Northern Gas Networks



Stakeholder Engagement Incentive Scheme

Submission 2017/18









Part 1 Our Engagement



Introduction



Our stakeholder vision and strategy



Our integrated strategies



Our engagement and feedback



Our culture and capability



Key outcomes



Accreditation and independent evaluation

Putting people at the heart of everything we do

Stakeholder engagement continues to be an essential part of everything we do at Northern Gas Networks (NGN). Our stakeholders help to guide our strategic decision making and work with us day-to-day on a wide range of partnership programmes, which are making a positive difference in local communities.

Our commitment to responding to stakeholders' needs has a direct impact on the trust the public places in us. At a time when trust in public and private institutions is more strained than ever, I am especially proud that our customer trust rating is almost twice the industry standard and higher than some of the most respected retail brands on the market.

We are entering a period of major sector change. Affordable bills and value for money remain key priorities for our customers. The future role of gas in a low carbon economy also presents a pressing agenda that gas distribution networks (GDNs) must respond to with imaginative and far-sighted strategies.

From boardroom to the doorstep: giving stakeholders genuine influence

I see it as a crucial part of my own role, and that of the senior management team, to work with stakeholders to shape the strategic direction of the business. And across our operations, we have continued to make stakeholder engagement an integral part of the way we work. For example, we've updated our app to help colleagues capture tailored customer information on the doorstep, and we've provided colleagues with training on customer vulnerability.

I believe it is this combination of senior leadership and operational buy-in that has reaped great returns. Our stakeholder relationships have reached a level of maturity and we can be open, honest and frank about the opportunities and challenges our business faces, allowing us to work together on the most sensible ways forward.

Over the past year, I have been involved in more than 45 meetings with key stakeholders and attended every meeting of our external stakeholder panel to provide updates and listen to views. I've heard stakeholders focussing strongly on how we can evolve our business for a low carbon future, while continuing to get the basics right: affordable bills, great customer service and a safe, reliable network. We've found that stakeholders are particularly enthused about working with us on opportunities to progress new forms of gas, such as hydrogen.

Preparing for GD2

Our dedicated GD2 team has stepped up planning for the next regulatory period and we are in the process of creating an independent Customer Engagement Group, supported by the views and experience of our stakeholder panel. We're also continuing with other stakeholder engagement activities, such as research, tailored events and best practice sharing to ensure that our plans reflect customer expectations.

An independent 'health check'

To provide assurance around our stakeholder approach, we undertake a detailed independent external audit each year. This takes place over a period of months, rather than in a short window of a few days, which gives the auditor a more authentic view of our approach and culture. Feedback from our 2018 external audit was extremely positive. We were praised for ensuring that stakeholder engagement is a critical factor in strategic decision making, and our leadership team's commitment to developing and maintaining excellence in engagement.

We look forward to discussing our approach and achievements in more detail with the panel, later this year.



Engagement highlights 64.400 stakeholders reached:

of stakeholders are satisfied with their relationship with NGN (monthly satisfaction survey)

75% of attendees at our annual event felt valued as an NGN stakeholder

of our stakeholder panel members felt that customers get value for money for the services they pay for

9.1/10 our customers scored us 9.1 out of 10 for trust (independent survey by the ICS)

of attendees at our first Utility
Infrastructure Provider (UIP)
engagement event said they'd like
similar meetings in the future

An independent view

"I sit on several panels to represent the Major Energy Users' and can say that NGN has an open style to engagement. They listen to issues from a broad range of stakeholder groups and the CEO and his senior management team never shy away from discussing and dealing with difficult issues. The stakeholder panel has improved significantly over the last year. Changing the venue to the NGN offices rather than an external location provided the opportunity to experience part of their culture first–hand.

I have also been able to build good relationships with key senior managers who provide support and advice on an ongoing basis, for example, with the upcoming GD2 process and with my role as the consumer representative at the UNC Modification Panel. I found the information on the H21 Leeds City Gate hydrogen project both informative and encouraging in the positive attitude to developing a future for the gas industry."



Our stakeholder vision and strategy

Stakeholder engagement underpins everything we do so that we are inclusive, responsive and recognised as a trustworthy, reliable and innovative organisation, delivering excellent customer service.

At a glance: our approach to stakeholder engagement

- Owned and driven by the CEO and senior managers.
- **Comprehensive engagement strategy** reviewed each year.
- **Collaboration with like-minded organisations** to achieve far more for customers than we could alone.
- Commitment to research and evaluation, to ensure an evidence-based approach to decision making.
- Tools and training to help all colleagues understand the importance of engagement and how to do it effectively.
- Independently audited and underpinned by best practice principles of inclusivity, materiality and responsiveness.

Our shared priorities: reviewed and reaffirmed with stakeholders this year

Safe, reliable and affordable are all interlinked basic requirements which stakeholders tell us must underpin all service delivery. We have therefore consolidated our priorities into three broad areas:



Providing a safe, reliable and affordable service.

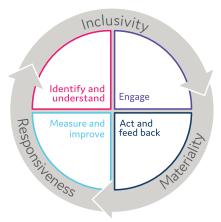


Providing outstanding customer experience.



Creating lasting energy solutions.

Our framework for engagement



- Identify and understand

 Annual stakeholder opportunities, issues and risk mapping with senior management team and departments
- Tailored stakeholder engagement plans for key projects and activities such as our community work

Engage

- Open and transparent engagement
- Range of methods tailored to stakeholder interests and knowledge, e.g. our first Utility Infrastructure Provider workshop
- Engagement with a purpose e.g. influencing activity in relation to energy futures

- Act and feed back
 Feed stakeholders' views back into the business
 Emerging themes identified

- Action plans agreed and delivered
 Outcomes fed back to stakeholders via appropriate channels e.g face-to-face and website

Measure and improve

- Activity recorded, measured and improved e.g stakeholder satisfaction feedback Processes reviewed and improved through feedback, accreditation and annual audit
- Outcomes measured and scaled up; learning feeds into decision-making processes

Decision making

Decision making: from feedback to outcomes

Stakeholders NGN colleagues Shareholder - CKI high) Shippers and suppliers such as Centrica Consumer groups such as Citizens Advice ᅌ Knowledge of gas distribution (low Regulator - Ofgem, HSE · Highways England · Local authorities Government departments and MPs Pressure groups Business groups and trade bodies such as Major Energy Users' Counci Charities and support groups Directly impacted customers (domestic and commercial) Indirectly impacted customers (domestic and commercial) Builders and developers

Landlords and agents Media





Example outcomes

direction – double payments when things go wrong,

Changes to day-to-day operations – the new Totex model, page 7

Feedback to stakeholders

Our integrated strategies

Our engagement programme is guided by a number of interrelated strategies. The strategies are living documents that undergo regular review. Everything flows from our business strategy, which sets the overarching priorities and our direction of travel.



Business strategy

Defines our business priorities – what we want to do, why, and how. In response to stakeholder feedback, we have reworked the strategy in the past 12 months to make it more accessible – with simple descriptions of the key services we provide for our customers, and our priorities for each service area. We are taking a similarly direct and accessible approach to our GD2 business plan – work on which is already underway.

Stakeholder strategy

Updated annually and contains our framework for engagement (see page 2).

Customer strategy

Developed in 2012 and updated annually. This shifted our thinking to reflect our ongoing commitment to anyone who might be affected by our works, whether their gas supply is interrupted or not (e.g. commuters travelling through our roadworks). There is a strong focus on different types of customer, their varying priorities and what this means for our service provision. Further customer research in 2018 will help to deepen these insights, and allow us to evolve our strategy.

Social strategy

Defines our social priorities, from Carbon Monoxide awareness to fuel poverty. We routinely co-deliver projects and share resources with partners, allowing us to achieve even more for our customers. Learning from the engagement styles used by our partners, we're adopting our own approach which is having a positive impact on our culture.

The strategy incorporates our Community Promises which define our priorities for supporting local communities, ensuring we focus our investment, time and energy on the things that make a lasting difference.



Vulnerability strategy

Co-created with our stakeholders and colleagues, this describes our approach to supporting customers in vulnerable circumstances. In 2017/18 the strategy has continued to drive focused activity and the development of our own colleagues by providing training to help them identify and understand vulnerability so that we can best meet customer needs. Areas of focus:

- Understanding customers' needs
- Communicating clearly and consistently
- Developing and supporting our own team
- Sharing best practice to grow knowledge

Environment strategy

2017/18 saw us update our environment strategy. Informed by feedback from over 500 colleagues and stakeholders, it identifies five key priorities, each with targets and short, medium and long terms plans:

- Take action against climate change
- Improve air quality
- Use resources responsibly
- Enhance life on land
- Create lasting energy solutions (energy futures)

Energy futures strategy

One of our environmental priorities (see above), this strategy has evolved as a result of stakeholder recommendations. Stakeholders worked with senior management to agree the four areas for the strategy:

- Whole-systems approach to gas electricity and transport
- Supporting green gas powered transport
- Exploring alternative, sustainable forms of gas
- Developing hydrogen as a fuel for the future

Innovation strategy

Innovation is essential to our business. We ensure that all innovation projects are subject to rigorous cost benefit analysis, as well as an assessment against other measures such as delivering added value to communities and customers. Our innovation strategy defines our objectives, sets out the methodology for assessing value, and provides a step-by-step process for taking ideas from the drawing board to the streets of the North of England.

"Stakeholder engagement continues to be integrated into strategy, policies and procedures across the business. This year, the company has sought to clearly articulate the links, interactions and synergies between the stakeholder strategy and other core engagement strategies including the customer strategy, social strategy, environment strategy and business strategy. Stakeholder engagement is recognised as critical to maintaining the company's position as a 'frontier business' in all these areas."

AA1000 SES Evaluation of Stakeholder Engagement, March 2018

Our engagement and feedback

In 2017/18 we continued to engage a diverse range of stakeholders, using a wide range of techniques to gather meaningful feedback.

Priorities research

815 stakeholders engaged

Stakeholder conference

25 participants

Stakeholder panel meetings

20 members

Priorities research (scaled up)



Our stakeholders' priorities have remained largely consistent for the past few years. They want us to get the basics right, by providing a safe, reliable and affordable service.

