October
2026

Cadent
Your Gas Network

# Developing networks *for the future*

## Long-Term Development Plan 2026

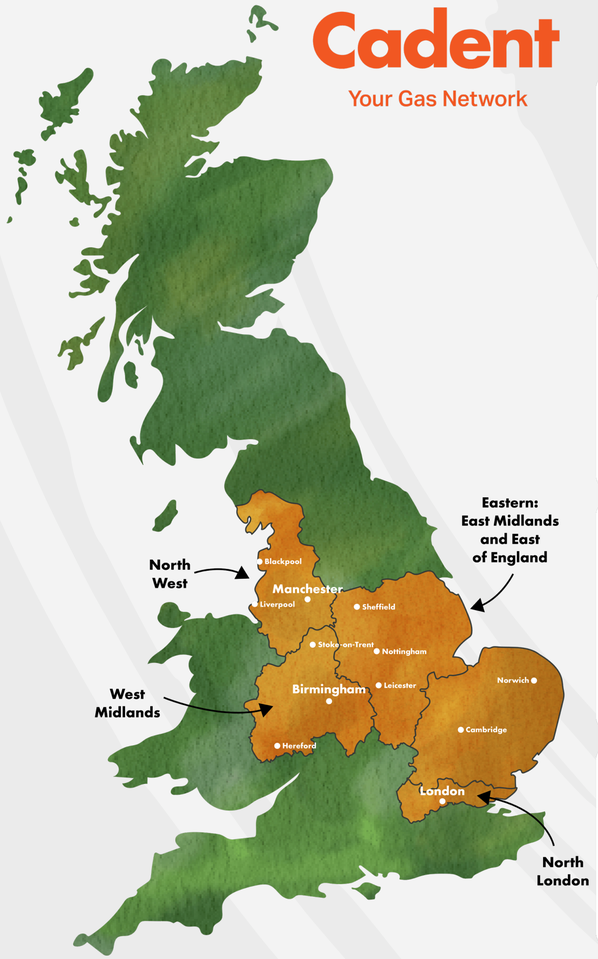


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Cadent

Your Gas Network




## Our four networks

### North West

**2.7m**
homes and businesses

### West Midlands

**2.0m**
homes and businesses

### Eastern: East Midlands and East of England

**4.0m**
homes and businesses

### North London

**2.3m**
homes and businesses

# Welcome



**Dave Moon**

**Director of Asset Strategy**

**Welcome to Cadent's 2026 Long Term Development Plan. This document sets out how we will continue serving customers safely and reliably while supporting the UK's transition to net zero. It explains the investments, capabilities and partnerships we are developing to reduce environmental impact, maintain resilience and preserve future options. Our plan is shaped by engagement with customers, stakeholders, local authorities, regulators and industry partners. Their feedback reinforces the importance of safety, reliability, affordability, vulnerable customer support, environmental performance and regional needs.**

The 2026 LTDP reflects the wider energy planning landscape, including NESO's Future Energy Scenarios, Regional Energy Strategic Planning and Local Area Energy Plans. These provide important national and local evidence on how energy demand, infrastructure and decarbonisation needs may evolve. The route to net zero remains uncertain, so our investment decisions must keep the network safe today while enabling credible lower-carbon pathways.

Our focus remains on safe and reliable service, methane reduction, asset resilience, biomethane and future low-carbon gases where appropriate, supported by better data and innovation. This long-term view is supported by practical action across the business, including new anaerobic digestion connections for low-carbon green gas and improved scenario modelling for a decarbonising energy system.

The Iron Mains Risk Reduction Programme remains central to safety and resilience, replacing ageing metallic mains with modern polyethylene pipes to improve reliability and reduce leakage. Innovation is helping us manage risk, control costs and reduce emissions. Our Advanced Leakage Management Approach and Digital Platform for Leakage Analytics will help target the assets responsible for the greatest emissions and prioritise the most effective interventions.

Major hydrogen infrastructure and regional hydrogen programmes, including HyNet, East Coast Hydrogen, Capital Hydrogen and Hydrogen Valley, are helping build evidence on where hydrogen may have a future role, subject to policy, demand, funding and investment decisions. We welcome your feedback as we develop a plan that supports customers today while preparing for a lower-carbon energy future. Further information is available at cadentgas.com/ltdp.

# Strategic vision and the *role of the network*

## Keeping energy flowing while enabling a lower-carbon future

The United Kingdom has a legally binding target to achieve net zero greenhouse gas emissions by 2050. The route to that target remains uncertain and will depend on policy, technology, consumer choices, regional needs and the pace at which new infrastructure can be delivered. Against that background, our role is to continue providing a safe, reliable and affordable gas transportation service while enabling credible lower-carbon pathways.

We operate critical national infrastructure serving homes, businesses, public services, industry and power generation across four regional networks. The network therefore has two connected responsibilities: to meet the needs of customers who rely on gas today, and to prepare assets, capabilities and commercial arrangements for a changing energy system. These responsibilities must be managed together. A transition that weakens safety, resilience or affordability would not be sustainable, while investment that ignores future decarbonisation could create avoidable cost or constrain future choices.

*"Our strategic aim is to maintain a safe and resilient network, reduce its environmental impact and preserve practical options for customers and the wider energy system."*

### Our priorities

- Reduce operational emissions, with a particular focus on methane leakage, fleet, property and supply-chain impacts.
- Enable the growth of lower-carbon gases, including biomethane and potential future hydrogen applications where policy and demand support deployment.
- Support customers and communities through a transition that must remain affordable, inclusive and responsive to regional circumstances.
- Invest in a safe, reliable and resilient network that can continue supporting energy security and economic activity.

### A balanced and adaptable approach

There is no single pathway for decarbonising heat, industry, transport and power. We use evidence, scenario analysis and staged investment to identify actions that deliver value across several plausible futures. These include replacing ageing assets, improving network visibility, reducing leakage, creating capacity for renewable gases and contributing data to national and regional energy planning.

Innovation and collaboration underpin this approach. We work with customers, local authorities, the National Energy System Operator, electricity networks, regulators, government, industry bodies, technology providers and other gas networks. This collaboration supports shared evidence, consistent assumptions and better coordination between investment decisions that affect the same places and customers.

# Customer and stakeholder priorities

## Using engagement evidence to shape plans and investment

**Our engagement strategy is built around listening, learning and acting, with customers at the heart of our decisions. It gives us a clear view of what customers and stakeholders expect from Cadent.**



In developing our business plan for RIIO-3, we identified five key insights that helped validate the customer hierarchy of needs originally developed during RIIO-2. These insights, outlined on the figure on this page, continue to guide our approach and ensure that our priorities align with those of our customers.

Safety, resilience and reliability remain customers' top priorities, reflected in our customer research findings. Resilience has become increasingly important following global events, while expectations on customer service and support for vulnerable groups continue to rise.

We continue to build on RIIO-2 insight as affordability, resilience and net zero affect customers more directly. For RIIO-3, we have strengthened our approach to track changing public views on energy more regularly.

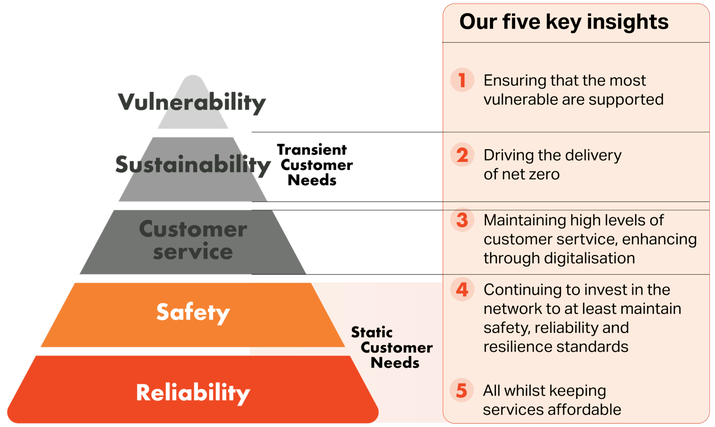
**Our Energy Diaries research programme** helps track these shifts over time. Recent work found that almost 40% of small businesses and over 50% of charities are concerned about their long-term viability due to affordability.

Over 50% of customers say they are concerned about climate change and more than 70% support the Government's net zero target. However, 74% believe they are already taking all the actions they can afford, with most actions being relatively small

in impact, such as recycling at home. Customers expect large-scale environmental improvements to be led by Government and large companies.

We strengthened our engagement through the launch of the Customer Challenge Group and Sustainability Challenge Group, which provide expert scrutiny, diverse perspectives and accountability across RIIO-3 priorities and environmental commitments.

We also engage with NESO and local authorities to share network insight, support local and regional energy planning, and help develop robust decarbonisation and infrastructure plans. We review our engagement strategy each year to ensure it remains relevant and delivers better outcomes.



# Demand forecasts and future energy scenarios

## Planning for uncertainty while meeting near-term network obligations

We use demand forecasts, future energy scenarios and local evidence together to plan for uncertainty. Forecasts guide near-term operational and investment decisions, while scenarios test how demand could change under different heat, industry, power and green-gas pathways. Using both helps us meet current network obligations while preserving credible future options.

