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Welcome to the latest edition of **DeliveringDecarb**. This is our first newsletter for a new year, so we'll be taking a look at some of January 2023's most notable happenings, as well as what's on the horizon for gas decarbonisation in the year ahead.

For those who enjoyed our DecarbDiscussions podcast, there's another episode now available, and it's of particular interest to anyone wondering how metering assets and management processes will need to change as the UK makes the transition to low carbon gas blends - or potentially 100% hydrogen. More info below.

And don't forget to check our Dates for your Diary section if you would like to join one of our panel discussions and add your voice to the conversations taking place about gas decarbonisation during 2023.

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01 Notable news

BEIS publish Mission Zero: Independent Review of Net Zero

Mission Zero: Independent Review of Net Zero was published by the Department for Business, Energy & Industrial Strategy (BEIS) on 16th January 2023. In his foreword, Chair Chris Skidmore acknowledges some of the UK's net zero achievements so far, but also expounds some of the reasons why the UK needs a clear and actionable plan moving forward. With energy security at the top of the agenda following the 2022 energy crisis, he stresses that both delayed and rushed decisions on energy can lead to unfavourable consequences. With this in mind, the Review seeks to establish how to 'create a delivery ecosystem to achieve the best possible decisions for the future'.

Among the 129 recommendations made, one of the most notable for the gas industry is that policymakers 'set a legislative target for gas free homes and appliances by the same date, to contribute to a gas free grid in future'.

The Review also recognises the crucial role of hydrogen in delivering net zero, as well as the need for better industry and stakeholder collaboration. It recommends the creation of a cross-sectoral infrastructure strategy by 2025, stating: 'We need to rapidly build and adapt the infrastructure for electricity, hydrogen, other liquid and gaseous fuels and CO₂ networks that support our green economy. The scale of this challenge, and the breadth, is too much to be left to the whims of individual projects'.

[Read more](#)



01 Notable news

NGN announces new Customer Energy Village milestone

On 11th January, Northern Gas Networks (NGN) announced that it would be working with technology partner IOTICS to create a decentralised data ecosystem for its recently launched Customer Energy Village.

The Customer Energy Village is a collaborative project, built by NGN with support from partners including Newcastle University, National Energy Action and North East Energy Catalyst. It provides a unique testbed of nine homes where different technologies and solutions will be used to decarbonise homes from different building eras, from the 1910s to 1990s. The aim of the project is to understand which decarbonisation and energy efficiency solutions, including the use of hydrogen as an alternative to natural gas, are best suited to different housing stock.

Construction of the village began in February 2022. It consists of three 1910 terraced homes, two semi-detached 1930s houses, a 1950s bungalow, two flats from the 1970s and a detached home from the 1990s, to represent millions of UK homes. IOTICS will help NGN gather real-time performance data and share it with a team of industry experts, academics and engineers; enabling them to test and scale solutions for moving customers onto low carbon energy in a practical and affordable way.

[Read more](#)



01 Notable news

Kier explores the potential of green hydrogen for powering highway depots

On 16th January, Kier announced that it would be working with Protium, a Hydrogen Energy Services Company (HESCO™), to conduct a feasibility study exploring the environmental, technical and financial benefits of using hydrogen alongside other renewable energy sources to power its highway depots.

Due to be completed in Summer 2023, the study could potentially create a blueprint for future net-zero depots, helping to address the challenge of delivering a net zero transportation sector in the UK as well as helping Kier Highways achieve its target of being net-zero on its scope 1 & 2 (operational emissions) by 2030.

Matt Tompsett, Head of Environment and Sustainability at Kier Highways, said: “We will need a mix of renewable green fuels to achieve net zero and deliver our services in the future... working with Protium will help us to understand how hydrogen will play a role in the future of highways construction and maintenance”

[Read more](#)



01 Notable news

Update to green ammonia definition in Green Hydrogen Standard

On January 13th, the Green Hydrogen Organisation (GH2) set the standard for green ammonia, announcing that a definition was included in its updated Green Hydrogen Standard. According to the standard, only 'ammonia produced with green hydrogen of no more than 0.3kg of carbon dioxide equivalent (CO₂e) per kg of ammonia will be classed as green ammonia by GH2'.

Ammonia is viewed as a key tool in the transportation and storage of green hydrogen and it has been predicted that a market for green ammonia and other hydrogen carriers will emerge by 2030. The definition will be a significant tool to promote decarbonisation of the food and energy system, ensuring better certainty and transparency that green hydrogen conforms to the highest standard on emissions.

Jonas Moberg, CEO of GH2 says: "The standard is essential to establishing the global rules for the production, trade, and use of sustainable zero-carbon fuels like green hydrogen and green ammonia."

[Read more](#)



01 Notable news

National Grid substation powered by hydrogen in a 10-week trial

National Grid has conducted a 10 week trial to test the feasibility of using a hydrogen power unit (HPU) as a direct replacement for diesel-powered backup generators across more than 250 sub-station sites.