In 2017/18, we took the opportunity to delve more deeply into these three priorities, to find out which elements were valued most. Essentially, we wanted to gain more detailed feedback.

The findings are helping us deliver the right emphasis in our decision making, especially in creating our GD2 business plan.

The priorities research engaged 815 stakeholders and found:

- Attending gas escapes within one hour and delivering affordable bills were valued most of all
- Developing alternative fuels is seen as an investment priority.
- Providing transparency around bills, through enhanced communication, is essential

Stakeholder and customer conference



In 2017, we held our first stakeholder and customer conference attended by more than 25 stakeholders and hosted by our CEO and senior management team.

The event was an opportunity to:

- Engage a broader range of stakeholders and customers, beyond our official stakeholder panel
- Set the scene for the year, by sharing our plans and asking for feedback on our priorities
- Show examples of innovation and future energy, from our hydrogen car to our Digital Operations Room
- Gather feedback on the essential elements of service delivery highlighted by stakeholders in our priorities research

"Northern Gas Networks is really proactive in their relationship with their customers and relevant stakeholders. They obviously want to understand what their customers need and expect and if they're on the right track, so they're keeping their ear to the ground by really involving customers in an event like this. I think it's brilliant."

Natasha Barley, Hull Children's University

A combination of live electronic voting, video interviews, workshops and presentations was used to engage delegates and source valuable feedback. This included:

77% of delegates said they wanted to get more involved in our customer experience activity

95% of delegates said they wanted to get more involved in our work in future energy

Delegates said that when it came to future energy, developing 'whole energy' solutions (breaking down traditional silos between gas, electricity and transport) was the most important aspect of our future energy strategy

With 30% of the vote, delegates said that when it came to customer experience, providing a speedy, professional response to a gas emergency is the most important



Our dedicated stakeholder panel

Our stakeholder panel comprises more than 20 organisations from business, academia, utilities, charities and the voluntary

In 2017/18, we held regular meetings with the panel to discuss key industry topics and share progress. Key consultation themes arising from our stakeholder and customer conference

- Bills and value for money: A transparent bill breakdown, with comparisons to other utilities and services (e.g. insurance) was felt to be the best approach.
- **Future energy:** Several members of the group have formed a new, dedicated energy futures stakeholder group, which works directly with our Customer Energy Solutions team. Stakeholder representatives include:
 - Energy Utility Alliance
 - Northern Powergrid
- **Real time information:** we explored the potential types and ways of sharing information with stakeholders in real time. 60% of delegates offered to help us to shape this further.

Communicating our bill breakdown and value for money

We asked our stakeholder panel members if they thought that the gas distribution bill of £10.83 per month is good value for money and whether communicating the bill breakdown to customers is worthwhile.

- 80% of stakeholders thought the gas distribution bill provided good or excellent value for money
- 100% of stakeholders agreed that showing the bill breakdown to customers would be a good idea. It was suggested that a comparison to other utilities and insurance coverage would help customer understanding.

The bill breakdown now includes comparisons with day-to-day items and services. It has been shared with colleagues through team briefings and we are communicating value for money messages on our printed materials and our website.

Engaging hard to reach stakeholders and customer groups

We want to ensure that we hear from a wide range of voices, including stakeholder and customer groups with whom we don't have day-to-day contact. For the past four years, we have made proactive efforts to reach out to different groups, and engage them in dialogue, formal research and shared projects.

✓ Vulnerable customers and commuters – 2014/15 onwards

Micro-businesses – 2015/16 onwards

Shippers and suppliers 2016/17 onwards

m / Night workers, stay at home parents, Utility Infrastructure Providers and future customers – 2017/18 onwards

The outputs and outcomes from the research continue to be delivered (see table).

2017/18 Group	Strategy and purpose	Tailored approach	Feedback	Outputs
Night workers & stay at home parents	Customer strategy - To better understand this group, the impact of our works, different touchpoints and our relationship with them.	4 focus groups – 2 per group (1 urban and 1 rural) , each comprising 5-8 participants.	Timely and tailored communication is key "I can adapt to anything as long as I have warning" "Hot water is an essential part of our daily routine – if I couldn't shower I wouldn't be able to leave the house."	 Communication materials sent further in advance and more frequently. Innovation project looking at providing customers with alternative hot water supplies.
Utility Infrastructure Providers (UIPs)	Customer strategy - To openly discuss NGN service performance, best- practice sharing and areas for improvement.	Dedicated workshop led by Head of Third Party Connections.	100% would attend a similar event in the future. Overall interest = 9.29/10	 Quarterly meetings GDN best practice sharing forum established. Dedicated website area for UIP & Independent Gas Transporter (IGT) customers.
Future customers – aged 18-21	Business strategy - To explore their understanding, interest and priorities to help shape our GD2 plans.	 Joint research with electricity and water partners to avoid stakeholder fatigue and aid understanding of our services. Mobile app followed by 5x90 minute evening focus groups (2x studying, 2x working, 1x NEET) + 300x 10 minute interviews. Engaged this age group in the context of their short to medium term lifestyle goals. 	Prioritise safety, affordability and services that directly impact them. Utility providers should be focused on environmental issues in the longer term.	Views considered alongside those of other stakeholders and integrated into GD2 strategy. "This is another example of good practice in the right forum for engagement with a specific group." AA1000 SES Evaluation of Stakeholder Engagement, March 2018

Results and feedback from stakeholder engagement surveys

Alongside specific research projects, we have a rolling programme of regular customer and stakeholder surveys – conducted online and via telephone – allowing us to take a constant 'temperature test' of sentiment and opinion, and stay on top of emerging trends, priorities and issues.

Overall stakeholder satisfaction

In 2017/18 we conducted 385 surveys. Our monthly surveys provide us with insights into customer opinion, throughout the year, allowing us to take quick action to address any emerging issues.

79% of stakeholders are satisfied with their relationship with NGN

81% are satisfied with the relevance of communication

83% are satisfied with the frequency of communications

Overall customer satisfaction

Over the past four years our commitment to providing an excellent customer experience has helped us to maintain strong Ofgem customer satisfaction scores.

Network	YTD Q3 2017/18 score
Northern Gas Networks	9.14
Scotland	9.29
Wales & West Utilities	9.16
Southern	8.98
North West	8.74
East of England	8.79
West Midlands	8.27
London	8.19
	Northern Gas Networks Scotland Wales & West Utilities Southern North West East of England West Midlands

Customer – measuring beyond utilities

For the past four years we have participated in the Institute of Customer Service (ICS) ServiceMark scheme. This allows us to benchmark ourselves against the best UK businesses, outside of just the utilities sector. Through this survey we engaged customers affected by our planned work, which is our lowest scoring area for customer satisfaction.

This year we achieved an industry-leading score of 90.4, against a utilities average of 75.1 and ICS benchmark of 78.2.

Our customers also trust us, with a rating of 9.1 out of 10 - higher than big brands such John Lewis, Amazon.co.uk and Apple.

They find dealing with us takes very little effort – scoring us a low (positive) 2 out of 10 for their effort expended. Much better than the utilities average of 5 and ICS benchmark of 4.9.

90.4 Our industry-leading ServiceMark score
9.1/10 Customer rating for trust



Broadening our reach

Testing work in progress



Online 'Test IT' research allows us to gather feedback on 'work in progress' projects, from up to 300 stakeholders from diverse backgrounds and groups. This allows us to develop projects in a collaborative way. In 2017/18, we tested:

- Our Stakeholder Report
- Communicating our bill breakdown
- Key customer leaflets

We asked:

for feedback on our complaints procedure leaflets

They answered:

- 92% said the leaflet tells them what they need to know about NGN
- 86% said the information is easy to understand
 - 79% said it makes them think NGN is always trying to deliver a better service.

Outputs:

The inclusion of phone numbers and addresses linked to relevant organisations including the Energy Ombudsman was seen as helpful, and we'll be applying this to wider customer communications where relevant.

We asked:

for feedback on our gas mains replacement communications (envelope and calling card)

They answered:

- 76% said the information on the envelope makes them want to find out more
- 91% said they found the card useful
- 88% said the information on the card is clear
- 93% said they would read the letter

Outputs:

We're applying the design principles to all of our key customer communications including letters, leaflets and cards and have developed a tone of voice to increase engagement and improve understanding.

Map users

A wide range of our stakeholders from local authorities to developers use our online maps. This year we reached out to more than 2500 regular users for feedback on the service.

"I really appreciate digital maps because the response is very quick and they always have what you need."

Local authority representative, February 2018

Average satisfaction among respondents: 8.04 out of 10.

Customer Interface Centre

Our Customer Interface Centre sees front line colleagues carry out satisfaction research immediately following planned or emergency work, allowing us to quickly identify and resolve any issues.

9.94/10 satisfaction rating on the doorstep (based on 16,141 surveys)

Midge steals the show



Midge is our gas detection dog – a former police dog trained to sniff out gas leaks. As well as being our secret weapon on the front line, he is also a fantastic means of engagement.

Midge attended the Low Carbon Network Innovation (LCNI) conference in December 2017.

Midge helped us to engage circa 630 delegates who attended the LCNI conference.



On the doorstep

We believe in making every contact count. Our focus is on working with stakeholders every day to offer the best service.

- 15 Community Care Officers (CCOs) ensuring local stakeholders are looked after before, during and after our replacement and gas holder works.
- 9 regional hubs colleagues responsible for overseeing emergency and planned work in each geographical patch meet in weekly 'hubs', to discuss planned and ongoing projects, and associated stakeholder engagement activities.
- **2 frontline stakeholder managers** to ensure stakeholders are appropriately engaged during planning and development of streetworks, major projects and community initiatives.
- 2217 frontline workforce colleagues engaging and responding to customer and stakeholder needs, resolving any day-to-day issues.

