XOSERVE

DELIVERING DECARB

June 2026

Contents

01 Notable news

The role of hybrid heat pumps in heat decarbonisation

A report from Stonehaven, sponsored by SGN, has set out an alternative pathway for decarbonising home heating that places greater emphasis on hybrid heat pumps and biomethane, rather than relying primarily on full electrification.

The report argues that current heat pump-led policies face challenges around cost, consumer acceptance and political support.

It suggests that wider deployment of hybrid systems – combining a heat pump with a gas boiler – could cut household gas consumption by around 75% while offering lower upfront costs than standalone heat pump installations. Scaling this approach could also deliver system-level benefits: installing around 1.9 million hybrid heat pumps by 2030 could save an estimated 2 million tonnes of CO_2 annually, while easing pressure on the electricity network during periods of peak demand.

Alongside this, the report highlights the role of increased biomethane injection into the gas grid, arguing that this combined approach could accelerate emissions reductions while making better use of existing infrastructure. It also calls for stronger policy support for biomethane production and recognition of its role in delivering a lower-cost, consumer-friendly route to net zero.

Read the full report here.

Industry calls for clarity on EU-UK ETS linkage

A joint letter signed by the Carbon Capture and Storage Association and 50 industry stakeholders has called on the EU and UK to provide greater clarity on plans to link their Emissions Trading Systems and establish a framework for cross-border CO_2 transport and storage.

With 2026 expected to be a pivotal year for carbon capture, utilisation and storage (CCUS) deployment, signatories warn that regulatory uncertainty is delaying investment decisions and project development. The group is urging policymakers to set out clear milestones and implementation timelines, arguing that a coordinated EU-UK approach is essential to accelerate industrial decarbonisation, support CCUS deployment and maintain European competitiveness.

Read the full letter here.

01 Notable news

H-Power delivers the UK's first commercial sale of hydrogen from cracked ammonia

H-Power has signed an agreement to supply 5,000kg of fuel cell-grade green hydrogen to Protium, marking the UK's first commercial sale of bulk hydrogen produced from cracked ammonia to a third-party customer. The hydrogen will be produced from bio-ammonia at H-Power's Dunsfold pilot facility and distributed through a new 'virtual depot' arrangement with Protium.

The deal demonstrates growing demand for low-carbon hydrogen and highlights the potential of ammonia cracking as a commercially viable route to hydrogen production, storage and distribution without reliance on government subsidies.

Read the full story here.

NESO's 2026/27 Early Winter Outlook

NESO has published its Winter Outlook 2026/27 Early View, concluding that Great Britain's electricity supply margins are expected to remain adequate and broadly in line with recent winters, with sufficient capacity to meet demand despite higher forecast peak consumption. However, the report highlights continued uncertainty in energy markets, driven by geopolitical tensions and disruption to LNG flows.

For gas, the implications are a potentially tighter market environment, with lower European gas storage levels, higher and more volatile prices, and increased sensitivity to global supply disruptions that could place upward pressure on winter gas costs.

Read the full story here.

IEA Global Hydrogen Review 2026

The IEA has published its Global Hydrogen Review 2026, highlighting both the continued growth of low-emissions hydrogen and the challenges facing the sector. While global hydrogen production capacity is expanding, progress remains constrained by slow policy implementation, limited demand creation and delayed investment decisions.

For the UK, the report reinforces the importance of accelerating hydrogen demand, infrastructure development and market frameworks to meet deployment ambitions. The IEA also highlights hydrogen's potential contribution to energy security, supporting the UK's efforts to diversify energy supplies, strengthen industrial competitiveness and advance net zero objectives.

Read the full story here.

01 Notable news

Peak Cluster UK CCS project advances to next stage

Spirit Energy's Morecambe Net Zero project has reached a key milestone after entering the Assess Phase of its carbon storage licence. The project aims to repurpose the depleted Morecambe gas fields to store up to one billion tonnes of CO_2 and transport emissions from cement and lime plants in the Peak District.

If developed, it could capture three million tonnes of CO_2 annually, helping decarbonise around 40% of the UK's cement and lime sector.

Read the full story here.

Sustainability First Calls for Action on Gas Disconnections

Sustainability First has urged Ofgem, DESNZ and the HSE to give greater attention to the future of gas networks as heat pump adoption accelerates. The organisation warns that the current gas disconnection process is complex, inconsistent and potentially costly, creating barriers for consumers looking to move away from gas. Alongside the publication of Ofgem's long-awaited disconnection framework report, they are calling for clearer customer information, action to reduce disconnection costs, and closer coordination between suppliers and gas network operators.

