### **Energy Efficiency Standard for Social Housing (EESSH)**

#### Q and A

### STANDARD ASSESSMENT PROCEDURE (SAP)

# 1. How should landlords assess compliance with the EESSH minimum ratings if they use energy data collected using older versions of SAP?

The EESSH minimum ratings are set using the SAP 2009 methodology so landlords should make use of energy data collected using SAP 2009. The use of a specific SAP baseline methodology is the same approach as that used for the SHQS. Landlords may also choose to extrapolate data collected using the SAP 2009 methodology to provide a data set across their stock but not to provide duplicate EPCs.

Where landlords do not have sufficient SAP 2009 data, then SAP 2005 data can be used to make an estimate and converted to SAP 2009 ratings using the table provided by BRE (see below). However, landlords should be aware that this will be less accurate than using the 2009 methodology; some properties may "fail" EESSH on older versions but "pass" EESSH using SAP 2009.

# Relationship between SAP 2005 ratings and SAP 2009 ratings. The table indicates typical differences between the ratings.

| SAP<br>2005 | SAP 2009 by Main Heating Fuel |     |     |             |                  |         |  |  |
|-------------|-------------------------------|-----|-----|-------------|------------------|---------|--|--|
|             | Mains<br>gas                  | LPG | Oil | Electricity | Solid<br>mineral | Biomass |  |  |
| 1           | 1                             | 10  | 1   | 6           | 12               | 9       |  |  |
| 10          | 9                             | 20  | 9   | 16          | 21               | 18      |  |  |
| 20          | 19                            | 31  | 19  | 26          | 31               | 28      |  |  |
| 30          | 29                            | 41  | 29  | 37          | 41               | 37      |  |  |
| 40          | 39                            | 50  | 39  | 46          | 50               | 47      |  |  |
| 50          | 48                            | 59  | 50  | 56          | 59               | 56      |  |  |
| 60          | 58                            | 68  | 60  | 65          | 68               | 65      |  |  |
| 70          | 67                            | 76  | 70  | 74          | 77               | 74      |  |  |
| 80          | 76                            | 84  | 80  | 82          | 85               | 83      |  |  |
| 90          | 85                            | 92  | 90  | 91          | 93               | 92      |  |  |
| 100         | 94                            | 99  | 100 | 99          | 100              | 100     |  |  |

Landlords have to demonstrate to the Scottish Housing Regulator that they continue to be able to report accurate compliance data. Landlords should therefore aim to replace older estimated data, for example by using data collected from new EPCs or from future stock condition survey work, on a planned basis.

## 2. How should landlords assess compliance with the EESSH using future versions of SAP?

The Scottish Government plans to provide conversion tables for future versions of SAP. This is a similar approach to that adopted for the energy efficiency element of the Scottish Housing Quality Standard. A conversion table detailing energy efficiency ratings required to meet EESSH using both SAP 2009 and SAP 2012 is available on the EESSH website.

3. In the SAP conversion table detailing energy efficiency ratings required to meet EESSH using both SAP 2009 and SAP 2012 – why, when calculated on SAP 2012, have the ratings for those dwellings fuelled by gas remained unchanged whilst those fuelled by electricity have all been reduced?

The SAP rating of a property is based on the annual cost of providing heating, hot water, ventilation and lighting. Whenever a new SAP version is created, the fuel prices are updated and the algorithm for generating the rating is amended so that on average, i.e. over all dwelling types and all fuel types, there is no change to the SAP rating. However, when considering particular dwelling types and particular heating fuels (as is needed for the EESSH) differences can arise. Comparing the fuel prices used in SAP 2009 and SAP 2012, the price of electricity rose substantially more than the price of gas leading to a different relationship for electricity compared with gas.

4. Why does the EESSH rating calculated on SAP 2012 for an electrically heated detached house appear to be lower than that specified for an electric fuelled house in SHQS?

The EESSH rating calculated on SAP 2012 for an electrically heated detached house is 57 but for landlords to have achieved the SHQS by April 2015, the SAP rating was 61. At first glance it appears the energy efficiency rating is being diluted but this is not, in fact, the case. It is not possible to make a direct comparison as the specified electricity rating for SHQS relates to all housing types whereas the EESSH electricity rating is more type specific. The difference is entirely due to the price rise in electricity supply and in essence does not dilute the energy efficiency performance of the buildings in question.