Demand forecasting is essential to safe and economic network planning. It supports asset replacement, reinforcement, new connections, capacity assessments and severe winter planning, when peak requirements may remain important even if annual gas use reduces over time.

Our forecasts draw on historic consumption, weather, economic and demographic trends, policy, energy efficiency, technology uptake, new connections and expected changes in industrial and commercial activity. We also use NESO future energy evidence, stakeholder engagement and specialist input to challenge assumptions and test a wider range of outcomes.
Please see Appendix D1 for demand forecast information at a local level through to 2035.

## Ten-year outlook

The updated ten-year outlook is slightly lower than last year's forecast, mainly due to slower normalisation of consumer demand. Residential demand is expected to recover first, with commercial demand recovering more slowly. Industrial demand is expected to reduce slightly later in the ten-year period, reflecting Government hydrogen cluster announcements and changing industrial decarbonisation assumptions.

Annual and peak demand may not fall at the same rate. Electrification, hybrid systems, smart controls and changing customer behaviour could reduce annual gas use while still requiring gas or other molecules at critical times. Graphs 1 and 2 in Appendix D show annual throughput and peak demand respectively to 2035. Throughput means the total amount of gas transported through the network over a year. This distinction matters because network capability is driven by the demand that must be met at peak times, such as very cold winter days, not just by the total amount of gas used over the year.

## Scenario-based planning

Scenarios do not predict a single future. They provide a structured way to test decisions against different combinations of policy, technology, consumer behaviour and economic conditions. We use this evidence to identify no-regrets actions, understand trigger points and avoid decisions that depend unnecessarily on one pathway.

- Near-term forecasts guide operational and investment decisions using the best available central assumptions.
- Longer-term scenarios test the implications of greater electrification, increased green-gas supply, new industrial demand and changes in power generation.
- Local and regional evidence helps identify where national trends may play out differently because of housing, industry, infrastructure or resource availability.
- Sensitivity analysis highlights assumptions that have the greatest effect on capacity, asset or investment requirements.

Together, these forecasts and scenarios help us test how national decarbonisation targets could affect network demand and inform practical planning choices.



# Whole energy system and strategic planning

## Coordinating gas, electricity, heat and emerging technologies

**A secure, affordable and lower-carbon energy system cannot be planned by looking at gas, electricity, heat, transport fuels, hydrogen and renewable gas in isolation. Choices made in one part of the system can affect capacity, cost, deliverability and resilience elsewhere. We take a whole-energy-system approach, using network evidence and regional insight to help identify practical pathways that work for customers, communities and the wider energy system.**



The gas network already supports homes, businesses, industry and electricity generation. As the energy system changes, its role will vary by location and over time. In some places, gas demand may reduce as buildings and transport electrify. In others, gas infrastructure may continue supporting industrial processes, dispatchable power generation, biomethane, hydrogen-ready developments or local resilience. Understanding these interactions is essential for choosing options that are deliverable and efficient

Our power generation work shows why this coordination matters. The project identified more than 850 gas-fired generation sites across Great Britain, including around 400 dispatchable generation sites and 450 combined heat and power sites. It also found that around 25% of UK dispatchable generation capacity is connected to gas distribution networks. These sites can create changing summer and peak-day demand patterns, particularly where flexible generation responds to electricity-system constraints.

## National and regional planning

Our work with the National Energy System Operator and regional planning bodies to help ensure gas network evidence is visible in strategic energy planning. This includes sharing demand forecasts, network capability, asset information, scenario evidence and regional insight. This information can help planners understand where existing infrastructure may support decarbonisation, where constraints could emerge, and how investment across gas, electricity and heat networks should be sequenced.

Regional Energy Strategic Plans and Local Area Energy Plans are important routes for bringing national direction together with place-based evidence. Local plans can highlight housing characteristics, industrial clusters, heat-network opportunities, development growth, transport needs and local energy resources that are not always visible in national models. Our role is to contribute consistent, usable evidence so these plans can reflect the value, limits and future options of the gas network.

This approach requires common data, transparent assumptions and clear decision points. It also requires planning methods that recognise regional differences rather than applying a single pathway everywhere. The following principles guide how we contribute to whole-system planning.

## Planning principles

- **Use shared evidence:** Provide clear, consistent and traceable data, and explain where assumptions or local conditions differ.
- **Assess whole-system value:** Consider cost, deliverability, resilience, customer impact and environmental performance across gas, electricity, heat and emerging technologies.
- **Reflect regional variation:** Recognise that each place has different demand, infrastructure, resources, constraints and customer needs.
- **Preserve future options:** Avoid decisions that unnecessarily close off credible pathways where policy, technology or demand remains uncertain.

# Whole energy system and strategic planning continued



## Hydrogen readiness and future flexibility

Hydrogen may have a future role in selected industrial, power and other energy applications, subject to government policy, commercial development, funding and confirmed demand. Our planning therefore focuses on understanding asset capability, identifying where repurposing or new infrastructure could be relevant, and avoiding actions that would unnecessarily limit credible hydrogen options. Regional hydrogen programmes are covered in page 16.

## Next steps

We will continue to improve the quality, consistency and accessibility of network information shared with national, regional and local planners. We will align internal investment evidence with whole-system scenarios, strengthen engagement with local authorities and network partners, and focus tool development on clear user needs. This will help ensure future planning reflects existing infrastructure, emerging demand, regional priorities and the practical timing of investment across the energy system.

# Asset strategy, resilience and investment

## Investing in a safe, resilient and adaptable network

**Our asset strategy is designed to keep the network safe, reliable and resilient while preparing for a more uncertain energy future. Investment decisions are based on asset condition, risk, customer impact, environmental performance, legal obligations, resilience and whole-life cost. This ensures we target interventions where they deliver the greatest value and avoid committing customers to unnecessary or poorly timed expenditure.**

Our Strategic Investment Planning framework brings together asset data, engineering judgement, modelling, cost-benefit analysis and assurance. It provides a clear line of sight from strategic objectives to asset interventions, expected outcomes and delivery plans. Rolling investment plans are aligned with the Strategic Asset Management Plan and supporting Network Asset Management Plans, so short-term activity remains connected to long-term network needs.

### Asset management priorities

- **Target risk:** Prioritise interventions where they provide the greatest safety, reliability, environmental or customer benefit.
- **Improve asset evidence:** Strengthen data quality, digital tools and performance monitoring to support consistent decisions and regulatory reporting.
- **Plan for uncertainty:** Use scenario analysis to test how future demand, technology and regional pathways could change asset requirements.
- **Make trade-offs visible:** Use cost-benefit analysis and assurance to compare options transparently and support evidence-based decisions.
- **Strengthen resilience:** Embed climate and cyber resilience into asset management, alongside continuous improvement aligned with ISO 55001 and high-reliability organisation principles.

### Climate resilience

Climate change can affect network assets through acute events, such as flooding and severe storms, and through chronic changes, including higher temperatures and changing ground conditions. We are developing risk models and adaptation pathways to identify vulnerable assets, test existing controls and prioritise proportionate interventions. By 2028, we expect climate risk management to be integrated into our asset management systems, enabling more consistent stress testing of the network and clearer links between risk evidence and investment decisions.

### Digital and cyber resilience

Greater digitalisation creates opportunities for improved network visibility, asset performance insight and decision support. It also increases reliance on data, systems and communications. We are embedding cyber risk assessments into the asset management framework so digital and cyber risks are considered alongside physical asset risks. Investment decisions should consider system availability, data integrity, access control, recovery capability and the operational consequences of system failure.

### Investment governance

Investment proposals will continue to be developed through structured needs identification, option assessment, cost and risk analysis, assurance and delivery planning. Over the next planning cycle, we will strengthen the connection between asset strategy, whole-system scenarios, climate evidence, cyber resilience and regional energy planning. This includes preparing to incorporate the 2028 RESP output into our GD4 business planning process, so future investment proposals reflect emerging regional priorities as well as national obligations and asset condition evidence. Progress will be tracked through clear outcomes and leading indicators, not only expenditure or activity volumes.

# Delivering a safe and reliable network

## Modernising essential infrastructure and reducing risk

**Safety and reliability underpin our approach. Customers depend on the gas network for heating, business activity, public services, industry and power generation, especially during periods of high demand or severe weather. Our investment and operational plans must therefore protect asset integrity, support effective emergency response and reduce risks from ageing infrastructure.**

### Iron Mains Risk Reduction Programme

The Iron Mains Risk Reduction Programme is one of our most important long-term safety programmes. It replaces ageing iron mains, particularly those close to buildings, with modern polyethylene pipe. The programme is driven by safety requirements and also delivers wider benefits by reducing the likelihood of gas escapes, improving reliability, lowering methane leakage and supporting a more adaptable network.

We will continue to deliver the programme in line with applicable safety obligations, regulatory expectations and risk-based engineering evidence. Current planning assumes the remaining Tier 1 iron mains within scope will be addressed by 2032, subject to confirmation of the final programme scope and delivery profile. Where larger-diameter pipes or other assets present material risk, targeted intervention will continue to be assessed through established risk management and investment governance processes.

