



# Northern Gas Networks

## Discretionary Reward Scheme 2013-15



### Our Mission: People, pipes and passion

Our responsibility to our customers, colleagues, communities, partners and environment is so much more than a box-ticking exercise at Northern Gas Networks (NGN).

We firmly believe that a responsible business approach is essential so that we can continue to deliver social and economic benefits to our region, now and in the future.

Our Community Promises, set out under the five S's (to Serve, Stop, Share, Shape and Sustain), underline what we will deliver for the communities that we serve in our continual pursuit to 'Be the Best'.

Our promises have been developed with our stakeholders and directly inform our annual plans and KPIs. This helps to maximise cross-over opportunities between what we do within fuel poverty, CO awareness and lowering carbon emissions, both by harnessing the impact and improving the measurability.

This passion to 'Be the Best' and exceed our targets shines through in what we have achieved with our fuel poverty, CO awareness and environmental activities over the last two years. We hope you enjoy reading our submission.

## ► Our approach: keeping the region warm and informed

Our fuel poverty strategy focuses on two areas:

### **Delivering beyond the meter:**

In other words going above and beyond our connections targets; making them count by delivering holistic solutions.

### **Fulfilling a wider moral obligation by building better partnerships:**

Going above and beyond, delivering gas-led solutions to help people out of fuel poverty (or just poverty in general).

At our November 2014 stakeholder workshops, there was a general consensus that NGN's updated approach to Fuel Poverty is appropriate and inclusive - 83% said our approach is OK, good, very good or excellent.

## ► Delivering beyond the meter

We're working hard to deliver end-to-end solutions so people receive the new heating systems, appliances, insulation and energy advice required to make a difference.

On the back of the Chancellor's Autumn Statement that pledged £25m to UK local authorities to tackle fuel poverty, we've proactively approached all our local authority stakeholders outlining how we can help.

For example, in Durham, we've utilised our latest technology to supply detailed mapping of our network to highlight off-gas areas in lower super output areas, allowing us to work together to develop informed 'beyond the meter' programmes.

We're also working with Leeds City Region (incorporating nine local authorities) to do the same. In Leeds alone, we've uncovered over 2,400 off-gas fuel poor households eligible for 'beyond the meter' packages inside the outer ring road.

We're developing direct partnerships with more Registered Social Landlords (RSLs), enabling us to reach larger numbers of individuals, to offer gas connections, often supported by additional in-house measures. We are now working with three large RSLs, managing over 100,000 homes in our region, each of whom has committed to work with us, with one advising of a three year programme to switch 943 properties to gas.

We've increased from one to three fuel poor partners providing more holistic coverage of our region:

- **Community Energy Solutions (CES)**, our incumbent fuel poor partner has been brought in house to better align our activities and raise the profile of what they do across the business.
- **Warm Zones (a division of NEA)** covers the North East and East Yorkshire, providing opportunities to access NEA funding for 'beyond the meter' and additional heating/installation measures.
- **Yorkshire Energy Services** covers the West, they are also taking a national lead on Park Homes and will assist our strategy to target this hard-to-reach audience.

DID YOU KNOW?

Customers have realised

**£3,798,193**

(est) in energy savings through our fuel poor connections to date

## ► We're growing an army of fuel poor ambassadors

NEA has now trained all of our Connections Customer team and other customer-facing colleagues (over 100 colleagues) to identify signs of fuel poverty and deal sensitively with vulnerable customers. There was a 25% uplift in single fuel poor vouchers issued, following the training in summer 2014, as in the same period in the previous regulatory year.

Our Connections team spoke at a number of community meetings during 2013/14, giving up their own time to educate customers about the availability of free connections and raising awareness of the risks of CO.

## ► Fulfilling a wider moral responsibility by building better partnerships

### **The Children's Society:**

'Warm and Informed' is our most powerful and impactful initiative to date, delivering against all of DECC's strategic fuel poor outcomes.

This groundbreaking 12-month pilot scheme in two of Bradford's most deprived areas kicked off in November 2014 and was officially launched in February.



**10,000** The estimated number of children in Bradford living in fuel poverty

**1250** The number of interactions with families through workshops and follow-up visits



We've funded 3 advisors to support families in need



Community workshops have been delivered



We've met with 22 families in financial hardship and set up manageable repayment plans for customers totalling £18,945

**“ We're delighted to partner with NGN on this vital project which will bring affordable warmth to local families and vulnerable children and help many escape the energy debt trap. ”**

Jane Middleton, Area Director of The Children's Society

The scope of the project is expanding to include routes to work workshops, children's events, plus healthy eating and cookery workshops. Our Community Artist, Mick Hand, will deliver workshops to subtly communicate health, safety and wellbeing messages.

