

Our 2021 Stakeholder Report



WELCOME...

To our 2021 stakeholder report readers.

We publish this report each year to update our customers and stakeholders on our activities and performance over the past 12 months.

This year, as well as highlighting key activity over 2020/21, we've also taken the opportunity to reflect on the past eight years, throughout the RII0-1 regulatory period.







Keeping the North of England cooking on gas is always a complex

and varied job – but especially so during the global pandemic that has dominated so much of the past two years.

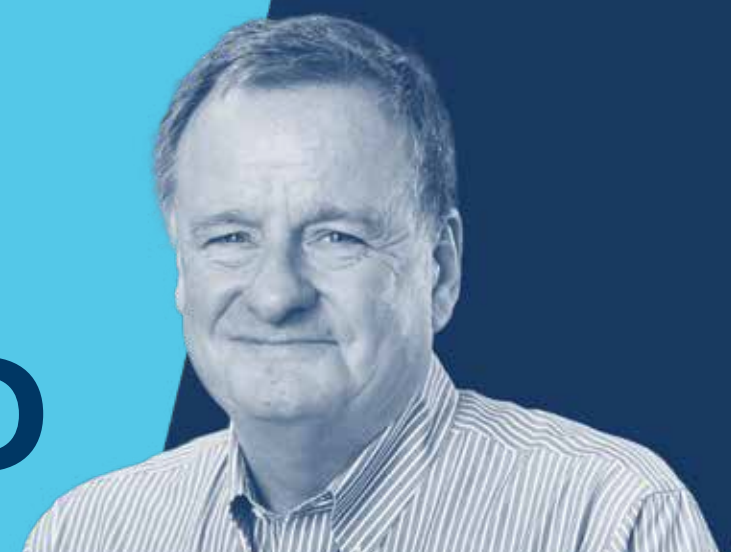
You can read about how we have responded to the pandemic, and reached out to help our more vulnerable customers, throughout this report.

We hope you find the report interesting and informative. Please do get in touch if you'd like to find out more about any aspect of our work.

HOW TO GET IN TOUCH

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A WORD



FROM MARK

Back in 2013, at the start of a new regulatory period for our business, we made a number of promises to our customers.

We promised to get the basics right, by providing a safe and reliable gas service that our 2.7 million domestic and business customers could rely on. We promised great customer service, by responding promptly to complaints, by minimising the inconvenience caused by our roadworks and by tailoring our services to the needs of different types of customers.

We promised to reduce our business carbon footprint, while at the same time, developing new forms of green, sustainable energy.

And we promised to help struggling customers in vulnerable circumstances, by providing free gas connections and by working with partner organisations to offer a holistic range of support.

Eight years later, as we closed out the regulatory period, I'm delighted to say that we have delivered on our promises, and indeed, gone even further in some areas.

Our customer service score has averaged 9.07 out of 10 across the period placing us in 2nd place among all UK gas distributors.

We've maintained a number one position for efficiency in the industry, by introducing innovative new ways of working to save money without compromising our service.

Our business carbon footprint has reduced year-on-year and we have adopted a UK-leading role in the development of hydrogen as an alternative to natural gas, paving the way for a new era of clean and sustainable heating for homes and business – as evidenced by the Government's recent publication of its Hydrogen Strategy.

And we have helped thousands of struggling customers to reduce their energy bills, enjoy warmer homes, avoid social isolation and take advantage of new, NGN-funded community services and resources.

In 2020/21 – the final year of the last regulatory period – we showed no signs of slowing down. From our new Social Mobility Pledge, which aims to narrow the opportunities gap for local communities, to our release of Green Bonds, which give customers a stake in the creation of a greener gas network, we have continued to implement challenging and imaginative new ways of working.

With the Coronavirus pandemic still restricting day-to-day life and exacerbating many of the struggles faced by our local communities, we know life is not going to be easy for many of our customers in the years ahead.

Stakeholders regard Northern Gas Networks as an anchor institution – one that has influence on the economic and social prosperity of the region. In a post-COVID world, this role has never been more important.

I believe our relationship with our stakeholders and customers has grown closer during the pandemic. I am incredibly proud of the way colleagues have responded – through charitable acts, and by continuing to provide front line gas services, even in the face of alarming headlines and statistics.

As we start the next regulatory period, we are in a strong position. Our pipe network is in great shape, our office infrastructure, systems and processes are cutting edge and we have the partnerships in place to make sure we continue to help our communities recover.

Mark Horsley
Chief Executive Officer
Northern Gas Networks

WHAT WE DO, AND WHERE WE SERVE

We are Northern Gas Networks (NGN), the North of England's gas distributor.

It's our job to look after all the pipes and associated equipment that keep 2.7 million homes and businesses cooking on gas.

Our network spans the North East, northern Cumbria and much of Yorkshire.

We also provide the region's emergency gas response service. If you smell gas and call the National Gas Emergency Line – 0800 111 999 – our engineers will be dispatched to keep you safe.



VALUE FOR MONEY

We are committed to investing our customers' money wisely.

NGN remains the most efficient gas distributor in the UK. We use local engineering companies to carry out our pipe replacement work – which puts money back into the region and results in better service.

We use innovative processes and techniques – from robots that can fit inside pipes to police trained sniffer dogs to detect leaks – to get our core work done more quickly and cost-effectively.

We use a value framework as the basis for our investment decisions – which looks at the long-term social, environmental and economic impact of our investments.

And we have modernised our workforce, with new terms and conditions, training programmes and a new IT system, to ensure everyone can work efficiently, every day.

In 2020/21, we saved £49 million against our projected budget, and have saved £299 million since 2013.

Thanks to these savings, £107 million will be returned to customers in the form of lower network charges.

HOW WE SPEND YOUR £139

Although our name isn't on the bill, around £139 (17%) of the average gas bill goes towards the distribution services we provide.

Since 2013, we have invested this money as follows:

£800 MILLION ON NEW PIPES

We replaced 3,886 km of old metal pipes with more reliable plastic versions.

