REGEN

Home Energy Model methodology for assessing existing dwellings and producing new EPC metrics

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About Regen

Regen provides independent, evidence-led insight and advice in support of our mission to transform the UK's energy system for a net zero future. We focus on analysing the systemic challenges of decarbonising power, heat and transport. We know that a transformation of this scale will require engaging the whole of society in a just transition.

Regen is a membership organisation with over 200 members who share our mission, including clean energy developers, businesses, local authorities, community energy groups and research organisations across the energy sector. We manage the Electricity Storage Network (ESN) – the industry group and voice of the grid-scale electricity storage industry in GB.

Summary and recommendations

We welcome the government's reform of the regime for assessing the energy performance of buildings. The current system is not fit for purpose, particularly given the increased importance of flexibility and the misalignment between cost of energy and carbon. The Home Energy Model (HEM) represents a step change in capability. It is important that a new Energy Performance Certificate (EPC) methodology makes the most of these improvements, supporting consumers in making informed decisions and driving fair outcomes through wider heating and housing policy, such as grant funding eligibility and Minimum Energy Efficiency Standards (MEES).

An effective EPC methodology is a vital tool in supporting a fair transition to clean heat. EPCs are used to enforce energy performance, monitor progress and target funding, and must therefore be robust, clear and accurate. We do not support introducing a modular approach, as it would lead to double standards in EPCs. It is good that additional assessments are available

to consumers to better understand the energy use of their home, but these should not be incorporated into EPCs themselves, which must be standardised.

We welcome the introduction of a multi-metric approach, as this enables EPCs to drive policy more effectively. These metrics should be as simple and straightforward to understand as possible. This is to aid communication and trust, but also reduces the risks for fraud, gaming of the system and unintended consequences. This has implications for each of the proposed headline metrics.

It is right that the Heating System Metric will characterise the efficiency and carbon intensity of the system and ensure that direct electric heating with insufficient energy storage does not achieve a band C. This is vital in ensuring that MEES compliance does not incentivise cheap direct electric heating with no storage, which would dramatically increase tenant bills. The metric should be comprehensive in assessing energy storage and therefore include both electrical and thermal storage. Whether energy is stored chemically in a battery or as heat bears no relation to the cost and carbon outcomes for the household. It is a false distinction to exclude one and not the other.

It is essential to facilitate and incentivise flexible energy usage to support a clean, cheap energy system. We believe that the proposed Smart Readiness Metric is not an effective way to do this. Firstly, it is unnecessary, as the true value of generation and storage can and should be captured in the Heating System Metric and the Energy Cost Metric. This is meaningful, as it relates to measurable outcomes directly and does not require the government to make value judgments on the potential value of different technologies. Secondly, the metric is an artificial construct that is complex, hard to justify and impossible to design without introducing unintended consequences, opportunities for gaming the system and fraud. Instead, a yes/no metric to indicate the presence of a smart electricity meter would be simple to define and a valuable piece of information to potential tenants or owners.

In our response, Regen recommends that:

- **Recommendation 1:** A modular approach undermines the requirement for EPCs to be standardised. It introduces opportunities for misselling, fraud and would create a two tier EPC framework where the poorest are unfairly penalised. HEM supports additional services outside the EPC framework.
- **Recommendation 2:** The Fabric Performance Metric cannot accurately account for thermal insulation for heating and overheating risk. It should focus on insulation for heating, as the primary driver of energy use, and a separate secondary overheating metric should be introduced.
- **Recommendation 3:** To score a C for the Heating System Metric, it is vital that homes have efficient low carbon heating, either through a heat pump, a low carbon heat network connection or electric heating with sufficient storage.