*"Mains replacement is primarily a safety programme, with significant reliability, environmental and future-readiness benefits."*

### Operational reliability

Reliable service depends on more than replacing assets. It requires effective inspection, maintenance, pressure management, emergency response, competent people, secure systems, supply-chain capability and contingency planning. We use operational performance, asset condition and risk information to identify emerging issues and adjust maintenance or investment priorities before they affect customers.

The network must also remain capable of meeting peak demand and responding to changes in supply or consumption. Demand forecasting, resilience analysis and whole-system planning therefore inform decisions on asset capacity, redundancy, operational flexibility and intervention timing.

### Delivering responsibly

Large-scale network work affects communities, roads, local authorities and businesses. Our work with delivery partners and stakeholders to plan work safely, minimise disruption and identify opportunities for coordinated street works. Responsible delivery also supports skilled employment, regional supply chains and practical collaboration with other infrastructure providers.

### Looking ahead, we intend to:

- Complete the remaining risk-reduction work required under the iron mains programme, subject to confirmed scope and regulatory requirements.
- Use improved asset, leakage and operational data to target interventions where they deliver the greatest safety, reliability and environmental benefit.
- Continue strengthening operational, climate and cyber resilience as part of routine asset and investment planning.
- Coordinate delivery with local authorities, utilities and communities to reduce disruption and identify opportunities for shared delivery.
- Maintain asset capability for credible lower-carbon gas pathways where this is supported by policy, funding, demand and evidence.

# Environmental performance, leakage and methane reduction

## Reducing emissions through better measurement, targeted intervention and operational decarbonisation

Reducing greenhouse gas emissions and wider environmental impacts is central to our long-term strategy. Our main direct opportunity is reducing methane leakage from the network, alongside action on operational gas use, fleet, buildings, electricity, waste and supply-chain activity. We bring these areas together so emissions reductions are delivered safely, affordably and with clear evidence of benefit.

Our aim is to reduce emissions while maintaining safety, reliability and affordability. We will do this by combining long-term asset replacement with targeted leakage detection, improved analytics, operational controls and stronger assurance of intervention outcomes.

## Shrinkage and network emissions

Shrinkage is gas that leaves the network without passing through a customer meter, including leakage, operational gas use, theft and unaccounted-for components. Leakage forms the majority of shrinkage emissions, making pipe replacement, pressure optimisation, detection and targeted intervention the main improvement levers.

Historic progress has been driven principally by the iron mains replacement programme, system-pressure optimisation and operational measures. Future reductions will combine continued mains replacement with a more advanced, measurement-led approach to leakage management. To estimate emissions from our gas distribution system, we use a regulator-approved methodology and model. This includes emissions from mains, services, above-ground assets, third-party damage, own-use gas and theft.



Over the past decade, we have achieved a 31% reduction in shrinkage volumes, equivalent to the annual gas consumption of over 32,500 homes. This progress has been driven by targeted pipe replacement, optimisation of system pressures, and gas conditioning.

## Advanced Leakage Management Approach (ALMA)

Methane reduction is one of the most significant environmental opportunities for a gas distribution network. Traditional models remain useful for regulatory assessment and long-term planning, while field measurement gives a clearer view of where emissions occur. Our Advanced Leakage Management Approach brings detection, analytics and intervention into one end-to-end process.

The approach has three connected elements:

- **Advanced Leakage Detection (ALD)**, including Picarro vehicle-based survey capability and fixed sensors, improves emissions visibility and survey coverage.
- **Digital Platform for Leakage Analytics (DPLA)** combines sensor, asset and hydraulic information to produce actionable insights.
- **Advanced Leakage Intervention Programme (ALIP)** then targets repair, pressure changes, robotic techniques or replacement where evidence indicates the greatest benefit.

# Environmental performance, leakage and methane reduction continued

| Detect | Analyse and prioritise | Intervene and learn |
|---|---|---|
| Vehicle and fixed sensors improve visibility of emissions | Analytics combine measurements, asset data and network modelling. | Targeted repair, robotic techniques or replacement reduce high-impact leakage. |

## Why measurement matters

Measurement-led leakage management helps us move from broad estimates to a targeted view of where emissions occur. Picarro survey data supports this by combining measured methane indications with asset and network information. Pilot evidence indicates that a relatively small number of leaks can account for a disproportionate share of emissions, although this should not be treated as representative of the full network without further evidence. Wider survey coverage and repeat measurement will improve confidence and help target interventions more effectively.

## Intervention and continuous learning

Detection and analytics only reduce emissions when they lead to effective action. Options may include repair, pressure changes, robotic techniques or asset replacement, selected according to safety, feasibility, cost, disruption and expected emissions reduction. Post-intervention measurement should confirm outcomes and improve future models and priorities.

## Fleet transition

In our RIIO-2 business plan and Environmental Action Report, we set an ambition for all emergency response engineers to drive zero-emission vehicles by 2026. Technology and charging infrastructure constraints mean progress has not fully matched that ambition, but we have made strong progress and will continue reviewing further electrification opportunities during RIIO-3.

Around 50% of our emergency response vehicles are now zero-emissions, and we will continue transitioning vehicles where this is safe and practical.

Our heavy goods vehicle (HGV) fleet runs on bio-CNG, with each biomethane-powered vehicle cutting carbon dioxide ($CO_2$) emissions by up to 84%, typically 130–150 tonnes per year, compared with the same vehicle powered by Euro VI diesel. Science-based targets guide our strategy and support measurable carbon reduction.

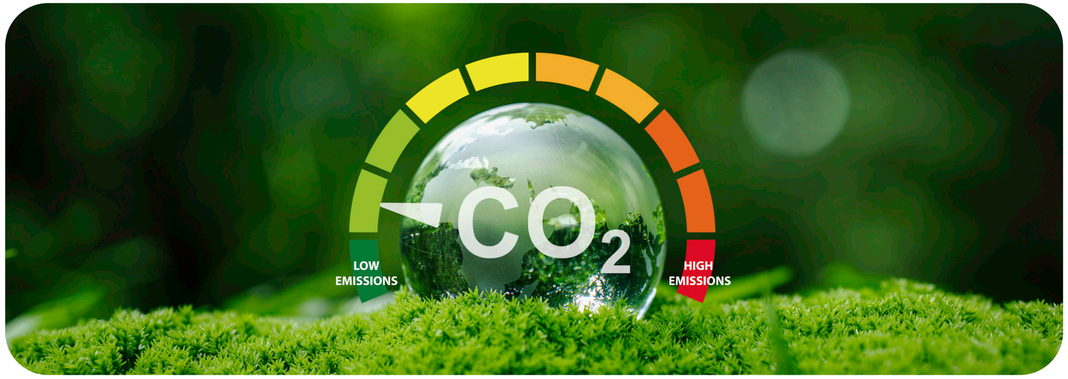
We are also reducing our carbon footprint by electrifying our commercial fleet, with over 500 electric vehicles already in use, upgrading properties and procuring renewable energy for our offices and depots. We are addressing Scope 3 downstream emissions, which are indirect emissions linked to our wider value chain, by engaging our supply chain on emissions-reduction plans and contractor fuel use. We will continue reviewing each applicable category against the Greenhouse Gas Protocol as our data maturity grows.

Future fleet transition will continue to prioritise safety, practicality and resilience. We will report progress, constraints, the revised trajectory and the criteria used to protect emergency response capability, particularly where vehicle availability, range, payload or charging infrastructure affect deployment.



## Operational footprint and delivery priorities

- Expand Picarro and wider measurement coverage with consistent survey and assurance processes.
- Integrate leakage evidence into asset risk and investment planning.
- Track verified emissions outcomes and refine estimates using observed evidence.
- Continue fleet, property and waste decarbonisation without compromising resilience.
- Use lower-carbon fuels and electrification where operational needs and infrastructure allow.
- Work with suppliers and contractors to improve Scope 3 emissions data and reduction plans.
- Share learning with regulators and industry partners on methane reduction.




Case Study

## Digital Platform for Leakage Analytics (DPLA)

Since 2021, we have been proving vehicle-based Advanced Leakage Detection (ALD) technology, including Picarro survey capability, in our North London network to reduce methane emissions and improve our carbon footprint. Picarro surveys use high-sensitivity methane measurement to support targeted identification and prioritisation of emissions. ALD provides critical measurement insights, revealing that a small number of leaks account for a disproportionate share of emissions: in our pilot, 10% of leaks contributed to 33% of total emissions.

In December 2025, we launched the Digital Platform for Leakage Analytics. The platform ingests complex datasets from Picarro and other ALD surveys alongside Cadent asset data, giving colleagues a clearer view of where emissions occur and which assets they relate to. This allows existing investment programmes, such as the Iron Mains Risk Reduction Programme (IMRRP), to be targeted more precisely and deliver greater value.

By collecting emissions data at wider scale and analysing it consistently, DPLA can help us identify higher-emission areas before traditional reactive programmes detect them. We are using the platform to support a more planned work mix and, in early 2026, began a Cadent-wide rollout of vehicle-based ALD to establish a larger data collection programme.