£506.6 MILLION TO KEEP CUSTOMERS SAFE

We provide a 24-hour emergency service for customer who smell gas. Over the past year, we attended over 638,000 emergency call-outs, getting to more than 99% of them within the regulatory one or two hours.

£449 MILLION ON BIG ENGINEERING

We have some sizeable equipment on our network, which requires continual maintenance and occasional replacement.

£12.9 MILLION ON INNOVATION

Innovative processes and techniques can help us deliver our core work more cheaply and effectively. Our investment of £12.9 million in RIIO-1 has already delivered £4.6 million of savings.

£541 MILLION ON TAXES AND LICENCE FEES

Taxes and business rates paid to central and local government. This also includes the licence fee for industry regulation.

£357.7 MILLION ON LOANS FOR PREVIOUS INVESTMENT

To give the gas network the investment it needs, we borrow money and repay it like a mortgage.



ENGAGING WITH OUR CUSTOMERS AND STAKEHOLDERS

We're constantly talking with our customers and stakeholders, on the doorstep, online, through focus groups and forums and via surveys, to make sure we focus on the things that really matter.

Our Customer Engagement Group, a group of 10 individuals from across our region, with different backgrounds and skills, work alongside us – challenging our decisions and acting as a sounding board – to make sure we deliver the things that really matter to the region.

Meanwhile, our enduring Citizens' Jury brings together around 50 domestic customers broadly representative of our network. We have retained over 78% of our original members since

the group was established in 2019, who now act as mentors for our new members ensuring we have a balance of experience and fresh perspectives. This has allowed us to engage on more complex and sensitive issues such as shareholder returns and inclusion. Whilst engaging virtually throughout the pandemic has been challenging at times, the benefits have outweighed the challenges, allowing our customers to deliberate and inform business decisions such as our Covid-19 response, Diversity and Inclusion Strategy and Social Mobility.

Modelled on our Citizens' Jury, this year we launched our Young Innovators Council, made up of 35 young people aged 14 to 19-years-

old. The council is drawn from across our network area and represents the wide range of communities we serve. Issues like our transition towards net zero and recovery from the pandemic will profoundly affect young people in the years to come. As our future employees, customers and partners of tomorrow, we felt it was crucial we give them a voice in the decisions we are making that will affect them. In line with our Social Mobility Pledge commitments, the council provides a unique opportunity for young people to learn more about the energy industry whilst developing a range of work-based skills.

FINANCIAL REWARDS

To make sure we deliver a great value service to customers, our regulator, Ofgem, monitors our performance each year against pre-agreed targets.

We get financial rewards for beating targets and penalties for falling short.

The process is known in the industry as RIIO: Revenue = Incentives + Innovation + Outputs.

Across the regulatory period (2013-2021), we received a total of £79.3 million of financial rewards from Ofgem, for exceeding our performance targets. The money has been reinvested in our business.

HIGHLIGHTS

£18 MILLION
For delivering great customer service. No penalties were received.

£33 MILLION
For exceeding our targets for gas lost through pipe leaks – a key metric, as gas leaks can cause environmental damage.

£11.1 MILLION
For efforts to involve stakeholders in our activities and decision-making processes.



MAKING A POSITIVE DIFFERENCE TO OUR COMMUNITIES

Our network area contains some of the poorest neighbourhoods in the UK, with customers having to cope with high levels of fuel poverty and low household income.

The COVID-19 pandemic has hit these disadvantaged communities the hardest, compounding deep-rooted socio-economic issues.

Against this backdrop, our role as an anchor institution – one that creates social good through our daily work and long-term business decisions – has never been more important.

To make sure we focus our resources where they can have greatest impact, the past 12 months saw us develop an online tool, which provides a 'heat map' of vulnerability factors, ranging from fuel poverty levels to air quality.

Armed with this new tool and guided by internationally-recognised frameworks such as the UN Sustainable Development Goals – we have continued to support our most vulnerable customers and communities.

Our Community Partnering Fund, which supports grass roots community projects, has now invested nearly £300,000 since 2019, with recent projects having a strong focus on COVID recovery.

We have introduced a new strategy to encourage sign up to the Priority Services Register (PSR) – to make sure that as many vulnerable customers as possible can benefit from extra support in the event of gas loss or other utility outage.

Our eight-year target to deliver 14,500 free gas connections to fuel poor customers was comfortably exceeded – with a total of 15,621 free connections over the period. And through our partnership with Yorkshire Energy Doctor, we've continued to provide complementary support, such as energy saving advice and free home insulation.

Despite the pandemic, we continued to educate the region about the dangers of Carbon Monoxide (CO), via online training for partner organisations and web-based school resources.

And in another exciting new development, we launched our Social Mobility Opportunity Action Plan, which has seen us increase work experience opportunities, apprenticeships and school outreach programmes.

VISUALISING VULNERABILITY ACROSS OUR REGION

Without accurate, easy to understand data about the types of challenges local communities are facing, we can't hope to utilise our limited resources effectively.

Realising that our data was held across multiple platforms and was often difficult to interpret, we created a new, central tool to help guide our activity. The tool provides a 'heat map' of more than 30 vulnerability factors, such as air quality, fuel poverty levels, number of food banks and number of customers

on the Priority Services Register. The tool allows us to see where on our network these different vulnerability factors combine, creating areas of significant need.

And this mapping tool is not the only thing guiding our social programme. We use the international UN Sustainable Development Goals framework to set targets and track progress and are signed up to the Business in the Community (BITC) Responsible Business Tracker, which sets out actions

that environmentally and socially responsible businesses should take and benchmarks performance.

Finally, we use our own 'value framework' to calculate the environmental and social impacts of our business decisions. We have applied the tool to major investments since 2019 – including our new business plan - to help us understand the benefits and impacts of projects and decide whether to scale up, start or halt projects.

PERFORMANCE HIGHLIGHTS

FREE GAS CONNECTIONS

We delivered 859 free gas connections for fuel poor customers in 2020/21, bringing our total for the eight-year regulatory period to 15,621 – comfortably exceeding our target of 14,500.

