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?

Although cogent in places, the text often drifts in a way that suggests incomplete comprehension. For example, from the top of page 17:

In the UK, the Display Energy Certificate (DEC) takes this approach. Applying to public sector buildings over a total floor area of 250m², the DEC provides an energy performance operational rating of the building from A to G. In contrast to the EPC, a higher rating can only be achieved by the building improving its energy performance and emitting less carbon.

The EPB Regulations apply to public sector buildings but DECs are applicable across the range of benchmarks available in the MHCLG approved software. Many commercial buildings use DECs for their ESOS reporting, where most of the energy use of the organisation is in buildings. This is used as it is a low cost/cost effective method.

The last sentence should read – In contrast to the EPC, a higher (operational) rating can be achieved by improving asset rating (EPC rating) and by improving the energy management of the building, ideally a combination of the two, otherwise an improvement in say asset rating could be cancelled out by poor energy management.

And on page 18:

In short, an EPC rating will always provide meaningful information about the quality of a building's fabric and services. However, for the reasons outlined above, the evidence is showing that, in buildings above 1,000m² (which tend to be more complex), the EPC rating does not translate to the energy performance of the building in practice, as defined by its energy and carbon intensity.

The highlighted section is contradicted in a later chapter by suggesting that the operational rating could replace the need for an EPC. The "does not translate" statement suggests an expectation that it should when there is no such expectation.

The benefits of using NABERS is presented somewhat in isolation. Is it showing an improvement when compared to doing nothing? There is plenty of published information on the benefits of using DECs, but most of it was produced before the introduction of ESOS so based mainly on public sector buildings. What does the literature tell you about the relative ease or difficulty of changing occupant behaviour in public sector buildings and commercial buildings? Is there any difference?

Your document could have list like this:

~~NABERS~~ DECs measure actual impact, rather than intent: the ratings are based on actual

energy consumption and associated greenhouse gas emissions,

• ~~NABERS~~ DECs ratings are clear, accurate, up-to-date, and reliable, (you'd need to update benchmarks)

• ~~NABERS~~ DECs allow like-for-like comparisons between buildings,

• ~~NABERS~~ DEC ratings can be aligned with responsibilities within the building,

• ~~NABERS~~ DECs were designed to support how the industry operated, developed from Normalised Performance Indicator principles promoted by the Energy Efficiency Office and its successors since the early 1980s.

The list could then include:

DECs are provided by a well established and regulated industry that provide operational ratings cost effectively.

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.

Again, your rationale is not quite sharp. The EPC/DEC relationship needs to be clearly understood. It is true that there is no link between the two ratings; why would there be as they are measuring different things. It is important to understand though that it is not an either/or situation. They need to be used together. A building with an excellent A rated EPC can still be badly managed (e.g windows open with heating on), so you need the DEC as well; a poor rating letting you know that you are managing your excellent building badly, or a good rating confirming that you are making best use of it.

The flipside to this is that if you have a poor F or G rated EPC it is very difficult to achieve a good DEC rating without first improving the EPC

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.

The proposal to modernise the DEC is certainly overdue and widening their use to all non-domestic buildings is a positive step. However you are underestimating the inherent value in DECs and seem to be diverted by a Commercial Brand that is not universally acknowledged as fit for purpose, nor necessarily readily transferrable to a UK climate and building stock. What reason does the Government have to promote a commercial product from Australia rather than invest further in a publicly owned product developed in UK that is tailored to the UK building stock?

Specifically, the only reason that DECs are primarily used for public buildings is that this is what the EPB Regs required. Since the introduction of the ESOS Regulations in 2015, DECs have been produced for many private sector buildings to meet the ESOS requirements. Have you looked at the success of this? Benchmarks in the DEC methodology and software, from CIBSE TM46 cover a very wide range of buildings. It is true that the benchmarks need to be more granular and up to date. CIBSE TM22 can be used/incorporated for better granularity and updating is needed whatever Government decides to do. The need is for a continual process of development and improvement.