Community Care Officer highlights:

Ensuring local stakeholders are looked after before, during and after our replacement and gas holder works.



stakeholders

Customers engaged face-to-face

Businesses engaged face-to-face

Customer engagement meetings

410 External meetings attended

27,200 Hand delivered communications

Pupils informed about danger of playing near our works

(All figures quoted are circa)

Our culture and capability

Our culture of empowering people to do the right thing for our stakeholders and customers runs throughout the business, from our global parent company to our front line teams working in local communities.

Parent company support

Our parent company, Cheung Kong Industries (CKI) is committed to global engagement and knowledge sharing, and encourages its member companies to adopt a similar approach. CKI holds global conferences to share best practice on communication, innovation and health and safety.

A network-wide approach

Strategic - Our CEO continues to update colleagues on key stakeholder activities through various channels. He is an active user of Yammer and holds regular conference calls for the whole business, which includes key stakeholder news.



Mark Horsley – July 5, 2017 at 6:56am from iPhone

Only two weeks ago we were also referenced in the Times newspaper for the work we are doing in the hydrogen future, all I can say is Wow!! What a great team we are, leading the UK and internationally in the future role of gas, this is also alongside the work we are partnering with Cadent (formally National Grid Gas) on blending methane

Local delivery - We've continued to evolve our service delivery model, so that we take a more holistic (Totex) approach to planning and delivering work.

A key development in 2017/18 was appointing a Business Operations Lead (BOL) for each of our nine geographical patches. These BOLs are now responsible for co-ordinating all work in a patch - from emergency repairs to planned jobs unlocking greater efficiency and improving flexibility.

Totex in action

Our Totex model led to a great outcome for Gateshead Housing Association and residents in 2017.

"We had originally intended to repair two rising mains (pipes up the side of a building) on a high rise block of flats, under our emergency and repair workload. However, by taking a more holistic view, we were able to adapt our planned works in response to local stakeholder feedback, and carried out a full-scale replacement of all 24 pipes on the block. We recognised that this approach would be far less disruptive for residents (avoiding annual inspections and repeat repairs) and more cost effective in the long-run.

We worked closely with the housing manager, caretaker and social services to engage residents, tailoring our approach for those who were harder to reach or known to be challenging. We achieved a 100% access rate, meaning all 200 customers had their supplies restored before our engineers left site.

Fergal O' Donovan,



"The new Totex model, with a Business Operations Lead (BOL) as the single person responsible for all business activities in an area, provides a structure in which operational engagement can be better coordinated, and resources allocated across business activities in response to local stakeholder and customer priorities. There is clear evidence that this allows the BOL to innovate in collaboration with key stakeholders."

AA1000 SGS Evaluation of Stakeholder Engagement, March 2018

Senior management setting the standard

Stakeholder engagement is embedded in senior managers' personal objectives and the outcome of the stakeholder incentive scheme is considered a key performance measure.

Dedicated stakeholder team

The central stakeholder team oversees our engagement programme in accordance with our engagement strategy, coordinates stakeholder events and ensures there is adequate training in place for colleagues across the business.

"The stakeholder team has been strengthened, adding two new members of staff, enabling it to expand its focus from management of stakeholder strategy to direct engagement in development of business strategy via the senior leadership team."

AA1000 SES Evaluation of Stakeholder Engagement, March 2018

Tools and capacity building

We provide colleagues across the business with the right tools and training to deliver effective engagement at local level. Key developments include:

Writing workshops: held with 100 colleagues, to help them write customer letters and emails in a straightforward and engaging way.

"A good workshop that really got you thinking about how we construct communications."

Suzy Townsend, Planning Team Leader – Connections

- **Enhanced vulnerability training** for more than **500** colleagues.
- **ICS customer service courses 38** colleagues enrolled on the 4-6 month courses which will result in 17 ICS qualified coaches, 17 practitioners and four assessors.
- Induction programme stakeholder engagement remains an integral topic for new starters.
- Online engagement tools such as Slido for conducting real time polls at events and virtual 'Stickyworld' workshops to gather feedback on our environment strategy - 52 comments received from stakeholders.
- Leadership development programme all colleagues on the programme undertake a stakeholder engagement module. Following feedback from the first year, we now have Bronze, Silver and Gold standards for a more tailored approach.

One of the projects looked at Considerate Constructors Scheme (CCS) driven innovation, to recommend how the innovation and CCS teams could work better together to track and develop innovation.

Key outcomes

Over the last year, we have engaged with over 45,800 stakeholders from the doorstep to boardroom. We have also surveyed more than 18,600 current and future customers to measure their satisfaction, understand their priorities and continuously improve our services.

Possibly the best measure of how effective this engagement has been (examples provided in pages 4-6), are the outputs and outcomes we deliver as a result. Building on our established partnerships and lessons learnt from previous years, in 2017/18 we invested almost £1M to deliver more than 160 substantial outputs. Our tailored engagement activity has led to positive outcomes for stakeholders and meant that we can deliver more for less, in support of our commitment to deliver best value for money. The below table summarises these and Part 2 picks up on some examples in more detail.

Stakeholder group	Engagement method	Actions as a result	Example action/output	Example outcomes for stakeholders/customers	Cost
	Audit	1	AA1000 Stakeholder Engagement Standard - retained for 6th year	External assurance of best practice	£11,200.00
	Research	1	Stakeholder satisfaction survey - 385 stakeholders surveyed	79% of stakeholders are satisfied with their relationship with us	£0.00
	Conference and events	6	Customer and stakeholder conference - Engaged a broad range of stakeholders around our customer experience priorities and Energy Futures Strategy	Clearer focus for Energy Futures Strategy, built around stakeholders' top priorities of making 'whole energy solutions' work and delivering hydrogen to improve air quality	£8,300.00
	Stakeholder panel	6	Stakeholder panel - 20 members, representative of our stakeholders helped to shape key initiatives and strategies including our energy futures work	Dedicated energy futures stakeholder group established to help drive and measure progress against the strategy Value for money messaging now included in customer letters, leaflets and enevlopes	£2,500.00
	Digital	5	Online engagement tools - Slido and Stickyworld platforms used to complement traditional engagement methods - 52 additional comments from stakeholders on the environment strategy	Transparent engagement between stakeholders as well as with NGN. Supports accessible, inclusive and responsive engagement	£6,400.00
All Stakeholders	Research	3	Test it - Gathered views from up to 300 stakeholders on our customer communications, stakeholder report and how best to communicate the value of the services we offer.	92% of stakeholders said our complaints leaflet tells them what they need to know	£37,500.00
	Accreditation	1	ISO 55000 - International Organization for Standardization - Asset management	Additional assurance demonstrating stakeholder engagement and action across key business areas	£5,200.00
	Accreditation	1	ISO 14001 and OHSAS 18001 - International Organization for Standardization - Environmental standard and Occupational Health and Safety Management		£15,200.00
	Research	9	Priorities research - enhanced approach, drilling deeper to understand what our stakeholders value most	Top 9 commitments identified around which we can develop and test potential service packages for GD2	£20,700.00
	Research	1	Online map users survey - sent to 2,568 map users	Average satisfaction among respondents: 8.04 out of 10	£0.00
	Communications	1	Interactive stakeholder report on website	Stakeholders can understand our performance against all RIIO output areas, helping them to make informed contributions.	£3,800.00
	Communications	1	Raising awareness of CO - screening a series of videos at public events to promote CO safety, reaching up to 2.2m within our region	Customers' baseline knowledge of CO increased from 6.19 in 2015/16 to 7.52 in 2017/18 across our region	£16,300.00
	Workshops	7	Bounce events - Attended by circa 190 colleagues. These led to working groups to improve and update customer communication and experience	93% of customers surveyed said our new gas mains replacement envelope would encourage them to read the letter	£6,400.00
	Workshops	6	Theft of gas - cross company team and full time Compliance Administrator appointed to prevent sites from becoming unregistered at any point in the customer journey.	As a result of our proactive approach, we have undertaken 137 investigations into unregistered sites, some of which resulted in recoverable income for shippers and suppliers	£26,000.00
ves	Colleague engagement	1	Mark's calls and business chats - 5 calls and monthly chats, open to all 2,217 colleagues, network wide	Engage colleagues about NGN business plan commitments and key stakeholder engagement activities	£4,100.00
sentati	Colleague engagement	10	Innovation depot days - 6 roadshows helped to embed 10 innovations across our work sites	More than £900,000 of efficiency savings as a result of embedding NGN-funded innovation	£290,000.00
r repres	Research	1	Institute of Customer Service - 29% response rate to colleague engagement survey	Achieved an improved score of 73.63% against the ICS benchmark for utilities of 72.74%	£0.00
Colleagues, contractors & their representatives	Training	1	Professional Development Programme (PDP) - Bronze/Silver/Gold standards introduced following colleague feedback. All colleagues on PDP undertake a stakeholder engagement module	Increased capacity in smart metering team to support more frequent supplier engagement. Improvements identified to consistently measure the benefits of grass-roots innovations	£0.00
contract	Training	1	Communication workshops - 100 colleagues supported to write clearly and appropriately handle customer calls to improve customer experience and understanding	Communications tailored to meet the needs of customers and stakeholders - 81% of stakeholders are satisfied with the relevance of communication from us	£16,100.00
agues,	Training	8	Enhanced customer training - more than 550 colleagues have been trained to support customers, particularly those in vulnerable situations	Average customer satisfaction score of 9.14/10 5,100 customers referred to Northern Powergrid's and Electricity	£8,300.00
Colle	Colleagues and contractors	1	Construction services colleagues - 940 colleagues and contractors attended the two-day stand down event including best-practice sharing around customer experience and reinstatement processes	North West's Priority Services Register No Local Authority improvement notices.	£30,500.00
	Conference and events	2	Unison Hydrogen roundtable - attended by CEO and H21 Programme Director	Working with trade unions to understand the potential impact of hydrogen on the future workforce and to establish an All-Party Parliamentary Group on hydrogen	£1,700.00
	Workshops	1	Environment Strategy engagement - more than 400 colleagues helped to shape the strategy's objectives and action plans	Developed an outline strategy on which stakeholders could be asked to comment	£900.00
Shareholders	Conference and events	5	CKI and wider shareholders - presented and shared best practice around modern terms and conditions, innovation and technology investment	Our '21st century Terms and Conditions' have been recognised as contributing to a 18% opex outperformance (Moody's Investors Service, Credit opinion)	£4,900.00
Energy Industry & wider utilities - UK & abroad	Partnership	3	Infrastructure North - Social sub-group chaired by our Head of Social Strategy, has delivered joint engagement and initiatives including scaling up of our Green Doctors programme	14,000 older people living independently made aware of the Priority Services Register, fuel poor network extension scheme and locking cooker valves. £98,000 of lifetime savings through energy efficiency measures, warm home discounts and switching	£13,300.00
& wider u	Industry working groups	Citizens Ad	pate in around 40 formal industry working groups often leading on key in lvice to better support consumers - our GDN collaboration has included sh ng PSR data, liaising with BEIS around changes to the Fuel Poor Network Ext	aring stakeholder engagement best-practice, sharing NGN's process	£33,100.00
ustry 8	Conference and events	1	Low Carbon Network Innovation conference - 29 colleagues and our gas detection dog Midge engaged 626 delegates	Increased collaboration and best practice sharing across the energy industry	£1,400.00
rgy Ind	Partnership	4	Client partner - Considerate Constructors Scheme (CCS)	Actively share best practice and innovations within and outside industry	£0.00
Enel	Workshop	5	Utility Infrastructure Providers (UIP) event - Dedicated workshop to discuss service performance and best practice sharing	Quarterly meetings, GDN best practice sharing forum established, dedicated website area for UIP customers	£5,400.00