UNLOCKING HOUSEHOLD SAVINGS

Our Green Doctors scheme, which provides practical energy saving help for households, allowed customers save £250,000 in 2020/21 and over £996,000 in lifetime benefits over the regulatory period – keeping money in the pockets of our most vulnerable customers.

SUPPORT FOR GRASS ROOTS SCHEMES

Our grants programme, the Community Partnership Fund, awarded £99,152 to worthy causes in 2020/21, with a strong focus on COVID recovery projects. Since the scheme was launched in 2018, more than £298,318 has been awarded, benefiting more than 6,000 local people and creating 14 new jobs.

CONTINUING TO HELP OUR COMMUNITIES DURING COVID

The COVID-19 pandemic has hit the most vulnerable communities the hardest and it will be a long and arduous road back for many.

We've continued to support hard hit communities, by adapting existing services, and introducing new forms of support.

For example, our Community Partnering Fund, which provides grants for grass roots projects, now has a new 'recovery from COVID-19' category, and has recently provided grants for schemes ranging from a community fridge project to funding a support centre who help those in need to purchase essential household items.

Our Warm Hubs model, which provides places for communities to come together, has been adapted for remote delivery, with slow cookers and energy advice packs distributed via food banks.

We've adapted the way we deliver core services, such as replacing service pipes, to minimise or completely avoid contact with customers who are shielding. We have also moved education provision, such as school CO awareness, online, as a temporary replacement for classroom-based sessions.



BOOSTING SIGN-UP TO THE PRIORITY SERVICES REGISTER

20% of our customers are currently on the Priority Services Register (PSR) – a database of customers who may need extra support in the event of a problem, such as an interruption to the gas, water or electricity supply.

However, we know that vulnerable customers make up 30% of our overall customer base – so there is clearly more work to do to encourage sign ups to the PSR – especially against the backdrop of the COVID-19 pandemic.

In response, we've worked with our stakeholders to develop a new PSR strategy, which will help us achieve 5,000 referrals annually over the next five years – a 30% increase on levels during R100-1.

We've already started delivering against many of the actions in the strategy. For example, we've simplified our website PSR sign-up process and created PSR information in Urdu and Punjabi.

NARROWING THE OPPORTUNITIES GAP

Our stakeholders have asked us to do more to address the widening gaps in opportunities between those in disadvantaged and prosperous communities.

In response, we've signed the Social Mobility Pledge and created our own opportunity action plan which will see us increase opportunities for work experience with NGN, enhance our outreach work with schools and adults, and widen the net when recruiting apprentices.

Although it's early days, we've already made big strides, such as launching a partnership with local colleges to deliver leadership and green apprentices programmes, which has seen us recruit 27 new apprentices, including three female maintenance technicians.

TAKING ON THE 'SILENT KILLER'

Carbon Monoxide is colourless, odourless and can be deadly – which is why it has been dubbed the 'silent killer'.

We educate all ages about the dangers of CO. Our front-line emergency engineers are trained to deliver customer information on the doorstep, and we use online resources and school visits (pre-Covid) to educate children about CO from a young age. We designed a digital activity pack for 240 local primary schools and launched a new national competition for young students.

As a BPEC-accredited training provider, we have trained nearly 70 people across 5 partner organisations to raise awareness of CO, including advocates in local Sudanese and Kurdish communities, front line firefighters in Tyne and Wear and West Yorkshire and community groups from Carlisle to Kirklees.

TACKLING FUEL POVERTY

We're committed to helping our more vulnerable customers stay warm; budget effectively and look after their health.

We know fuel poverty still a pressing issue, with 15% of the UK's fuel poor households in our network.

We have delivered more than 15,500 free gas connections to customers in fuel poverty since 2013. However, these families often face many other complex problems – which is why we strive to go further than just putting in a new pipe.

A new project with Communitas Energy is taking a pragmatic view to tackling fuel poverty, by considering all available solutions. That could be a gas connection, or, in deprived or off-grid remote areas of the North East and East

Riding of Yorkshire - an alternative such as an air source heat pump system.

We have commissioned another partner – Yorkshire Energy Doctor – to run a three-year course to train front-line staff to become community energy ambassadors. 118 ambassadors across 82 organisations have already been trained since March 2020.

Meanwhile, our Green Doctors scheme, which sees experts carry out home energy audits, provide energy saving advice and install simple measures such as draft excluders and low energy light bulbs, has seen more than 5,178 families receive support since the scheme launched in 2016 – unlocking an estimated £996,500 in lifetime savings.

NET ZERO: ENSURING FUEL POOR CUSTOMERS ARE NOT LEFT BEHIND

The move to a net zero economy and the emergence of new technology is exciting – but can present a risk of leaving financially vulnerable customers behind. Customers who are already in fuel poverty could be the last to take up new green technology and opportunities – unless we can intervene to prevent this.

We have worked with Newcastle University, Northern Powergrid and Northumbrian Water to collate research and data on

fuel poverty, vulnerability and decarbonisation, to ensure fuel poor customers are not left behind in the green revolution.

This work will provide insights which will inform the utility sector's approach to the roll out of green technologies and the transition to net zero.

A SAFE, RELIABLE SERVICE

Getting the basics right in any job is essential. In our case, that means providing a safe service, with few supply interruptions, so customers can get on with their day.

The COVID-19 pandemic continued to have an impact on our repair and emergency response work – forcing us to adapt working practices to keep both our customers and our colleagues safe.

Ongoing investment in our pipe network, combined with the fantastic work of our emergency engineers, ensured that customer were kept safe and supply issues were relatively rare.

We replaced 397km of ageing metal pipe with plastic equivalents in 2020/21, and 3,886km over the full eight-year period, through an ongoing programme of work to modernise the network and reduce the likelihood of gas leaks.