Our partnership has informed the content of the society's report and guidance document, produced in conjunction with the Association for the Conservation of Energy for the EAGA charity, providing a blueprint for reaching fuel poor families through children's centres.

It's also been referenced in DECC's March 2015 document 'Cutting the cost of keeping warm - a fuel poverty strategy for England' as an example of best practice.

We're now bringing in additional partners such as Groundwork who, through their Green Doctor programme, will help people make their homes more environmentally friendly, energy efficient and provide financial advice and support.

### Infrastructure North: sharing resource:

Our regional collaboration with Northern Powergrid (NPG), Yorkshire Water and Northumbrian Water continues to grow in terms of scope and impact:

- In 2014 we launched our 'Safe Warm and In Control' campaign with a central website providing information and resources for professionals and organisations looking after vulnerable people, older people and those on low incomes.
- We've joined NPG's Social Issues Expert Group which meets quarterly and is attended by NEA Chair Derek Lickorish and Chief Executive Jenny Saunders as well as Shona Alexander, Chief Executive, Newcastle-upon-Tyne Citizens Advice Bureau.
- We're exploring ways of feeding NGN-generated PSR data into NPG's existing database.

### Newcastle City Council/Newcastle University/Northern Powergrid and Your Homes Newcastle:

NGN and NPG have each provided £64K funding for this social engineering project to assess the energy usage and expectations of the residents within six multi-storey buildings in Newcastle, developing a best practice blueprint for making these buildings more efficient and sustainable.

**Accessing electoral data:** Bridget Phillipson, MP for Sunderland North, offered to support us in gaining access to PSR data and we've brought our Infrastructure North electricity and water colleagues on board so we can all benefit. Bridget recently hosted (and later tweeted about) a coffee morning for local constituents, attended by NGN and NPG.

### TWITTER FEEDBACK



### Warm Hubs:

Working with Community Action Northumberland (where over 28,000 people live in fuel poverty), this scheme provides places for people to keep warm, have a hot meal, meet friends and receive energy efficiency advice as well as providing access to an oil buying scheme. It supports off-gas regions where it isn't possible to connect people to the gas network. Twenty residents, other key partners and local councillors attended the launch event at Crookham Village Hall in February 2015.

DID YOU KNOW?

**89%** said there was a need for a Warm Hub in their area

**94%** said they would regularly attend events

A further 19 hubs are planned

### Pop-up Energy Hubs:

In the Borders region, we're working in partnership with the NEA and SGN to establish five drop-in centres in village shops and halls. The first took place in Branxton Village Hall this March, where two attendees were helped to find cheaper energy through USwitch and literature was circulated about the financial benefits of using an oil-buying scheme.

### Unlocking wider benefits

With our fuel poor partners, we look to maximise the support that we can provide our customers. Over the last two years together we have:

- Used the services of our fuel poor partners parent organisations to bring more help to around 290 homes, through access to funding for external wall insulation and heating systems often linked to our Fuel Poor Network Extension Scheme.
- Funded two energy efficiency advisors who help to unlock previously unclaimed benefits, while offering energy saving tips.
- Helped another 130 families access heating and insulation measures to improve their quality of life through referrals to other schemes such as Warm up North and Health through Warmth.

These activities result in significant additional savings and income.

SAVINGS	2013-2015
Insulation and heating systems	Over £150,000
Unclaimed benefits	Over £800,000

“Mr B. is 90 years old, living in the North East. In January 2014 CES managed the installation of external solid wall insulation which was fully funded via ECO. A benefits check was undertaken resulting in Mr B. now receiving £7,490 (£144/week) extra.”

Lee Cattermole, Programme Director  
at Community Energy Solutions

## ► Our approach: working for a sustainable future

Increasingly we look at ways of making big changes that have real impact and we've empowered our people to think big too.

We're also tackling the priorities identified by stakeholders. There was consensus at our most recent workshops that we needed to take a sustainable approach with all of our activities. They wanted us to consider using electric or gas-powered vehicles (we are), educate around the key futures arguments and options (we are) and drive technical solutions and pilot programmes (we are).