- **Recommendation 4:** All energy storage and generation should be accounted for in the Heating System Metric, as they all impact the realised cost and carbon intensity of electric heating. Excluding electric battery storage while including thermal storage is an artificial choice that does not reflect reality.
- **Recommendation 5:** Carbon intensity assumptions and the band thresholds must be updated together to avoid inefficient electric heating becoming incentivised as the grid decarbonises.
- **Recommendation 6:** It is vital that EPCs assess overheating risk, but this can only be done through an independent metric. It does not make sense to force cooling into the heating metric and doing so would lead to confusion and perverse outcomes.
- **Recommendation 7:** Do not include cooking within the Heating System Metric. This is not the right place to further incentivise clean cooking.
- **Recommendation 8:** The Smart Readiness Metric should be replaced with a yes/no value for whether homes have a smart meter installed. The value created through wider generation and smart technology should be fully captured in the Heating System Metric, as well as the cost metric.
- **Recommendation 9:** PV size should be incentivised through the Heating System Metric as a source of energy, which acts to lower the cost and carbon intensity of electric heating, as well as through the Energy Cost Metric. It is unhelpful and unnecessary to try and characterise it through an additional, artificial Smart Readiness Metric.
- **Recommendation 10:** Battery size should be incentivised through the Heating System Metric as a source of storage, which acts to lower the cost and carbon intensity of electric heating, as well as through the Energy Cost Metric. It is unhelpful and unnecessary to try and characterise it through an additional, artificial Smart Readiness Metric.
- **Recommendation 11:** The government must work with NESO, Ofgem, Elexon and the wider industry to deliver lower electricity costs urgently . Failure to do so results in the Energy Cost Metric undermining the aims of the wider EPC in supporting the transition to clean heat.
- **Recommendation 12:** Communicate cost based on a rating and banding approach. This offers greater clarity to consumers and allows them to compare homes based on a standardised approach. Offering a bill value that does not reflect their behaviour is misleading.

Responses to questions

Question 1: Modularity of data inputs

Do you agree with the introduction of a modular approach to data input for existing builds, where assessors can enter complete data where available and rely on defaults for other elements?

Strongly disagree

The consultation highlights the current shortcomings between detailed data in SAP and partial data in rdSAP. This disconnection is highly problematic and creates a double standard for new builds. It is desirable that this gap be narrowed as much as possible and that assessors are encouraged to fill in as much detailed data as possible.

However, the EPC's role in policy means that it must be standardised. A modular approach introduces complexity and variation. This undermines trust in the EPC and introduces wider opportunities for gaming the system and fraud. What's more, additional datasets may be hard to verify and audit.

There is also an issue of fairness. Some households may not be able to afford additional surveys while others can, risking making the EPC score obtained for a home contingent on household income.

The open-source nature of the HEM means that any organisation can develop and market 'EPC+' products, which could include additional modular elements that improve the accuracy, but this should not be incorporated into the official EPC wrapper.

Reducing the validity period of EPCs to five years would have a much greater impact on accuracy than allowing modular changes to data inputs.

We outline some possible risks of this approach in question 2.

Recommendation 1: A modular approach undermines the requirement for EPCs to be standardised. It introduces opportunities for misselling, fraud and would create a two tier EPC framework where the poorest are unfairly penalised. HEM supports additional services outside the EPC framework.

Question 2: Impacts of modularity

Please share your views on the following potential impacts of a modular approach.

a. Quality of assessments and EPCs:
   - assessment accuracy
   - trust, usability, or consistency in EPCs
   - how inputs are communicated to consumers/householders
b. Impact on assessors' workloads, costs, training, and skills?
c. Implementation risks, for example: QA/audit and fraud risk, supply-chain readiness and training needs
d. Anything else you feel is relevant.

Modularity would increase variation between EPCs. Our answer principally covers part a, with some relevance to fraud risk, under part c.

Variation in EPC results can erode consumer trust, as consumers expect them to be standardised and consistent. Currently, EPCs are poorly understood and poorly trusted. The HEM approach could help improve this, but it severely undermines trust when two EPCs for the same home show very different results.

Increased variation between EPCs supports gamification whereby assessors can experiment with different levels of data accuracy to find the outcome that most closely matches their ideal result. This may be to reach as high a score as possible to support the sale of a home, but could equally be to lower the score to make it eligible for particular grant funding.

The current rdSAP methodology has some fields where the assessor can choose to enter a category answer, or a more specific answer – most obviously the make and model of a boiler or heat pump. The system is set up such that there is always a penalty for choosing the more general category, so the assessor is incentivised to identify the make and model (assuming they want to achieve a high score).

We would suggest that this is not the best approach, as it leads to a larger gap between default and measured values, which can increase the potential for gamification. We suggest that default levels are chosen to be as accurate as possible for the population of homes they set out to describe, thus minimising the range between default values and the detailed data that might be entered. This reduces the potential for gaming the system within 'true' responses.

There will always be some flexibility for assessors. Principally this should be managed through auditing and training processes, as well as ensuring that assessors are as independent as possible.