When the gas did go off, either due to planned work, or unexpected issues on the network, we got supplies back on quickly, beating our targets for the number and duration of interruptions. There were lots of factors behind this strong performance, including ongoing training for our repair teams and use of innovative techniques and equipment, such as acoustic cameras, to detect leaks more quickly.

Our emergency response times were ahead of target – as they have been throughout the regulatory period. When customers smelled gas and called the National Gas Emergency line, our engineers arrived on the scene within the statutory one or two hour windows more than 99% of the time. Observing COVID rules while responding to these calls is not always easy – especially when working in customers' homes - but our engineers rose to the challenge with their usual professionalism.

LOOKING AFTER OUR NETWORK DURING THE PANDEMIC

Keeping our pipe network in great shape often requires face-to-face contact with customers. For example, we frequently need to enter homes to temporarily switch off the gas supply.

With many customers still shielding, however, this is not always practical.

Thankfully, we have been able to accelerate the introduction of several new working practices which can limit or completely avoid the need for customer contact during essential work.

We are trialling the use of compressed natural gas (CNG) bottles, as a temporary way to keep individual properties on gas supply during essential work.

We are also trialling the use of a product called a Tee Nee – essentially a pipe clamp – which allows us to replace service pipes without the need to switch off the gas supply.

As well as supporting our work during the pandemic, these techniques also stand to reduce customer inconvenience in the long term.

PERFORMANCE HIGHLIGHTS

A MORE MODERN NETWORK, ONE PIPE AT A TIME

We replaced and installed a total of 3,886km of new, plastic underground pipes, which will last for many decades to come. And by replacing the oldest and most leak-prone pipes first, our network is in better shape than ever.

THERE WHEN CUSTOMERS NEED US

We attended gas escapes within the 1- or 2-hour requirement close to 100% of the time, both in 2020/21 and across the RIIO-1 period - an industry-leading performance.

SPEEDIER REPAIRS

We completed 65.1% of network repairs within 12 hours in 2020/21 and close to 64.5% of the time across the RIIO-1 period – an increase from around 60% at the start of the period.

FEWER DISRUPTIONS

We outperformed our targets for the number and duration of planned and unplanned interruptions to customers' gas supplies, both in 2020/21 and across the RIIO-1 period. Over eight years, the region's gas went off for 170 million minutes due to planned work, and 47 million minutes due to unplanned work (e.g. emergency repairs).

PLUGGING BIGGER PIPES

Replacing large diameter gas mains can be extremely costly and disruptive to motorists, businesses and nearby households – due to the size of excavations required.

On smaller pipes, we can reduce the size and number of excavations using a tried and tested product called ESeal - an expanding foam plug that seals off sections of the old gas mains that we want to take out of commission.

We've now launched a project to develop a new ESeal product suitable for larger pipes. It's currently in development, and if field trials prove successful, the new solution stands to substantially reduce traffic disruption, operational costs and carbon emissions.

MAKING STREET WORKS MORE ACCESSIBLE

Many customers find barriers in the street inconvenient, but for customers with vulnerabilities such as mobility challenges or visual impairments, they can present a much bigger obstacle.

There is already a code of practice governing the way signs, lights and guard rails are set out – but there is always room for improvement.

That's why we launched Streetscore - a risk assessment tool for streetworks that aims to go beyond current industry standards to make life easier for all customers.



CREATING A GREEN, SUSTAINABLE BUSINESS

Even before the COVID-19 pandemic hit, our customers were concerned about another global crisis – climate change.

People expect us to do everything possible to reduce our business carbon footprint, as well as developing new, sustainable forms of energy, which can help the UK achieve its climate change goals.

We have set ourselves the target of becoming a net zero carbon business by 2031 and have created a series of environmental targets which are aligned with the UN's Sustainable Development Goals.

The move – a first for our sector at this time - has ensured more transparent reporting, while giving our stakeholders the opportunity to hold us to account.

Leakage of natural gas from our network has always been our biggest source of carbon emissions. Through our rolling mains replacement programme and use of more sophisticated techniques to manage gas pressure and detect leaks, we reduced overall leakage by 3% in 2020/21 and 25% over the entire regulatory period - with an estimated carbon saving of 640,000 tonnes over the 8 year period.

Use of technology, such as video conferencing, reduced our need to travel during the pandemic, with 1.3m fewer business miles over the past year .

Carbon emissions associated with electricity consumption has fallen by 31% since 2013. This is partly due to a rolling programme of office and depot refurbishment, in which energy efficiency measures have been installed as standard. We've also switched to 100% renewable electricity supply where available, and introduced paperless billing and printing, which has helped to reduce office and depot waste by 20%.

Our worksites are now far less wasteful, as we continued to reduce the amount of virgin aggregate we use to fill in excavations, while increasing recycling and reuse rates. Reducing virgin aggregate use is now a key performance measure for our contractors, encouraging a greener supply chain.

We have also rolled out innovative land remediation methods, following the removal of disused gas holders. Our award-winning Sunshine on the Tyne project, which pioneered a carbon-neutral, solar powered process to remove coal tar contamination from the site of a former holder, is now used at every appropriate site.

PERFORMANCE HIGHLIGHTS

A REDUCED CARBON FOOTPRINT

We have reduced our business carbon footprint by 38% since 2013 – saving 10,500 tonnes of carbon.

FEWER LEAKS

We reduced network shrinkage and leakage by 25% across the regulatory period, helping to reduce greenhouse gases in the atmosphere.

MORE SUSTAINABLE TRAVEL

Fewer business miles and investments in our vehicles has lead to a 25% reduction in annual carbon emissions from our fleet in over the 8 year period

GREENER OFFICES

Changes such as efficient stock management, paperless billing and printing less have helped cut office and depot waste by 20%

GREENER WORK SITES

A reduction in the use of virgin aggregate, plus increased aggregate recycling and reuse rates, made our worksites cleaner and greener than ever before. Use of virgin aggregate in 2020/21 was just 14,740 tonnes, compared to 37,662 tonnes in 2013.