The DPLA has received full funding throughout RIIO-3, and Cadent is enhancing its functionality. We are also leading a working group with the other GDNs to support consistent rollout across their networks.

# Biomethane and green gas strategy

**Biomethane is a low carbon alternative to natural gas and forms a key part of our vision for a low-carbon future. As the UK's largest gas distribution network, we are committed to unlocking the full potential of biomethane to help decarbonise heat, power, and industry.**

We currently have 46 biomethane sites connected to our network, providing over 4 TWh of low-carbon gas, enough to heat 400,000 homes. Our ambition is to support a rapid expansion of biomethane production, facilitating up to 20 TWh of biomethane production to connect to our network by 2035, through a transformed commercial, operational, and regulatory framework that creates capacity on the network.

This strategy not only supports the UK's net zero targets but also delivers value for customers and society by reducing emissions and supporting economic growth in rural areas. For further information refer to Appendix B.

## Biomethane's role in decarbonisation, energy security and economic growth

The National Energy System Operator latest analysis confirms that biomethane can deliver significant value across the energy system, and that production levels can increase substantially beyond current levels[1]. Their 2025 Future Energy Scenarios highlight that the UK must produce 64 TWh of biomethane annually by 2050 - up from just 7 TWh per year today - to meet legally binding climate targets, including net zero[2] . There is significant untapped potential: recent research for the Green Gas Taskforce estimates the **UK could technically produce up to 120 TWh of biomethane per year by 2050**, without affecting domestic food production. The Green Gas Taskforce, co-founded by Cadent and industry partners, continues to champion biomethane's critical role in the UK energy system and its contribution to decarbonisation[3].

Alongside decarbonisation, energy security and economic growth are increasingly important considerations for energy policy. As a domestically produced green gas, scaling biomethane can increase our energy sovereignty, reduce our reliance on imports, and create more jobs in rural areas of the UK.



For more information, see:
1. neso.energy/document/384986/download 2. neso.energy/document/364541/download 3. greengastaskforce.co.uk

# Biomethane and green gas strategy continued

## We are making it easier for biomethane producers to connect

Since our first connection in 2013, we have sought and responded to customer feedback to help drive down costs and improve our processes and commercial frameworks. We are continually reviewing and refining our processes through lessons learned following project commissioning. We continue to receive large numbers of enquiries about the connection of new plants, and have **10 accepted connection offers and a further 6 site connections in delivery.**

To meet the levels of biomethane we are targeting, we are working with developers on increasing our network's capacity for the green gas. This includes identifying optimal locations for network reinforcements, such as installing reverse compressors, to enable us to transport more biomethane. As part of the RIIO-3 price control settlement, **we have secured initially £80 million of funding from Ofgem for network reinforcements**, with further potential depending on policy evolution and demand across our networks.

To ensure we use this funding efficiently, we have launched our new entry reinforcement assessment window process. The assessment windows are planned to be run regularly and will help us collate and optimise connection requests and prioritise our network reinforcement plans. We held our first assessment window in January 2026, which attracted 37 applications. We are currently working through the applications with developers to assess the least-cost network reinforcement that would be needed for these sites. We are looking to hold at least one more assessment window in 2027.

By maximising the use of existing infrastructure and supporting the transition to green gases, **we are helping to deliver a resilient, flexible, and sustainable energy system for the UK.**

To find further information on our entry gas connection services for biomethane, or other forms of distributed gas, please visit [cadentgas.com/our-services/biomethane](cadentgas.com/our-services/biomethane).

### Table 1: Biomethane sites – total connections and production capacity

| Year | 14/15 | 15/16 | 16/17 | 17/18 | 18/19 | 19/20 | 20/21 | 21/22 | 22/23 | 23/24 | 24/25 | 25/26 | 26/27 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sites** | 10 | 22 | 28 | 29 | 32 | 35 | 36 | 38 | 42 | 44 | 47 | 45[1] | **As of August: 46**<br><br>**Forcast by year end: 49** |
| **Max flow (TWh/ year)** | 0.64 | 1.44 | 1.78 | 2.03 | 2.38 | 2.52 | 2.63 | 2.87 | 3.13 | 3.35 | 4.04 | 4.79 | **As of August: 4.89**<br><br>**Forcast by year end: 5.38** |

*1. In 2025, two producers disconnected. This was offset by expansions from existing production sites already connected.*

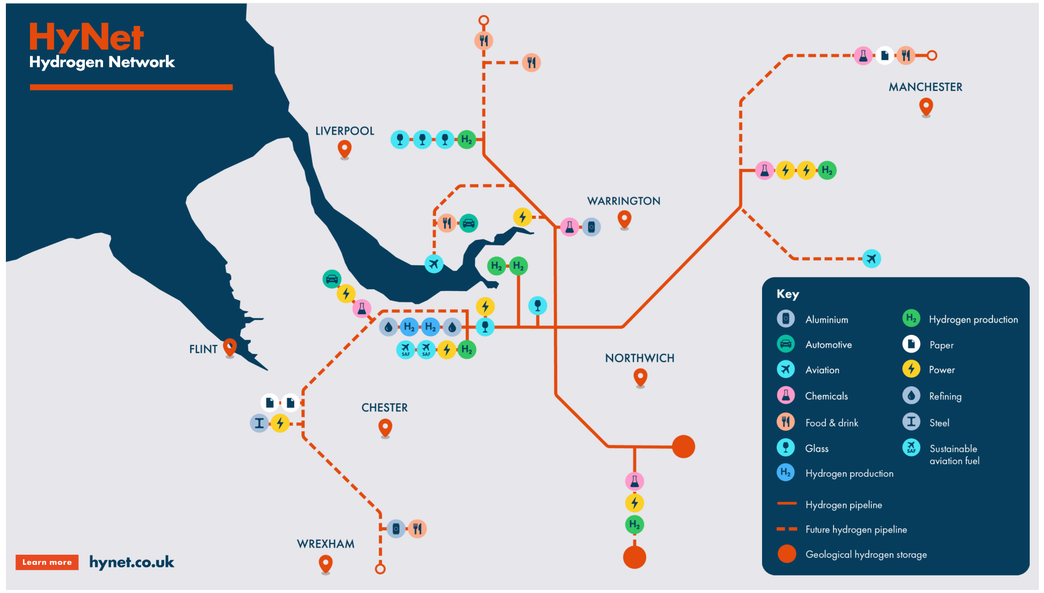
# Biomethane and green gas strategy continued

## Hydrogen

We continue to develop regional hydrogen programmes across all network areas: HyNet North West, East Coast Hydrogen, Hydrogen Valley and Capital Hydrogen.

HyNet North West is our furthest advanced network project and has progressed to an advanced stage of engineering design. The project is highly deliverable, with a healthy pipeline of hydrogen production projects and industrial demand from manufacturers and power generators. The network will connect to underground storage in Cheshire. Subject to the Hydrogen Transport & Storage Business Mode (HTSBM) competition being opened, HyNet could be the first Cadent hydrogen network project to apply for funding and if selected and constructed, the project could help to abate almost 6m tonnes of carbon dioxide per annum.

The H2 East Humber to Nottinghamshire Pipeline project is part of Cadent's East Coast Hydrogen Programme. After securing funding through an Ofgem Re-Opener mechanism in 2025, the project is currently carrying out a Front End Engineering Design study, which will put the project in the best position to apply for possible future Government HTSBM funding rounds.



# Connections and network growth

## Enabling customers, communities and producers to use network capacity

Connections are one of the key parts of the LTDP because they link network capability with customer, economic and environmental outcomes. We support domestic and commercial customers, industry, power generation, independent networks, infrastructure providers and renewable-gas producers. The objective is to provide a transparent and efficient connection service while making prudent use of existing and new capacity.

## Connection trends

In 2025/26, new connection activity remained below the levels anticipated at the start of RIIO-2, continuing the year-on-year decline seen throughout the period. The latest RRP forecast indicates that total connections across RIIO-2 will be substantially lower than originally planned, highlighting the continued uncertainty in forecasting future connection requirements.

## Power generation and system resilience

Gas-fired power generation remains vital for energy resilience. We currently have 216 power generation sites connected, generating 2,474.2 MW, with 13 additional projects accepted for future design and build. We continue to support the power generation community and Utility Infrastructure Providers (UIPs), focusing on project design and commissioning.

## Competitive and third-party connections

We process connections to Independent Gas Transporter (IGT) networks and UIPs, ensuring seamless integration with our network. Account management is now being embedded across the end-to-end process, and we continue to run a customer engagement programme to drive continuous improvement. We have introduced tiered pricing to incentivise IGT and UIP customers to submit completion files promptly, supporting timely updates to our asset data systems. Full details of our connection services are available at **cadentgas.com/services/3rd-party**.

## Communities and buildings

For some off-gas-grid communities, network extension may offer a lower-disruption route away from more carbon-intensive fuels, although suitability depends on local circumstances and long-term energy plans. Trials and evidence should be used to understand customer value, carbon implications and any regulatory change required.