Government appointed EPB Schemes have experience of managing quality since 2008 and have recently upgraded this with the use of smart audit calling rules. Although originally involved, BRE withdraw activity from this in 2014. You might want to investigate why they dropped this scheme before getting them involved again, especially if you are planning to move this from the steady oversight of the EPB Schemes. Even with adjustments for weather and occupancy and mixed benchmarks, all covered in the current DEC methodology, the production of a DEC requires basic numeracy and literacy. Summing the number of kWh from metered reading records and dividing by floor area is the extent of the work involved. Scaling from drawings produced by chartered

surveyors is an acceptable way of obtaining floor areas, but it not the only method. Other than this, there is absolutely no basis for requiring input from chartered professionals in the production of an operational rating. It might be a good idea for work to update and fine tune the methodology, but the roll out really doesn't need that skill level. No wonder your cost estimates are so high.

It is fair to say that there appears again to be muddled thinking about the basic concept of operational ratings in this section.

The rating must be 'investment grade'…….. This is vital to the success of this policy. If there is confidence in the ratings, then building performance is more likely to be reflected in things like the building's rental and asset value.

Investment grade advice comes from linking asset rating information with operational data, it is not something provided by a "quality" operational rating on its own, which is produced with no reference to the asset characteristics at all. Also it is not telling you about the building's performance it is telling you about the performance of the building's occupants. This does not influence the rental or asset value.

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.

This can be done using the existing DEC capability and national register of energy certificates.

The DEC delivery industry is mature and provides the confidence of MHCLG oversight. One provider also operates with UKAS, the Government's National Accreditation Body, accreditation for even greater confidence in the process. NABERSs does not provide this level of confidence.

If you simply extend the scope of the EPB Regulations to include all buildings over 1000 m^2, this roll-out takes care of itself. Keep it simple, it is a simple rating.

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?

Use DECs, they are a considerably lower cost option than the illustrations you provide later in the document.

6. Should the Government:

• Allow owners of buildings above 1,000m² 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.

Absolutely not. See explanation in response to Q1. You cannot successfully drive up occupant based improvements in energy use if they cannot first identify an inherently energy efficient building. This is the role of the EPC. To use the better understood car analogy, when you buy a car you don't ask how much petrol the owner bought in the previous year - the DEC - you ask how many miles per gallon the car does according to the Government's standardised test - the EPC.

• Continue to require owners of buildings above 1,000m² 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.

Absolutely.

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.

There are no risks to providing better energy information, i.e. both ratings, if you are aiming drive down energy use which is the most cost effective way to achieve zero carbon.

7. Recognising that the Government has committed to review the threshold for each sector, do you consider 1,000m² to be a sensible starting position for determining which buildings should be required to obtain annual performance-based ratings?

Yes, this is consistent with existing regulatory requirements.

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?

This is not within the remit of most PEPA members, but this sort of thing is already covered by existing frameworks such as ISO 14001 which is adopted by many organisations, large and small.

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

As they appear to be describing the current DEC framework, yes.

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.

The flow chart in this section is not consistent with the text associated with Q9. This flow chart is not workable. The annual production of the rating is a desktop function, but it needs the input of the competent assessor to make appropriate adjustments if the building occupant identifies changes to occupancy or changes to activities or floor areas.

Investment grade advice is mentioned again, but investment advice is not something that can be drawn from the occupational rating alone.

The current DEC methodology calls for advice reports on a 7-year cycle, this could be changed to 4 if that was felt more appropriate. This advice covers considering improvements to the building, but also advice on improving energy management practice.

In this section you consider overlap with ESOS reporting and the gaps due to sampling. Where DECs are used for ESOS, sampling is **not** permitted, so all buildings will have a DEC rating. Another serious gap is that you have not considered UKAS backed ISO 50001 certification, which covers everything you are considering and requires evidence of continual improvement year on year. This is also

recognised in the ESOS regulations and should be an alternative means of demonstrating compliance for any operational performance rating requirement.