Read the full story here

Hydrogen industry warns UK policy delays threaten investment

A coalition of hydrogen manufacturers and industry bodies has warned that continued delays to the UK's hydrogen strategy and subsidy programmes are putting investment and supply chain growth at risk.

The concerns were reinforced by SSE's decision to pause several standalone hydrogen production projects, citing policy uncertainty around the rollout of low-carbon hydrogen. Industry leaders say the lack of clarity on future funding and project support is undermining investor confidence, with some companies reportedly considering moving planned investments overseas. The sector is calling for urgent policy decisions to maintain momentum and secure the UK's hydrogen economy.

Read the full story here and find more detail on SSE's decision here.

01 Notable news

Leaders meet to secure £500m for hydrogen network

Industry leaders and politicians are calling for £500m of government support for the Humber Hydrogen network to become the UK's first hydrogen production and storage centre. The proposed project is led by firms including National Gas, Centrica, Equinor and SSE Thermal and would connect hydrogen production, transport and storage infrastructure across the region.

Supporters say the scheme could help decarbonise key industries, boost energy security and establish the Humber as the UK's leading hydrogen hub.

Read the full story here.

BiofuelAi wins £1 million government award

BiofuelAi, a University of Surrey spinout, has won the UK Government's £1 million Manchester Prize for its AI platform that helps biogas plants optimise production.

The technology provides operators with real-time insights to improve efficiency, with pilot projects showing increased revenues, higher profits and lower emissions. The company estimates its platform could help reduce nearly 300,000 tonnes of CO_2 emissions annually by 2030, supporting the growth of biomethane and renewable gas production across the UK.

Read the full story here.

Study highlights need for large-scale hydrogen storage

A new study published in Applied Energy highlights the importance of large-scale hydrogen storage in enabling a decarbonised UK energy system.

It finds that without sufficient storage, the benefits of increased hydrogen production and renewable generation are limited. The study points to the UK's North Sea depleted gas fields and offshore geology as a major opportunity for large-scale hydrogen storage, concluding that unlocking this capacity will be critical to integrating renewables and supporting system-wide decarbonisation.

Read the full study here.

02 Spotlight on...Ofgem's latest SIF awards

The latest round of Ofgem's Strategic Innovation Fund (SIF) has awarded £22.9 million to 18 projects supporting innovation across Britain's energy networks.

While much of the funding is focused on electricity systems, digitalisation and network resilience, the portfolio also provides useful signals about the evolving role of gas, hydrogen and low-carbon molecules in the UK's net zero strategy.

At a time when hydrogen policy remains uncertain and key funding decisions are still pending, the SIF programme offers reassurance that investment in system enablers for gas decarbonisation continues. Importantly, the focus is shifting away from individual technologies and towards integrated system solutions spanning gas, electricity and emerging energy vectors.

Whole-system thinking becomes part of the puzzle

A theme emerging from this year's awards is the move towards more whole-system planning. Rather than treating electricity and gas networks in isolation, two projects this year focus on improving coordination across infrastructure and energy vectors. While more innovation in this space is still needed, these are encouraging first signs.

The FastPress project, led by NESO, will develop a decision-support tool to help plan and repurpose Britain's gas transmission network. This reflects a growing recognition that gas infrastructure will not simply be phased out, but may be adapted to support hydrogen, biomethane, synthetic methane and potentially carbon transport for CCUS.

Alongside this, the Network Security in a Quantum Future (NSiaQF) project, led by NESO, will develop tools to identify and mitigate emerging quantum-related cyber risks across energy infrastructure. While quantum computing remains an emerging technology, the project reflects growing recognition that future low-carbon energy systems will need to be both decarbonised and resilient.

As hydrogen, CCUS and increasingly digitalised networks become more interconnected, strengthening cyber security is becoming a critical component of long-term energy system planning.

Hydrogen storage is another area gaining prominence. The Knapton H2 Storage for H2P project, led by Northern Gas Networks, will develop storage solutions designed to support hydrogen-to-power and regional hydrogen networks.

This reflects a broader shift in emphasis. While hydrogen production has dominated early policy and investment discussions, there is emerging consensus that storage and flexibility will be just as critical. As renewable generation expands, long-duration storage will be required to manage seasonal and multi-day imbalances in supply and demand.

02 Spotlight on...Ofgem's latest SIF awards

Hydrogen is increasingly being positioned as a key enabler in this balancing role, rather than purely as a fuel for end-use sectors.

The Green Molecule Project, led by Southern Gas Networks, highlights continued interest in synthetic methane as part of the decarbonisation mix.

