cotality™

Policy Analysis

MEES

Looking for the sweet spot of equivalence between old and new performance metrics, and why it matters.

The Government is currently consulting on the introduction of new Minimum Energy Efficiency Standards in the private rented sector.

Concurrent reform to the EPC will introduce a change from the single EER metric to multiple metrics, most likely to be FEES (fabric performance) and metrics related to cost, heating system sustainability and smart readiness.

The Government's preferred approach to a new minimum standard is to require homes in the PRS meet a primary standard set against the fabric performance metric and then a secondary standard set against either the smart readiness metric or heating system metric, with landlord discretion on which secondary metric their property meets.

Our initial preference was for simplicity – a single metric that is easily communicated, straightforward to assess, and an auditable evidence base.

But while the Government states its intent to find equivalence between fabric and the existing metric, we know from extensive work with social housing providers over the past 15 years how nuanced the achievement of EPC Band C can be. And therefore a change in the key EPC metric will mean some homes find it easier, and some harder, to achieve the target.

With that in mind we've set out to understand the relationship between fabric performance and the SAP cost-based metric, along with the relative "winners" and "losers" from a change in metrics, and subsequent policy implications.

In summary, the comparison makes the case for heating system efficiency as the secondary metric so that fuel poor homes cannot reach 'EPC C' on the basis of fabric performance, when tenants still face high heating bills.

23m homes

represented in our analysis of the "winners" and "losers" under MEES.

78% of homes in EPC Band D-G

could meet the standard if a fabric performance target accommodates all homes currently rated SAP A-C.

13% of homes in EPC Band A-C

could face unexpected costs if the fabric performance target applies the 'Heat Pump Ready' definition.

A heating system metric is required

to avoid the unintended consequence of expensive to heat homes attaining SAP C.

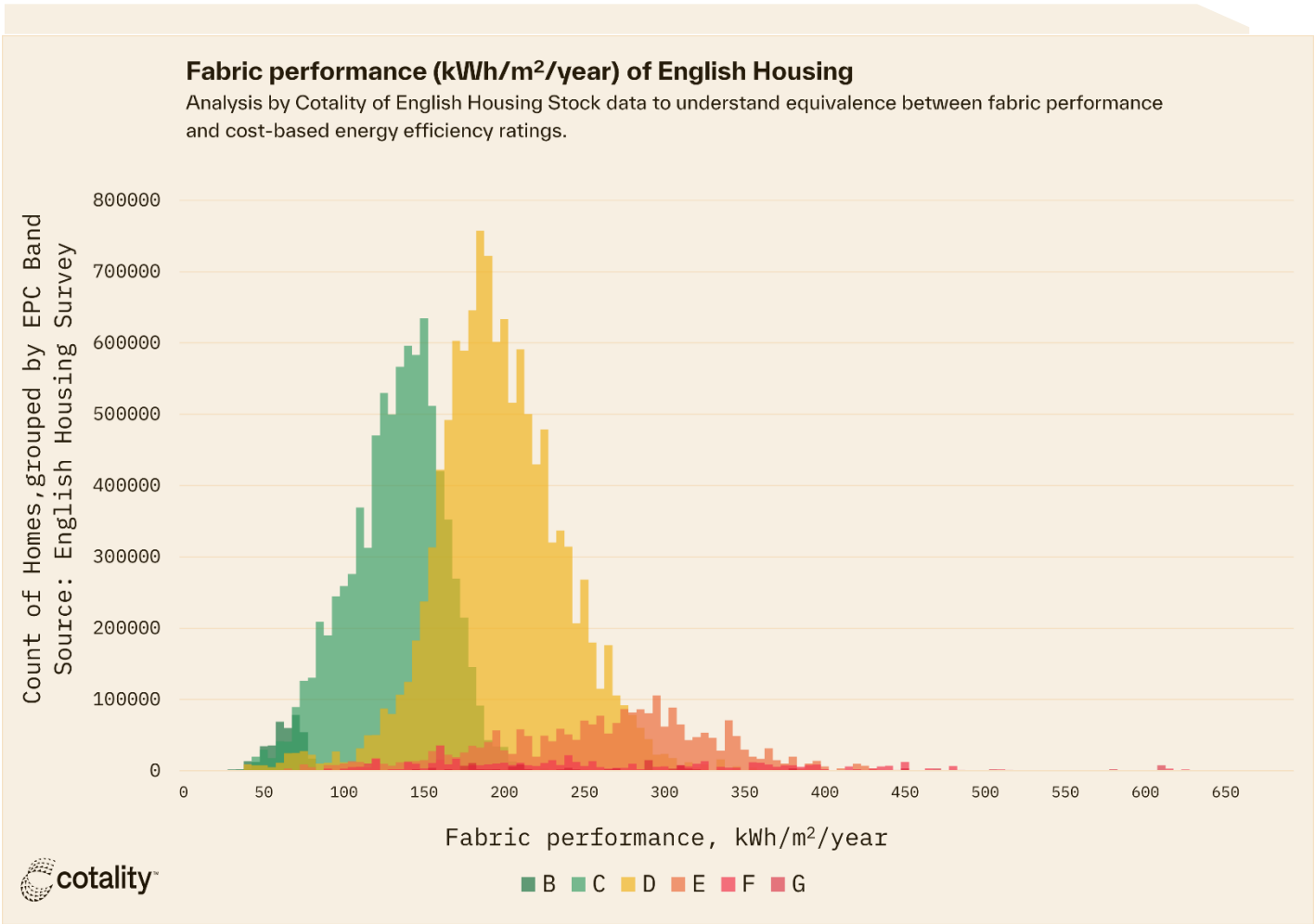
Method

To understand the implications of a change in the metric, Cotality has assessed the relationship between the current cost-based SAP ratings and two potential measures of fabric performance:

