

Rt Hon Claire Coutinho MP
Department for Energy Security and Net Zero
3 Whitehall Place
London
SW1A 2EG

Smart Building Rating: A Digital Tool to Scale Demand Flexibility

Dear Secretary of State,

We are writing to introduce you to the exciting new Smart Building Rating (SBR) proposal, designed to unlock consumer demand flexibility at scale. Find the full report attached.

Volatile fossil fuel prices have made the case for homegrown renewable generation clearer than ever - tackling climate change and bolstering our energy security. This complicates our ability to balance supply and demand; we cannot fire up renewables as we do fossil fuel plants. To harness the power of the wind and sun, we need a far more flexible system. This is not optional, nor can it be put off. Renewables are expected to grow from over 40% of electricity generation today to around three-quarters by 2035, while electricity demand nearly doubles.

Consumers themselves can play a central role in balancing the grid, while cutting their bills. Households and businesses can shift their energy demand to when supply is cleanest and cheapest - made easy through smart technologies and automation. This will maximise the use of cheaper renewables and mitigate the scale of grid reinforcement needed. Demand flexibility could save the system between £9.6 to £16.7 billion in 2050, while smart systems export opportunities alone could support ~£3bn and 14,000 jobs in 2050.

The prize is clear, yet there is no policy mechanism to drive the transformation needed. We need to ready our buildings for “smart” electrification by ensuring they are equipped with the low-carbon technologies capable of delivering flexibility, such as EV chargers, heat pumps, smart thermal stores, batteries and solar. This will enable a smart energy system that can tap into flexibility from tens of millions of assets in our homes and businesses.

The SBR measures a building’s capacity for flexibility, or its “smartness”, allowing us to place a value on flexibility that engages consumers and incentivises property upgrades. It is a targeted new measure to complement much-needed reforms to the Energy Performance Certificate. A range of metrics can deliver complementary outcomes for “net zero buildings” - energy efficiency, flexibility and decarbonisation.

Initially, we will develop a proof-of-concept which allows users to generate an SBR for their home, demonstrating its public policy value. **We would like to see Government consult on the introduction of a new measure of demand flexibility in future, and work with industry on its effective implementation.**

The organisations listed below support the SBR as an essential tool in our transition to a smart, flexible grid while bringing down energy bills.

We would welcome further discussion on the proposal.

Yours sincerely,



Lucy Yu
CEO, Centre for Net Zero



Guy Newey
CEO, Energy Systems Catapult

Organisations supporting the Smart Building Rating proposal



Rt Hon Michael Gove MP
Levelling Up, Housing and Communities
2 Marsham St
London
SW1P 4DF

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