# 5. Is there any difference between the SAP rating and the EESSH energy efficiency rating?

No. EESSH expects landlords to meet the energy efficiency rating applicable to the dwelling type and fuel used. The term "EESSH energy efficiency rating" and the term "EESSH SAP rating" are used interchangeably and refer to an "energy cost" rating.

6. Does the same EESSH energy efficiency rating apply whether SAP (2009) or RdSAP is used?

Yes. It is anticipated that most assessments would be completed using EPC RdSAP methodology. If landlords wish to use full SAP this is also acceptable.

### **ENERGY PERFORMANCE CERTIFICATES (EPCS)**

### 7. Are landlords expected to produce EPCs for each property?

Social landlords are not expected to produce 100% EPCs for EESSH compliance purposes. Landlords may however choose, as good practice, to work towards this target.

### **CLONED DATA**

# 8. Is it permissible to use cloned or extrapolated data to calculate whether a group of properties achieves the minimum EESSH rating?

Yes. This should be conducted to establish statistical and/or industry standards but it is anticipated that over time landlords will improve the quality of their information by visiting more of their properties. However, data gathered through cloning or extrapolation should <u>not</u> be used to populate a new EPC instead of using data collected from a full assessment.

The EESSH is monitored by the Scottish Housing Regulator who plan to adopt a risk based and proportionate approach. Further information is available here

https://www.scottishhousingregulator.gov.uk/publications/technical-guidance-eessh-december-2015

# 9. What is meant by 'Robust extrapolation' and 'cloning of data to industry standards'?

Where a large number of properties are identified by the same features, a representative 20% sample (with no less than 30 houses) of that stock would be considered to be statistically robust and valid for EESSH purposes, providing the features identified are truly representative of the stock being measured.

### **DWELLING TYPES**

### 10. What is classified as a "four-in-a-block" style dwelling?

The Scottish Housing Condition Survey (SHCS) guidance classifies 'four in a block' as flats in a common block, where each flat has its own separate access i.e. not through a common stair or entrance and also where no common access or entrance is present.

Any set of purpose built flats (but not a converted house or tower/slab block) that has shared or common access (even if some of the flats are not directly accessed by this common access) is likely to be a tenement flat. This means that where a building has four flats but the top floor is accessed via a common stair, then it is likely to be a tenement flat.

This also means that it is possible to have a 4 in a block classification for a building that contains more than 4 flats if all flats have separate access and where there is no common entrance or stairway present.

It may be worth considering the other definitions for flats first and use a process of elimination to arrive at the definition – i.e. if the flats are not tenement, tower, slab or a converted house then they are likely to be 4 in a block.

### 11. What is classified as "a maisonette" style dwelling?

A maisonette is any flat over multiple floors i.e. with an internal stair. For EESSH purposes, a maisonette should be classed as a "flat" if the building it is within has a common stair. If the maisonette is in a building without a common stair, it should be classed as a "four in a block"

12. In the most recent RdSAP conventions, the definition of 'detached' has been extended to include a property that has no party wall. For example, a ground floor flat with an exposed wall on one side and an unheated corridor on the other side will be detached in terms of RdSAP. Will the definition of detached in EESSH be extended to allow for this?

The EESSH definition of "detached" relates only to a detached house. Flats should achieve the minimum rating outlined for flats. The EESSH working group concluded the four property types specified should be used for ease of monitoring and reporting.

13. Should ratings for gas heated tenement flat (69) and gas heated four-in-a-block (65) be re-considered. The heat loss perimeter is more in the tenement flat (due to the common close) than in the four-in-a-block yet the EESSH rating is higher for the tenement flat?

The published EESSH ratings here are correct. However, this anomaly is acknowledged and will be considered as part of the EESSH review expected in 2017.

### **FUEL TYPES**

14. What would be the appropriate EESSH rating for renewable technologies such as heat pumps (including ground source and air source) combined heat and power (CHP) and district heating fuelled by a variety of fuels including biomass, waste and hybrid gas/renewables?

The main fuel source used in renewable technologies will determine which rating applies. Electric is the main fuel source used in Air Source Heat Pumps (ASHP) and Ground Source Heat Pumps (GSHP) – they are therefore required to meet the 'electric' EE rating as specified for the different dwelling types.