Multi-occupancy buildings need particular attention because infrastructure condition, ownership, access, communal systems and future heating choices can affect many residents at once. We inspect relevant gas infrastructure and develop investment plans where replacement is required. Where replacement is not viable, customer support and coordinated planning with building owners and local partners are essential.

## Vulnerable customers

Connection activity also supports social outcomes through the Fuel Poor Network Extension Scheme and community partnerships. These interventions should be coordinated with wider affordability, energy-efficiency and wellbeing support so that a connection forms part of a sustainable solution for the household.

## Future focus

- Improve transparency of available capacity and connection requirements.
- Use digital information and account management to simplify the customer journey.
- Coordinate with local and regional energy plans to anticipate demand and avoid inefficient reinforcement.
- Enable renewable-gas connections through the actions described in page 14.
- Continue learning from customers, developers and delivery partners to improve service and predictability.

# Innovation and digital transformation

## Turning evidence into safer, more efficient and lower-carbon ways of working

Innovation helps us to solve defined customer and operational challenges, improving safety, efficiency, resilience and environmental performance. Projects must produce usable evidence and have a clear route into operational practice, investment decisions or wider adoption.

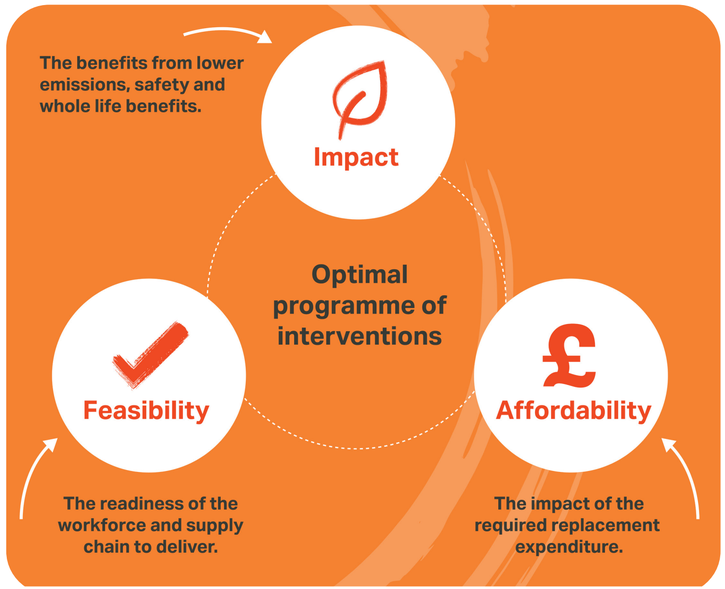
Projects start with a clear need, intended outcome and accountable owner. Trials involve operational users and delivery partners, with safety, data, cyber security, training, funding and long-term ownership considered before wider deployment.

## Priority areas

- Reducing excavation, disruption, leakage and operational risk.
- Improving pressure control, network monitoring and capacity use.
- Supporting renewable-gas connections and energy planning.
- Using secure, reliable data to improve decisions and customer support.

## Innovation funding and governance

Innovation is funded through the Network Innovation Allowance, Strategic Innovation Fund or business-funded deployment, depending on maturity and expected benefits. Projects are assessed against five criteria: need, benefits, risk, learning and potential for adoption. Reporting then clearly separates proposals, trials, completed projects and operational deployments.




## Digital transformation

Digital transformation improves network visibility, forecasting and decision-making. Priorities are reliable asset information, interoperable data, secure platforms, clear ownership and tools designed around operational needs. New platforms are developed only where existing capabilities cannot meet the requirement.

## Collaboration and learning

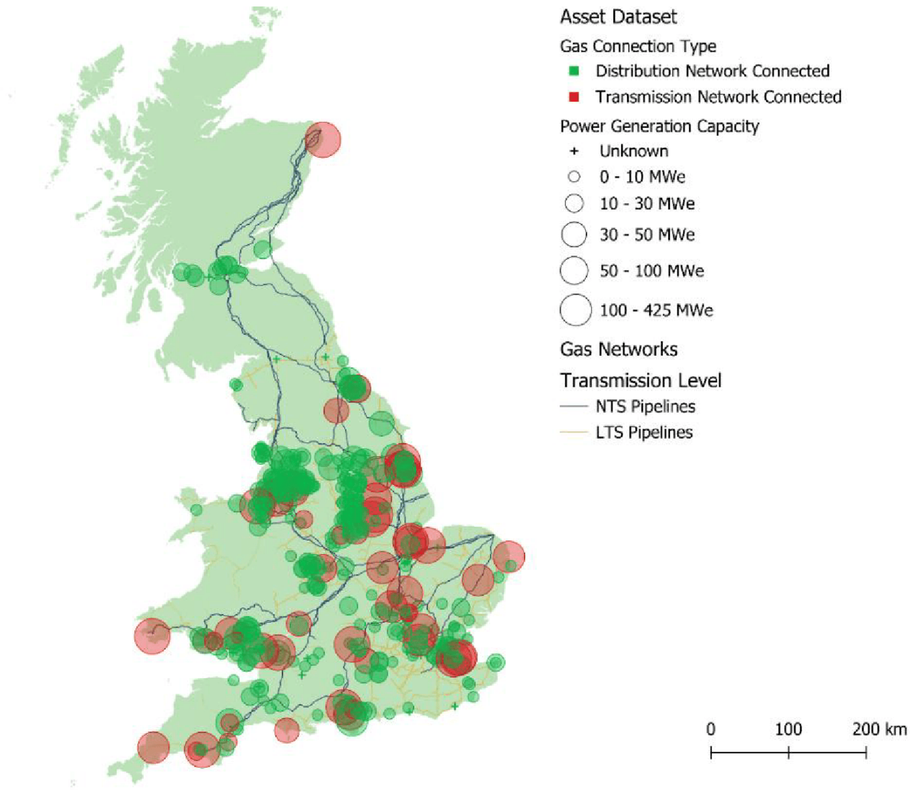
We work with networks, technology providers, academia, government, regulators and delivery partners to share evidence, reduce duplication and accelerate adoption. Lessons are captured throughout delivery, including where projects change direction or stop.

## Innovation case studies

### Smart Pressure Control

This project is testing remotely controllable governors, telemetry and digital control to manage network pressures more responsively. Business-funded deployment on selected assets will assess benefits for operational efficiency, biomethane injection, changing demand and reduced site interventions.

# Innovation and digital transformation continued




Map of Power Generation sites across the UK

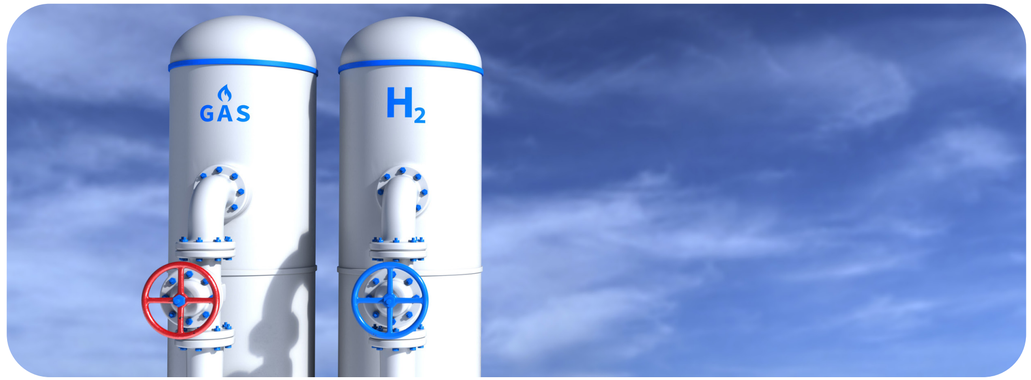
## Role of Gas Distribution Networks in Power Generation

This project developed a quality-assured dataset of more than 850 generating sites across Great Britain and tested future scenarios for 2030, 2040 and 2050. It found that gas distribution networks connect around a quarter of Great Britain's flexible generation capacity, strengthening evidence for demand forecasting, resilience assessment and regional energy planning.

## Hydrogen Blending

Our hydrogen blending programme has developed technical, safety, operational and commercial evidence, including field evidence and support for the national safety review. Any future implementation remains subject to government policy, regulatory approval and the required safety and commercial arrangements.

Further details on these and other innovation projects are available in the Innovation Annual Summary.



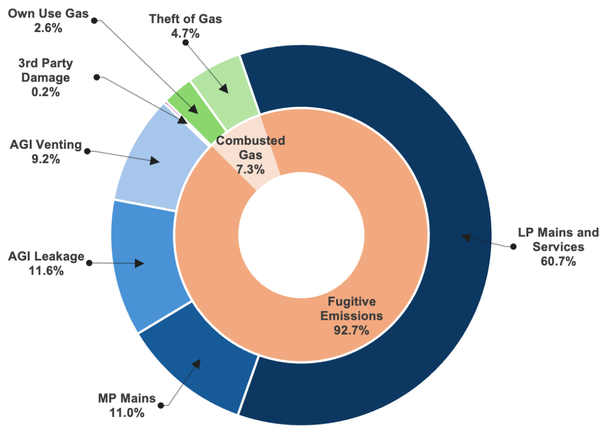
# Appendices

## Appendix A: Shrinkage and Emissions Methodology and Performance Data

### Emissions Performance

The chart shows the split between the different leakage components, theft of gas and own use gas categories in 2025/26. We expect the mains leakage portion to continue to decrease year on year because of gas mains replacement activity. Own use gas and theft of gas are calculated as a factor of throughput and so will vary according to demand.