GIVING CUSTOMERS THE CHANCE TO INVEST IN A GREENER FUTURE

In 2021 we launched the sector's first retail Green Transition Bond, allowing our customers to invest in their local community and a net zero future.

The bonds allow customers to invest a minimum of £5.

The £1 million raised is being used to help fund our pipe network upgrade to allow the network to transport hydrogen in the future.

This is first time a gas distributor has given its customers the opportunity to invest in this way – allowing them to benefit financially, while playing their part in a greener future.



HELPING COUNCILS DEVELOP NET ZERO ROADMAPS

Almost 70% of councils in our region have developed plans to reach net zero. To support their efforts and encourage collaboration, we developed the industry's first Joint Charter with Northern Powergrid.

The Charter sets out how we will enable a single conversation between utility networks and local authorities. It includes a range of clearly defined principles and actions covering engagement, joint data sharing, funding and a commitment to a full consideration of all routes to net zero.

And the Charter has already resulted in better collaboration. For example, we've supported four council-led projects to map out future energy scenarios covering over half of our network area.

HELPING WILDLIFE TO FLOURISH

Our infrastructure sites may not seem an obvious haven for wildlife, but thanks to our Homes for Nature initiative, biodiversity is flourishing.

We are working with maintenance contractors and local groups to deliver site specific measures such as creating habitats, installing bat and bird boxes, and even a nest camera for a bird watching club to observe peregrine falcons on a gas holder!

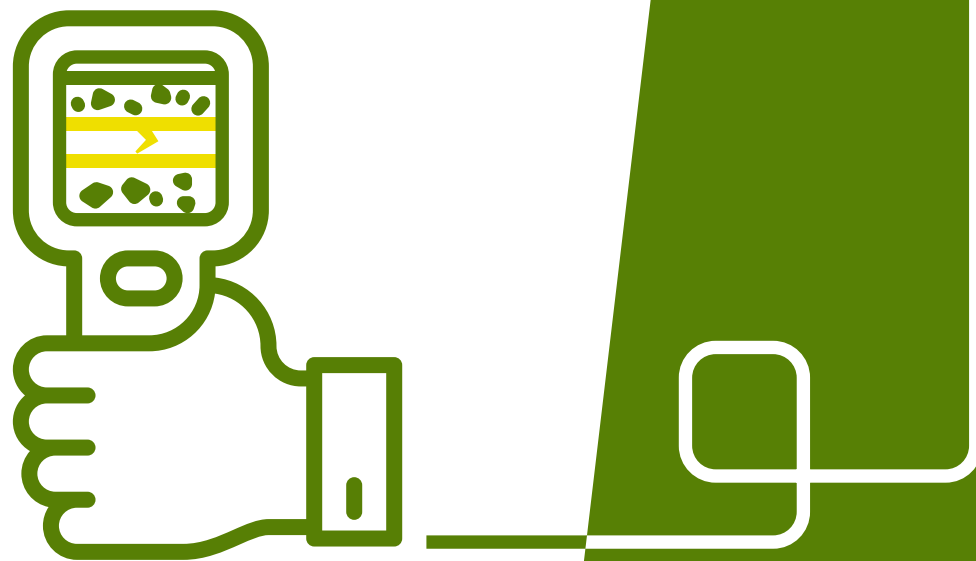
We have taken action at 50 sites over the last three years and will install measures at 200 more over the next five. In 2020, we also entered a five-year partnership with the Community Forest Trust to plant 40,000 trees in areas of our network with high air pollution.

CREATING A GREENER SUPPLY CHAIN

We want all our suppliers to work in the most environmentally sustainable way possible, which is why we launched a new sustainable procurement strategy in 2020.

We now ask potential suppliers about their waste, pollution, energy, carbon, biodiversity and other policies through our tendering process and, for contracts above £10,000, we will only buy from those who meet exacting standards.





REDUCING GAS LEAKS

When gas from our pipe network escapes into the atmosphere, it contributes to the build-up of harmful greenhouse gases.

We have reduced leakage by 25% since 2013 - that's around 640,000 tonnes of carbon.

We've done this by replacing our oldest and most leak prone pipes with modern plastic equivalents, and by using clever technology to monitor the network and detect leaks.

Thermal cameras now help us to detect the sound of gas escaping from over 150 feet away, by displaying leaks on screen in thermal images. We've recently started using inspection cameras that can be inserted into a shallow excavation and then travel up to 200 metres along a pipe to identify a leak. And new handheld gas detection units, which are much more sensitive than the old models, are allowing our engineers to find and fix leaks more quickly.

REDUCING THE REVS

We often need to keep our vans' engines running in order to power lights and equipment during emergency work.

To reduce the noise and air pollution this causes, we've introduced a technology called i-stop. that drops the engine's revs whenever the onboard equipment is not being used.

i-stop has so far been installed in 16 new vehicles, saving 1,461 litres of fuel, with many more work vans set to receive the technology in the coming years.



REDUCING SINGLE USE PLASTICS

We are working with other utility companies and suppliers to reduce single use plastic packaging for items such as utility fittings.

We've written to major pipe manufacturers, on behalf of all gas distributors, to ask them to avoid this plastic packaging – with one supplier already responding positively.

And in another industry first, we are bidding for funding to develop a sustainable packaging alternative, made from fish waste.



THE GAS IS GREENER

As the UK accelerates its progress towards a low carbon economy, we need to come up with greener ways to power our homes and businesses, at an affordable price tag.

At NGN, we have positioned ourselves at the forefront of this movement, by delivering ground-breaking research in sustainable fuels such as hydrogen and supporting the development of integrated energy networks, which dissolve the traditional barriers between gas, electricity and energy storage.

Our pioneering work around hydrogen is helping to inform national policy decisions. When burnt, hydrogen only produces heat and water, making it a realistic solution for heating and cooking.

The publication of the Government's Hydrogen Strategy in August 2021 shows just how far this nascent industry has come. The strategy sets out a vision of a thriving, low carbon hydrogen sector, supporting over 9,000 UK jobs, unlocking £4 billion of investment and generating 5 GW of hydrogen by 2030 – enough to heat 3 million UK homes each year.

