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Welcome to our June newsletter, your essential read for all the latest news, insights and key dates related to gas decarbonisation. If you're joining us for the first time, our focus is on bringing the gas industry together - to turn our common goal into a shared experience and reduce the complexities associated with the net zero transition.

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01 Notable projects

HyDeploy update

After 11 months of successfully blending hydrogen into a small section of live network in Winlaton, the HyDeploy 2 project came to an end this month. This important decarbonisation project saw Northern Gas Networks, Cadent, the HSE and other partners collaborate to prove the gas network's ability to accommodate a 20% hydrogen blend.

Industry processes to start reverting the temporary arrangements will now be started. The project affected 668 customers (mainly domestic) and saw NGN process voluntary customer payments to all properties across c. 30 suppliers. Almost all payments have been processed through business as usual



industry flows, reaching customers in a timely manner. Supplier of Last Resort (SOLR) transfers impacted some properties, however NGN and Xoserve successfully worked with those affected to ensure no adverse impact as a consequence of HyDeploy 2 or the SOLR process.

HyDeploy 2 has provided some crucial insight into how introducing hydrogen to the gas mix will affect industry parties and energy consumers, and as closedown processes are undertaken in CDSP systems, we'll continue to keep the industry informed during the return to business as usual. These important learnings will help shape future projects and ways of working. Read more.

Heat Networks Zoning

The outcomes of the BEIS Consultation on Heat Network Zoning were published this month. The key takeaway is that the UK government will be pushing forward with plans to develop new heat network zones by 2025, in line with the commitments made by their 2020 Energy White Paper. The plan is to undertake a national mapping exercise of the gas network and identify areas where heat network zones can deliver low cost, low carbon supply solutions using sustainable alternatives to natural gas. This will provide an excellent opportunity for the identification of suitable 'hydrogen zones'. See the Heat Networks Government Response document.

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01 Notable projects

HySupply 2 competition

The winners of a £60 million government competition to develop hydrogen as the superfuel of the future have now been announced. 28 innovative hydrogen projects across the UK will receive a share of the funding, which is expected to create 12,000 jobs. Among the winners were Yorkshire's ITM Power, which has been awarded more than £9.2 million to build a next generation 5MW electrolyser stack; Cadent Gas Limited in the West Midlands, which will receive £296,174 for feasibility work focusing on how to purify hydrogen that has been through the gas grid to make it suitable for use in vehicles like lorries; National Nuclear Laboratory in Cumbria, which will receive £242,619 to review and model processes that can use the heat from nuclear reactors to produce hydrogen. <u>Read more</u>.

Industrial fuel switching programme

The successes of Phase 1 of the government's Industrial Fuel Switching Programme have now been shared in a document that highlights some of the important projects underway to decarbonise UK industry. Hydrogen will play a crucial role in making net zero operation a possibility for our nation's I&C businesses, potentially ending their reliance on fossil fuels. Read about the success stories.



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02 Industrial clusters

If the UK is to achieve its ambitious net zero plans, it will be vital to understand how emissions from our primary industrial areas could decrease over time. In an effort to accelerate change and provide plans for an optimal route to net zero, several projects are underway within 'industrial clusters': areas where industrial CO_2 emissions are high and the potential to make significant reductions is strong.

These include:

- The Acorn Project
- Humber Cluster Plan
- Hynet
- South Wales Industrial Cluster
- East Coast Hydrogen Report

Xoserve is working closely with the industry to understand how this might impact other areas, and facilitating stakeholder engagement to support the development of shared plans.

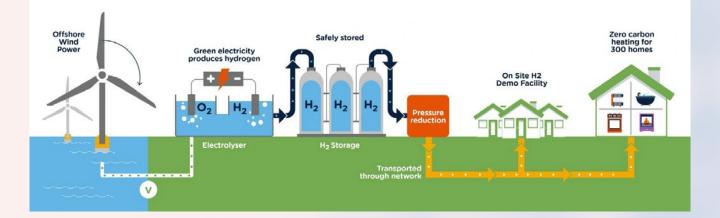
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03 Spotlight on H100 Fife

H100 Fife is a world-first project led by SGN, bringing green hydrogen to homes on the East coast of Scotland. Up to 300 homes in Levenmouth will have the opportunity to opt in to 100% hydrogen gas supply and have their natural gas boiler and appliances replaced with new hydrogen-ready versions, which will be maintained for free by SGN for the duration of the project. Participants will remain with their existing supplier when they transition to hydrogen and will not pay anymore for their hydrogen gas supply compared to natural gas. They will also be able to change their gas supplier, just as they can do now, at any time during this project.

By switching homes from natural gas to hydrogen gas for their heating and cooking requirements, H100 Fife lays the foundations for future decarbonisation of the gas network in Scotland and the UK. The project also provides an important opportunity to understand how the switch to hydrogen will impact the gas industry, including for billing, metering and the way that gas energy content (Flow Weighted Average Calorific Value, or FWACV) is measured across the system.

The H100 project is set to go live in 2023 and run until March 2027. Read more about H100.





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04 Policy milestones

Here are the key Government policy/ regulatory milestones:

Autumn 2022 - Indicative assessment on the value-for-money case for <u>blending</u> <u>hydrogen</u> in the existing network

Q4 2022 - <u>Business model</u> for hydrogen support finalised

2022 - Decision on <u>rebalancing policy</u> <u>costs</u> between electricity and gas

2022 - Final investment decisions on two 'Track 1' Carbon Capture & Storage (CCS) clusters **2023** - Final policy decision on <u>hydrogen</u> blending

2023 - First <u>hydrogen support contracts</u> allocated

2023 - Hydrogen heating trials to commence in local neighbourhood

2023 - Decision on hydrogen village location

2025 - New business models for hydrogen transport and storage infrastructure designed



2025 - Hydrogen certification scheme introduced

2025 - Hydrogen village trials to commence

2025 - Target for reaching 1GW electrolytic hydrogen production capacity and price competitive annual allocation rounds

2030 - New target for creating up to 10GW low carbon hydrogen production

2030 - Hydrogen town trial to commence



05 Dates for your diary

We'd love to see you at our Hydrogen Implementation forums! To join, please email box.xoserve.decarbonisation@xoserve.com

Don't miss these upcoming summer sessions:

IGT working group	Friday 15th July	10:00 - 11:00
Network working group	Monday 18th July	10:00 - 12:00
Metering working group	Monday 25th July	10:00 - 12:00
Shipper working group	Friday 5th August	11:30 - 13:00



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06 Industry engagement

With so much change across the industry, we know that keeping track of all of the projects and changes can be difficult. That's why we have launched an Industry "Intranet". This will be a central repository where you can access latest news, updates, project findings and industry thinking.

If you would like access to this site, please contact box.xoserve.decarbonisation@xoserve.com

