

PRESS RELEASE

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Stoli Chem awarded a grant by the BEIS Industrial Energy Efficiency Accelerator (IEEA) to scale up continuous flow manufacturing for sustainable chemical production



The chemicals sector consumes the oil equivalent to 5.4 million cars annually to manufacture compounds as diverse as pharmaceuticals, battery materials and latex gloves. Establishing low-carbon, high-efficiency chemical production methods will make an important contribution to the UK's Net Zero ambitions and competitiveness.

Stoli Chem's £1.3M project "Scalable continuous manufacturing for sustainable chemical production", awarded by the Industrial Energy Efficiency Accelerator (IEEA), will help create a step-change in production technology for the fine chemicals and pharmaceuticals industries, transforming inefficient batch processing into scalable continuous manufacturing.

Stoli Chem, in a collaboration with Robinson Brothers, one of the UK's largest independent chemicals manufacturers, and the Process Intensification Group of Newcastle University will scale up Stoli's Scalable Agitated Baffle Reactor (SABRe) system. The goal – to halve the economic and environmental costs of chemical manufacturing.

The IEEA is funded by the Department of Business, Energy & Industrial Strategy (BEIS) as part of the Net Zero Innovation Portfolio (NZIP) and it is managed by the Carbon Trust with support from Jacob's and Innovate UK KTN.

Dr Nikolay Cherkasov, Stoli Chem's Managing Director, said: "Our SABRe platform combines the flexibility of batch with precision and efficiency of continuous processes. It can cut energy consumption in half and significantly reduce the use of solvents. With the IEEA's support, our consortium will scale and demonstrate green chemistry in an industrial setting."

"This will create new jobs in the Midlands also. Stoli is hiring another organic chemist and chemical and mechanical engineers," Dr Cherkasov added.

Paul McKinney, Associate Director at the Carbon Trust and programme manager of the IEEA, commented: "Decarbonising the fine chemicals industry is a key challenge for the UK. With the support of the BEIS Industrial Energy Efficiency Accelerator, I hope this project will bring the innovation and collaboration that will help accelerate the chemicals industry towards that goal."

Enquiries

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About Stoli Chem

Stoli Chem designs and manufactures continuous flow chemical production systems and processes that dramatically cut the cost of fine and speciality chemicals such as fragrances, food supplements, cosmetics and intermediates for pharmaceuticals. Established in 2016 as a University of Warwick spinout, Stoli Chem has extensive expertise and experience in heterogeneous catalysis, characterisation, and process development and analytics. <u>https://stolichem.com</u>

About Robinson Brothers

Founded in 1869, Robinson Brothers is one of the largest independent manufacturers of fine chemicals and rubber accelerators, offering a wide range of custom manufactured intermediates on a commercial scale. <u>https://www.robinsonbrothers.uk/</u>

About the Process Intensification Group, Newcastle University

The Process Intensification Group (PIG) at Newcastle University is the largest research group in the world, with over 60 active researchers, working to reduce the size of process technology by a factor of 10 – 100. Process intensification drastically reduces capital costs, running costs, safety hazards and improves process control. The group develops technologies for reactions, separations, mass transfer and mixing for a range of partners in the chemicals, food and pharmaceuticals industries. http://pig.ncl.ac.uk/

About the BEIS Industrial Energy Efficiency Accelerator (IEEA)

The IEEA is a four year programme funded through the BEIS Net Zero Innovation Portfolio (NZIP), a £1 billion fund announced in the UK Prime Minister's ten point plan for a green industrial revolution, to accelerate the commercialisation of low carbon technologies, systems and business models in power, buildings, and industry. £8 million in funding have been made available to fund demonstration projects through Phases 3 and 4 of the IEEA programme projects. It is anticipated that the BEIS IEEA funding will unlock up to £10 million of additional investment from the private sector to support the demonstrations.

programmes.carbontrust.com/ieea

About the Carbon Trust

The Carbon Trust is a global climate consultancy driven by the mission to accelerate the move to a decarbonised future. We have been pioneering decarbonisation for more than 20 years for businesses, governments, and organisations. Drawing on a network of over 300 experts internationally, the Carbon Trust guides organisations through their journey to Net Zero. From strategic planning and target setting to delivery, activation, and communication - we provide smarter ways to turn intent into impact.

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