

Faraday Battery Challenge:

standards programme

The Faraday Battery Challenge

There is growing demand for batteries for electrification, with the market estimated to be worth £5 billion to the UK and £50 billion to Europe by 2025. The Faraday Battery Challenge (FBC), backed by the UK government will invest in research and innovation projects and new facilities to scale-up and advance the production, use and recycling of batteries. It will lower carbon and air pollution in the UK, while creating new opportunities and industries.

Standards and best practice have a key role to play in the FBC and in supporting the growth of the industry in the UK and internationally.



Standards programme

BSI is leading the standards programme, which is sponsored by Innovate UK and the Faraday Battery Challenge (FBC).

The objectives for the programme, as part of the wider FBC, include:

- Developing and codifying good practice to fill in key knowledge gaps and responding to pressing challenges (including around health, safety and environmental considerations) - critical to UKBIC and UK industry
- Building public confidence in batteries and EVs
- Identifying further gaps and challenges and devising appropriate responses
- Growing the Faraday battery network

The programme, which started in 2019, covers three areas of work:

- Scoping including workshops and research into the current standards landscape
- The development of three Publicly Available Specifications (PASs)
- Strategic roadmap for future standards and standards uptake

PAS development

The three PASs will provide recommendations for the health, safety and environmental considerations for battery manufacture in:

- 1. Electrode and cell components
- 2. Pack and modules
- 3. Vehicle design

These PASs will include consideration of end of life, second life and recycling aspects. They will also form the basis of a wider, long-term standardization approach to battery manufacturing, in the UK and internationally.

The three PASs will be of interest to a wide range of industries and stakeholders including manufacturers of pack and module batteries, cell manufacturers, vehicle manufacturers, government, regulators, insurance companies, lenders, financing companies, local authorities, shipping, fire, supply chain, reclamation, recycling and re-manufacturing companies.

Scoping and roadmap

The Programme kicked off in October 2019 with a workshop, attended by 40 industry and government stakeholders, to launch and scope the overall programme. This engagement laid the foundations for the programme, based on an understanding of current challenges for industry, and will help inform thinking for the strategic roadmap for future standards

As part of the initial scoping stage we also:

- Created a standards landscape report (looking at relevant published standards and initiatives and identifying gaps for development)
- Facilitated workshops to develop the detailed scopes for the proposed three PASs, and to secure industry/stakeholder involvement in the actual PAS development process.

Following the development of the three PASs, BSI will gather the learnings from the programme as a whole and build on the strategic overview conducted as part of the scoping activities. This will enable BSI to develop a strategic roadmap for future standards and standards uptake in support of the aims of the Faraday Battery Challenge.



Get involved

If you would like to find out more about the FBC standards programme, or get involved in either the public consultation for the PASs or in discussions on the future roadmap then please contact us at:

faradaybatterychallenge@bsigroup.com