- Space heating requirement in kWh/m²/year, as proposed in the consultation on Energy Performance of Buildings Reform
- the W/m²K measure of SAP dwelling heat loss used by Government in its Options Assessment.

We have calculated these measures across the latest English Housing Survey dataset, extrapolated to the full housing stock. There are limitations in the detail due to the uncertainty around the definition of the new metric, the availability of comparable data for Wales, the lack of Band A homes in the English Housing Stock dataset and the availability of reliable tenure data. Despite these issues, we have determined that the analysis remains helpful to illustrate the potential scale of arising issues.

Analysis by kWh/m²/year



This analysis identifies a significant overlap between the Bands in terms of fabric performance, with the full ranges set out below.

Table 1: the range of fabric performance found for homes in the English Housing Survey dataset, by EPC Band

	Lowest kWh/m^2/year	High kWh/m^2/year
Band A	N/A	N/A
Band B	30	110
Band C	40	240
Band D	40	470
Band E	65	470
Band F	90	625
Band G	140	950

This means that wherever the fabric performance Standard is set, some homes currently in a lower Band may find they meet the Standard where those currently in a higher Band find they fail.

From our analysis of the English Housing Survey data, we assessed the impact of the two fabric performance standards used as proxies in the options assessment. If the Government were to set a fabric standard such that 20% or 50% of PRS properties would be below the standard, as considered in the options assessment, we estimate:

- At a fabric performance threshold of 230 kWh/m^2/year
  - 20% of homes would be below the standard
  - All but 0.03% of current EPC A-C homes will remain SAP C or above
  - 70% of current EPC D-G homes will attain SAP C or above
- At a fabric performance threshold of 175 kWh/m^2/year
  - 50% of homes would be below the standard
  - 93% of current EPC A-C homes will remain SAP C or above
  - 23% of current EPC D-G homes will attain SAP C or above

There are limitations to this analysis but in broad terms it highlights the challenge facing policy-makers.

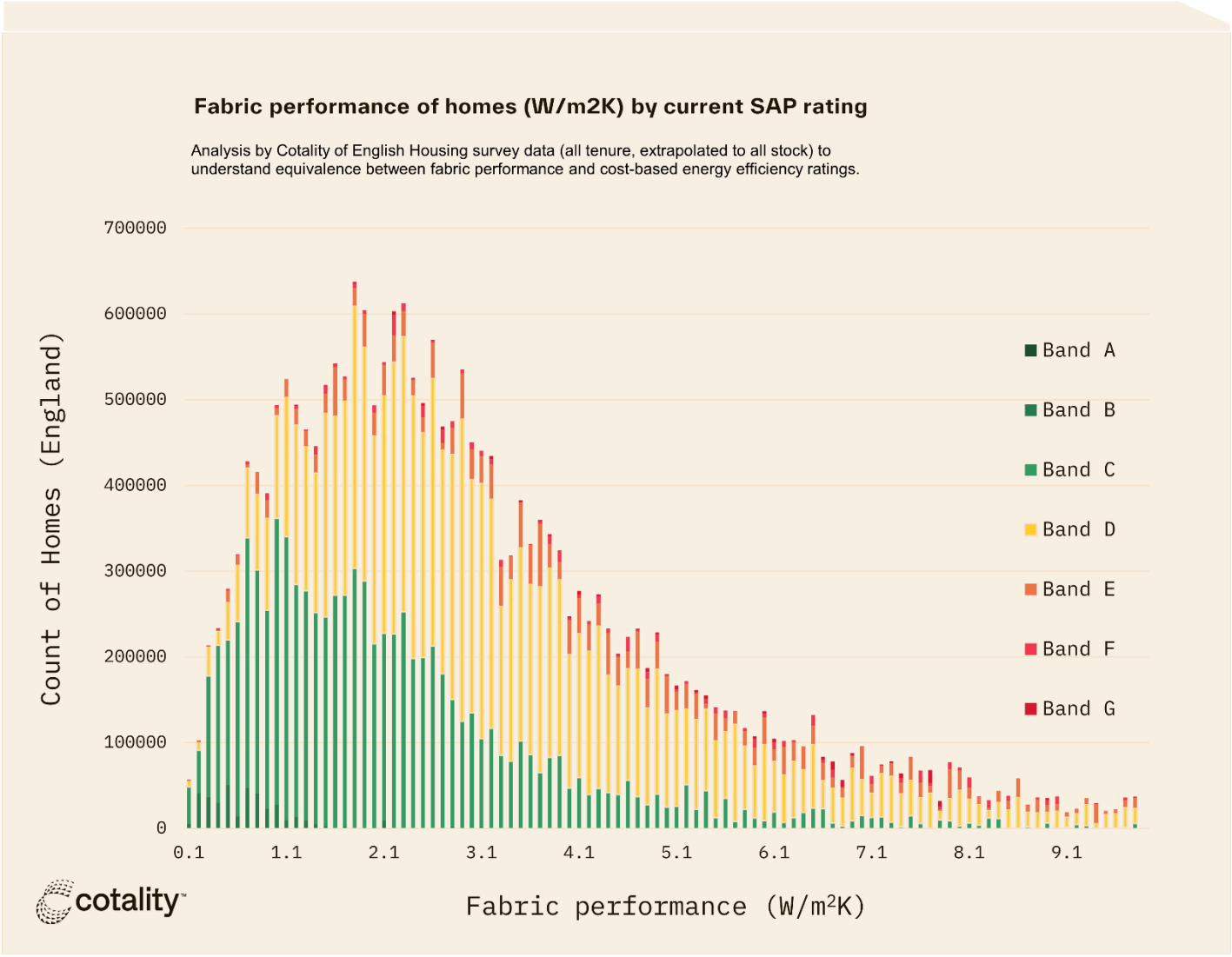
Set a robust target and some landlords may find themselves facing unexpected works, where they had thought their home(s) would meet the standard as originally proposed. This is most likely to affect landlords who have one or more home(s) that have solar PV or very efficient heating in an older, perhaps solid-walled home.

