

To: Rt Hon John Glen MP, Chief Secretary to the Treasury

Cc: Lord Callanan, Parliamentary Under Secretary of State (Minister for Energy Efficiency and Green Finance)

Sent by email

25 May 2023

Dear HM Treasury

### **Modernising the technology list for Energy Saving Materials**

We welcome the UK government's call for evidence to expand the technology list for energy saving materials. **We recommend that the government modernises the technology list by adding batteries, smart thermal stores and home EV chargers for VAT relief.** Extending this VAT relief to flexibility products will incentivise the rapid uptake of these low carbon, energy saving materials. We additionally recommend that the VAT relief for energy saving materials runs until 2030, in line with the government target to reduce energy demand by 15% by 2030.

No new technology has been added to the list since 2006. During those 17 years, we have seen the rapid advancement of software and the decline in costs of flexible products that can respond dynamically to changes in the carbon intensity of electricity generation. With the expansion of renewable generation in recent years, the ability of flexible demand products to respond to carbon intensity is more valuable than ever. The government has ambitious targets to go further and decarbonise the power system by 2035 as part of the UK efforts to tackle climate change. This requires more demand products that can best adapt to the intermittency of renewables. These products can provide flexibility to help to reduce infrastructure upgrade costs for the distribution and transmission system.

Adding these flexible products to the technology list would reduce costs for consumers, remove competitive distortions and minimise perverse scenarios for installers of low carbon technologies. Today, a smart thermal store is zero-rated when installed as part of a heat pump system and a battery is zero-rated when installed with a solar panel array. However, households pay 20% VAT for the same products when added to an existing heat pump system or solar panel array. This extra 20% acts as a disincentive for people to add flexible demand products

to improve the efficiency of their system and to efficiently use renewables through the wider electricity system.

Modernising the technology list for energy saving materials would help the UK government and Ofgem to achieve their aim of a smart, flexible power system. The government recognises the importance of flexible demand products and is introducing standards for Energy Smart Appliances such as heat pumps, EV chargers and smart thermal stores. Ofgem has required Distribution Network Operators to develop Distribution System Operator businesses and is proposing that the Future System Operator takes on a flexibility planning role. National Grid ESO has run a Demand Flexibility Service during winter 2022/23, as well as developing other products for market. Adding flexibility products such as batteries, smart thermal stores and EV chargers to the technology list for energy saving materials would support this work.

As well as expanding the technology list, we recommend that the temporary zero-rating of energy saving materials runs until 2030. The government has a target to reduce energy demand by 15% by 2030. This means incentivising people to reduce their consumption of fossil fuels and install low carbon products. Expanding the technology list and extending the duration of the zero-rating is an opportunity for the UK government to ensure that the tax regime supports people to reduce their energy demand.

This letter has been coordinated by Thermal Storage UK. Co-signatories to this letter may respond to the call for evidence separately.

Yours sincerely

Thermal Storage UK  
Caldera  
Sunamp  
tepeo  
Skipton Building Society  
UK Power Networks  
Citizens Advice  
Nesta  
BEAMA  
Sustainable Energy Association  
E3G  
Powervault

EON  
Ovo  
EDF  
Flexitricity  
Energy Saving Trust  
Association for Decentralised Energy  
E3G  
Eco Mirage UK  
Fischer Future Heat  
Think Electric Heating  
Heatio  
Heat Pump Federation