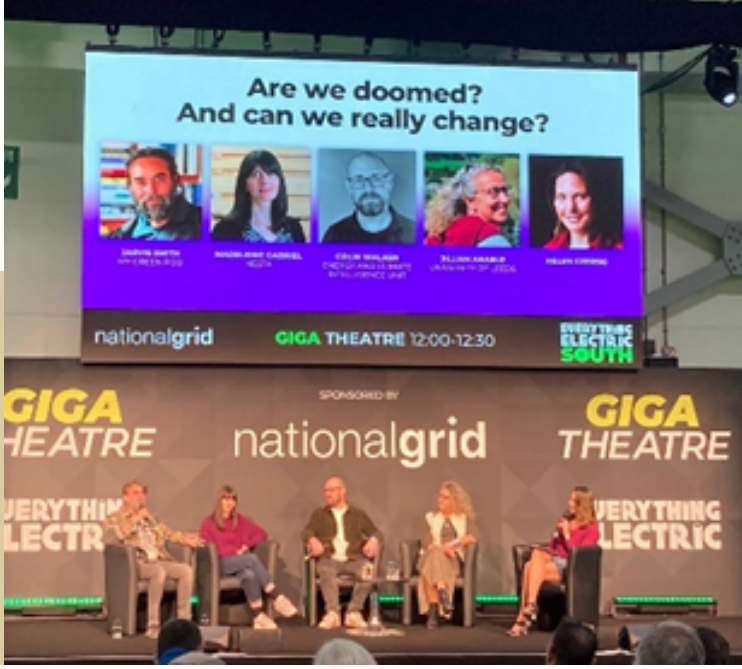
Durham University
Durham Energy Institute

Centre for Postgraduate Training in Energy

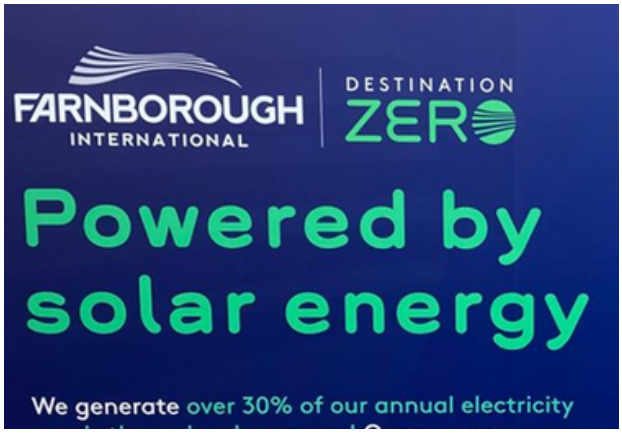
EVERYTHING ELECTRIC AT FARNBOROUGH, EXCEPT THE PLANES



For us researchers in energy, heading to an academic conference is a great way to network and keep up to date with developments in our research field. But a trade show can also offer opportunities to see how the latest developments in energy research meet their real life applications. It's also a chance to hear policy developments, to talk about diverse areas of interest outside our own research fields, and to widen career horizons. For all these reasons, it was great to visit Everything Electric South this weekend.

Ironic location for an energy transition event

The show was at Farnborough International Airport, one of the three biggest private jet hubs in the UK. Walking in past several billboards unashamedly greenwashing the Airport's environmental impact – "We generate 30% of our electricity needs through solar energy!" – I felt slightly nauseated, even without the kerosene fumes from Learjets and Gulfstreams catapulting up the runway every other minute. I'd had a 3km cycle along a busy dual carriageway from Farnborough station, DEI fellow Andrew Crossland who I was meeting, had a similar experience trying to access the event from North Camp rail station. The location felt incongruous, and left me wondering whether Farnborough international were hosting an energy transition event to boost their corporate environmental responsibility, and wondered how much of my entry ticket had gone to Farnborough International?' Farnborough airport's response to the climate crisis has been to expand and they have weaponised the law to bring injunctions (instruments typically used against abusive partners and stalkers) to silence critics (Guardian, 2024). I felt like I'd arrived at the wrong place; although I later heard Jilian Anable (University of Leeds) comment during a panel that – "Sustainable aviation is poppycock."



Range of expert panels cover a broad agenda

For all it felt like the wrong venue, there was a great range of talks (45 were listed at the two main theatres) including a balance of policy, technology and future-scanning with some refreshing criticism of the foci of the event itself. It was commercial and consumer-focused, meaning that actors in the wholesale market were less well represented than companies selling cars, microgeneration and storage.

Suppliers, Ovo, Octopus, E.On and Scottish Power were represented, as were National Grid and Community Energy cooperative, Ripple, together with a good range of companies focused on microgeneration and storage. I was disappointed that the microhydro and domestic-scale wind generation didn't have a presence. Dave Borlace (Just Have a Think) hosted discussion, with his characteristic flair for picking up and expanding on points of discussion and making complex ideas accessible. There were also a number of energy consultants and analysts - Claire Rowland of Energy Systems Catapult gave some great insights on quick fix policy and regulatory change, for example shifting levies from electricity to gas to incentivise electrification; or dropping marginal pricing in electricity markets, to ensure consumers benefit from cheap renewables. I also enjoyed Colin Walker's (Energy & Climate Intelligence Unit) input – "Change doesn't happen because of market forces; it happens because of strong Government intervention." There was plenty of tech talk for the energy geek. I sought out the speakers from a panel exploring 'The new wave of battery chemistries', to chat electrode potentials and why BYD are using sodium ion in cars. I have never before had a complete stranger interrupt a conversation to enthusiastically ply me with photos of his piles (the voltaic kind), which he had manufactured and installed himself).

'Everything elec-truck' - driving the energy transition?

For all the input of future transport systems, there was, no getting away from cars, and often ridiculously big and dangerous looking cars. I bought the Guardian newspaper on the day of the event, it had an article entitled 'Killer cars' which reviews the rising popularity of SUVs, stating "a vehicle with more mass will hit a person with more force. A higher bonnet makes it harder for the driver to see a child and more likely that their vehicle will strike their head, or an adults vital organs." It concludes by citing research that suggests a pedestrian or cyclist hit by a pickup truck is 200% more likely to be killed. Of the 110 exhibitors, the vast majority were focused on private vehicles, I only saw 2 micro mobility stands. Moreover, most of the cars were big. I tried to book a test drive of the smallest BYD car, but when I arrived I was given the key to a four-wheel drive, which boasted a much larger heat-managed battery. I can't say it wasn't fun to be behind the wheel of a car that does 0-60mph in 3.6 seconds, but it felt completely divorced from solving the future of transport. Chatting to the salespeople for the EV companies, it was clear that a big battery has become the new 'must have' accessory for those wealthy enough to afford a new EV. At an earlier panel, Jilian Anable commented on the dominance of private cars and their size at the event – "what we're doing is making inequality bigger… there are the haves and have-nots… things will get a lot more expensive, a lot more scarce, and a lot more politically volatile." Jarvis Smith, on the same panel concurred, saying "we live in an ultra-privileged society. We have taken from the global south for 500 years. We need to think about how we give back."

Ben Hall
Energy CDT Student