



Update from The Fusion Cluster

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APPG FUSION MEETING, 27 JUNE 2023

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Introducing The Fusion Cluster

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Bringing together the right organisations and people to get to fusion faster



The Fusion Cluster status

- * Established in November 2021, The Fusion Cluster operates across the UK
- 200+ organisations, including fusion energy developers, supply chain, investors, academia, UKAEA's national facilities
- * Several fusion energy developers from North America and Europe are involved:





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Highlights from UK public & private fusion

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Tokamak Energy

- Collaboration with General Atomics on high-temperature superconducting technologies for fusion energy and other applications
- One of eight companies to receive \$46 million from US Department of Energy's milestone-based fusion development programme
- Plans to build new advanced fusion prototype ST80-HTS at UKAEA's Culham campus



Tokamak Energy's E1 commercial fusion power plant



- Created a £12 million Prosperity Partnership with three universities and Machine Discovery to fund critical research in fusion and recruit 14 postdocs, 12 PhD students and 40 undergraduate interns
- * Launched fusion and STEM outreach programme at local schools
- * Agreement with UKAEA to design and construct new energy-gain demonstrator Machine 4 at Culham Campus







- * Spin-out from Kyoto University, with offices in UK and US
- * Picks-and-shovel business supplying and developing systems for fusion energy developers
- Raised \$79 million in oversubscribed series C funding round, taking total funds raised to \$91 million









- WK Industrial Fusion Solutions Ltd is being formed to deliver the STEP fusion prototype plant at West Burton
- * JET 40th anniversary: celebrating the achievements of one of the world's largest and most advanced fusion programmes, based in the UK at Culham
- * Spin-out technologies emerging
- * PM and Secretary of State for Energy Security & Net Zero launched the UK's "Powering Up Britain" energy strategy on a visit to UKAEA at Culham Campus in March





Thank you



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