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.

This proposal is about building occupants having information on how well they are managing their building to help them manage it better. You can't manage what you can't measure. There are no reasons to exempt any building from having this information.

Of the current enforcement regimes around energy regulations, the Environment Agency seem to be the most effective option.

There is already a very well established market in providing energy management support, the UK has the second highest number of issued ISO 50001 Energy Management Systems Certificates in the world, second behind Germany where there are significant financial incentives for this certification. It is not clear why there is a need to mention this in the consultation, particularly with reference to how a small market in an Australian state has developed.

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?

Given the experience of operational ratings in the UK it is not clear what frequent reference to a relatively small scheme in Australia is adding. It is certainly well understood that having the rating is itself a strong motivator, no-one wants to look bad.

What does need to be recognised is that in the energy world, the A to G bar chart colour graded from Green (good) to Red (bad) is well established in the UK. When Domestic energy ratings (SAP ratings) were first introduced in the early 1990s, one of the providers converted the energy ratings to stars on the "hotel" 1 - 5 star scale. This did not gain wider traction. The A to G scale is very well understood by everyone, you will see it by the door as you board a plane, you will see it on every car in car showrooms, you will see it on fridges, washing machines, ovens and well as DECs and EPCs of course.

You appear to be considering a 1-6 star scale as used in Australia, this is completely counter intuitive to where we are in the UK and will undermine the inherent benefits of introducing a commercial building performance rating. Anything other than the standard A to G will only cause confusion.

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?

This is worth repeating. You appear to be considering a 1-6 star scale as used in Australia, this is completely counter intuitive to where we are in the UK and will undermine the inherent benefits of introducing a commercial building performance rating. Anything other than the standard A to G will only cause confusion.

In our response to Q11 we acknowledge that financial incentives have driven a big uptake of ISO 50001 certification in Germany. It is fairly straightforward to say that financial incentives would help

however in this case we are talking about saving money as well as reducing carbon. Do we really need to incentivise organisations to save money?

A further complication is that the rating can be improved by improving the energy performance of the asset or by improving energy management practice, or a combination of both. Would you consider funding measures to improve commercial building EPCs as well as the operational rating. You currently do this for homes, but not for commercial buildings. It would be welcome, but expensive.

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 reiterate star ratings will not be effective in the UK.

All DECs currently issued are already publicly visible on gov.uk. The softer interventions are all good, when so many companies have published zero carbon targets this sort of naming and shaming is going to be very effective.

Penalties for low rating could also be used, but the idea of linking it to low carbon heating is less likely to be effective in the absence of clear direction from the government. This is probably the area of least concern in many commercial buildings anyway. Cooling loads are usually a lot more significant than heating in commercial buildings.

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

Rating systems such as DECs in the UK are a means of communicating a complex technical message in a format readily understood by the non-technical market. (Professor Andrew Geens).

The analysis in this section is useful and we agree with the assessment and approach providing this is part of the modernisation of the DEC methodology so that the benefit applies to all non-domestic building operational ratings. This is another advantage of developing the current DEC methodology, for the benefit for all users, rather than trying to re-invent a wheel just for the private sector.

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 do not consider this a priority, there are already strong financial drivers, tariffs, that encourage building operators to optimise their demand profile. Often load management and storage arrangement are the only way that extensions to buildings or even new buildings can be developed in power dense locations.

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

We have already made it clear that Option 1 is the only option that can be considered to be consistent with all energy rating systems in the UK - see Q12. EPCs and DECS already use A to G to communicate ratings even though the numbers behind them are quite different. This is the whole point. The lay person doesn't need to understand energy theory to know that A is better than D is better than G. Furthermore we have made it clear that not only should the rating be the same as DECs, but that the operational rating should be an updated version of the DEC and that this updated

DEC should be used universally for all non-domestic buildings. It makes no sense economically, practically or in regulatory terms to have different operational rating systems for public and private buildings.