### Cadent Shrinkage Component Breakdown




The majority (92.7%) of our emissions are from leakage, with own use gas and theft of gas only contributing a small percentage of the total. Own use gas and theft of gas are components that account for gas that is used, but not metered, and so is estimated as part of the Distribution Network emissions assessment.

A summary of the 2025/26 shrinkage volume performance against the prior year is shown in the table below, detailing the movement of each component compared to the previous year's emissions.

| Component | | GWh | Commentary |
|---|---|---|---|
| **2024/25 Shrinkage** | | **973.0** | **2024/25 Emissions Total** |
| Mains & Services | ↓ | -35.4 GWh | Benefits from mains replacement |
| System Pressure | ↓ | -14.1 GWh | Impact of system pressure movement |
| MEG Treatment | ↓ | -0.8 GWh | Changes to gas conditioning performance |
| 3rd Party Damages | ↑ | 0.2 GWh | Changes to 3rd party damage volume |
| AGI Emissions | ↓ | -0.1 GWh | Movement in AGI venting and leakage |
| Own Use Gas | ↓ | -1.7 GWh | Throughput impacts on Own Use Gas |
| Theft of Gas | ↓ | -3.0 GWh | Throughput impacts on Theft of Gas |
| Calorific Values | ↑ | 4.2 GWh | Impact of changes to Calorific Values |
| **2025/26 Shrinkage** | | **922.4** | **2025/26 Emissions Total** |

### Cumulative Performance

Across our four networks shrinkage gas losses were reduced by 50.6 GWh (5.2%). Based on an assumed typical annual consumption of 12,500 kWh, this reduction is equivalent to the gas usage of over 4,000 domestic properties.

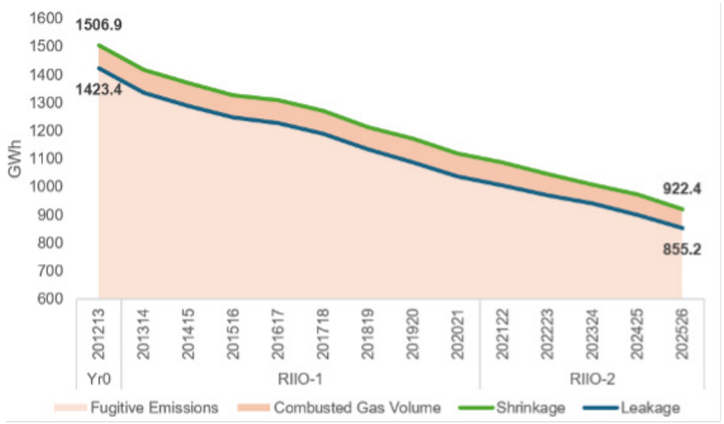
- Delivery of the iron pipe replacement programme by inserting plastic into our metal pipes
- Optimisation of system pressures in the local networks
- Injection of mono-ethylene glycol (MEG) into our networks, which helps reduce leakage by swelling pipe joints

Network level cumulative performance is summarised in the table below, demonstrating the latest reported performance against the outturn position prior to the start of our RIIO-1 regulatory period.

| | Eastern | North London | North West | West Mids |
|---|---|---|---|---|
| **2012/13 Emissions** | 516.8 GWh | 272.8 GWh | 391.1 GWh | 326.3 GWh |
| **2025/26 Emissions** | 322.8 GWh | 161.3 GWh | 226.0 GWh | 212.3 GWh |
| **Reduction** | -194.0 GWh | -111.5 GWh | -165.1 GWh | -114.0 GWh |
| **Reduction** | -37.5% | -40.9% | -42.2% | -34.9% |

# Appendix A continued

Since 2012/13, we have achieved shrinkage volume reductions of 584.6 GWh (38.8%) against opening baselines. This is the equivalent to the gas consumption of over 46,500 homes using the calculation approach described above. The graph below demonstrates the long-term emissions profile of shrinkage and leakage.



# Appendix B: Biomethane and green gas

## There are broad environmental and economic benefits to biomethane injection.

Biomethane is produced by fermenting organic matter, with feedstocks ranging from farm and animal waste to food and sewage waste, crops and silage. This gas can be injected straight into the existing gas distribution network, and customers won't need to make any changes to their appliances, making it a cost-effective decarbonisation solution for hard to electrify homes and businesses. In addition to decarbonising the gas we as a nation rely on for energy, the production and injection of biomethane into the gas grid also affords several other environmental and economic benefits:

- It provides a green and sustainable solution to waste management for industrial, commercial and domestic users.
- It also produces two useful co-products: Digestate (an organic fertiliser that reduces the need for artificial fertilisers produced by fossil fuels) and biogenic CO2 (which can be stored in the ground with CCUS technologies to reduce atmospheric CO2 levels).
- It provides additional green revenue streams and jobs for farmers and rural economies.

## Biomethane will be needed to reach net zero

The National Energy System Operator has confirmed that more biomethane can deliver significant value across the energy system, in their 2026 report on the role of biomethane. For more information, see: neso.energy/document/384986/download

In their 2025 Future Energy Scenarios (FES) publication, the National Energy System Operator (NESO) have concluded that producing 64 TWh of biomethane by 2050 to displace natural gas is necessary to meet the UK's legally binding climate targets, including net zero by 2050. This compares to 7 TWh produced today. For more information, see: neso.energy/document/364541/download

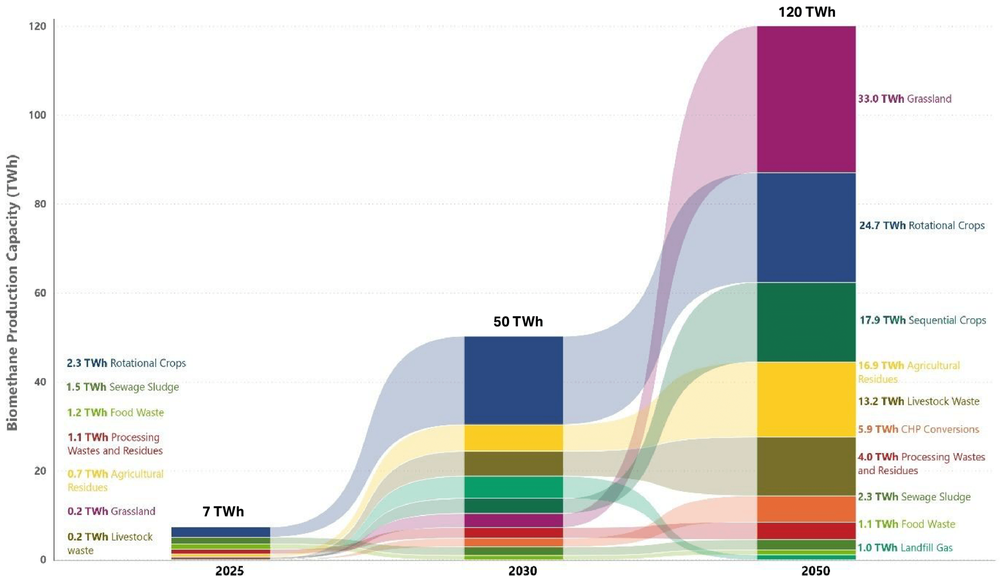


# Appendix B continued

## There is untapped biomethane potential to scale biomethane in the UK, bringing economic benefits

We have co-founded the Green Gas Taskforce with other gas networks, biomethane producers and biogas members organisations. The purpose of this Taskforce is to explore and explain the importance of biomethane to the UK energy system.

Recent research by Alder Bio Insights commissioned by the Green Gas Taskforce has conservatively estimated there will be technical potential for 120 TWh per year of biomethane in the UK by 2050, without impacting our domestic food growing potential. Displacing natural gas with 120 TWh of biomethane would mean between 20% and 90% of the UK's gas by 2050 is low carbon (dependent on future gas demand scenarios).




**Biomethane growth potential, by feedstock type (TWh per year)**

Recent research by Baringa commissioned by Cadent and the Green Gas Taskforce has found that, by reaching 120 TWh per year of biomethane, we could deliver net zero at significantly lower cost (c. £174bn).

The economic benefits go wider than net zero. The work found that because the UK biomethane sector is 85% UK-based, investing in scaling biomethane means creating nearly 60,000 high-quality local jobs and economic growth worth up to £70bn by 2050.

For more information on our work with the Green Gas Taskforce on biomethane's benefits and potential, please visit greengastaskforce.co.uk



# Appendix B continued

## We are facilitating more distributed entry for green gas

We continue to engage with our customers so we can refine our processes to facilitate continued growth in the biomethane sector. We are facilitating more entry capacity in our network through:

**Identifying existing capacity with better measurement**

We are installing flow meters at critical points in our network to refine our data of available capacity and identify hot spots where developers can connect most easily. This data is being converted into network capacity maps that we are preparing and will be sharing with developers.

