

James Murray MP,  
Exchequer Secretary to the Treasury

29 August 2024

Dear Minister

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

**We recommend that the UK government modernises the Energy Saving Material (ESM) technology list by adding heat batteries for central heating as a product eligible for zero-rated VAT as part of the Budget on 30 October.**

Officials in the Department for Energy Security and Net Zero (DESNZ) and HM Treasury have offered great support to adding heat batteries for central heating, recognising this will incentivise the rapid uptake of low carbon heating products and support the government's Warm Homes Plan. We understand that the extension now solely depends upon a Ministerial direction. We also recommend that the VAT relief for all ESMs, including heat batteries, runs until 2030.

To meet the government's ambitious targets to accelerate power decarbonisation to 2030, we will need to expand renewable generation and harness flexibility to balance demand and supply on the grid. Demand-side products that can be used flexibly, like heat batteries for central heating, will be more valuable than ever because of their ability to adapt to intermittent renewable generation. Making heat batteries for central heating more accessible to households will be crucial in helping to reduce the demand for, and cost of, network reinforcement to upgrade our distribution and transmission system as we transition to an electrified future.

Adding heat batteries for central heating to the technology list would reduce costs for consumers, remove competitive distortions and minimise perverse scenarios for installers of low carbon technologies. Today, a heat battery for hot water is zero-rated for VAT when installed as part of a heat pump system. However, households pay 20% VAT when installing a standalone heat battery for central heating or when adding a heat battery for hot water to an existing heat pump system. Charging VAT at 20% for heat batteries for central heating is a disincentive for people to add flexible products to decarbonise their heating and to efficiently use renewable generation through the wider electricity system.

Modernising the technology list for ESMs would help the UK government and Ofgem to achieve their aim of a smart, flexible power system. Additionally, it will demonstrate to industry a willingness to rapidly accommodate product innovation, which will need to be encouraged in the drive towards net zero. Positive progress has been made to recognise the importance of flexible demand products. For

example, DESNZ's policy to introduce standards for Energy Smart Appliances such as heat pumps, EV chargers and heat batteries through the Smart Secure Electricity System programme. Adding heat batteries for central heating to the technology list for ESMs would support this work.

We are aware from discussions with officials that both DESNZ and HM Treasury support extending zero-rated VAT to cover heat batteries for central heating. HMRC recognised in December 2023 and meetings in 2024 that heat batteries meet the criteria to qualify as an ESM. We understand that the extension now solely depends upon a Ministerial direction.

**As well as expanding the technology list, we recommend that the temporary zero-rating of ESMs be extended until 2030.** This will provide a long term investment incentive for both people and the industry. Expanding the technology list and extending the duration of the VAT zero-rating is an opportunity for the UK government to ensure that the tax regime supports people to reduce their energy demand and carbon emissions.

We have shared this letter with the Rt Hon Ed Miliband MP, Secretary of State for Energy Security and Net Zero, Miatta Fahnbulleh MP, Minister for Energy Consumers and Lord Livermore, Financial Secretary to the Treasury. We understand that a number of parliamentarians are writing to you separately calling for this extension.

This letter has been coordinated by Thermal Storage UK. If you have any questions, please contact [tomlowe@thermalstorage.org.uk](mailto:tomlowe@thermalstorage.org.uk)

Yours sincerely