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 already explained why we think that the NABERs style Star Rating is the wrong approach. The considerations are fine, but there is an established system for providing ratings in respect if buildings and their use (owned in the public sector) which can be adapted and improved to deliver the Government's objectives

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.

The "how to get a rating" section describes how to get a DEC almost perfectly. Please also note that the list of sectors that you identify on page 80 are all available in the existing DEC methodology and software. The reason that you should be taking this opportunity to update and expand the DEC system to all non-domestic buildings is perfectly illustrated with your cost illustration.

The consultation document says that the Government's ambition is for the rating to be accurate, reliable, and trusted, at the lowest possible cost to businesses and building owners.

From our knowledge of the DEC market, the first 4 year cycle range is more like £700 - £1200. The work for the 3 years requiring a desktop exercise are pretty much independent of building size; the numbers being processed are bigger, but this doesn't usually influence time and hence cost. With 4 yearly physical checking this would be the same each time around the cycle. Considerably less than costs that you have arrived at. The difference may be due to your mistaken assumption that chartered professionals need to be involved.

Office specific consultation

20.The Government's approach for implementing annual performance-based ratings in commercial offices over 1,000m² 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.

Covered in responses 1 -19.

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**

The Government did explore the option of trying to replicate the equivalent of an EPC B in a performance-based rating (for example, equivalating EPC B to a 4.5-star rating)

You have provided commentary on why it is not something that can be done.

The 'do nothing' option is the only solution for all buildings regardless of size, the requirement for one rating does not negate the need for the other. They are intended to be used together and are complementary not contradictory. Any hybrid attempt is adding complication, increasing the risk of misunderstanding and accidental non-compliance.

22.Do you consider that there should be any other exemptions applied specifically to the office sector?

No.

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?

As set out in your consultation the costs seem unreasonably high, but you are overcomplicating everything. See our response on costs in Q19. You could also read "Exploring the use of Display Energy Certificates" published by DECC in 2013 for advice on how to do this.

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

No. See response to Q19 and "Exploring the use of Display Energy Certificates" published by DECC in 2013.

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

No. See response to Q19.

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.**

If you need this, Option one is fine.

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?

The resolution to this question is simply where the service is metered, is it a landlord meter or tenant? Unlike the domestic renting situation, commercial space is often let as a shell to be fitted out by the tenant and then returned to the landlord as a shell at the end of the tenancy. It is not a question of whether the landlord is providing adequate services.

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

Yes

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.

Yes, the important thing is to retain the MEES PRS requirements.

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.

Metering has been required in Building Regulations for a long time, both for new buildings, but also whenever new equipment is installed in an existing building. The requirement is for 90% of energy use to be identifiable by end use. This new requirement would be a good way of enforcing this requirement where it has been implemented. There should be no exemptions other than an initial period of grace to sort it out, and no estimating other than by utility providers. There will always be a utility bill. If there really is insufficient metering there is no rating, and penalties should be applied to encourage compliance. Anything short of this will be discriminating against public sector building operators.

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 three is the method currently used in the production of DECs so if DECs are used, this is the status quo and the preferred option. The term used is composite benchmarking and is only used for areas with activities not typical of the core benchmark.

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

It should have become apparent through our responses to Q1 – Q31 that we believe that this initiative is the perfect opportunity to update the DEC methodology and benchmarks to make it suitable for all non-domestic buildings going forward. It is already being used sub-optimally for ESOS compliance for many of the buildings that you are considering.

The advantages of this approach are that the updating can be done by a small central team, the data outputs will automatically be lodged on the .gov.uk register and there is already a pool of competent, regulated and quality-controlled personnel that will be able to deliver this rating scheme cost effectively and immediately.