**Controlling gas flows to create more capacity where it is most needed**

We are installing smart pressure management technology and offtake metering systems across our network to help control our network flows and unlock more capacity at lower pressure tiers for biomethane developers to inject their produced gas, particularly during summer months.

**Reinforcing our network to improve capacity**

We have commissioned the first reverse compression solution in the UK, the Optinet Project, that proves the concept of network solutions in the UK and unlocks capacity through compression




up the pressure tiers when demand is low. We are exploring a standardised network reverse compression solution that can be replicated in capacity-restricted areas to cost-effectively facilitate the opportunity for more biomethane injection.

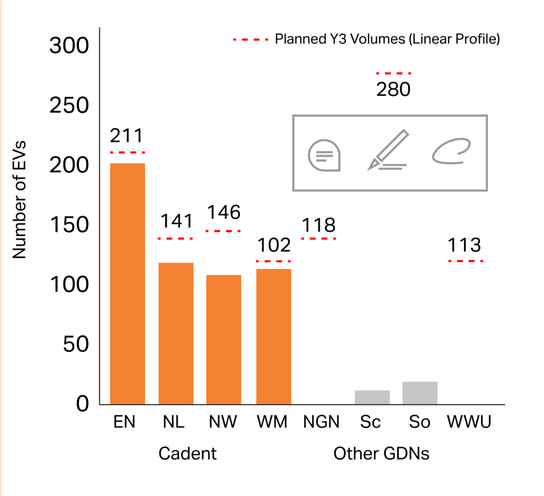
We have launched our new entry reinforcement assessment window process to coordinate network reinforcement for sites looking to connect. Our first window ran in January 2026. We received 37 applications, which if all connected would create an additional 5.4 TWh/year of installed capacity onto the network. Of the 37 applications, 8 have been able to proceed down the standard connections route (no reinforcement needed) due to the increase in flow data we now have available on the network, which has increased our confidence that we will be able to offer the producer injection capacity at low demand levels. For the remaining sites, which require reinforcement, we are working with the producers on identifying the lowest cost fit-for-purpose reinforcement solutions needed to connect their sites.

**Streamlining connections processes**

We continue to work collaboratively with the AD community and the Gas Distribution Networks (GDNs) through the 'Green Gas Technical Forum', to drive standardisation for biomethane connections across the networks to support growth.

# Appendix C: Transport decarbonisation performance data

**We are leading the sector in zero emissions commercial fleet roll out, achieving 49% of the period target, with other GDNs only achieving 2% combined**

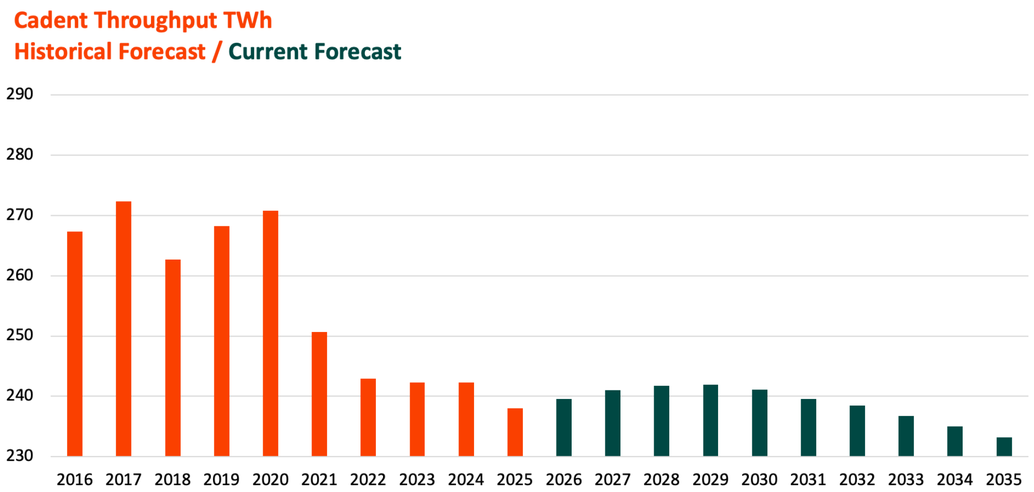



Each 100% biomethane-powered HGV typically saves up to 84% of $CO_2$ emissions, equivalent to around 130–150 tonnes per year, compared with the same vehicle powered by Euro VI diesel.

| | East Anglia | East Midlands | North-West | West Midlands | North London | Total |
|---|---|---|---|---|---|---|
| CNG Fueling Stations | 1 | 5 | 5 | 1 | 2 | 14 |

# Appendix D: Demand forecasting methodology and assumptions

This year's projection for future demand is slightly lower than the previous year's forecast, largely due to a slower normalisation of consumer demand. Residential demand is forecast to recover over the next couple of years, followed by commercial demand, which is expected to recover more slowly. Industrial demand is predicted to decrease slightly in the later part of the ten-year outlook, reflecting government target announcements on the use of hydrogen in industrial clusters.




*Graph 1: Annual throughput – 10 year historical and 10-year forecast*

In 2018, Ofgem requested that networks across transmission, distribution, gas and electricity agree a common set of factors and assumptions for developing their core view of the future. As part of this review, we debated the key areas that will affect and drive behaviours in gas demand over the next ten years.

The outcome was an unprecedented level of collaboration and knowledge sharing, which has resulted in greater understanding and agreement on the common factors and assumptions affecting each network's demand forecast. This has reinforced the stance we take in all key areas, providing a strong basis on which to review and agree the position for our demand forecast.

The FEP 2026 document provides four scenarios based on the 2026 pathways. The FEP team has focused on process improvements this year and has also provided us with an updated ten-year outlook. The scenarios provide guidance based on the underlying assumptions for each pathway, while the forecast indicates expected demand based on those assumptions.

This year, we have used the ten-year outlook provided by NESO as we both believe that this represents the most realistic view of the shorter-term evolution of the energy system and is influenced less by the modelling assumptions regarding the longer-term decarbonisation choices.

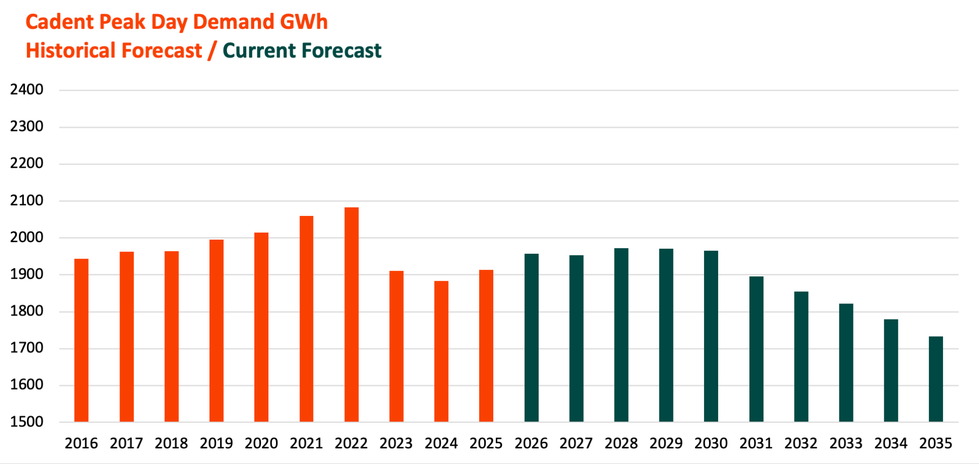
# Appendix D continued

## Forecast comparison and accuracy

The forecast is broken down as follows:

**Appendix D1** contains demand forecast information at a local level through to 2035.

- A comparison of actual demands during 2025 with the forecasts in our LTDP
- Maximum and minimum demand days and forecasts for winter and summer 2025/26.




*Graph 2: Peak hour demand - 10 year historical and 10-year outlook*

## Future demand factors

Annual demand is increasing, although it remains lower than the 2025/26 forecast described above. Demand is then expected to decrease gradually over the ten-year period because of energy efficiency measures in homes and industry. The assumptions about the impact of energy efficiency measures on gas demand will continue to be reviewed as easier measures are completed, leaving more costly and difficult measures to address.

Our demand forecast includes alternative technologies such as air-source heat pumps, which will reduce customers' use of gas. We also include gas-efficient appliance technologies, such as gas-sourced heat pumps and combined heat and power, which reduce carbon intensity.

These new and emerging technologies can help us remain flexible as we meet domestic peak heat demand and reduce pressure on the electricity grid. New hybrid appliances powered by renewable electricity could switch to gas at peak times, or at other times when there is not enough renewable electricity.

Other developments include smart technologies that can switch from electricity to gas depending on changes in the price of electricity, and smart appliances that can choose the cheapest or lowest-carbon fuel. Combining all these technologies is the best way to make the most of renewables across both energy supplies. It will also maximise the use of the network and associated assets that customers have already funded.

