

## UNITED KINGDOM

British Standards Institution (BSI)

Standards supporting UK ambitions to net zero

### Overview

To accelerate the growth of energy smart appliances (ESAs) in the UK and enable the roll-out of electric vehicle (EV) charge points, the UK government supported a stakeholder-led process to create the necessary knowledge infrastructure. The initiative included a major standards development work stream led by the British Standards Institution (BSI) in its role as the UK's national standards body, and is a critical enabler for the UK government's stated ambition of decarbonizing the operation and use of the UK's transport system and achieving cross-economy net-zero impact by 2050.

It was important to ensure broad stakeholder inclusion and the forum had a government cross-department team: the Office for Zero Emission Vehicles (OZEV), the Department for Business, Energy and Industrial Strategy (BEIS) and the Department for Transport (DfT); the regulator (Ofgem) and representatives of the UK's innovation community (Energy Systems Catapult); industry and trade associations (distribution network operators, Energy Networks Association, BEAMA, Society of Motor Manufacturers and Traders, Confederation of British Industry, techUK); the joint government–industry Electric Vehicle Energy Taskforce (EVET); certification and accreditation bodies (United Kingdom Accreditation Service, Association of British Certification Bodies); academia, research and consumer interest groups such as the UK Energy Research Centre (UKERC) and Citizens Advice.

From the forum, BSI formed a Strategic Advisory Group (SAG) to guide and coordinate a multi-stakeholder, collaborative approach to the development of new standards that would be aligned with existing and planned regulation. The agreed programme outcomes were based on national policy principles of grid stability, data security and privacy, interoperability, and consumer focus.

The approach built on previous research and engagement work commissioned by BEIS around standards, policy and regulation in this area, which included mapping the existing framework of standards and regulation and identifying knowledge gaps and needs. In May 2021, two new consensus-based, fast-track, iterative publicly available specifications (PAS) were published: PAS 1878, *Energy smart appliances – System functionality and architecture*, and PAS 1879 *Energy smart appliances – Demand side response operation – Code of practice*.

## Outcomes and benefits

The stakeholder work and standardization programme will help to inform planned government regulations and guidance on ESAs and smart EV charge points, as well as provide the basis for a future certification market and accreditation framework. After an initial period of gathering implementation feedback, it is envisaged that we will put the documents forward for consideration to the international standards community in ISO and the International Electrotechnical Commission (IEC) for use as global standards for industry.

## Partners involved

### *Requesting organization:*

- UK government

### *Supporting organizations:*

- British Standards Institution (BSI)

## Timeline

The initiative ran from early 2019 to May 2021.

### References

- BSI, “Energy Smart Appliances Programme” [Web page]:  
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