Stakeholder group	Engagement method	Actions as a result	Example action/output	Example outcomes for stakeholders/customers	Cost
	Partnerships, conferences	1	Ongoing interface with BEIS and Climate Change Committee - following H21 Programme Director secondment in 16/17	£25m Hy4Heat programme - designed by an NGN colleague during secondment	£0.00
	and bi-lateral meetings	1	Hy4Heat programme launch - Supported BEIS to engage key stakeholders around the £25m fund and potential of hydrogen	Better understanding of the safety effect of hydrogen in the streets (the network) and in the buildings (domestic, industrial and commercial)	£600.00
		1	Imperial College London's white paper on 'the future of the existing gas networks' - NGN's H21 Programme Director was a key contributor	Explaining large scale energy transformation in the context of decarbonisation obligations to ensure key influencers and policy	£600.00
onal & ıment		1	Hydrogen keynote speeches - made at 18 conference and events in the UK, mainland Europe, Asia and Australia	makers are aware of all the facts to allow them to set energy policy in the interests of all customers	£10,800.00
		1	More than 20 meetings with MPs, BEIS, LA and Government bodies around the future of heat and Clean to Green energy journey		£10,800.00
Local, regional, national & international governments	Communications	1	112 MPs, Local Authority Chief Executives and LEPs - sent personalised letters with details of their local Business Operations Lead, our vulnerability strategy, innovation report and ongoing opportunities to engage	Provided information to help stakeholders support their local constituency and communities	£0.00
	Partnerships	1	Pot hole trial - partnership with Cumbria County Council in which NGN repaired existing potholes at the same time as reinstating our own works	We avoided three separate road closures, saving local tax payers £3,000	£300.00
Business and enterprise	Meetings	1	Hydrogen supply chain - 20 meetings to engage businesses throughout supply chain on our H21 programme	Ensuring comprehensive supply chain support to deliver an end-to- end customer journey - providing confidence to policy makers and influencers in the H21 vision	£9,600.00
v	Workshops	1	104 play safe, stay safe sessions were delivered in primary schools	12% more sessions delivered than in 2016/17 to keep circa 24,700 children safe around our work sites	£0.00
bodie	Conference and events	1	Crucial Crew programme - sharing safety messages in partnership with the emergency services and other utilities	More than 8,100 children educated in gas safety	£9,700.00
Education and community bodies	Workshops	3	Safety Seymour workshops - rolled out across our network, delivering more through half-day sessions and sending follow up postcards	Extending our reach – circa 1,000 children across 22 classes	£4,700.00
Сотп	Partnership	1	Hull & East Yorkshire Children's University Programme - 5 NGN trained mentors provided unique learning experiences	Helped to raise the aspirations of 788 young people in Hull	£24,200.00
on and	Partnership	1	Employability & STEM programme - for students aged 11–18	Helped to raise knowledge of STEM related careers and future aspirations of 11,390 students	£12,100.00
ducati	Conference and events	2	University engagement - engaging students and faculty members around alternative forms of gas and NGN's key projects	Inspiring students into the gas industry and fostering innovation to ensure our workforce meets future customers' needs	£1,800.00
ш	Partnership	1	CO safety competition - delivered collaboratively with GDNs	145 entries across our network - raising CO awareness with entrants, their parents, and teachers $$	£1,400.00
Major energy	Membership/ meeting	1	Major Energy Users' Council (MEUC) - two day conference attended by circa 300 major energy users and wider utilities	Face-to-face engagement with key stakeholders. Increased awareness of NGN's City CNG project, demonstrating opportunities as part of the "Greening the Transport Fleet"	£600.00
users	Membership/ meeting	1	Major energy user's community calendar - sponsorship and helping choose which entries make it into the 'My perfect day' themed calendar	Raised awarenss of NGN and promoted the National Gas Emergency helpline to 20,000 customers. Helped to raise aspirations of participating primary school children	£1,300.00
	Partnership	4	NGN smart metering project team - working in partnership with BEIS and suppliers to support our customers during the rollout of smart meters	More than 265,000 smart meters installed across our network this year, with customers only experiencing 28 interventions per 10,000 installs	£2,000.00
Suppliers	Meetings	1	Hydrogen supply chain - engaged Centrica around H21 project and potential impact on shipper processes	Working together to understand the impact of hydrogen conversion on shippers' processes and identify opportunities to minimise disruption to customers e.g. changes in billing	£900.00
tomers	Customer contact	3	Replacement works communication trial - Introduction of scheme specific microsites, targeted social media and digital signage to keep commuters informed	Reached local road users as well as directly impacted customers. Audience size increased tenfold	£100.00
ns, cus iives	Customer contact	6	Immediate support for 3,300 customers during a gas loss incident - provision of food, heating and accommodation	Tailored support for customers in their time of need	£84,500.00
onnection	Audit	1	Institute of Customer Service (ICS) ServiceMark - benchmarking ourselves against the best UK businesses – outside of utilities	Our customers scored us 90.4% satisfaction against an all-sector benchmark of 78.2% We also scored 9.1/10 for trust – higher than John Lewis	£5,000.00
Domestic, business connections, cus and their representatives	Accreditation	9	Considerate Constructors Scheme (CCS) - 106 sites and 3 depots registered	56 national awards recognising our best practice for site safety, appearance, colleague welfare, respect for the community and environment. Scored an average of 40.20 against a national benchmark of 36.11	£24,900.00
estic, ar	Customer contact	1	Roadworks.org - publicise details of our works, including traffic management maps and local customer literature online	Circa 360,000 clicks on the interactive map – twice as many as in 2016/17	£33,700.00
Dom	Customer contact	2	Customer Interface Centre - empowering colleagues to provide tailored service to meet individual customers' needs.	1,310 hours spent educating customers about CO, increasing awareness from 7.52 to 9.32 out of 10	£45,000.00
Future customers	Research	1	Joint utilities research - with Infrastructure North partners to understand how future consumers (aged 18-21) value our service in relation to those of electricity and water companies	Future consumers' priorities integrated into our GD2 business plan – A safe and reliable supply (88%) and affordability (86%)	£6,100.00
ach , and	Workshop	3	Community Promises Fund events - engaged 38 attendees across 2 events to share lessons learned from previous year.	Increased awareness of CO, energy efficiency, Priority Services Register and fuel poverty amongst frontline volunteers. Easier for applicants to report and measure project outcomes	£6,500.00
to re	Research	3	Joe Public research - up to 30 night workers and stay at home parents engaged across 4 focus groups	Findings have informed an action plan to improve the customer experience of this hard to reach group.	£12,700.00
Vulnerable customers, hard to reach , and Third-sector	Third sector partnerships and meetings	10	Supported more than 32,950 customers in vulnerable circumstances - scaling up and rolling out our social outreach programmes and expanding our network to include more than 45 trusted partners	Practical support including: 5,100 customers referred to electricity network's Priority Services Register (five times more than in 16/17) 7 families almost £1,000 better off as a result of Warm Home Discount applications Increased frontline volunteers' knowledge of CO awareness from 6.14 to 9.32 out of 10	£71,800.00
ulnera	Training	1	Accredited CO awareness training - delivered to 7 partner organisations	Sustainable approach to broadening our reach. Partner organisations reach a combined total of 3,400 at risk individuals	£400.00
- 5 -	Community involvement	1	Charitable donations - to local good causes	Raising awareness of NGN's social programme and making a positive impact on the communities we serve	£26,500.00

2017/18 totals

More than 160 substantial outputs

Circa £1M invested

Accreditation and independent evaluation

Considerate Constructors Scheme

We won 56 awards at the annual Considerate Constructors Scheme (CCS) National Site Awards in 2017/18 - 28 bronze, 14 silver and 14 gold awards.

The awards are recognised as the 'gold standard' for civil engineering projects, with work sites independently benchmarked for safety, site appearance, environmental consideration and public and colleague welfare.

We apply CCS principles, including best practice stakeholder engagement, on all sites, and have developed an internal benchmarking process which we apply to sites which are not registered for the external CCS assessment process.



"The growth of the National Site Awards year-on-year reflects the expansion of the construction industry's commitment to raise standards in considerate construction across an ever-increasing number of sites throughout the UK and Ireland. This year's award-winning sites have all demonstrated a relentless commitment to help improve the image of our industry."

Edward Hardy,

Considerate Constructor Scheme Chief Executive

"The CCS scheme has provided an excellent framework for developing a model of 'what good should look like' at NGN sites, and demonstrating what can be achieved at a site. However, there are a large number of jobs that are too small or too short for the full CCS process. Development of the 'Non CCS' process represents a significant development in integration of stakeholder engagement and community involvement across all jobs, with internal checks based on the CCS audit model."