## ► Reducing impact

**Premier league contractors:** Our Construction Services model, which is centred around employing small local contractors, is already reducing our carbon footprint (an estimated 60% fleet reduction, which will deliver a significant reduction in mileage). Now we've set up a 'Premier League' initiative that rewards contractors for reducing their environmental impact. They receive points for using non-dig techniques and for meeting the environmental criteria within the Considerate Constructors Scheme (eg using solar-powered welfare cabins and storing surplus spoil in containers to reduce visual impact). Outputs are measured weekly and, annually, the top three point scorers win £10,000, £5,000 and £2,500, respectively.

 **Fleet reduced by 60%<sub>(est)</sub>**

**Core & Vac + Acoustic Camera:** Although our trial was funded by Ofgem, we're now investing an initial £750,000 to introduce two units as well as appointing a full-time Acoustic Camera Operator and Specialist Site Manager.

Our trial of 167 repair jobs showed high accuracy of leak identification, a reduction in the time taken to pinpoint leaks and, in some cases, a reduction in the time taken to complete a repair from four days to four hours! A typical excavation has reduced in size from around 1.4 msq to between 450 and 600mm diameter and virgin material use is reduced by 96%. 95% of the trial jobs delivered a cost saving of 12%. We're now working with colleagues at National Grid and SGN to support their internal campaigns to introduce it within their own businesses.



**Spoil recycling:** We're the only GDN using our own spoil to fill voids created by our gas holder demolition (23 over the R100 period) as part of our Materials Management Plan. To date 5,500 tonnes of spoil have been deployed in this way at St Marks Street, Hull, reducing our use of virgin aggregate by the same amount.

**Recycled materials:** We're actively supporting Yorkshire Highways Authorities and Utilities Committee (YHAUC) in their efforts to assist more suppliers gain accreditation in our region and we're delighted that one of our existing West Yorkshire suppliers, Mone Brothers, is opening a new recycled aggregate plant in Hull.

## ► Plugging the gap

We've significantly stepped up our efforts to not just manage, but also make lasting improvements in tackling leakage and shrinkage. We've:

- Appointed a dedicated Leakage and Pressure Control Manager, responsible for a full-time team of nine, providing 24/7 system surveillance.
- Invested £8.5m in a centralised system, installing 2,500 automated loggers and state-of-the-art pressure control systems. This ensures real-time information is fed back to our central team, enabling immediate identification of leaks or potential leaks, allowing immediate remote adjustments to pressure or deployment of an engineering team to a precise location.
- Carried out one-to-one briefings with managers and engineers from across our network to explain how timely re-adjustment of pressures pre, during and post engineering works can support our efforts.

As a result of this we've outperformed our baseline targets for the last two regulatory years, reducing the amount of gas that escapes from our network. But we're not stopping there; a new team is being introduced which looks holistically at environmental management, not just maintaining pressures. This new model of working is as much about people as it is technology and we look forward to sharing the outcomes of this with you in our next DRS.

## ► Looking for carbon savings in every corner of the business

- We've spent circa £8m on a smaller, more fuel efficient fleet and limited speed to 62mph over the past two years, delivering an estimated 43% fuel efficiency. We're working with Cenex to see how we make further savings on fleet energy and carbon emissions.
- Green Road telemetry is now fitted to our entire operational fleet, helping us deliver a potential 10% fuel efficiency improvement – even Mark Horsley, our CEO, has one – and we've launched an awards scheme to find NGN's Best Driver.
- 100% of our metered electricity is now renewable.
- We're paying All Star, our fuel card provider, £1.59 per director's fuel card, per month, to plant trees which offset our carbon footprint of 11 tonnes in 11 months.
- Our green procurement policy means that the selection of land management suppliers is based 70% on environmental practices and technical expertise and 30% commercial.
- We've provided training for all levels from yard men to senior leaders about how they can manage environmental performance and reduce impact.

## ► Energy futures: Breakthrough thinking

As Chair of the Energy Innovation Centre, our CEO is committed to bringing together other utility and technical partners to explore energy futures.

Our Head of Energy Futures has been given the approval, time and funding to fully research ideas that could potentially tackle the energy trilemma (effective management of emissions, security of supply and the cost of delivering a workable solution) and revolutionise the role of gas in the future energy mix.

The H21 project was conceived by NGN towards the end of 2014 and looks at the bigger picture around creating truly sustainable and less impactful sources of energy.

**“Hydrogen cities are a really exciting proposition and I'm delighted that Northern Gas Networks is conducting this trial in Leeds; We look forward to working closely with them to make the most of the opportunities this innovative project can offer our city”**

*Mel Taylor, Green Economy Lead at Leeds City Region Enterprise Partnership*

Generating excitement among leading academics, energy experts and utilities, the project has been designed to test the theory that the UK could convert to running on hydrogen generated from traditional natural gas and electricity sources using much of the existing energy infrastructure.

