

ClimateTech APPG Evidence Session: Energy Generation

Session Review



Format: Presentations from Firms with Q&A
Date: Wednesday 12th February
Time: 11.00-12.00
Venue: Room S, Portcullis House, 1 Victoria Embankment, London SW1A 2JR

Chair/Facilitator: Charlie Mercer

Objective: For members of the ClimateTech APPG to hear from entrepreneurs developing cutting edge technology that will generate low carbon electricity, including the economic and decarbonisation impact they are having today, and their potential to scale given the right support from policymakers.

Context: The UK is home to thousands of entrepreneurs developing technology to produce low carbon electricity. This includes startups generating energy themselves, firms developing technology as part of the low carbon electricity supply chain, and firms decarbonising the grid.

According to data from Startup Coalition's 2024 ClimateTech Index, the energy sector is the most populous (338 firms), highest funded (£7.4bn), most valuable (13.7bn), and employs the most people (8,900) of any sector in the Index. On average, a firm in the energy sector has a median value that is 12% higher than the Index average, and has received 25% more in grant funding than the average firm in the Index. The sector also employs 28% more people on average than the average firm in the Index.

46% of firms in the sector are developing hardware, and 72% are engaged in some form of hardware or manufacturing (including energy generation and fuel production), with 62% of all debt financing secured by firms in the Index going into the energy sector.

This evidence session specifically focused on startups generating electricity.

Attendees:

Members:

- **Chair:** Steve Race MP
- **Officers:** Edward Morello MP and Brian Mathew MP
- **Members:** Lord Gascoigne

Secretariat:

- Startup Coalition - Charlie Mercer, Policy Director

Witnesses:

- [SENSEWind](#) - Sandra Eager, Corporate Development Manager
- [Nova Innovation](#) - John Meagher, Chief Business Officer
- [CorPower Ocean](#) - Shona Pennock, Lead Energy Systems Engineer
- [Orbital Marine](#) - Oliver Wragg, Development Director
- [IONECH](#) - Tom Kirk – Co-Founder and Operations Director

- [Tem Energy](#) - Joe McDonald, Co-Founder & CEO; Joe Collen, Account Director Words + Pixels

Others:

- Richard Arnold, Policy Director, Marine Energy Council & Secretariat for the Marine Energy APPG

Minutes

- The meeting was brought to order and opened at 16.00.
- After introductions from the Chair and the Secretariat, the evidence session was held under the Chatham House rule.
- The following minutes capture the key topics covered.

Key takeaways:

- The UK is home to a vibrant ecosystem of innovative firms designing technology to support the generation of low to no carbon electricity.
- The UK is particularly well suited to renewable generation, with natural conditions favourable to onshore and offshore wind, and one of the best geographical potentials for wave and tidal stream energy in the world.
- Renewable energy generation is expensive, and startups and scaleups in the sector are disproportionately exposed to fundraising challenges relative to other startups focused on software.
- The Contracts for Difference regime has been an incredibly effective catalyst for nascent renewable energy technology, and the ring-fenced funding for tidal stream was welcomed by the sector.
- Crucially, tidal stream is still at too early a stage to compete with wind or solar projects on the CfD regime, and it is therefore important to maintain the ringfenced funding going forward to support the scaling of the sector.
- Some colleagues suggested that if the Government wants to double down on the UK as the future home of tidal energy, then the ringfenced funding should be expanded.
- The wave sector does not currently have any dedicated CfD support and colleagues suggested that a similar ringfencing approach would be beneficial to scaling the sector.
- Across multiple sectors, colleagues flagged that dedicated support to de-risk CapEx in early stage proof of concepts would be beneficial.
- Multiple witnesses cited grid connectivity as a clear barrier to scaling.
- Whilst the concept of GB Energy was welcome, some witnesses suggested that more detail on the goals, scope and opportunities presented by GB Energy would be welcomed by the sector and greater clarity would support attracting investment.
- One witness focused on streamlining access between end consumers and generators of energy, highlighting the economic benefits of increasing efficiency in the market.