

## **Assystem wins two contracts for new STEP fusion plant**

*Blackburn company will support first of a kind commercial fusion power plant*

Lancashire-based engineering giant, Assystem has been awarded two contracts by the UK Atomic Energy Authority (UKAEA) to support the development of 'STEP' (Spherical Tokamak for Energy Production), the UK's prototype fusion power plant that will demonstrate the commercial viability of fusion energy.

In the first contract, Assystem has been selected as key partner on the STEP Fuel Cycle Tritium Engineering Framework. Assystem's expertise in thermal energy management, electricity conversion and safety expertise in high-hazard environments will be instrumental to this work that will concern the inside the plant at temperatures expected to reach around 150 million °C.

The second contract involves the assessment of different designs for STEP's 'breeder blanket', the first-of-a-kind component responsible for creating the tritium fuel required for successful fusion.

Assystem and their partners, Thornton Tomasetti, will work with STEP's research team to develop software capable of undertaking simulations to help define breeder blanket designs that can produce enough tritium to advance the project to the next phase of simulation and testing, moving us closer to achieving commercially viable fusion energy.

Matthew Gallimore, Assystem's Chief Sales Officer said: *"STEP is a globally significant project in the development of fusion energy as it takes us a step close to the commercial phase of this new technology. The teams at Assystem bring strong experience in fusion gained on JET and ITER and we are excited to be creating more jobs in fusion development through these latest contract wins."*

Assystem is a global engineering company focused on delivering the energy transition projects that will reduce the impact of climate change. It is a leader in the development of innovative low-carbon technologies such as fusion energy and holds major contracts in its' development at ITER, where it has been Architect Engineer since 2005, including for the design of the Divertor Remote Handling System [1]

The firm is also actively involved in the EU DEMO and Joint European Torus (JET) projects and maintains a partnership with the Institute of Plasma Physics, Chinese Academy of Sciences to provide support on the development of the China Fusion Energy Test Reactor (CFETR). [2]

Assystem recognises that today there is a unique opportunity for the advancement of fusion technology globally, and to support its progress it commissioned the Institution of Mechanical Engineers (IMechE) to produce a report on the roadmap to commercial fusion which was launched on 20 October 2021. [3]

## ENDS

### NOTES TO EDITORS

[1] Assystem awarded contract for next phase of ITER divertor remote handling system:  
<https://www.assystem.com/en/press-release/assystem-awarded-contract-for-next-phase-of-iter-divertor-remote-handling-system/>

[2] Assystem announces two collaborations on fusion experiments with UK and with China:  
<https://www.assystem.com/en/news/assystem-announces-two-collaborations-on-fusion-experiments-with-uk-and-with-china/>

[3] The report, *Fusion Energy: A Global Effort – A UK Opportunity* can be read here:  
[www.bit.ly/FusionOpportunity](http://www.bit.ly/FusionOpportunity)

### ABOUT ASSYSTEM

**Assystem** is an international engineering group. As a key participant in the industry for over 50 years, the Group supports its clients in managing their capital expenditure throughout their asset life cycles. Assystem S.A. is listed on Euronext Paris. For more information please visit [www.assystem.com](http://www.assystem.com)

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### ABOUT STEP

STEP (Spherical Tokamak for Energy Production) is an ambitious programme to design and build a prototype fusion energy plant, targeting operations in 2040. It is a UK Atomic Energy Authority (UKAEA) programme with initial aims to produce a concept design and choose a site by 2024.

The STEP prototype will be used to develop the technology and enable a fleet of commercial plants to follow in the years after 2040.

STEP builds on UKAEA's expertise in developing 'spherical tokamaks' – compact and efficient fusion devices that could offer a more economical route to commercial fusion power.

More information: <https://step.ukaea.uk/>

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