Recommendation 1: A modular approach undermines the requirement for EPCs to be standardised. It introduces opportunities for misselling, fraud and would create a two tier EOC framework where the poorest are unfairly penalised. HEM supports additional services outside the EPC framework.

Question 3: Alternative approaches to existing dwellings

Please share your views or provide any evidence on any alternative approaches you think we should consider for existing dwellings.

A standardised approach is necessary, as opposed to the proposed modular approach, as outlined in the previous answers.

Recommendation 1: A modular approach undermines the requirement for EPCs to be standardised. It introduces opportunities for misselling, fraud and would create a two tier EOC framework where the poorest are unfairly penalised. HEM supports additional services outside the EPC framework.

Question 4: Naming terminology

If a modular approach is adopted, the term "Reduced data HEM" (RdHEM) may not accurately reflect the model's structure or purpose. We want to ensure the terminology clearly conveys this flexibility and avoids confusion with previous approaches. A clear, intuitive name will help stakeholders understand the purpose of the methodology and distinguish it from both full HEM and legacy RdSAP. Potential options for the new name are:

- HEM for Existing Dwellings (HEMEX)
- HEM Input Expansion (HEMIE)
- Mixed Data for HEM (MdHEM), or
- Reduced data HEM (RdHEM).

Do you have any views on the proposed alternative name(s) that would better capture the intent and flexibility of a modular version of HEM? Do you have any other suggested options that are not listed above?

We agree that 'reduced data HEM', would be a poor name. 'HEM for existing dwellings' is the name that uses the clearest language for the consumer and is grounded in the purpose of the approach. This would be our preference.

Question 5: Fabric performance

Do you agree with the proposal to evaluate fabric performance using FEE?

Strongly disagree

It is essential that the fabric performance measure is fully independent of usage pattern assumptions, which may vary between heating systems. We support this aspect of the choice.

We do not support the use of a metric which aims to characterise both heating and cooling within one value. This undermines the meaning of the metric entirely. For example, it would presumably be possible for two homes to have an identical FEE score, but with a very different division between heating and cooling requirements.

While we support the inclusion of overheating within the EPC system, it must be separated from the fabric performance around heating. Instead, we would recommend that the Fabric Performance Metric be a measure of just heating need, as this drives the energy use for most homes and will continue to do so, despite continuing global heating. An additional metric should characterise the overheating risk of the home. This makes the overheating issue more prominent and clarifies the nature of each aspect of fabric performance, without convoluting them.

Recommendation 2: The Fabric Performance Metric cannot accurately account for thermal insulation for heating and overheating risk. It should focus on insulation for heating, as the primary driver of energy use, and a separate secondary overheating metric should be introduced.

Question 6: Equivalence of the C/D boundary

Do you agree with the approach to maintain broad equivalence between the C/D boundary in the current EER rating and the C/D boundary in the Fabric Performance Metric?

Neither agree nor disagree

While we agree on the need to maintain as much consistency as possible during the transition to HEM, it is important to understand the details of what it actually means and how it is assessed.

The EER rating is a measure of cost, whereas the Fabric Performance Metric is a measure of an energy requirement. It is therefore impossible to 'maintain broad equivalence' without making assumptions around the heating system and the presence of renewables. Presumably, the

proposal is to perform a statistical analysis of a large sample of EPCs at the EER C/D boundary and define the Fabric Performance Metric at that point.

When doing this there are two issues that must be considered: the presence of solar PV and the fuel used. Homes with solar PV and/or using a cheaper fuel will have much worse fabric performance than other homes at the C/D boundary.

The majority of homes use mains gas for heating and do not have solar PV. This means that setting the boundary such that average overall change between the two systems is minimised will mean that these homes see little change. Homes with different fuel costs will see significant changes:

- Homes with higher cost fuels (under SAP assumptions) will have a higher fabric score than their previous EER metric
- Homes with solar will see their fabric score is lower than their previous EER metric.

These swings will be very significant for some homes, as fuel cost and solar PV are very strong factors in the EER calculation. There may be other differences that will also result in modest changes. These shifts are inherent in the change from a cost-based metric to a fabric metric, but the implications should be understood before setting the boundary.

Question 7: Heat transfer coefficient

Do you agree with the Government's proposal to introduce an option for recording Heat Transfer Coefficients based on SMETER measurements, as supplementary information about fabric performance?