AA1000 SGS Evaluation of Stakeholder Engagement, March 2018

56 CCS National Site Awards 2017/18







Independent audit

For the sixth year in a row, our engagement has been externally assured against the internationally recognised AA1000 Stakeholder Engagement Standard (SES). During a 10 day independent audit, conducted over the course of 2017/18, the assessor interviewed those managers responsible for specific areas of engagement, observed a variety of stakeholder engagement activities and carried out a comprehensive document review.

Moody's Annual Credit Ratings Opinion

Our continued focus on efficiency and cost saving has been recognised by a leading credit-rating agency. Moody's highlighted that NGNs main scope for outperformance is cost efficiency. Reduced labour costs under the company's '21st Terms and Conditions' have contributed to 18% OPEX outperformance.

ICS Customer Service

We achieved a Service Mark from the Institute of Customer Service (ICS) in 2014. In 2017, we have been reaccredited, achieving an industry leading score of 90.4.

ISO 22301 (business continuity)

In 2017/18, we started working towards the ISO 22301 standard, which provides assurance around business continuity. Stakeholders' needs are assessed in relation to our critical activities and every department highlights their back-up arrangements and how they would communicate with customers and stakeholders in the event of a business continuity incident.

ISO 14001 (environment)

The ISO 14001 standard for Environment, Health and Safety includes an enhanced stakeholder element. The audit encompasses a review of written materials, site visits and interviews with colleagues. The standard was retained in 2017/18.

ISO 55001 (asset management)

The Assessment Management Standard ISO 55001 contains a stakeholder element which we are externally measured against each year. This audit contains a review of written materials, practical examples and interviews with key business managers. The standard was retained in 2017/18.

Utility Week Awards



In 2017/18, we won the **Utility Week Community Initiative** of the Year for Warm Hubs – a jointly delivered programme with Community Action Northumberland which supports customers facing fuel poverty, social isolation and other complex challenges. The initiative is described in more detail on page 18.

We were also shortlisted for the 2017 Health and Safety initiative of the year (in collaboration with CO Gas Safety and the other GDNs). Our collaborative award submission focussed on our 2016/17 CO Safety Competition, which received almost 1,000 entries nationwide.

"This year has seen consolidation and maturing of NGN's commitment to stakeholder engagement within its governance and decision-making processes. Stakeholder engagement and stakeholder experience have been confirmed as critical factors in the strategic direction of the business."

AA1000 SES Evaluation of Stakeholder Engagement, March 2018

Part 2 Meeting our stakeholders' priorities



Providing a safe, reliable and affordable service



Providing outstanding customer experience



Creating lasting energy solutions



2017/18 - Outcome highlights



Providing a safe, reliable and affordable service

Engagement with our customers and stakeholders in 2017/18 confirmed that people expect us to get the basics right, every time. They want a safe, reliable and affordable service, with transparency around bills. Research among late teens and 20-somethings also confirmed that these basic requirements are top of the list for out next generation of customers.

We remain the most efficient gas distribution network, clearly demonstrating our commitment to keeping costs down. We do this through innovative partnerships and imaginative solutions – never compromising safety or quality.

Roadworks: faster, cheaper and more considerate

Nobody likes roadworks, but feedback from our stakeholders and customers confirms that the public is more accepting when jobs are delivered efficiently, and with due consideration to their needs. In 2017/18, we worked with partner organisations and our supply chain on a variety of industry-leading projects.

Pothole partnership:

We understand that Local Authorities are facing tighter budgets, and regular complaints from customers about different contractors closing the same stretches of road. This feedback prompted us to lead the way in delivering a more joined-up service.

Over 11 months we worked with Cumbria County Council to design and deliver a 'pothole trial'. At no extra cost to gas customers, our engineers filled in existing potholes during a mains replacement scheme in Appleby-in-Westmorland. Not only did this bring the pothole repairs forward for local residents, the cost of doing this work at the same time as making good our own holes was far less than the cost the Local Authority would have incurred doing it separately. This helped to make the highway safer for customers and helped the council to avoid potential car damage claims.

By also inviting water contractors to repair a damaged valve at the same time, we avoided three separate road closures, saving local tax payers £3,000.

We are talking to Cumbria County Council about the potential to expand the scheme, discussing the idea with North Yorkshire County Council and plan to contact all the local authorities within our network.

"The work undertaken by Northern Gas Networks shows the benefits of having a good and close working relationship between a Utility and a Highway Authority, that not only benefits both parties but all of our stakeholders."

Gary Maxwell, Streetworks, Cumbria County Council

Stakeholders said:

- Be more joined up with local authorities and other utilities
- Your job isn't finished until the final hole has been filled in and everything's tidied away

Speedier reinstatement:

Customer feedback, including Ofgem satisfaction survey scores reveal that delays with reinstatement – either on the highway or a customer's driveway – are one the biggest sources of public frustration. We continue to perform well against the Guaranteed Standard of Performance (GSOP) Regulation to complete private reinstatement within five working days. In 2016/17 we renegotiated our reinstatement contract with suppliers, building in targets for continuous improvement – moving from 3 to 2 working days. A year on, our main reinstatement contractor is not only achieving high levels of performance against the GSOP standard, but is now completing 66% of private reinstatement within two working days. We won't stop there, our ultimate aim is reinstatement in one working day.

Our ambitious approach has resulted in zero local authority improvement notices during the past 24 months.

We have also improved customer experience at no extra cost to the customer, by providing our reinstatement partner, USSL with:

- Customer service training
- Improved communication materials such as customer leaflets
- NGN branded vehicles
- NGN-standard PPE



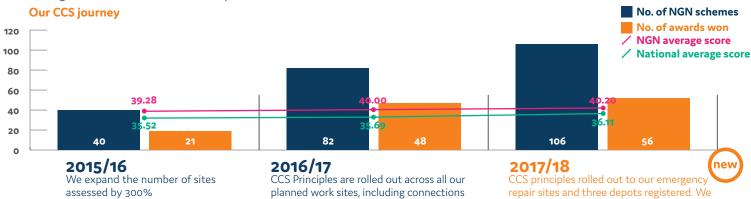
have trialled the CCS measuring social value

report, which highlighted engagement and

social benefits on a major project in Jarrow.

Considerate work sites:

In 2014, we became the first UK energy distributor to join the Considerate Constructors' Scheme (CCS). This independent benchmarking programme assesses our work sites against industry best practice for safety, appearance, respect for the community, environment and colleague welfare - all of which are important to our stakeholders.



jobs. We become an CCS Partner, actively shaping CCS best practice and promoting

the benefits of the scheme to other utilities.

Part two | Providing a safe, reliable and affordable service

CCS innovation examples

Embedding CCS across our operations has empowered our colleagues and stakeholders to come up with innovative ideas, which have a further positive impact on our sites. Examples of innovations being trialled or rolled out across out network this year include:

			Driving best	practice	
	Safety	Appearance	Respect for community	Environment	Colleague welfare
Use of app to monitor noise and vibrations	1			-	1
Trialling boot scrapers at the excavation site		1			
Dedicated Site Pride Operatives introduced to ensure high standards are maintained throughout the duration of works	1	1	1		
Harvesting rainwater on site to clean muddy work boots		1	1	-	
Trialled non-permanent utility markers	1			1	
Safe dig alternatives to conventional excavator buckets – designed to prevent service cables from getting caught when excavating	1		1		4
Red barriers and non-slip pathways to support partially sighted residents	1		1		
Solar powered eco cabins on every site		1		1	1
Defibrillators on site (not just at the cabin) providing a potential lifeline for customers in the area	√				1

Reducing the risk of gas escapes

Stakeholders said:

- A reliable gas supply is essential in running my house
- Safety is my number one priority

Continued investment in our pipe network has seen a year-onyear reduction in leaks and emergency repair jobs. However, any escape of gas is a potential concern for customers. 2017/18 saw us continue to invest in technology and new approaches to identify the source of gas escapes more efficiently, including an industry-first, called Midge.

Sniffing out leaks: Midge is a police-trained sniffer dog who has been recruited to our front-line team to help us locate gas leaks. He can detect smells up to 26 feet underground and in parts per trillion.

Following a successful Network Innovation Allowance (NIA) trial, we have continued to fund Midge, deploying him on 46 occasions to help us get the gas back on quicker and avoid costs of around £130,000.

Innovation in action: In September 2017 we experienced a major supply loss incident, which affected 296 homes in Leeds. We used a range of innovative techniques to get customers back on gas two days ahead of schedule and avoided costs of circa £85,000.

Midge's contribution in Leeds

- Midge found the root cause of the leak in record time, saving us a day
- £36,000 (of the total £85,000) of costs avoided was thanks to Midge
- Midge made friends along the way, putting customers at ease



Carbon Monoxide awareness

Our rolling programme of activity includes delivering CO awareness training for on and off gas communities. We carry out CO awareness briefings with customers following emergency call outs, and have an education outreach programme for schools.

	Activity	Customer group	Numbers reached
10	Sponsoring CO awareness campaigns in shopping centres and film festivals	Everyone, including visitors to our region	Up to 2.2m
	Raising awareness of CO in customers' homes	Domestic customers	More than 10,000
	Sharing safety messages in partnership with the emergency services and other utilities	Primary school children aged 5 to 11	More than 8,000
	Educating about the dangers of playing near our work sites, through Play Safe, Stay Safe school sessions	Primary school children aged 5 to 11	More than 24,700
	Rolling out Safety Seymour (Cadent's purple bear) to raise awareness of CO	Primary school children in years 1 and 2	Almost 1,000
	Delivering BPEC accreditied CO awareness course to trusted partners	Community Promises Fund volunteers (p.17)	7 partners reaching more than 3,400
	CO safety competition	Children aged 5 to 11	Circa 145

Stakeholders said:

- Educate customers about the signs and symptoms of CO
- Work with other organisations to spread safety messages in a consistent way

Safety Seymour - the NGN way

To meet the needs of our local stakeholders and reach more children in one day, we deliver two half-day, rather than one full-day session in schools. We also send postcards to children after their summer breaks to reinforce the important safety messages learnt in school.



