energy and shift the industry from a design-forcompliance culture to a design-for-performance culture. The continual feedback by annually reviewing performance encourages improvements and identifies poor performance, as well as providing a feedback loop to inform future design decisions. Such an approach can complement minimum standards by providing the review process to ensure that the design actually performs as it was intended.



As outlined in Question 8, the use of operational ratings should be very much be viewed as separate and complementary to EPCs, rather than an attempt to combine with EPCs. The BBP does not believe operational data should be combined with EPCs as operational data must be monitored on at least an annual basis, but EPCs are valid for 10 years. However, lessons may also be learned from the RT 2012 Energy Performance Certificate (DPE) system implemented in France, through which certificates can be produced on the basis of either predicted energy use or actual performance/consumption (based on past energy bills).

- When looking at operational ratings, the BBP views the NABERS scheme as the most successful international example of how an operational rating can improve the energy efficiency of commercial buildings on a national scale. Since it's mandatory introduction in 2010/11 it has brought about significant improvements in energy efficiency, improving the average energy intensity of Australian rated offices by 28% and increasing the average Star Rating from 3.2 to 4.4. It has also created a culture change in the approach to designing new buildings – fostering one of design-for-performance as oppose to one of design-for-compliance. See Figures 3 and 4 in response to Question 8.
- Via the industry-backed Design for Performance initiative, the BBP is currently working with the Office of Environment and Heritage for New South Wales to assess the applicability of introducing a NABERS-type scheme in the UK. The project is aiming to overcome the 'performance gap' by linking design intent to operational performance in-use via a process of enhanced modelling and requirement to monitor operational performance post-construction. It is recommended the Government consider how the findings of the project could inform the future development of Building Regulations Part L. The BBP would be very happy to explain the opportunities in further detail.
- A policy that focuses on performance-based outcomes, as opposed to design standards, has many wider benefits:
  - It overcomes needing to consider the nuanced detail of how blanket minimum standards affect the complex variety of building types and uses, as focus is on the performance outcomes rather than the specific method to achieve it. This approach provides the industry with greater flexibility, scope and potential for innovation to meet a performance outcome.
  - o It provides greater transparency to those actors that drive market change. For the case of real estate investment, this centres on the occupiers that use space and the investors that invest in commercial property companies and funds.
  - o It provides a platform for specific industry initiatives to use the operational performance data to build on. E.g. additional benchmarking or rating tools, technology providers, additional government reporting policies.



- 15. What evidence do you have on how useful the EPC rating and cost information are to consumers when purchasing or renting a property? Are consumers using information on the EPC to negotiate property prices or rents?
  - At the time of acquisition, commercial property owners use EPCs to check for any material risk in relation to Minimum Energy Efficiency Standards. Where such a risk is found, the property owner may factor in upgrade costs into the investment decision. However, it is the investment strategy (e.g. redevelopment opportunities, length of existing lease and length of expected holding) that would ultimately decide costs and appetite for risk. The BBP Acquisitions Sustainability Toolkit on p24 provides information on assessing MEES risk and how it could influence acquisition decisions.
  - In a survey of our members undertaken to assess views on the usefulness of EPCs during the purchase and renting of property the following feedback was gathered (see Appendix for full details):
    - o 62% of respondents thought that EPCs were "useful for owners when buying or selling a building".
    - o 56% of the members agreed that EPCs are "used by owners when negotiating on sale price", whereas 23% disagreed.
    - o Only 44% of the members agreed with the statement that EPCs were "requested by occupiers when leasing a property". This suggests EPCs may not be deemed an important indicator by occupiers when seeking space.
    - When asked if EPCs are "useful for occupiers when leasing a property" 11% of respondents agreed with the statement, 23% disagreed, yet 61% neither agreed nor disagreed with the statement, suggesting that any benefits that occupiers receive by EPCs are unclear. Responses also suggested that EPCs weren't used as a negotiating tool on rent reviews.
- 16. Do you have any evidence on consumers' understanding of the energy efficiency rating used in EPCs? Do you think a different rating such as carbon emissions or primary energy would have a better impact for consumers?
  - The format of both EPCs and DECs is broadly sound and follows a similar approach to appliance labelling (through the A-G rating model) with which consumers are widely familiar.
- 17. Which of the suggestions provided above do you think would enable prospective buyers and tenants to make more effective decisions based on the information on the EPC? Do you have any other suggestions? Please provide reasoning and any evidence you have to support your response.
  - As mentioned in the response to Question 4, a challenge for those procuring EPCs is the lack of visibility and transparency regarding the input values. If EPC certificates clearly stated the percentage of default values used by assessors to generate the certificate, it would provide a clear and simple indication with regards to the quality of that EPC.