By converting surplus renewable electricity and captured carbon dioxide into methane, the project explores a pathway that can utilise existing gas infrastructure while providing a storable, dispatchable low-carbon fuel. This approach offers potential advantages in terms of system compatibility and scalability, particularly for seasonal energy storage.

Rather than competing with hydrogen, synthetic methane is increasingly being considered as a complementary option within a broader low-carbon gas portfolio.

What this signals for gas decarbonisation

Taken together, the latest SIF awards suggest a steady but important evolution in how the UK views gas within the energy transition.

Rather than signalling the decline of gas infrastructure, the programme reflects increasing interest in how it can be repurposed and integrated into a low-carbon system. Hydrogen storage, synthetic methane and digital system tools all feature prominently, alongside broader efforts to improve whole-system coordination.

Crucially, this innovation activity continues despite wider policy uncertainty in hydrogen and low-carbon gases. The message from SIF is that the building blocks of a future gas system are still being actively developed, even if the final shape of that system remains uncertain.

For the gas sector, the direction of travel is clear: the future will not be defined by a single molecule or technology, but by an interconnected system in which multiple gases, electricity, and carbon flows must operate together efficiently and flexibly.

03 Policy milestones

The path to a decarbonised energy system continues to be shaped by steady policy and regulatory developments. Here we highlight the latest funding allocations, evidence publications, and consultation outcomes impacting the sector's transition.

Policy framework to grow the market for low carbon industrial products

DESNZ has published the outcome to the consultation on a policy framework to grow the market for low-carbon industrial products, focused initially on steel, cement and concrete. The framework proposes embodied emissions reporting, product classifications and green procurement measures to improve transparency, support informed purchasing decisions, stimulate demand for lower-carbon products, and accelerate industrial decarbonisation across key sectors.

Energy Sector Cyber Security Strategy

DESNZ, alongside the National Cyber Security Centre, Ofgem and NESO, has published the Energy Sector Cyber Security Strategy, setting out a four-year roadmap to strengthen cyber resilience across the UK energy system. The strategy focuses on improving threat awareness, enhancing resilience, strengthening incident response, expanding regulatory oversight, and building the skills and partnerships needed to support a secure Clean Power 2030 transition.

AI technical sandbox

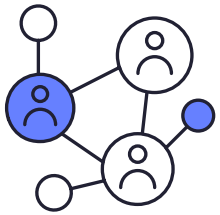
Ofgem has confirmed the launch of a 12-month AI technical sandbox pilot from late Autumn 2026. The regulator-led initiative will enable controlled testing of AI use cases in the energy sector, helping to assess risks, support innovation, strengthen consumer protection and inform future regulatory approaches through evidence gathered from real-world testing environments.

