

Plenary Panel Session

Sharing International Experience in Industrial Decarbonisation

Chair



Peter Taylor

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Sharing International Experience in Industrial Decarbonisation

This panel discussed the different approaches countries around the globe are taking to decarbonise heavy industry, how we can collaborate and learn from one another more effectively, and how the UK can remain internationally competitive.

Chair: Peter Taylor (University of Leeds)

Panellists: Ian Livingston (Equinor); Amarinda Bazeley (DESNZ); Adam Whitmore (Bellona); Imogen Rattle (University of Leeds); Graeme Miller (2Co Energy Limited)

There was broad agreement that the world is not where it needs to be regarding efforts to decarbonise energy-intensive industry. However, panel members pointed to new, targeted initiatives like Mission Innovation, which are seeking to accelerate decarbonisation. They stressed there is a lot more activity on the ground than people are generally aware of, such as in the development of sustainable aviation fuels, bio-fuels and heat storage. The 2015 Paris Agreement has focused people's minds and there has been increasing international collaboration. The Inflation Reduction Act is making it easier to invest in projects in the USA.

The UK is pursuing a cluster-based model, focusing on CCUS and hydrogen to decarbonise its industry. Whilst this approach is being adopted in other countries with favourable geology and access to ports, it is not a feasible pathway everywhere. Other countries will have to rely much more heavily on electrification. It was agreed that there is scalability in the cluster approach and that clusters can act as a springboard for the first wave of industrial decarbonisation.

The UK's Contracts for Difference (CFD) model worked well for renewables, but it is not guaranteed to be successful for CCS. The USA is pursuing a tax credits system instead, which has been driving decarbonisation initiatives at a rapid pace. Panel members stressed that whilst it is important to learn from the USA, we also need to remember the wider world and keep an eye on emerging business models, policies, and exciting initiatives in other countries.

Aligning common global standards will be key for progression. For example, they will have a pivotal role in creating global supply chains for green steel and we need to ensure carbon accounting is done accurately so there is confidence that the steel is actually green. This in turn will involve ensuring the standards are in place for the low-carbon hydrogen needed for green-steel production.

The overall conclusion from the panel was that the more we can collaborate internationally and share knowledge globally, the faster we can decarbonise industry. We need to make the best use of solutions that are already available elsewhere, build mechanisms for knowledge exchange on a world-wide scale, and align global standards as soon as possible.