Agree

Measured data has significant value for identifying performance shortcomings. It is right that this metric should be additional to the other metrics and not override the standardised process. We are somewhat wary about adding too much into the EPC – the more complicated it is the less accessible it becomes, which could undermine its value. The government should consider whether there are alternative approaches to supporting the use of measured performance data without integrating it into the EPC.

Question 8: Enabling additional data

Do you have any views on how the provision of additional information, such as that derived from SMETERs, should be

enabled within the energy assessment process in practice? Please provide any evidence to support your answer.

No answer provided.

Question 9: Do you agree with our proposal on the design and methodology for the Heating System metric?

Agree

The Heating System Metric is a vital introduction to ensure that efficient, low carbon heating is incentivised. The metric takes the right approach in being based on efficiency and carbon intensity, such that efficient electric heating (e.g. heat pumps) score highest, followed by direct electric heating and then various fossil fuel systems. The metric will be most powerful if it is complete and focused. We therefore make several recommendations that strengthen the metric by making it more accurate and simpler.

With MEES and other policies targeting band C, it is essential that this does not allow direct electric heating to be able to meet the requirements. Replacing gas boilers with direct electric heating would be a cheap measure for landlords to undertake, but would increase tenant bills hugely. If this were a possible step toward reaching band C, then MEES would drive up fuel poverty rates across the country and severely undermine support for the transition.

Recommendation 3: To score a C for the Heating System Metric, it is vital that homes have efficient low carbon heating, either through a heat pump, a low carbon heat network connection or electric heating with sufficient storage.

Energy storage will impact the carbon intensity of electric heating, and it is right that this can be used to achieve a higher score for this metric. It does not make sense that only thermal storage is considered and electric battery storage is excluded. A direct electric heating system with sufficient battery storage can offer the same benefits as thermal storage, and with the falling costs of battery storage, this is likely to become a compelling route to lowering the cost and carbon of electric heating. Any distinction between thermal and electric storage systems in this context is artificial and divorced from the reality that the two systems can have identical benefits. There is a further inconsistency around this metric and the presence of PV generation. PV can reduce the cost and carbon intensity of electric heating, with or without energy storage.

In our view, the advantages of HEM should be leveraged to make a complete assessment of the carbon intensity of the installed heating system within the full context of the home. PV, thermal storage and electric battery storage all impact the carbon intensity and cost of electric heating and should be considered as a cohesive system.

Recommendation 4: All energy storage and generation should be accounted for in the Heating System Metric, as they all impact the realised cost and carbon intensity of electric heating.

Excluding electric battery storage, but including thermal storage is an artificial choice that does not reflect reality.

The carbon intensity of electricity is changing and it is unclear as to how this will impact EPCs going forward. A regular update of the carbon factor of electricity, with no update of the thresholds, would lead to fewer electric heating systems scoring higher and potentially incentivising direct electric heating with no storage. Alternatively, fixing the carbon intensity could lead to accusations of inaccuracy in the EPC methodology as the values separate from reality.

We propose that there should be a published timetable of updates, where the carbon intensity and thresholds are evaluated together. This would give confidence in the continued accuracy of EPCs, whilst protecting against the risk of lower carbon intensity incentivising less efficient electric heating systems if thresholds are maintained.

Recommendation 5: Carbon intensity assumptions and the band thresholds must be updated together to avoid inefficient electric heating becoming incentivised as the grid decarbonises.

The consultation indicates that it will include heating and cooling metrics. It is hard to imagine how one metric can fairly assess both heating and cooling when the majority of homes do not have any active cooling system. If a home has no cooling system, it will use no energy for cooling. This suggests that even the most efficient cooling system would be penalised, as it would require some energy. Alternatively there would need to be some incorporation of 'cooling need' and how well this is met. Such a metric would be complex to design and could have unintended consequences. For example, where overheating is an issue it could incentivise active cooling systems, such as air conditioning, rather than passive cooling measures, such as shading. Overheating risk and cooling efficiency are important and should be assessed in their own metric, rather than being forced in alongside heating. Doing so will make it hard to assess both heating and cooling, as they will become muddled together.

Recommendation 6: It is vital that EPCs assess overheating risk, but this can only be done through an independent metric. It does not make sense to force cooling into the heating metric and doing so would lead to confusion and perverse outcomes.