Our work in hydrogen is now at a very exciting stage, as we deliver real-world trials to prove that the UK's existing gas networks can be converted safely and affordably to run on hydrogen.

With our partners, we have launched the world's first 100% hydrogen testing facility in Buxton, and in 20/21 in the village of Winlaton in the North East, we started testing blended hydrogen with more than 660 homes, to see how it performs for everyday heating and cooking.

We've continued to develop the capability of InTEGReL (Integrated Transport Gas Electric Research Laboratory), a 15-acre site owned and operated by NGN and range of partners. By demonstrating and proving whole energy systems thinking, the site aims to accelerate routes to decarbonisation.

On site we have built a hydrogen show home, fully equipped with hydrogen appliances, so people can see for themselves how hydrogen will work in everyday life. This is part of a wider Customer Energy Village of nine homes, which will allow us to carry out all manner of energy transition trials and research with a specific focus on supporting vulnerable and fuel poor customers in the energy transition process.

WELCOME TO OUR HYDROGEN HOME

To help the public and key industry partners such as boiler manufacturers to become familiar with hydrogen, we've built a hydrogen show home at our InTEGReL (Integrated Transport Gas Electric Research Laboratory) site in the North East.

The show home is fully equipped with hydrogen appliances, so people can see them working in everyday life. It also enables appliance manufacturers to test products in a real-world setting.

The Hydrogen Home is part of a larger Customer Energy Village, which will see the construction of nine houses built to standards from 1910 to the present day. Each home will include monitoring equipment, allowing us to test use of services, building performance and technology and help address the technical barriers to achieving net zero in older properties.

Meanwhile at our Spadeadam hydrogen test site, our partner DNV GL has constructed a HyStreet of three houses to test how hydrogen behaves compared to natural gas.

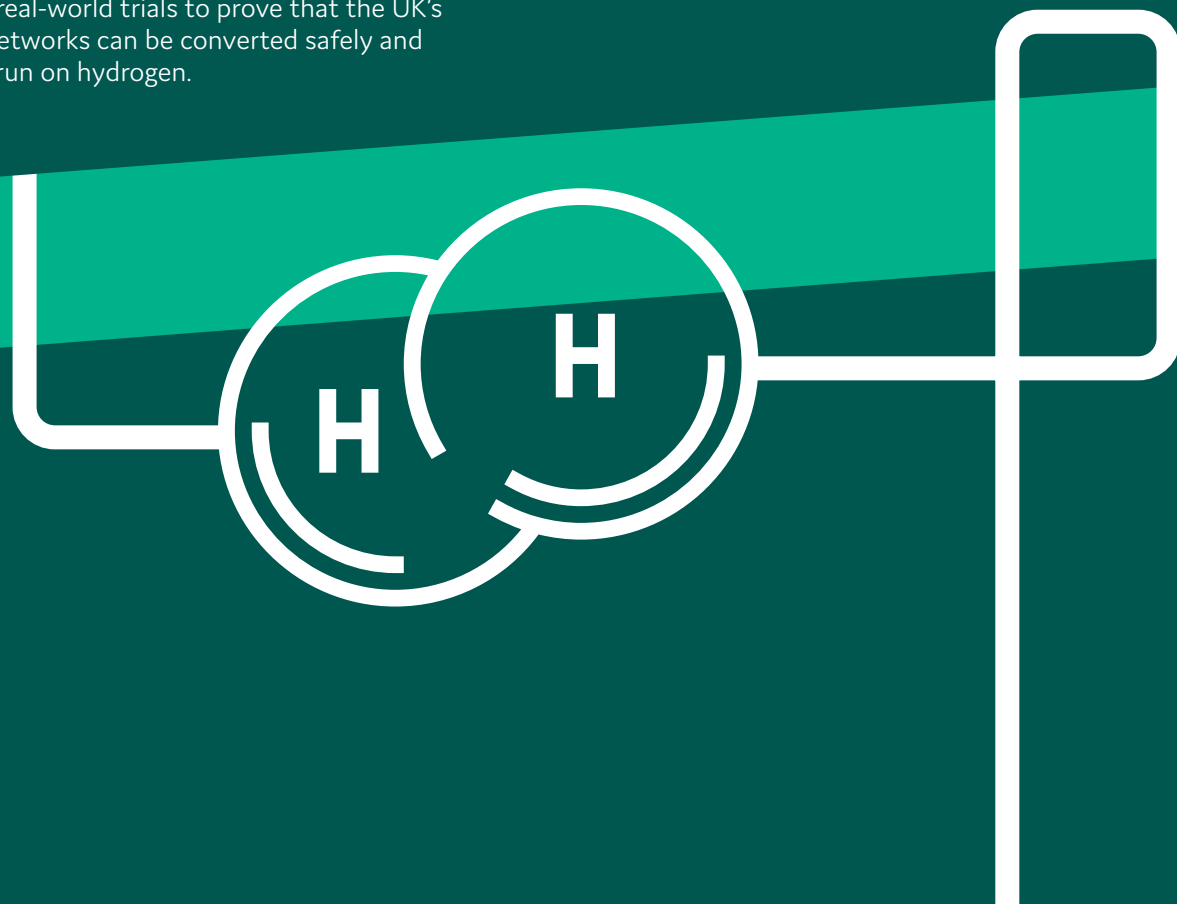
NOW WE'RE COOKING ON HYDROGEN

668 houses, a school and a number of small businesses in the North East village of Winlaton are now cooking and powering their central heating with a blend of hydrogen and natural gas.

The ten-month pilot, part of a wider project called HyDeploy, has seen a 20% blend of hydrogen added to the local gas supply.

Local customers don't need to change their appliances or alter their behaviour in any way – and they shouldn't notice any difference in the performance of their boilers and cookers.

The use of blended hydrogen is considered a crucial first step on the road to 100% hydrogen, and a great way of reducing carbon emissions in its own right. In fact, if a 20% hydrogen blend was added to natural gas across the UK, it could save around 6 million tonnes of CO₂ each year – the equivalent of taking 2.5 million cars off the road.