During the trial, a GeoPura 250kW HPU was installed at National Grid's Deeside Centre for Innovation (DCI); a state-of-the-art testing facility hosting a 400 kV modified substation. The HPU was used to power low-voltage equipment such as cooling fans, pumps and lighting for 24 hours a day. It has also been tested for different load profiles including critical substation equipment. The trial results will now be examined to see whether a HPU can provide a viable zero-emission alternative to a diesel backup generator.

National Grid explains that although backup generators have less than a 1% chance of operating per year, moving away from diesel to low-carbon alternatives like hydrogen has the potential to reduce carbon intensity by 90%, saving over 500,000kg of carbon emissions.

[Read more](#)



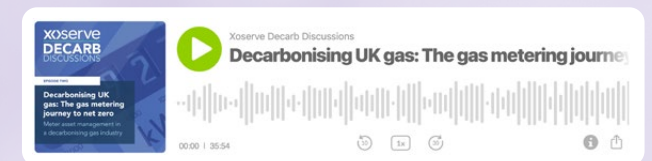
02 Spotlight on... The gas metering journey to net zero

If you're interested in finding out more about how UK gas metering organisations will be impacted by the transition to low carbon fuels, our new DecarbDiscussions podcast episode is a must-listen.

Join Xoserve's Victoria Mustard and her expert guests in the first of two metering-focused sessions where the demands and challenges of decarbonisation are discussed in detail.

In this first session, hear how metering business models are changing as organisations decarbonise, why smart gas meters are so important, and why stranded assets and engineer safety training are crucial issues that require focus from policy makers and the industry.

[Listen here](#)



03 Things to look out for

Call to innovators to help create net zero blueprint

The Energy Networks Association and Ofgem are encouraging 'cutting edge innovators from the UK and beyond' to join them at a new Energy Innovation Basecamp event. The full-day event will take place at the International Convention Centre (ICC) in Birmingham on 28th February 2023. Those who attend will hear leaders from the energy industry lay out the challenges ahead. They will then have the chance to network with other creative thinkers, and collaboratively shape 'problem statements'.

Following the event, finalised versions of the 'problem statements' will be published. These will be used to inform the development of 'SIF challenge' proposals. Innovators will also have the opportunity to submit their ideas for review, to assess their suitability for a range of funding pathways.

[Register here](#) | [Read more](#)

WUN hydrogen event

The Women in Utilities Network (WUN) is hosting a free event on 9th February, between 6-8pm. Join WUN Founder Angie Needle at the WSP offices in Mailbox, Central Birmingham where she will host a panel of women working on the hydrogen economy. The interactive session will provide an opportunity to network with other industry professionals, ask the questions most important to you and discuss the role hydrogen will play in our future energy system. Further Speakers to be announced.

[Learn more](#)

Future Networks Heat & Transport conference

The Future Networks Heat & Transport conference will take place on 7th February 2023 at The Birmingham Conference and Events Centre (BCEC). With an agenda that includes sessions from leading industry names on reliability of supply, financing net zero, flexible and resilient gas, low carbon networks, infrastructure and asset management, and the future of heat, it's sure to be a valuable day for a broad range of gas industry professionals.

[Learn more](#)

04 Policy milestones

Here are the key Government policy / regulatory milestones:

- **Autumn 2022** - Indicative assessment on the value-for-money case for [blending hydrogen](#) in the existing network
- **Q4 2022** - [Business model](#) for hydrogen support finalised
- **2022** - Decision on [rebalancing policy costs](#) between electricity and gas
- **2022** - Final investment decisions on two 'Track 1' [Carbon Capture & Storage \(CCS\) clusters](#)

- **2023** - Final policy decision on [hydrogen blending](#)
- **2023** - First [hydrogen support contracts](#) allocated
- **2023** - Decision on hydrogen village location
- **2024** - H100 trial to commence
- **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
- **2026** - Final policy decision on whether hydrogen will support domestic heating
- **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 sessions:

Shipper working group	Friday 10th February	11:30 - 13:00
Metering working group	Friday 17th February	10:00 - 11:00
IGT working group	Friday 24th February	10:00 - 11:00
Network working group	Tuesday 28th February	10:00 - 12:00



06 Keeping in touch

We've been working on a range of initiatives designed to help raise awareness of gas decarbonisation and keep everyone in the industry connected. Now launched, our **DecarbDiscussions** podcast will cover a range of topics from different industry perspectives. If you'd be interested in getting involved and hearing your voice on our podcast channel, please get in touch.

And don't forget to sign up to our industry 'intranet'. An exclusive resource for the gas industry, the intranet is designed to help you stay up to speed with the latest news, new projects and policy changes. It acts as a central repository for essential information related to your industry, some of which may not yet be available as a public resource. If you would like access to this site, please contact:

box.xoserve.decarbonisation@xoserve.com