Keeping costs down

Our culture of innovation, and determination to deliver the best possible service, is helping to keep our customers' bills affordable. In real-terms, our element of the average gas bill has decreased from £137 in 2012/13 to around £130 today.

Mains replacement savings

Our focus on operational efficiency continues. Six years ago we took the industry-leading step of employing small, locally run engineering firms, known as Construction Services Colleagues (CSCs), to deliver our mains replacement programme instead of large 'tier one' contractors.

The benefits of this agile strategy continue to be recognised within and outside our industry. We have shared our model extensively with stakeholders, for example, this year we have met with Wales and West Utilities and shared our approach.

Stakeholders said:

- Keep the bill as low as possible but not at the expense of safety
- It's about working smarter to give customers value for money

Modern Terms and Conditions

Five years ago we introduced modern market based terms and conditions for our direct employees that aligned to our customer requirements. Circa 70% of colleagues are now on these contracts. Our approach to our new terms and conditions has the potential to provide savings in a range of sectors, and has been shared with a number of organisations including Northumbrian Water.

"Reduced labour costs under the company's '21st century Terms and Conditions' have contributed to 18% opex outperformance." Moody's Investors Service, Credit Opinion, March 2018

Cumulative savings	2014/15	2015/16	2016/17	2017/18 (provisional)
Mains replacement	£7.29M	£7.34M	£10.05M	£14.22M
Overtime	£0.79M	£1.98M	£3.28M	£4.02M

Our mains replacement delivery model and the introduction of modern terms and conditions have reduced the average customer bill by 43p per year since 2012/13.

Delivering value for money through innovation:

Ofgem's Network Innovation Allowance (NIÅ) funding has been invaluable in allowing us to develop new technology and processes. Several NIA originated innovations have now become business as usual through additional NGN investment. These include:



Back Blade Protector: bespoke protectors on our mini-diggers' back-blades (which anchor each digger) help prevent scarring on the road surface, avoiding additional reinstatement work. Used more than 370 times this year.

Control Point: this system of quality assuring all of the joints we use to link pipes during replacement works avoids unnecessary future disruption. Rolled out to Construction Services Colleagues and used almost **74,000** times in 2017/18.

Stub end abandonment: a new way to cap-off 'stubs' (short pipe) in the highway, avoiding the need to dig in high-impact locations.

Quick wins with our supply chain:

We have also been working with our suppliers (outside of NIA) to develop new innovations to save time and money. In many cases, these projects have involved repurposing existing technology, or introducing simple, low-cost solutions to perennial issues.

Innovation	Stakeholder/customer benefit	2017/18 circa reach	Efficiency savings
Service Camera - to identify blockages from remote locations, pinpointed by CCTV technology.	Reducing the need for	1,200	£81,000
Emergency Control Valves (ECV) exchange kits – to repair semi-concealed ECVs, without the need for digging in driveways.	excavation.	80	£23,000
Water extraction kits – enable targeted removal of water from remote locations, pinpointed by CCTV technology.		90	£36,000
Anaconda tees – a robust but flexible pipe that can be shaped to bypass existing pipelines or structures, requiring 33% fewer PE fittings to make a service connection.	Reducing the need to disrupt existing utility services.	2,600	£74,000
Ductile iron cutter (adopted from Wales and West Utilities) – traditionally used to cut window glass we've repurposed this tool to cut through tough ductile iron gas pipe, saving time and money.	Reducing time taken and improving colleague safety.	70	£7,000

Tackling theft of gas

The cost of stolen gas is levied across all customers' bills and is a key concern for shippers and suppliers, so we work hard to identify and resolve unregistered sites. In 2017/18 we held a workshop supported by Durham Police Force to raise the profile of unregistered sites internally. A serving detective also attended to provide his perspective. As a result, we created a cross-company team to examine the issue from all angles and recruited an additional full-time compliance administrator.

Embedding our approach:

- Reviewing processes and training: to give colleagues throughout the business the skills and knowledge to identify and prevent sites from becoming unregistered at any point in the customer journey.
- Proactive communications: we prioritised and wrote to circa 640 unregistered sites and conducted 137 investigations across our network.
- Supporting, not penalising: a customer's failure to register their supply is not always a deliberate theft. In 2017/18, we delivered vulnerability training to colleagues to help them identify those customers that need support.

Recoverable in	ncome decreased this year as our proactive approach reduced the number of gas theft issues.							
Year	2014/15	2015/16	2016/17	2017/18				
Recoverable income	£25,000	£100,000	£180,000	£12,600				

Providing outstanding customer experience

At the heart of our customer strategy is a recognition that all customers are different and deserve a tailored service.

Over the past year, we've continued to deepen our understanding of the needs of different customer groups, and evolve the way we do things. This includes supporting our colleagues and wider stakeholders to better serve customers.

New services have been developed in a collaborative way, testing them with stakeholders and customers at various stages of development, to ensure they hit the mark.

Easing the pain during our essential works

We know that our work can be disruptive, but through timely and clear communication and speedy and effective compensation when things go wrong, we're making the experience as easy as possible for our customers.

Communication during planned work

We will never stop talking with our customers. Through our CCS best-practice principles (pp.11-12), Customer Interface Centre (p.16) and Community Care Officers on the ground (p.6), we continue to communicate with customers face to face. Over the past year we reached more than **55,000** customers on the doorstep.

In 2017/18, we replaced circa 580km of gas mains. This work is frequently disruptive, but through proactive communication, and tailoring our approach to local needs, we can make life easier. Key developments included:

- Scheme specific microsites: Customers have told us that traditional letter drops are not always effective so we have been trialling digital microsites, which include the latest information about our works, area maps and alternative transport arrangements of particular importance to night workers (see case study on right). We continue to register all new schemes on Roadworks.org as a matter of course.
- Targeted social media: We're also sharing real-time news via Facebook ads – a relatively low cost way of getting information directly to affected postcodes.
- Digital signage en route: Our teams can directly change the messages displayed on roadside boards, providing clear information and updates especially useful for commuters who discover our roadworks when sat in the car.

During 2018/19 we will be rolling these methods out across the network, targeting those replacement schemes with the potential to impact large numbers of commuters.

new Doubling disruption payments

We understand the inconvenience and discomfort our customers face when the gas goes off. In 2017, we took the unprecedented step of voluntarily doubling all our Guaranteed Standards of Performance (GSOP) payments for service failures, such as loss of gas for 24 hours or more, from £30 to £60.

The decision was supported by stakeholders, who agreed that an increased payment, funded by shareholders and not customers, better reflected the impact of a service disruption. We are now leading work to update the national standards.

Evolving our approach

	2015/16	2016/17	2017/18			
Guaranteed Standards of Performance (GSOP) - The NGN way	Introduced a voluntary standard of service to compensate customers left off gas for 8 hours of more.	Led changes to the system used by all GDNs to make additional voluntary payments possible.	Voluntarily doubled the amount we pay if we fall short of our guaranteed standards.			
Our customer- centric thinking	8 hours is the equivalent of two meal times so being without gas for this length of time causes customers real inconvenience.	To avoid confusion, the customer should receive one payment, covering both the GSOP and our voluntary payment.	Compensation levels were set in 2005 and have not kept up with inflation. Doubling the amount we pay better reflects the impact of a service disruption and helps to drive improved standards within NGN and across the industry.			

Stakeholders said:

- Tell us in plenty of time if there is going to be disruption and keep me updated
- I should be able to claim compensation quickly

Highly targeted digital comms

We used Facebook ads and a dedicated microsite to keep customers informed during a 20-week replacement scheme in Stockton in 2017/18. The site included real time updates for the circa 770 residents directly affected by the works as well as local road users who we reached via audience targeted Facebook adverts.

The approach helped us to extend our reach tenfold and engage with this hard to reach group of commuters.

Essential gas mains work on and around Cheshire Road, Stockton

The common of the comm



Facebook

Reach: 7,859
Positive engagement: 17
Negative feedback: 0



Microsite

Page views: 462
Average time on page:
3 minutes 29 seconds

Speeding up compensation

Roadworks can affect trade, and small local businesses are especially vulnerable. These businesses told us that the process of making a claim, and collating all the supporting information, can be lengthy and complex.

In response, we now:

- Provide businesses with a claim pack at the start of a long-running scheme rather than after 28 days (our previous approach).
- Proactively advise them about the claims process.
- Use a simpler claims form and guide.
- ✓ Provide the option to claim online.

Our proactive communications and simplified approach are encouraging more businesses to claim, with 46% more successful claims being submitted in 2017 compared to 2016.

£60 is now paid to domestic customers without gas for 24 hours or more. This is a return of almost of half their annual bill for our distribution services.

In December 2017, more than 460 customers in Helmsley were left without gas. Our engineers worked tirelessly to get the gas back on and supplies were restored in just 23 hours. Although we weren't required to compensate customers for the time they were without gas, we decided it was the right thing to do and we made a payment of £60 (equivalent to the doubled GSoP payment for customers left without gas for a 24 hour period) to each affected customer.

rolled

Going the extra mile during incidents

We continued to improve frontline support for local communities during gas loss incidents. Following feedback from a focus group with customers and stakeholders in the coastal town of Withernsea, where around 3,000 customers lost their gas supply for three days at the start of 2017, we've been putting our learnings from this and previous incidents into practice and adapting our approach. This includes utilising local resources and communication channels to share information and highlight support.

Stakeholders said:

- Be proactive and act quickly when things go wrong
- Work with us during incidents. No one knows the local community better than we do

Evolving our approach to incidents: Silsden, West Yorkshire

Over the 2018 Easter weekend, over 3,300 properties in the village of Silsden lost gas supply, following third party damage to our network. Temperatures were bitterly cold, with snow and freezing conditions. Our response was widely praised by local residents and stakeholders who even set up a dedicated NGN thank you page online with more than 500 members. Our approach included:

- Working with Bradford City Council and the British Red Cross, to identify and support circa 370 vulnerable customers.
- Using on-site door knocks to validate Priority Services Register data, notifying Northern Powergrid of any updates.
- Reaching out and coordinating support from the other GDNs and NGN contractors – more than 180 additional engineers joined us on-site.
- Proactively building relationships with local media at the start of the incident.
- Providing meals on wheels to customers with dietary needs.
- Working with Northern Powergrid to understand the resilience of the local electricity network and prioritise gas reconnections in the weakest 'zones'.