HELPING TO SHAPE THE HYDROGEN AGENDA

We are working at a regional and national level to help ensure that green forms of gas, particularly hydrogen, are promoted in a coordinated way, with the industry speaking as one voice.

In 2020/21, we enhanced our innovation site, InTEGReL, with the UK's first Hydrogen Home. The project, a collaboration with BEIS and Cadent, will demonstrate hydrogen appliances in a domestic setting.

Design of the house was informed by our Citizens' Jury. Designed as a Citizen Science project, customer interaction with the home produces data that our partners, including appliance manufacturers, can use to test and refine new technologies. And, in partnership with Leeds Beckett University, we'll undertake ongoing research to understand air quality in hydrogen homes, helping government and industry to better understand how these technologies perform. The Home is the first building in our wider Customer Energy Village, which will house facilities to test how different technologies operate in a whole systems world. Each home will include embedded monitoring allowing us to test use of services, building performance and technology and help address the technical barriers to achieving net zero in older properties across the energy mix. They will also enable a series of vulnerability and behavioural change innovation projects.

The publication of the Government's Hydrogen Strategy in August 2021 shows that these efforts have not been in vain. The strategy calls for a new hydrogen industry capable of supporting over 9,000 UK jobs, unlocking £4 billion of investment and generating 5 GW of hydrogen by 2030 – enough to heat 3 million UK homes each year.

MAPPING A HYDROGEN FUTURE

Prospective hydrogen producers need to know where they could inject hydrogen into our network, in large volumes.

To help them, we've produced prototype maps showing the best entry points and we have also developed a clear process for handling all hydrogen injection enquiries.

We've also commissioned research to better understand the cost of large-scale hydrogen production, compared to alternative forms of energy and published the findings in a 2020 report.



DEVELOPING A HYDROGEN DETECTOR

As hydrogen becomes an ever more viable future fuel for domestic heating and cooking, we are developing a domestic hydrogen detector.

We teamed up with Energy Innovation Centre (EIC) to invite suppliers to submit their ideas for the device.

Smoke and carbon monoxide alarms are important fixtures in most homes – providing an early warning in the event of fire or the presence of CO. Introducing a hydrogen detector will increase customer confidence in a move to widespread use of hydrogen for domestic heating and cooking

When the device is eventually brought to market, it is hoped it will become as ubiquitous as a home smoke alarm or carbon monoxide alarm.

DELIVERING GREAT CUSTOMER SERVICE

Our name might not be on the gas bill, but we never lose sight of the fact that 2.7 million homes and businesses are relying on us every day.

We have consistently been among the top performers for customer service in RIIO-1 with an average satisfaction rating of 9.07 out of 10 in Ofgem's customer satisfaction survey.

By understanding our customers, we've been able to tailor our services to their needs. We have carried out a 4-year 'customer persona' project to map different types of customers and their priorities and 'willingness to pay' research to understand the value that customers place on different levels of service.

We are the first gas distributor to double compensation payments to customers when we fail to meet minimum performance standards and also the first to make these compensation payments automatic, rather than requiring customers to claim.

We've introduced new ways to reduce disruption – such as coinciding our mains replacement work with other roadworks, to avoid digging up the street twice.

And we have made it quicker and simpler to get a new gas connection, by introducing a new online service and streamlining the application process.

We continually look beyond the utilities sector to improve the customer experience. In RIIO-1, we became the first utility company to sign up to the Considerate Constructors Scheme – which sees independent auditors assess the safety, public consideration and environmental performance of our work sites. Our participation in the scheme continued to drive up standards across our work sites in 2020/21.

Despite our best efforts, we do sometimes get things wrong. We have set ourselves challenging internal targets to resolve complaints within 60 minutes of the call, email or social media post coming in – and we achieved this 74.1% of the time in 2020/21.

MAKING BETTER CONNECTIONS WITH CUSTOMERS

We make around 7,000 new connections to our gas network every year. Jobs are extremely varied and range from connecting up a typical kitchen extension to large projects for major industry.

These connections are commercial transactions, and customers expect a speedy, reliable service from their very first enquiry. After all, their project is relying on us – and we don't want to be responsible for any hold ups.

Customers told us they want to see improved communications throughout the connections process and reduced delays at key stages.

In response, we've refined our connections process to make it more user friendly. We've simplified application forms, removed jargon and built a new online application portal.

As a result of these ongoing changes, customer satisfaction with their connections service has continued to rise – with a score of 9.05 out of 10 in 2020/21.

PERFORMANCE HIGHLIGHTS

INDUSTRY LEADING CUSTOMER SATISFACTION

Our overall customer satisfaction score in 2020/21 was 9.17 out of 10, and our average for the eight-year regulatory period was 9.07 out of 10. This ranks us in 2nd place among all UK gas distributors.

AWARD WINNING SITES

We have won over 200 Considerate Constructor Awards since 2014, recognising our efforts to make our work sites less disruptive and environmentally sound.



MODERNISING OUR BUSINESS

The world is changing rapidly and our business needs to keep up.

We need to make sure our people have the right skills for the decade ahead, our technology is cutting-edge and our approach to service delivery is sustainable and great value for money.

At the start of R10-1, we had an old and inefficient IT system, that was frustrating and cumbersome to use.

Our Future Ways of Working Programme, known as Future WOW, has reinvented the way we do IT. This programme includes a central SAP S4 Hana platform, which has brought our IT infrastructure into the 21st century, as well as a business-wide revolution in the way we perform core tasks, such as data gathering.

All colleagues now have personal development plans to ensure continual progress, while a bespoke leadership development programme nurtures our next generation of senior leaders.

A new training and development facility opened within our Leeds head office in 2019, to allow us to deliver bespoke training more easily.

We have introduced a bespoke mental health awareness programme which - as part of a wider mental health and wellbeing strategy - gives colleagues tools and techniques to recognise and manage the signs and challenges of low mental health.