03 Policy milestones

Upcoming opportunities to influence energy policymaking

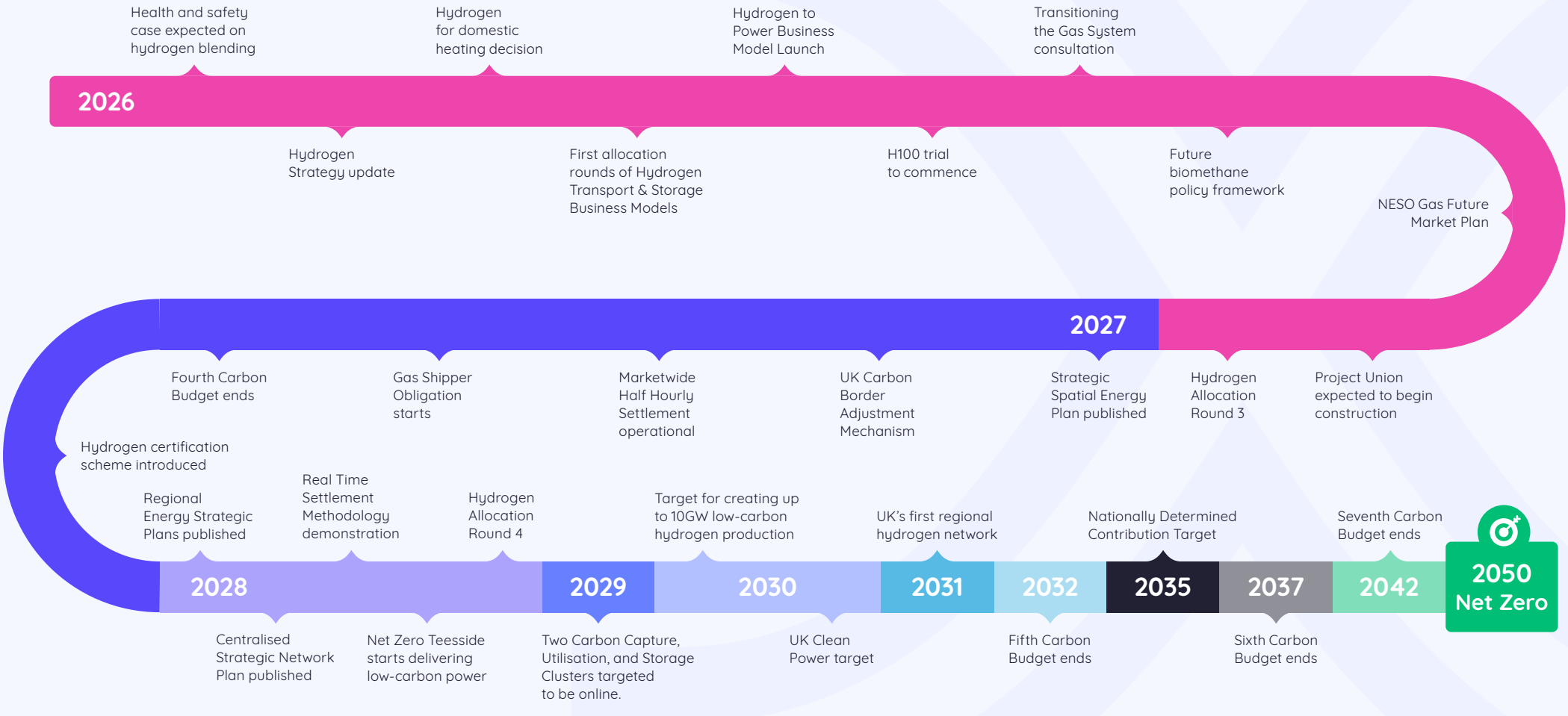
Several important consultations are currently open or closing soon, offering stakeholders a chance to provide expert input on key aspects of the decarbonisation transition:

1. **Flexibility in electrolytic hydrogen production and use** – DESNZ is seeking evidence to understand how flexible operation of electrolysers can be technologically and commercially delivered from the perspective of both producers and end users. Responses can be submitted until 6 July.
2. **Securing open data in energy** – Ofgem is seeking views on three proposed models for when network companies should publish data openly. Responses can be submitted until 14 July.
3. **AI assurance in the energy sector** – Ofgem is seeking views on the role of AI assurance in the energy sector, including how systems can be tested, evaluated and governed. Responses can be submitted until 12 August.



03 Policy milestones

Key Government energy policy/regulatory milestones:



04 Things to look out for

July's DeliveringDecarb edition will keep you informed of any new announcements, consultations or research on the potential future role and benefits of biomethane, hydrogen, gas blending and CCUS. For now, here are some upcoming publications to keep an eye on in the near term:

Expected in the coming months:

- UK Government's updated hydrogen strategy
- Gas Shipper Obligation consultation response
- Hydrogen blending into the GB gas transmission network response
- Consultation on hydrogen for home heating
- Hydrogen transport and storage market framework consultation response
- Future framework for biomethane production
- Transitioning the Gas System call for evidence
- Network investment and cost recovery call for evidence

If you can't wait until next month's edition of DeliveringDecarb, be sure to follow Xoserve on LinkedIn for comments and key takeaways as they happen.

05 Dates for your diary

Here are some upcoming dates in July when you can meet the Decarbonisation Team. We'd love to see you there.

IGEM Policy Conference	**London** Wednesday 1 July
Hydrogen Information Sharing Group	**Online** Friday 3 July
GDNs Monthly Decarb Meeting (internal)	**Online** Monday 6 July
Data Centre Demand Conference	**London** Wednesday 8 July

To join our quarterly Green Gas Implementation Forums or enquire about our meetings above, please email decarbonisation@xoserve.com.

06 Keeping in touch

If you've found any of the topics in this month's newsletter particularly interesting, please get in touch or share your comments on LinkedIn, tagging @Xoserve.

You can also delve deeper into decarbonisation with our Decarb Discussions podcast, which covers topics from different industry perspectives. To get involved and have your voice heard on our podcast channel, please get in touch.

To help you stay ahead of the curve, we've created the Decarbonisation Knowledge Centre, for the latest news, exciting new projects, and important policy updates. We're confident you'll find a wealth of valuable resources on decarbonisation.

If you'd like to suggest any ideas, please contact: decarbonisation@xoserve.com

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