

NEWS RELEASE

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Oxford Flow partners with nZero Group to deliver zero-carbon fuels for domestic heating

[Oxford Flow](#), the flow control equipment specialist, will provide its IM-S gas regulators as part of a partnership with Thyson Technology, an [nZero Group company](#), on SGN's [H100 Fife Future of Gas project](#), in Scotland.

H100 Fife is a first of its kind project to employ a direct supply of clean power to produce hydrogen in Buckhaven and Denbeath that will bring renewable hydrogen into homes, providing zero-carbon fuel for domestic heating. In the project's first phase, the network is expected to heat hundreds of local homes using clean gas produced by a dedicated electrolysis plant, powered by a nearby offshore wind turbine.

Oxford Flow will supply IM-S gas regulators equipped with PRX2L pilots and PB1 balancers to nZero Group, which will make up part of its twin stream active-monitor station. IM-S offers an increased flow capacity and has been designed and verified for use with up to 100% hydrogen, comfortably exceeding the UK government's target for Britain's gas networks to be ready to deliver a 20% hydrogen blend. Furthermore, Oxford Flow has engineered the regulator to eliminate the diaphragm, the most common failure and wear point in conventional gas regulators, contributing to a minimum service interval maintenance interval of up to ten years and eliminating the risk of leaks.

Faris Churcher, Business Lead – Gas & Energy Transition at Oxford Flow, commented: "Our partnership with nZero Group is another step in an exciting direction toward our ongoing support of the energy transition of our gas networks here in the UK. We're thrilled to be supporting another hydrogen to grid project, and it's positive to see gas networks and suppliers getting behind innovative technology as we transition from natural gas to hydrogen. IM-S has been engineered for use with both, and it makes sense that as we look at how we blend hydrogen into our networks, we work together to utilise technology that is guaranteed to support that shift for the long term."

The nZero Group, through its ownership of Thyson Technology and Orbital Gas Systems, two UK leading measurement and control partners across the natural gas, low carbon hydrogen, CCUS, petrochemical, and waste to energy sectors, aims to help the country achieve net zero greenhouse gas emissions whilst growing the talent base through its knowledge and track record. This partnership with Oxford Flow is just one example of how it solves complex strategic challenges for energy transporters, producers and industrial users, bringing together new and existing technology.

Matt Allen, Managing Director at nZero Group, added: "We're delighted to be partnering with Oxford Flow to deliver the H100 Fife project. Oxford Flow's commitment to engineering innovative solution and its drive to support the transition to net zero from its inception was clear to us – but the quality of its products and ongoing support stands it apart. It's difficult to find solutions that have

been 3rd party verified for use with up to 100% hydrogen, but Oxford Flow has put in that work, and it has given us immense confidence that this is the right partnership.”

In addition, Oxford Flow has also been awarded a contract directly from SGN to provide training for six to eight H100 technicians on the use and maintenance of its IM-S gas regulators.

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About Oxford Flow

Oxford Flow designs and manufactures innovative pressure control equipment using technology developed at Oxford University. Engineered to be more compact and lighter than conventional technology, Oxford Flow’s control valves and regulators eliminate the most common points of failure, leakage, and emissions; significantly reducing cost and maintenance for oil & gas, gas distribution and transmission, water and process industries.

The IM series range offers excellent pressure or flow control for gas distribution, gas transmission, fuel gas control, and various industrial applications. The compact design utilises the patented piston control system to deliver superior process control in a full stainless steel construction. The unique design employs a single piston instead of a diaphragm, increasing reliability and reducing maintenance costs.

About nZero Group

nZero Group is the parent/holding company of Orbital Gas Systems and Thyson Technology. Orbital Gas Systems has a rich history in delivering operational technology such as gas quality measurement, fiscal metering, pressure reduction stations, and odourisation solutions to the UK natural gas industry, while Thyson Technology’s pedigree was formed by delivering complex integrated analytical solutions to a range of industries, including offshore oil and gas, petrochemical, and natural gas sectors.

Both organisations have a significant installed base across the UK of biomethane gas to grid plants and share complementary firsts in hydrogen blending for gas networks and industrial fuel switching, with ambitions to serve the UK’s decarbonisation programme – and beyond.

For further information, please visit:

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