The EESSH guidance advises that dwellings which use fuel types other than gas or electricity should be classed as 'other' meaning they should continue at their current levels as set by Element 35 of the SHQS – see table below.

| Conversion table showing minimum NHER/SAP 2001/2005/2009 ratings necessary to pass SHQS criterion 35 |   |   |  |   |   |  |  |  |
|--|---|---|--|---|---|--|--|--|
| Fuel source for central heating systems  | National<br>Home Energy<br>Rating) NHER | Standard<br>Assessment<br>Procedure<br>(SAP) 2001 | Standard<br>Assessment<br>Procedure<br>(SAP)<br>2005/RdSAP | Standard<br>Assessment<br>Procedure (SAP)<br>2009/RdSAP | Standard<br>Assessment<br>Procedure<br>(SAP) 2012 |  |  |  |
| Gas  | 5                                       | 50  | 50   | 48  | 48  |  |  |  |
| Oil  | 5                                       | 60  | 54   | 54  | 47  |  |  |  |
| Liquid Petroleum Gas (LPG)   | 5                                       | 60  | 54   | 63  | 59  |  |  |  |
| Electric   | 5                                       | 60  | 58   | 63  | 61  |  |  |  |
| Solid Fuel   | 5                                       | 60  | 59   | 63  | 60  |  |  |  |
| Biomass  | 5                                       | 60  | 59   | 64  | 65  |  |  |  |

It is recognised that following the installation of some renewable technologies, it may still prove difficult for some dwellings to achieve the EESSH ratings. Social landlords are encouraged to make use of renewable technologies where appropriate – the issues around what ratings can realistically be achieved by them will be fully considered as part of the EESSH review scheduled for 2017.

The review will also consider the uncertainty around identifying which EESSH ratings are applicable for a wide variety for renewable technologies not fuelled solely by gas or electricity.

# 15. If renewable technologies are to be classed as 'other' what SAP is required for EESSH compliance?

As outlined above, technologies classed as 'other' should achieve the SAP ratings as defined by Element 35 of the SHQS. Those not specified in SHQS will be considered as part of the 2017 review.

### **BUILDING REGULATIONS**

# 16. Under which building regulations would new builds automatically pass EESSH?

New homes built to 2015 building regulations would deliver energy performance better than that sought under EESSH. However, as a minimum SAP rating is not required under current or previous building regulations, it is not possible to state at which point building regulations would ensure compliance with EESSH.

Any new dwelling built to a building warrant applied for on or after 1 May 2007 will already have an Energy Performance Certificate (EPC). By referring to EPCs for these properties, social landlords will be able to establish whether they already achieve the applicable EESSH rating.

## 17. Where EPCs have already been lodged, how should SAP uplifts be calculated?

Qualified energy assessors are best placed to advise social landlords on how to calculate SAP uplifts.

### **MONITORING**

# 18. What information will the Scottish Housing Regulator (SHR) need to validate and verify data?

SHR's information requirements are set out in its published guidance on EESSH indicators. Landlords should carefully check their data against the calculations in the Technical Guidance before submitting it to SHR. And landlords should, as a matter of course for their own internal audit or for their performance management systems, retain the calculations and workings for the EESSH. This should be made readily available to the SHR, if required, to provide assurances about the accuracy and reliability of the reported data.

### **FUTURE PROOFING PROPERTIES**

# 19. Should social landlords "future proof" properties now against any increase in the minimum energy efficiency rating?

It is for individual social landlords to decide what actions they need to take to ensure compliance with the EESSH. Social landlords can consider whether earlier investment in standards that are above the minimum would be a more efficient use of resources and provide more comfort for tenants in the long term. The setting of future milestones will be considered as part of the EESSH review expected in 2017.

### IS DISPOSAL OF STOCK AN OPTION?

### 20. Do I have to dispose of a property that cannot achieve the EESSH?

It is for individual social landlords to decide what actions they need to take to ensure compliance with the EESSH. There is no requirement to dispose of any property that cannot achieve the EESSH. It is expected that very few properties will not be able to achieve the minimum EESSH ratings. Disposal may be an option for consideration in these circumstances.

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