New technology and the way gas is used across the year and at peak times are changing, and this will continue as new technologies become the norm and behaviours evolve. This is leading to a clear distinction between our view on annual demands versus peak demand. Gas used across the seasons is likely to continue to decline, but the original relationships that the gas industry has built from experience are beginning to be less relevant. Through numerous innovation projects run by the gas networks, we are looking to understand the evolving relationships between peak and annual demands, and to consider whether we take a whole new approach to how we forecast future demand.

# Regulatory basis for document

**This statement is produced for the purpose of and in accordance with Cadent Gas Ltd obligations in Standard Special Condition D31 of its DN Gas Transporters License and section O4.1 of the Transportation Principal Document of the Uniform Network Code in reliance on information supplied pursuant to section O of the Transportation Principal Document of the Uniform Network Code. Section O1.3 of the Transportation Principal Document of the Uniform Network Code applies to any estimate, forecast or other information contained in this statement.**

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Standard Special Condition D3 requires that a statement, published annually, shall provide a ten-year forecast of Distribution Network Transportation Activity concerning likely use of the pipeline network and system developments that can be used by companies, who are contemplating connecting to our system or entering into transport arrangements, to identify and evaluate opportunities.

**Cadent Gas Ltd Pilot Way Ansty Park Coventry CV7 9JU**
**Registered in England and Wales No. 10080864 cadentgas.com**

# Further reading and references

## Please follow the links below if you would like to find out more:


1. https://www.neso.energy/document/384986/download
2. https://www.neso.energy/document/364541/download
3. https://greengastaskforce.co.uk
4. https://riio3.cadentgas.com/
5. Cadent's RIIO-3 Business Plan
6. https://cadentgas.com/about-us/future-of-gas/our-green-print Our Green Print - Future Heat for Everyone
7. https://cadentgas.com/get-connected
8. https://cadentgas.com/digging-safely/keeping-you-safe-around-our-pipes
9. How to dig and work safely close to our gas assets
10. https://cadentgas.com/news-media/document-library
11. Information and research carried out/commissioned by Cadent, about the future role of gas in the UK energy system.
12. https://www.neso.energy/publications/future-energy-scenarios-fes
13. NESO's full Future Energy Scenarios documents and supporting information.
14. www.ofgem.gov.uk
15. Homepage for the Office for Gas and Electricity Markets (Ofgem)
16. https://www.gov.uk/government/organisations/department-for-energy-security-and-net-zero/
17. www.energynetworks.org
18. www.eua.org.uk

# Closing statement



**Thank you for engaging with our 2026 Long-Term Development Plan. Our commitment is clear: to deliver a safe, reliable, and resilient gas network that supports the UK's journey to decarbonisation.**

Through innovation, targeted investment, and strong stakeholder engagement, we are reducing emissions, modernising infrastructure, and enabling the growth of green gases like biomethane and hydrogen. Our plans are shaped by customer feedback and regional needs, ensuring we remain adaptable and forward-looking.

We invite you to share your views at cadentgas.com/ltdp as we continue to set standards for excellence and sustainability in the energy sector.

**Dave Moon**
**Director of Asset Strategy**

# Glossary

| Acronym | Meaning | Definition |
|---|---|---|
| **AD** | **Anaerobic digestion** | A process that breaks down organic matter to produce biogas, which can be upgraded to biomethane for injection into the gas network. |
| **AGI** | **Above-ground installation** | Gas network equipment located above ground, such as pressure-reduction or control assets. |
| **ALD** | **Advanced Leakage Detection** | Enhanced survey and sensor capability used to identify and measure methane emissions from the network. |
| **ALIP** | **Advanced Leakage Intervention Programme** | A programme that targets repair, pressure changes, robotic techniques or replacement where leakage evidence shows the greatest benefit. |
| **ALMA** | **Advanced Leakage Management Approach** | Cadent's end-to-end approach that links leakage detection, analytics and intervention to reduce methane emissions. |
| **AQ** | **Annual Quantity** | The annual gas consumption at a supply point, measured over a year under average weather conditions. |
| **CCUS** | **Carbon capture, usage and storage** | Technology that captures carbon dioxide so it can be reused or stored rather than released to the atmosphere. |

| Acronym | Meaning | Definition |
|---|---|---|
| **CHP** | **Combined heat and power** | A system that generates electricity and useful heat from the same energy source. |
| **CNG** | **Compressed natural gas** | Natural gas compressed to high pressure, often used as a vehicle fuel. |
| **$CO_{2_2}$** | **Carbon dioxide** | A greenhouse gas produced by burning carbon-based fuels and a key measure in emissions reduction. |
| **CV** | **Calorific Value** | The amount of energy contained in each volume of gas, measured in megajoules per cubic metre. |
| **DPLA** | **Digital Platform for Leakage Analytics** | A digital tool that uses advanced sensors and analytics to detect and prioritise gas leaks across the network. |
| **EV** | **Electric Vehicle** | A vehicle powered by electricity, either fully electric or as a plug-in hybrid. |
| **FCO** | **First Call Operative** | A field engineer who responds to gas emergencies and operational issues. |
| **FEP** | **Future Energy Pathways** | A set of future energy pathway assumptions used to support demand forecasting and scenario planning. |
| **FES** | **Future Energy Scenarios** | Industry-wide scenario planning, led by NESO, to inform long-term energy system development and investment. |

| Acronym | Meaning | Definition |
|---|---|---|
| **GD2** | **Gas Distribution price control period 2** | The second gas distribution regulatory price control period under Ofgem's RIIO framework. |
| **GD3** | **Gas Distribution price control period 3** | The third gas distribution regulatory price control period under Ofgem's RIIO framework. |
| **GD4** | **Gas Distribution price control period 4** | The fourth gas distribution regulatory price control period under Ofgem's RIIO framework. |
| **GDN** | **Gas Distribution Network** | A licensed operator responsible for the safe and reliable delivery of gas within a defined geographical area. |
| **GT** | **Gas Transporter** | A licensed company responsible for transporting gas through the network to customers. |
| **GWh** | **Gigawatt hour** | A unit of energy equal to one million kilowatt hours. |
| **HGV** | **Heavy goods vehicle** | A large vehicle used for transporting goods, often referenced in the context of fleet decarbonisation. |
| **IGT** | **Independent Gas Transporter** | A company that owns and operates gas networks independent of the main Gas Distribution Networks. |
| **IMRRP** | **Iron Mains Risk Reduction Programme** | A long-term initiative to replace ageing metallic gas mains with modern polyethylene pipes to enhance safety and reduce leaks. |
| **ISO** | **International Organisation for Standards** | An international body that publishes standards, including asset management standards such as ISO 55001. |

| Acronym | Meaning | Definition |
|---|---|---|
| **LDZ** | **Local Distribution Zone** | A geographic area supplied by one or more offtakes from the National Transmission System, containing both high- and lower-pressure pipelines. |
| **LNG** | **Liquefied Natural Gas** | Natural gas that has been cooled to a liquid state for storage or transport. |
| **LTS** | **Local Transmission System** | Pipelines operating at more than 7 bar, transporting gas from the National Transmission System to the distribution system. |
| **MEG** | **Mono-ethylene glycol** | A chemical used in gas conditioning to help reduce leakage by swelling pipe joints. |
| **MJ/m³** | **Megajoules per cubic metre** | A unit used to express the calorific value, or energy content, of gas. |
| **MOB** | **Multi-Occupancy Building** | A building with multiple residential or commercial units, often requiring specific gas infrastructure and safety measures. |
| **MW** | **Megawatt** | A unit of power equal to one million watts. |
| **NARM** | **Network Asset Risk Metric** | A methodology for assessing and tracking the risk of asset failure across the network. |
| **NESO** | **National Energy System Operator** | The national body responsible for whole-system energy planning and coordination, including scenario development and network capability assessments. |
| **PHEV** | **Plug-in Hybrid Electric Vehicle** | A vehicle that combines a conventional engine with an electric motor and battery that can be recharged by plugging in. |

| Acronym | Meaning | Definition |
|---|---|---|
| **RESP** | **Regional Energy Strategic Plan** | Spatially modelled regional plans that guide infrastructure investment and decarbonisation pathways. |
| **RIIO** | **Revenue = Incentives + Innovation + Outputs** | Ofgem's regulatory framework for energy network price controls. |
| **RIIO-GD3** | **RIIO Gas Distribution price control period 3** | The third price control period for gas distribution networks under Ofgem's RIIO framework. |
| **SAMP** | **Strategic Asset Management Plan** | A long-term plan for managing network assets, balancing safety, performance and investment efficiency. |
| **SIF** | **Strategic Innovation Fund** | A fund supporting innovation projects in the energy sector, such as DPLA and advanced emissions sensors. |
| **TWh** | **Terawatt hour** | A unit of energy equal to one billion kilowatt hours. |
| **UIOLI** | **Use It or Lose It** | A funding or capacity-access mechanism where unused rights or funding may be released for wider use. |
| **UIP** | **Utility Infrastructure Provider** | A company responsible for designing and constructing gas networks, which may then be owned and operated by Cadent or an Independent Gas Transporter. |
| **UNC** | **Uniform Network Code** | The industry code governing arrangements for gas transportation, balancing and network operation in the UK. |