2020/21 also saw us launch our first Inclusion and Belonging Strategy, to encourage a more diverse workforce that reflects broader society.

The average age of our workforce has reduced from 48 to 38, through an over 55s retirement programme which has enabled colleagues to leave the business on favourable terms. We have rolled out new terms and conditions, including a bonus scheme aligned directly to R10-1 commitments.

And we have invested £12m over the past five years to create modern and inspiring workplaces, for both front line and office-based colleagues. This investment has created working environments which promote collaboration and teamwork.



BECOMING AN INCLUSIVE BUSINESS

2020/21 saw us take steps to become a more diverse and inclusive business, working with Business in the Community and The Equal Group to design our first Inclusion and Belonging Strategy.

Five new 'Colleague Communities' will inform and power its delivery. Chosen by our workforce, the communities (LGBTQ+, Women, Men's health, disability and parents/ carers) will develop specific projects and policies on an enduring basis.

We've seen some fantastic early results, particularly in terms of gender diversity.

In our #ICanBeMe apprenticeship recruitment campaign we saw a significant increase in women being shortlisted for interview and a 21% increase in the offers made to female applicants enabling us to quadruple our female engineering workforce

A DIGITAL REVOLUTION

The transition to a digital economy and the ability to collaborate more effectively using big data is a priority for all forward-thinking companies.

In 2020/21, we implemented real-time reporting to help us identify problems on the network before they happened. With better data, we've also developed our advanced analytics capacity - implementing interactive dashboards to explore data and use predictive analytics to improve our performance.

We've redesigned our processes to bring different areas of the business together on the same digital platform, improving the flow of information between departments.

And our Integrated Information Management system, SAP4Hana, has enabled us to deliver improvements to many digital services, from our website to our online payments system.



HIGHLIGHTS FROM RIIO-1

The 2020/21 business year marks the end of an eight-year regulatory period, known in the industry as RIIO-1.

We've come a very long way in these eight years, and here we take a look back at some of the key moments.

2013

SETTING OUR OWN STANDARDS AROUND COMPLAINTS

To give our customers the best possible service, we established our own internal 'gold' standard for complaints resolution, which went beyond industry requirements.

We set ourselves the target of agreeing resolution of 90% of complaints within 60 minutes of the customer call, email or social media post. 85% of complaints now have an agreed resolution within the hour – and we intend to push this percentage even further during RIIO-2.

2014

A CONSIDERATE BUNCH

We became the first gas distributor to join the Considerate Constructors Scheme – an industry benchmarking programme that assesses streetworks for their safety, environmental performance, and consideration for colleagues and the public.

We've gone on to win 201 awards, including 45 gold awards. More recently, we've become a CCS partner, which sees us work with 50 other organisations to shape industry best practice.

2015

A REVOLUTIONARY CONTRACTOR MODEL

We launched our Direct Service Provider (DSP) model – using local engineering firms to carry out our mains replacement activity. This remains a revolutionary approach to this day – with the majority of the utilities sector still using large national or multinational contractors for this work.

The DSP model has saved us close to £100 million during RIIO-1, as well as improving the customer experience.

2016

CORING THE ROAD: THE SMARTER WAY TO DIG

Why dig a great big hole when you can take a small sliver from the road instead?

That's exactly what our Core and Vac rigs do, which joined our fleet in 2019 after extensive trials. The engineering equivalent of giant apple corers, the units allow us to get straight to the problem area of a pipe with a minimum of mess, fuss and time

Since we introduced them to our network, we estimate they've saved £398,160 and cut jobs by 1,176 man hours.

2016

THE START OF A HYDROGEN REVOLUTION

We launched our H21 Leeds Citygate project – a research project to find out if it would be practically and financially viable to convert Leeds' gas network to run on hydrogen.

From this early research, dozens of additional hydrogen projects have sprung, with the profile of hydrogen as a viable future fuel now at an all-time high.

2017

LAUNCHING INTEGRAL

Taking a whole system approach

In November 2017, we launched InTEGReL, a new research and demonstration centre at a 15 acre site near Gateshead. Led by NGN, in partnership with Northern Powergrid and Newcastle University, InTEGReL focuses on 'whole-systems' projects which break down traditional barriers between gas, electricity and renewables. The site continues to support our own work in green transport and hydrogen, as well as providing a centre of excellence for other UK organisations to develop projects.

2018

COMMUNITY PARTNERING FUND

2018 saw us join forces with Northern Powergrid to extend our successful Community Promises Fund into a joint Community Partnering Fund of double the scale, focused on fuel poverty and energy efficiency, CO safety, the PSR, STEM skills and latterly recovery from COVID-19.

We have invested £150,000 through the fund, working with grassroots organisations to support communities where fuel poverty and vulnerability are greatest.

Since 2018 107,825 people have benefited overall from the fund, 18,267 people have benefited from improved home energy and living environments, 17 new jobs have been created in community organisations and 670 people have benefited from training and improved skills.

2019

STAN THE ROBO-ENGINEER

We launched a robot that can travel through underground gas pipes to carry out repairs.

Nicknamed STAN, the robot can travel 250 meters along the length of a pipe. It is equipped with a camera that transmits live footage of a pipe's condition and it can treat imperfections in a pipe by applying a special 'flexspray'.

The average duration of jobs has reduced from three weeks to just one week.

2020

A FAIRER COMPENSATION DEAL FOR CUSTOMERS

In 2019 we voluntarily doubled the amount of compensation customers are entitled to when we fail to meet minimum service standards.

We went on to become the first network to proactively pay this compensation to customers, rather than requiring them to apply for the money they were owed.





Ofgem followed our lead and have now made this level of compensation mandatory for all gas distribution network customers


2021

A STAKE IN THE FUTURE

We launched the sector's first retail Green Transition Bond, allowing our customers to invest a minimum of £5 in the our network.

The £1 million raised is being used to help fund our pipe network upgrade to allow the network to transport hydrogen in the future.

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we are
the **network**