H21 will use Leeds city centre to test the feasibility of the proposition, working alongside NGN's existing gas

main replacement programme (plastic pipes are perfect for transporting hydrogen).

We've delivered presentations about this at the ENA Annual Conference and individually to Ofgem, DECC, Leeds University, Scottish Hydrogen and Fuel Cell Association, Carbon Connect, Tees Valley Unlimited and MP Andy MacDonald.

Leeds City Council has just filed a bid for a £2m study to scope this out further. Meanwhile, we're talking to Osaka Gas, Japan's second largest gas supply and distribution company, to mine their knowledge about operating hydrogen systems.



## ► Alternative forms of gas

**T-Shale:** We're lobbying alongside United Kingdom Onshore Oil and Gas for more joined-up thinking around processing and distribution and organised a joint visit with National Grid to the US in March to find out more about their shale gas infrastructure.

### **Biomethane customer service improvements:**

We've transformed our service creating a dedicated in-house biomethane team, management systems, and interactive suite of customer-focused web applications (biomethane.northerngas.co.uk), literature and a conference and event programme. The website features the industry's first Gas to Grid pre-feasibility anaerobic digestions calculator, a plain English guide to the whole process and a 'hot spot' locator.

In March 2015, we hosted a series of events with the NFU to educate and support local farmers.



## ► Our approach: educating and protecting to prevent the dangers of CO

Over the past two years we have been focusing our attention on targeting the elderly and 18 to 24 year olds, in line with our strategy which was informed by the research we commissioned in 2010.

Increasingly we're focusing on collaborating to increase impact, developing activities for new audiences and improving the awareness and capabilities of colleagues and partners to boost reach and ensure sustainability. This approach helps us to understand where to best focus our efforts for maximum impact and identify emerging issues and groups. Our strategy moving forward is also informed by the recent CO inquiry which we actively contributed to.

We measure our impact through individual measures suited to each intervention or initiative, but the ultimate CO measure will always be lives saved – we estimate 22 additional lives were saved over the last two years.

At our November 2014 stakeholder workshops, there was general consensus that NGN's work on CO awareness is admirable and comprehensive – 94% said our approach is OK, good, very good or excellent. Suggested developments we're already addressing:

- Share information to achieve greater impact (we're doing this with iCOP).
- Focus on tenants in the private rented sector (we're starting to do this through our developing partnerships with landlords and The Children's Society – see Social Outputs section).
- Educate more people outside of NGN who deal with vulnerable people (see below).
- More focus on dangers presented by CO outside of the home (see details of iCOP evolution).



## ► Education

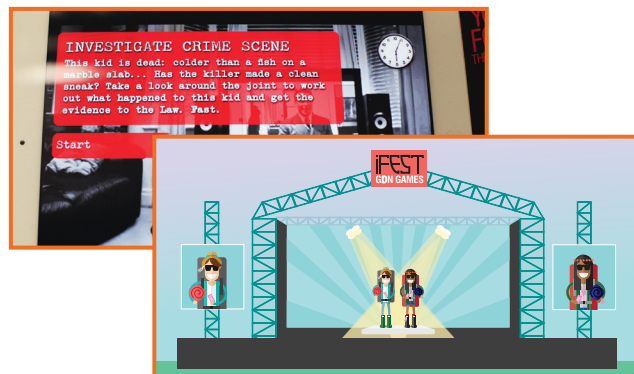
Our programmes now educate across more demographics and age groups:

### **iCOP and derivatives:**

Since its launch in 2012 iCOP has engaged around 4,000 students at university freshers' fairs across the North of England and over 30,000 people have downloaded the app. In 2013 we updated the app to include an end-of-game quiz to test and understand knowledge of CO symptoms and attitudes to CO. Of those that completed the quiz around 80% said they had an excellent knowledge of CO after playing the game and 60% of users would purchase a CO alarm. 81% said they would

share the game with friends and family.

We're now supporting the national roll-out of iCOP, as well as leading on its evolution with the other GDNs into a new campaign for 2015/16 and beyond. This new campaign, iFest, tackles the dangers presented by BBQs and fuel-burning devices when used in enclosed spaces such as tents and caravans.



### **iFEST:**

An online interactive game weaving in all the education, excitement and impact of iCOP with a festival theme that is to be heavily promoted throughout the 2015 festival season, in particular around key events such as Leeds Festival and Glastonbury. The game will be promoted in advance via a range of marketing activities including online advertising and media activity.