- Ensuring NGN food vouchers could be used at local catering businesses as soon as they were reconnected.
- Engaging with Silsden Buzz the village's extremely active
 Facebook page to keep the community up-to-date.
- Recruiting volunteers from the local church and wider community to hand deliver letters.
- Supporting the community spirit by handing out Easter eggs to local children - our engineers were even given some in return.



Thank you to everyone who came to the aid of Silsden this Easter

weekend. Great job NGN and volunteers locally. It's so good to be warm again x



3,505 food vouchers issued



vulnerable customers supported



2,609 customers provided with tailored heating



7,000 residents reached through online interaction

Working with industry partners for a joined-up experience

Our business customers serve our domestic customers too, such as people wanting new gas connections or smart meters installed. By working more effectively with these companies, and recognising that we share the same customer base, we can improve the end-to-end experience.

Smart meter roll-out: reducing customer impact

Approximately 900,000 smart meters have been installed in our region to date. Although this is a supplier-led programme, we continue to support the local roll out.

Our cross-organisational smart meter team was expanded this year to include a frontline engineer on our leadership development programme. Each month, the project team meets and reviews network-wide intervention rates to prioritise supplier engagement. We then meet most frequently with those suppliers (from the big eight to small suppliers) who have the highest proportion of interventions. Our collaborative work includes:

- Installing meters alongside mains replacement: we've launched a trial with NPower to see if smart meters and mains replacement work can be coordinated, to reduce customer inconvenience.
- Giving suppliers the right tools: if a meter installer encounters a missing handle on the emergency control valve of the old meter, they call our engineers to resolve the situation. This can delay the meter installer and worry the customer. As the meter installer is qualified to make the exchange, we help to speed up the process and have provided around 500 spare handles to suppliers.
- Toolbox talks: our engineers attend suppliers' toolbox talks for meter fitters, to highlight good installation practices and better understand the challenges they face.

Stakeholders said:

- Make it clear who I need to work with at NGN
- Streamline processes to save time and effort
- Collaborate to reduce disruption
- Speedy knowledge sharing: our proactive approach of letting suppliers know about issues we encounter as a result of installation errors is recognised by stakeholders as best practice. In particular, First Utility values our timely feedback to help address any training or performance needs. Over the past year we have shared our practices with the other GDNs and worked with the Health and Safety Executive (HSE) to ensure the supplier receives our reports about any safety issues at the same time as the HSE. Our targeted approach and proactive collaboration is really making a difference customers in our region experience only 28 interventions per 10,000 installs.

"We need the support of gas distributors such as NGN to make sure the smart meter installation process goes as smoothly as possible. The aim is to get the job done first time, so the customer isn't inconvenienced."

Dave Wright, Association of Meter Operators

Reviewing our process with UIPs

Utility Infrastructure Providers (UIPs) rely on us to approve their applications to connect to our network. In 2017, UIPs told us at a series of NGN-organised workshops, that the process could be simpler and faster. We took this feedback onboard and worked with them to make a number of improvements, including:

- A one-stop-shop online, which details the steps UIPs need to take to make connections to our network.
- A streamlined registration form, which can be easily downloaded.
- We are also creating a wider online resource, for suppliers, shippers, UIPs, Independent Gas Transporters (IGTs) and industrial/commercial customers, to support all types of business interactions with NGN.



Supporting customers in vulnerable circumstances

Almost a third of the customers we serve experience vulnerable circumstances at some point. Our dedicated vulnerability strategy describes our approach to supporting these customers.

Support on the doorstep

By having the right training, tools and referral networks our colleagues are empowered to provide holistic support for customers in vulnerable circumstances every day.

Stakeholders said:

- Collaborate with others to continually improve the service you deliver
- Build a network of local experts, who can help extend your reach and deliver shared goals
- Spot signs of vulnerability and empower your teams to do the right thing for these customers

2017/18 Highlights:

- 500 colleagues received enhanced vulnerability training
- Surveyed more than 16,100 customers
- More than 5,100 customers in vulnerable circumstances, referred to electricity distribution networks' priority services registers - that's five times more than in 2016/17
- Measured an increase in Carbon Monoxide awareness among circa 10,000 customers
- More than 700 customers given home energy, bills and switching advice
- ■£98,000 lifetime savings through energy efficiency measures, warm home discounts and switching

scaled An army of caring colleagues

Working with key partners, we have created a multi-faceted training programme for colleagues, to help them recognise signs of vulnerability, and know the best ways to offer support. This year more than **500** colleagues have received enhanced vulnerability training. Activity includes:

- Company-wide vulnerability training: a bespoke training course which covers types and signs of vulnerability; referral routes and NGN partnerships.
- Dementia champions: a full day induction by the Alzheimer's Society for colleagues to become dementia champions, enabling them to deliver awareness sessions for colleagues and stakeholders.
- RNIB training: a three-day pan disability course with the RNIB, and in partnership with Northern Powergrid.
- "Safeguarding' training with The Children's Society: frontline colleagues trained to recognise potential signs of neglect and abuse while working in homes across the region. We included 10 colleagues form Northern Powergrid and Northumbrian Water too.

"I really enjoyed working with NGN as they're similarly values-driven. We're increasingly collaborating on initiatives to maximise outcomes, share learning, knowledge and understanding. The training with RNIB was interactive and it was wonderful to gain perspective from another utility company."

Mina Dye-Sharp, Social Responsibility Advisor at Northern Powergrid

Understanding customers' needs

Our Customer Interface Centre (CIC) sees NGN staff talk to customers on the doorstep immediately following a planned or emergency job, to gauge satisfaction, and identify any issues which can be resolved right away.

An app is used to capture feedback in real time, including details of vulnerable circumstances, so our army of caring colleagues can offer immediate support.

Our focus on vulnerability issues is also helping us to identify trends, and take action in response. For example, we are launching a new trial with National Energy Action in Bradford, where our satisfaction scores with customers in vulnerable circumstances were lower than average. This will see us provide additional support when we need to disconnect vulnerable customers' gas supplies for safety reasons.

new

We've launched a project with one of our construction services partners in Yorkshire to capture customers' vulnerable circumstances 10 days ahead of works starting. This is helping our engineers to plan key activities around these customers' needs, such as knowing the best time to gain access to turn the gas back on.



Expanding our referral networks

In addition to our long-standing partnerships with The Children's Society and Groundwork, we have expanded our network of partner organisations, to whom we can refer vulnerable customers for additional support. This network now includes:

- Debt advice from specialist charity Step Change
- Energy efficiency advice from National Energy Action
- Assisted home living advice including locking cooker valves and social services contracts
- Home safety checks from the local fire and rescue service
- Direct referrals to Northern Powergrid and Electricity North West's Priority Services Registers



Community Promises Fund: a grass roots approach

Now in its second year, our Community Promises Fund provides grants of up to £10,000 for local initiatives which are improving quality of life for vulnerable customers. The programme helps to identify grass root organisations which share our social objectives, with projects focusing on fuel poverty, CO awareness, wellbeing, and promoting the Priority Services Register in areas of high social and economic deprivation.

In 2017, applications were assessed by NGN colleagues, and subject experts from Energy Innovation Centre, Northern Powergrid, National Energy Action, Citizens Advice and a successful applicant in 2016/17, DIAL (Leeds).

As well as delivering immediate, tangible benefits, the scheme allows us to identify new partners and approaches which we can develop for the longer-term. 11 projects received funding in the first year and delivered benefits throughout 2017/18, ranging from a ticket promotion to raise CO awareness with up to 1.5m bus users, to an outreach programme to promote energy efficency among refugee and immigrant communities.

"Community Promises is a great way of allowing NGN to fulfil its social objectives, while supporting grassroots initiatives. It's about tapping into the expertise and links that already exist in communities." Pip Goff, Leeds Community Foundation



Support that goes further for less

By empowering communities to do more, the cost of engagement has been reduced by 72% since 2015/16.

Year	NGN investment	Customers helped	Benefits delivered	Cost of help per customer
2015/16	£150,222	2,976	Before Community Promises Fund as reported in 2015/16 stakeholder submission	£50.48
2016/17 awards (projects delivered throughout 2017/18)	£55,806	3,940	Outcomes delivered 3,940 vulnerable and hard to reach customers directly supported Through training, we increased frontline volunteers' knowledge of CO from 6.14 to 9.32 7 partner organisations trained in CO awareness to BPEC standard, with a combined reach of more than 3,400 7 families almost £1,000 better off as a result of Warm Home Discount applications Dial (Leeds) has built sustainable partnerships with Yorkshire Energy Doctor and National Energy Action, whose advice and training have helped strengthen their applications for external funding Our partners at Highfield Food Co-operative helped us to identify local support networks in Silsden	£14.16 (actual v £18.53 projected)
2017/18 awards (projects to be delivered throughout 2018/19)	£50,126	4,505	Improvements delivered 49 applications received 9 funding awards made Application categories revised following feedback – energy efficiency and fuel poverty merged and a new category added to include promotion of the Priority Services Register 2 organisations re-awarded – allowing them to build on last year's successes Projects range from an Age UK initiative to promote the Priority Services Register to a partnership between NEA and Yorkshire Fire and Rescue to identify and refer potentially fuel poor households for additional support Led conversations with Northern Powergrid about jointly delivering the scheme in 2018/19, with a £100,000 funding pot available	£11.13 (projected)

new Measuring the impact

Some of the organisations awarded Community Promises funding in 2016/17 told us that they struggled to measure the impact of projects – especially qualitative aspects.

We explored a range of tools but felt none were quite right for our stakeholders. In response, we have developed a bespoke analysis tool, which provides weighting to different activities and outcomes, according to our social priorities.