Question 10: Do you agree with the proposal to set the C/D boundary such that direct electric will always score a D or below, and that storage-based technologies would score above or below the C/D boundary based on their emissions relative to direct electric.

Strongly agree

With MEES and other policies targeting band C, it is essential that this does not allow direct electric heating to be able to meet the requirements. Replacing gas boilers with direct electric heating would be a cheap measure for landlords to undertake, but would increase tenant bills hugely. If this were a possible step toward reaching band C, then MEES would drive fuel poverty rates up across the country and severely undermine support for the transition.

As a result of this choice very few homes will score C or above when the revised HEM EPC system is introduced. This represents a communication risk that could lead to trust and perception challenge, but is an unavoidable symptom of not yet having many homes that have transitioned to clean heat. We support the government in facing this head-on. This metric must be robust and strong to incentivise the transition to clean heat.

Recommendation 3: To score a C for the Heating System Metric, it is vital that homes have efficient low carbon heating, either through a heat pump, a low carbon heat network connection or electric heating with sufficient storage.

Question 11: What is your view on the option of reserving the highest scores of A/B for electric cooking appliances?

Disagree

The Heating System Metric should be reserved for characterising the heating system and relevant factors that impact the cost and carbon of running the system (e.g. battery storage). We do not believe that cooking should be included within the metric.

It is vital that electric cooking is promoted, but the standing charge already offers a considerable incentive to remove the gas connection when no longer using gas for heating. Consumer regulations are a better route to further supporting the transition. EPCs are not an effective place to do this. This increases the complexity of the survey and makes the metric harder for consumers to understand.

Recommendation 7: Do not include cooking within the Heating System Metric. This is not the right place to further incentivise clean cooking.

Question 12: Do you have any views on the proposed list of technologies that would be recognised under the Smart Readiness Metric and their relative scoring? Please provide any evidence to support your answer.

Incentivising homes to be able to offer flexibility is valuable to consumers and the wider energy system. All the proposals set out for the Smart Readiness Metric fail to do this effectively. EPC metrics are a key lever for policy requirements, such as MEES, as well as grant eligibility. It is

not fair to require investment, or exclude homes from funding based on this artificial metric, the details of which are hard to justify and will create winners and losers in unintended ways.

The efforts to design a completely artificial metric to characterise such a complex value are flawed. It will not only be meaningless, but the risk of inadvertently creating an easy way to increase the score without meaningfully creating greater flexibility is high. This will then be used as a way for MEES requirements to be met on paper without improving housing for tenants, or for the network.

In reality, the reason smart features are valuable is inherent in the carbon intensity of electric heating and the cost metric. There is no need for the Smart Readiness Metric.

The key attribute that cannot be captured in the cost and heating metrics is the presence of a smart meter. We suggest that the presence of a smart meter should be indicated, as a yes or no field in place of the Smart Readiness Metric. This would be a clear signal to consumers and provides meaningful data without introducing artificial incentives.

Recommendation 8: The Smart Readiness Metric should be replaced with a yes/no value for whether homes have a smart meter installed. The value created through wider generation and smart technology should be fully captured in the Heating System Metric, as well as the cost metric.

Question 13: Do you have views on the options we have set out for how to achieve a C on the Smart Readiness Metric?

As set out above, we believe that the Smart Readiness Metric is flawed and unnecessary. This is illustrated by the uncertainty and contortions in identifying the complex characterisation of getting to band C presented in the consultation.

There is no way to set the Smart Readiness Metric such that it is fair across all homes and cannot be gamed by landlords wanting to be compliant with MEES through the minimum cost. The outcome that the consultation outlines is the use of exemptions. These exemptions represent the failure of the metric to represent the wide range of homes fairly.

Recommendation 8: The Smart Readiness Metric should be replaced with a yes/no value for whether homes have a smart meter installed. The value created through wider generation and smart technology should be captured fully in the Heating System Metric, as well as the cost metric.

Question 14: Do you have any evidence to provide on what an appropriately sized solar array should be to reach a C?

The consultation clearly sets out the challenge of sizing the required PV arrays to achieve a C. It is our view that homes are so complex that it is not possible to do so without unfair implications. There are a wealth of interlinked attributes that impact the suitability of solar and the size that can be installed: floor area, property type, roof orientation, shading, roof shape, roof material, ownership of communal roof space, etc.