Set a target that avoids such unexpected works, and the Standard may not deliver on its original aim to address fuel poverty, as homes currently rated D-G may meet the standard based on fabric performance while still having inefficient heating systems.

Analysis by W/m² K

The Government's Options Assessment considers fabric performance using proxies in terms of SAP dwelling heat loss (W/m² K). To understand the potential impact on EPC Band performance, we have calculated this for homes assessed by the English Housing Survey and extrapolated findings across the English Housing Stock.

As with the earlier metric, EPC Bands show a broad fabric performance, with the performance of homes in current Bands A-C ranging from 0.1 to 10 W/ m² K.



The Government considered two proxy figures for a potential Standard set against this metric.

We applied these to the English Housing Survey data and found:

- At 3 W/m²K, 44% of homes currently in Band D-G would meet the standard
- At 4 W/m²K, 63% of homes currently in Band D-G would meet the standard

This means fuel poverty campaigners will find many homes that they would have expected to require work under a MEES, would not under these standards.

4 W/m² K

Heat pump ready standard:– this aligns with a threshold of fabric performance used in DESNZ modelling to determine when a property is “heat pump ready” for a low temperature heat pump. With this standard, around 20% of PRS properties – those with the worst fabric performance – would currently be below standard.

3 W/m² K

Higher standard: 3 W/m2 K – with this standard, just under 50% of PRS properties would currently be below standard. Of those, around 95% are judged to be below Band C for energy costs on current EPCs.

Additionally, we considered what the standards could mean for landlords who currently have ratings of EPC Band C or better.

- At 3 W/m²K, 22% of homes currently in Band A-C would fail the standard
- At 4 W/m²K, 11% of homes currently in Band A-C would fail the standard

This could mean unexpected costs, which may be of particular concern where landlords have made investment decisions based on the EPC rating – whether that was in the purchase or renovation and retrofit of the home. This should certainly be a factor in social housing where landlords have had to start investment on the basis of regulatory risk arising from the MEES outlined in 2017 and 2023, and the number of homes requiring work.

Analysis

Our view is that standards are welcome, they have been signalled for many years, and will help deliver healthier homes in a way that benefits both tenants and our environment. But this analysis has raised concerns.
While we will continue to make the case for simplicity and ease of communication, two findings have challenged our view that there should be a single metric.

- Newer, insulated homes with expensive to run heating are more likely to pass a fabric standard than achieve the current cost-based SAP C Band. The policy of Minimum Energy Efficiency Standards is rooted in a desire to address fuel poverty. We would not want to see this intent lost, but there is a risk if heating systems are not considered alongside fabric performance.

- Older homes that have achieved SAP C through solar PV, lighting and efficient heating are more likely to find they drop below SAP C with a change to a fabric-focused metric. Minimum Energy Efficiency Standards should be a catalyst for efficiency across fabric and heating, and not penalize those who have moved early. This will become even more important with the extension to social housing, where substantial investment has taken place, with Government funding, to improve homes to SAP C.

We therefore think that, in the absence of another signal to homeowners and landlords of the necessity to decarbonise and improve the efficiency of heating systems, a heating system metric - with a focus on efficiency - is required as a secondary metric in the private rental sector. Where no further fabric improvement is feasible the landlord should be able to achieve the standard through an efficient heating system.

A smart readiness metric would not deliver such obvious and direct benefits to tenants, and would add complexity to communicating the incoming Standard, and Cotality is keen that the Standard remains focussed on the delivery of lower bills despite moving from a cost-based metric.