We used the tool to help us choose successful applicants in 2017/18, and are making it available to participants to help them quantify results.

We also expect the tool will have a wider use, beyond Community Promises, by bringing a consistent methodology to the way we measure results of our wider social investment.

- Highfield Food Co-operative we were able to make an informed decision to award this project as, according to the analysis tool, it scored highly for being sustainable, scalable and replicable.
- National Energy Action is interested in seeing the outcomes of our tool, once fully tested.

Warm Hubs: holistic support for on and off-grid customers

Warm Hubs is a pioneering community project to help residents facing fuel poverty, isolation and loneliness.

The hubs provide warm, friendly places, staffed by volunteers, where vulnerable residents (usually in areas off the gas grid) can go to socialise, get warm, have a hot meal and access information, advice and referrals to relevant support.

Working with our partner, Community Northumberland (CAN), 20 hubs have been established across

We have funded the project for the past three years, and it has now become financially sustainable, and continues to expand and develop.

Stakeholders said:



Customers in rural communities often face social isolation, as well as cold homes

2017/18 successes include:



Expanding the scheme into Newcastle: a hub has been established in a deprived part of inner city Newcastle, with a further three hubs (each designed to meet a specific community's needs) in the pipeline for the city. For example, we're incorporating a Warm Hub into existing 'Silver Screen' film sessions targeting older members of the community in Fawdon.

Adoption by other networks: SGN in Hampshire has launched its first hub, inspired by our success, with mentoring from our project partners.

'Pop up' hubs: We have funded a trial to take Warm Hubs to the next level. Pop up hubs see partner organisations take a roadshow approach to reach isolated communities in even more remote areas. The first of these was held on a Saturday night in West Woodburn near Kielder with more than 40 people attending.

- Help for stay at home parents: Stay at home parents at risk of isolation were encouraged to attend a rural Warm Hub where they received training in pediatric first-aid.
- Award winning: Warm Hubs won the Utility Week award for Best Community Initiative in 2017.

"In my role here in Yorkshire and the Humber, I witness first hand businesses who care passionately about their workforce and the local community that they are a vital part of.

Take Northern Gas Networks for example, who established the Warm Hubs initiative - an award-winning scheme to provide a space for vulnerable customers in rural communities where people are often off the gas network."

Beckie Hart, CBI Regional Director – Yorkshire and the Humber

"Following three years of NGN investment, our hubs are now sustainable, and run autonomously by more than 200 committed volunteers."

Christine Nicholls, Community Action Northumberland.

Warm Hubs have been established in church and village halls, community centres, a café, a pub and even a fish and chip shop



Warm Hubs timeline



2015/16

Innovation

We team up with Community Action Northumberland to pilot 6 rural Warm Hubs





2016/17

- More than **1,000** residents attending each week in the winter months
- £750,000 of external funding
- NGN launches its first urban hub

2017/18

Replicable



- Adopted by other organisations such as SGN Hampshire
- Off-shoot models developed e.g. pop up hubs

customers helped

10,000

20.000

Creating lasting energy solutions

With the UK tasked with reaching an 80% carbon reduction target by 2050, there is an urgent need to develop affordable, sustainable energy solutions. Our collaborative projects continue to influence national, and international, decision makers, and are putting gas firmly back on the agenda as a viable fuel for the future.

A suite of trailblazing projects

Our interconnected projects are demonstrating that green forms of gas can help the UK achieve its carbon reduction targets in a phased, manageable way, while keeping bills affordable.

Hydrogen

A series of NGN-led projects to show that existing gas networks can be safely converted to 100% hydrogen – helping the UK meet carbon reduction targets without an unsustainable hike in customer bills.

InTEGReL

A new energy research facility to develop projects that break down the traditional barriers between gas, electricity and transport by taking a whole system approach. The focus includes 'power to gas' conversion (converting electricity to hydrogen) and sustainable transport.

Gas-powered transport

We are supporting the development of gas refuelling stations, and are trialling a range of gas powered vehicles in our own fleet.

(8)

H21: making the case for hydrogen Our H21 programme is delivering comprehensive evidence

Our H21 programme is delivering comprehensive evidence around the practicality, affordability and safety of hydrogen, in order to inform government policy decisions.

- Moving from a regional, to a national programme: H21 started in 2015 as an NGN project in Leeds. In 2017, it became a truly national programme. £9 million was committed by Ofgem, and a further £1.3 million by the other UK GDNs, to deliver safety evidence projects across the UK, and hydrogen strategies for other major cities.
 - "I'm glad to see businesses in Leeds like Northern Gas Networks at the cutting edge and working towards a low carbon future. Its innovative H21 project shows how the private sector can lead the way in helping reach our 2050 emission reduction targets."
 - Rachel Reeves MP, BEIS Committee Chair
- From theory to real world: trials have begun to test the safety and effectiveness of hydrogen in real world scenarios. These include a project called HyDeploy with Cadent and Keele University to test a blend of 20% hydrogen and natural gas on existing domestic appliances, a collaborative UK GDNs project led by NGN to test how 100% hydrogen behaves in the gas distribution network.



HyDeploy was launched to stakeholders, industry and government at Westminster in February 2018

- H21 North of England: we are partnering with Cadent and global energy giant Statoil on a wide ranging project which includes a detailed strategy for how to convert the gas network in the North of England to transport hydrogen.
- Global reach: Following our lead, hydrogen based studies are now underway in Australia, China, Europe, Hong Kong, Ireland, Japan, Scotland and New Zealand.

Stakeholders said:

Develop green hydrogen as a fuel for the future

Helping to shape the government's own hydrogen project: in 2017, BEIS launched its own £25 million Hydrogen for Heat Programme (now known as Hy4Heat) to provide evidence around safety of hydrogen within buildings, and stimulate the development of a range of hydrogen domestic appliances. The project was designed by our Head of Energy Futures, who spent a year seconded to BEIS to advise on hydrogen. The BEIS team still regularly consults NGN on hydrogen issues.



Our Head of Energy Futures spent a year seconded to BEIS to help design the government's own £25 million hydrogen study

Influencing national policy: In October 2017, the UK Government published its 'Clean Growth Plan' which describes conversion of the existing gas network to hydrogen as one of three plausible pathways to 2050 decarbonisation.

Parallel projects with Government

Our H21 NIC programme, and the Government's £25 million Hy4Heat Programme (informed by NGN) will provide critical safety evidence to support hydrogen conversion by 2021 - supporting future policy decisions.



Our initial H21 bid and ongoing programme of stakeholder engagement around the potential of 100% hydrogen conversion have paved the way for multiple partnership projects, including six led by NGN. Each successfully secured funding through a combination of stakeholder and GDN investment and Ofgem's Network Innovation Competition and Network Innovation Allowance.

Stakeholders Engaged | Outputs achieved

Cadent, Keele University, WWU, SGN, Statoil, Ofgem, BEIS Circa £20 million of stakeholder, NIA, NIC and GDN funding secured for a range of projects delivering evidence to support a hydrogen conversion policy in the UK.

Future outcomes

Maintaining customer choice and offering a more affordable alternative to an allelectric future.

InTEGReL: energy from gas: 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 will support our own work in green transport and hydrogen, as well as providing a centre of excellence for other UK organisations to develop projects.

"The InTEGReL project demonstrates how the private sector - working with the UK's world class Higher Education sector - can take a leading role in helping Britain reach our 2050 emission reduction target."

Greg Clark MP, Secretary of State for Business, Energy and Industrial Strategy

Stakeholders said:

Developing whole energy solutions is a priority



Early projects include:

- Power to gas: a feasibility study with ITM Power to convert 'spare' electricity into hydrogen, using electrolysis. The hydrogen could then be used to smooth out the supply of electricity from renewables in dead periods.
 - "This feasibility study has resulted in a close working relationship with Northern Gas Networks and the results are very exciting for the deployment of large scale powerto-gas energy storage on their network."
 - Graham Cooley, CEO of ITM Power
- Battery storage: in partnership with Northern Powergrid, we're progressing projects to create a new 100kW lithium ion battery facility on site and build two vehicle-to-grid chargers. This infrastructure will support a wide range of future projects.

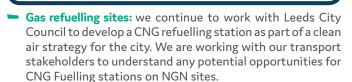
Gas as a transport fuel

We are working with a range of stakeholders to develop sustainable transport solutions. This work includes:

- Natural gas vehicles group: we are active participants in this working group, which includes fleet owners, the Industrial Vehicles Corporation (IVECO) and gas suppliers. Members are working together to influence national policy and develop an integrated strategy for gas as a transport fuel.
- Green transport: we are introducing gas powered and hybrid vehicles to our fleet and have spoken with Honda and other global car manufacturers about our H21 programme and plans to create a large scale hydrogen network to unlock the potential for hydrogen fuel cell vehicles.

Stakeholders said:

Gas can play a role in decarbonising transport



2017/18 – Outcome highlights Here are just a few examples of how our initiatives have had a positive impact for stakeholders

Holistic approach

integrated strategies e.g. Customer Strategy (p.3)

enhance customer/ vulnerability training (p.16) circa partner organisations supporting over **36,250** customers

Innovative thinking

circa £1m savings through innovative thinking (pp.11-13)

Midge, our gas detection dog, saved £94,000 and customers love him too!

Delivered 55 initiatives to better serve 53 challenging groups/communities, resulting in measurable benefits e.g.

Challenging groups - measurable benefit

5,100

customers referred to the Priority Services Register (Northern Powergrid and Electricity North West partnerships p.16)

Frontline volunteers knowledge of CO increased from 6.14 to 9.32/10 (Community Promises Fund) (p.17)

£98,000

lifetime savings through energy efficiency measures, warm home discounts and switching (Groundwork Partnership) (p.16)

Project management

Control Point -Rolled out across our operations and used **74,000 times** (p.13)

Avoiding unnecessary future disruption and £705,000 worth of risk (p.13)



Warm Hubs - year 3 project now financially sustainable and adopted by others. (p.18)

Smart/best practice -replicable

national awards for our work sites (p.11)

Pothole trial avoided three separate road closures saving local taxpayers £3,000 (p.11)