- 18. What evidence do you have on how easy it is to access EPC data or Open Data? What additional information would be valuable and why? If you are currently a user of the Open Data Communities website, what do you use the information for and how valuable is this website as a source of data?
  - The Call for Evidence states that it needs to be possible to share and access data effective to make the best use of EPCs. The ability for EPCs to be concealed or hidden upon request poses serious issues to the implementation of Minimum Energy Efficiency Standards. A property owner is at risk if an occupier undertakes an EPC without permission and conceals the lodged EPC. The property owner could then be at risk of Minimum Energy Efficiency Standards if the property was rated below an E but would be unable to check this via the EPC Register. Transparency needs to be made available across the board. The BBP agrees with the British Property Federation's suggestion that in the first instance parties should be able to see whether an EPC exists in relation to a property, notwithstanding the ability to view the full certificate.
  - It would be helpful for property owners and their designated agents and assessors to have a copy of the .nct and .xml file from the previous assessment made available upon request. This would help to review data inputs used in previous assessments. As highlighted previously, having access to previous SBEM and DSM models would also be helpful and would reduce the time and cost of EPC assessments and also allow for a better assessment of the EPC quality. It is however acknowledged, that this is not information that the government currently collects but may be something to consider.
- 20. How useful do you think a 'data warehouse', 'building logbook' and/or 'green building passport' would be in increasing take-up of energy efficiency improvements or supporting existing initiatives? What kinds of data might usefully be included in addition to EPC data and how could these proposals best be implemented? How might more comprehensive assessments be encouraged without making them a requirement for homeowners?
  - The BBP would fully endorse actions by Government to increase the transparency and accessibility of energy performance data within the UK. Recommendations by the Green Finance Taskforce for a Building Passport that mirrors Portfolio Manager within the US is an excellent opportunity for the UK to take a leading role in providing business with the basic operational energy data needed to drive their own energy reductions. Such a solution also has the added benefit of improving the Government's own understanding of energy use to support further evidence-based policymaking.
  - The key benefit of such an initiative is that multiple datasets can be added in time and go well beyond energy/environmental related information e.g. EPC data, operational energy data, valuation, flood risk, building controls etc. The passports would be transferable between property owners.
  - The BBP has published an Acquisitions Sustainability Toolkit that provides a detailed checklist of information that would be useful for commercial property owners to request and collect as part of property acquisitions which may be useful in considering the type of information that could be included within a 'building log-book' or 'building passport'.



- 26. This Call for Evidence has outlined a number of options for making improvements to EPCs. Of the suggestions discussed in this document or which you have put forward, is there one or more you think is particularly important, or are there any other suggestions you have or comments you want to make about FPCs?
  - Whilst outside the specific scope of EPCs, a key issue is how they are used for wider regulations and the lack of information and clarification regarding the use of EPCs for those specific regulations. This issue predominately exists in relation to Minimum Energy Efficiency Standards.
    - In the instances of 'shell and core' buildings, which are common for retail and industrial uses, the current structure of Minimum Energy Efficiency Standards results in a scenario in which some property owners are effectively required to obtain two EPCs, one to market the given property – which is likely to result in a poor EPC rating due to the use of default/worst case values - and another to allow for a lawful lease to be granted once the occupier has completed their bespoke fitout. As noted in response to Questions 9, 10 and 12, this problem is particularly acute for existing shopping centres where EPCs exist for individual units and churn of retailers within units are frequent. In such instances, EPC assessments are not necessarily required after a tenant fit-out and therefore the new equipment installed is not captured within any form of energy efficiency assessment. In such instances, MEES compliance becomes a strategic assessment based on most appropriate times to undertake a new EPC assessment as opposed to encouraging retailers to install energy efficient equipment, particularly in relation to HVAC and lighting.
    - o It is acknowledged that the EPC guidance was updated in December 2017 which included alterations to the guidance on listed building exemptions, however for the purpose of legal challenge the wording pertaining to protected buildings (e.g. listed buildings or buildings in a conservation area) remains ambiguous. At best the ambiguity may result in unnecessary time and resource spent engaging with local conservation officers or EPC assessors, at worst the guidance could result in either non-compliance or the character or appearance of a protected building being unacceptably altered. Clarity on this issue would be welcome.
    - The ability for EPCs to be concealed or hidden upon request poses serious issues to the implementation of Minimum Energy Efficiency Standards. A property owner is at risk if an occupier undertakes an EPC without permission and conceals the lodged EPC. The property owner could then be at risk of Minimum Energy Efficiency Standards if the property was rated below an E but would be unable to check this via the EPC Register. Transparency needs to be made available across the board. The BBP agrees with the British Property Federation's suggestion that in the first instance parties should be able to see whether an EPC exists in relation to a property, notwithstanding the ability to view the full certificate.
    - The split responsibilities for the MEES Regulations and the operation of EPCs between DBEIS and MHCLG respectively appears counterintuitive to effective implementation. It is recommended that the responsibilities for MEES and EPCs are housed under a single government department to allow for greater flexibility and swifter change.



As mentioned in the response to Question 4, a challenge for those procuring EPCs is the lack of visibility and transparency regarding the input values. If EPC certificates clearly stated the percentage of default values used by assessors to generate the certificate, it would provide a clear and simple indication with regards to the quality of that EPC.

# Appendix - Member Survey Results

The following questions were posed to members to help inform the BBP's response to the Call for Evidence. The results provided below are based on 18 member responses.