### **Boost for schools initiatives**

Refresh for '2021 In Your Hands' - This unique educational initiative delivered to Key Stage 3 children (11 to 14 year olds) by NGN colleagues was first launched in 2012/13, but was refreshed at the start of the 2013/14 academic year in line with feedback from teachers and students. The new style programme which educates around CO awareness and gas safety, sustainability and the environment, was shortlisted for a coveted CIPR Award and has been delivered to more than 700 children attending 26 workshops since April 2013. On average, students' understanding of the dangers of CO increased from 3.57 to 7.87 out of 10 following the programme.

We take every opportunity, through our safety and wider education programmes to raise awareness of the dangers of CO with children. Through our safety programmes, Crucial Crew and STEM we have reached over 9,500 children.

**Lifeboat links:** In 2014, we teamed up with the Royal National Lifeboat Association in Redcar to raise CO awareness among sea-faring communities who have experienced CO-related deaths and illnesses caused by butane cookers used on vessels.

### Training an army of CO educators:

We're working with the CO-Gas Safety charity to promote a BPEC accredited CO awareness programme and have already delivered it to 11 people within NGN and partner organisations; The Children's Society and Groundwork. We're now looking to train more colleagues to deliver the training themselves, with plans to educate local midwives, community matrons and other healthcare providers and community groups over the coming year.

## ► Protection

Through circa £1.8m investment, we have now rolled out 1,200 handheld Gasoseekers which detect levels of methane, CO and oxygen in the air. We were the first GDN to adopt this technology and our First Call Engineers have all been trained to use these machines and are making a real difference. In the year before we adopted this technology (2012) we recorded just 86 instances compared to 169 in 2013 and 194 in 2014.

In 11 of the instances recorded in 2014 CO had not been suspected meaning this initiative has already helped to save lives.

DID YOU KNOW?

**22** lives saved  
2013-15



## ► Prevention

**Social awareness:** We're delivering a workshop for healthcare professionals through Involve Yorkshire and the Humber and VONNE, raising awareness around CO, fuel poverty and vulnerable customers.

**CO briefings:** All of our First Call Engineers have been trained to deliver these valuable briefings. We're taking the time needed to share CO messaging within the home while increasing our ability to respond to one and two hour emergencies. Since April 2013, we have delivered 2,865 one-to-one briefings in individuals' homes.

**Dominic Rodgers Trust:** In April 2014 we led a programme of activities, designed with the Dominic Rodgers Trust, to raise awareness of the dangers of CO, we worked with the other GDNs to maximise impact. Over 273 colleagues took part in an online survey, helping us to understand awareness levels and the need for capacity and capability building internally. As well as building capability internally (through briefings, quizzes, badges to aid striking up conversations with customers etc), we helped to raise awareness externally by supporting media events such as the release of 200 balloons and visiting 21 caravan sites and campsites to provide information.

**Community groups:** In 2014, one of our colleagues identified a local youth project supporting vulnerable young adults near to one of our replacement schemes. Seeing this as an opportunity to raise CO awareness with a particularly vulnerable group we have now delivered CO awareness briefings and CO alarms through the project. A recent incident in Flatbush, New York highlighted the Jewish community as a group that is particularly at risk of CO due to the popularity of the Shabbos Blech gas cookers. We recently delivered a presentation on CO at the Labriut Healthy Living Centre in Gateshead, alongside the fire service. These centres are located throughout the UK and we have shared learnings from the session with colleagues across the GDNs.

### Ongoing communications:

We continue to use every opportunity to communicate the dangers and raise awareness of CO.

- **CO leaflets:** Thousands of copies have been distributed since April 2013 as part of our schools and community awareness activities and also through the fire service and Women's Institute.
- **York depot:** A giant CO awareness sign on the side of our York depot is visible from trains running along the adjacent East Coast Main Line route from Edinburgh to London.
- **Awareness articles:** Coverage secured in a number of regional publications including that of our partner, Community Action Northumberland.
- **Darlington Borough Council website** now features an animated CO infographic provided by NGN.



# Our Community Promises

Serve



**Customer,**  
we will serve you the best  
way we can

Sustain



**Environment,**  
we will sustain and protect the  
environment we live in and  
ensure optimum safety

Stop



**Social,**  
we will work tirelessly to  
stop needless hardship and  
risk to health

Be the best

Shape



**People,**  
we will shape a sustainable  
future for our people,  
communities and colleagues  
of the future

Share



**Stakeholder,**  
we will be open and  
share information with our  
partners to drive sustainable  
improvements