A metric could be created that works fairly for perhaps 80% of homes, but there will always be exceptions where solar is not possible or effective. For example, solar may be the cheapest way for a landlord to meet MEES requirements, even if significant shading from nearby buildings makes it ineffective.

It is not fair to require investment, or exclude homes from funding based on this artificial metric, the details of which are hard to justify and will create winners and losers in unintended ways. Solar arrays are well represented in the cost metric in a meaningful and fair way. The Smart Readiness Metric is an unnecessary and ineffective way to characterise and incentivise their value.

Recommendation 9: PV size should be incentivised through the Heating System Metric as a source of energy, which acts to lower the cost and carbon intensity of electric heating, as well as through the Energy Cost Metric. It is unhelpful and unnecessary to try and characterise it through an additional, artificial Smart Readiness Metric.

Question 15: Do you have any evidence to provide on what an appropriately sized electric battery should be to reach a C?

As set out above, we believe that the Smart Readiness Metric is flawed and unnecessary. This is illustrated by the uncertainty and contortions in identifying a fair battery size measure to reach band C.

Effective battery size is intrinsically linked to the consumption pattern and overall demand of the home. This makes it best characterised in the context of the Heating System Metric and the Energy Cost metric. Here it will be characterised fairly through the measurable on cost and carbon.

Recommendation 10: Battery size should be incentivised through the Heating System Metric as a source of storage, which acts to lower the cost and carbon intensity of electric heating, as well as through the Energy Cost Metric. It is unhelpful and unnecessary to try and characterise it through an additional, artificial Smart Readiness Metric.

Questions 16: Do you agree that a bidirectional EV charge point should be recognised as an alternative to other forms of energy storage, such as batteries, in order to achieve a C on the Smart Readiness Metric?

No answer provided.

Question 17: Do you have any other comments regarding the design and methodology for the Smart Readiness metric?

As outlined, the Smart Readiness Metric is a flawed and unnecessary metric. It undermines the value of EPCs, makes assessment more complex and will reduce the comprehension of EPCs among the public.

Recommendation 8: The Smart Readiness Metric should be replaced with a yes/no value for whether homes have a smart meter installed. The value created through wider generation and smart technology should be captured fully in the Heating System Metric, as well as the cost metric.

Question 18: Do you agree with our proposed approach to the design and methodology for the Energy Cost metric?

Agree

The Energy Cost Metric is important to give consumers something that relates directly to cost, as this is the primary lens through which they will consider the energy performance of a home.

There is a risk that some homes will have low energy performance in other metrics, but low cost reflected here. Above all, this highlights the need to align electricity and gas costs with the carbon impact of the two fuels.

While electricity remains too expensive compared to gas, the ambition to transition to clean heat will be undermined, and the EPC metrics designed to support the transition will be poorly received. The government should focus efforts to lower electricity costs such that price efficiency and carbon are well aligned.

Recommendation 11: The government must work with NESO, Ofgem, Elexon and the wider industry to deliver lower electricity costs urgently . Failure to do so results in the Energy Cost Metric undermining the aims of the wider EPC in supporting the transition to clean heat.

Question 19: Do you agree that the cost metric should be presented in £, rather than bands?

Strongly disagree

There are benefits to communicating costs in £ as a meaningful metric for households, but it also risks undermining perceptions of EPC accuracy when the value is misaligned with lived experience. EPCs aim to characterise a home, not a household, so the value will never reflect the true energy cost, which is related principally to behavioural factors, which an EPC does not aim to measure.

Consumers do not generally understand this and will expect a cost measure to align with their experience. They will lose trust in values that are far higher or lower than reality, and it is misleading to present a value that appears to take account of these aspects, but does not.

This issue is compounded by fluctuations in fuel costs over time. It is possible for energy prices to diverge significantly, so a cost metric requires regular updates. This then introduces variation between EPCs, based on when they were evaluated. This undermines the ability to compare homes, which is the key requirement of EPCs.

A rating and banding approach is more effective at communicating the relative cost performance of homes. It is more honest to consumers than giving a cost that will not be accurate in terms of how they use energy and the current cost of energy.

Recommendation 12: Communicate cost based on a rating and banding approach. This offers greater clarity to consumers and allows them to compare homes based on a standardised approach. Offering a bill value that does not reflect their behaviour is misleading.