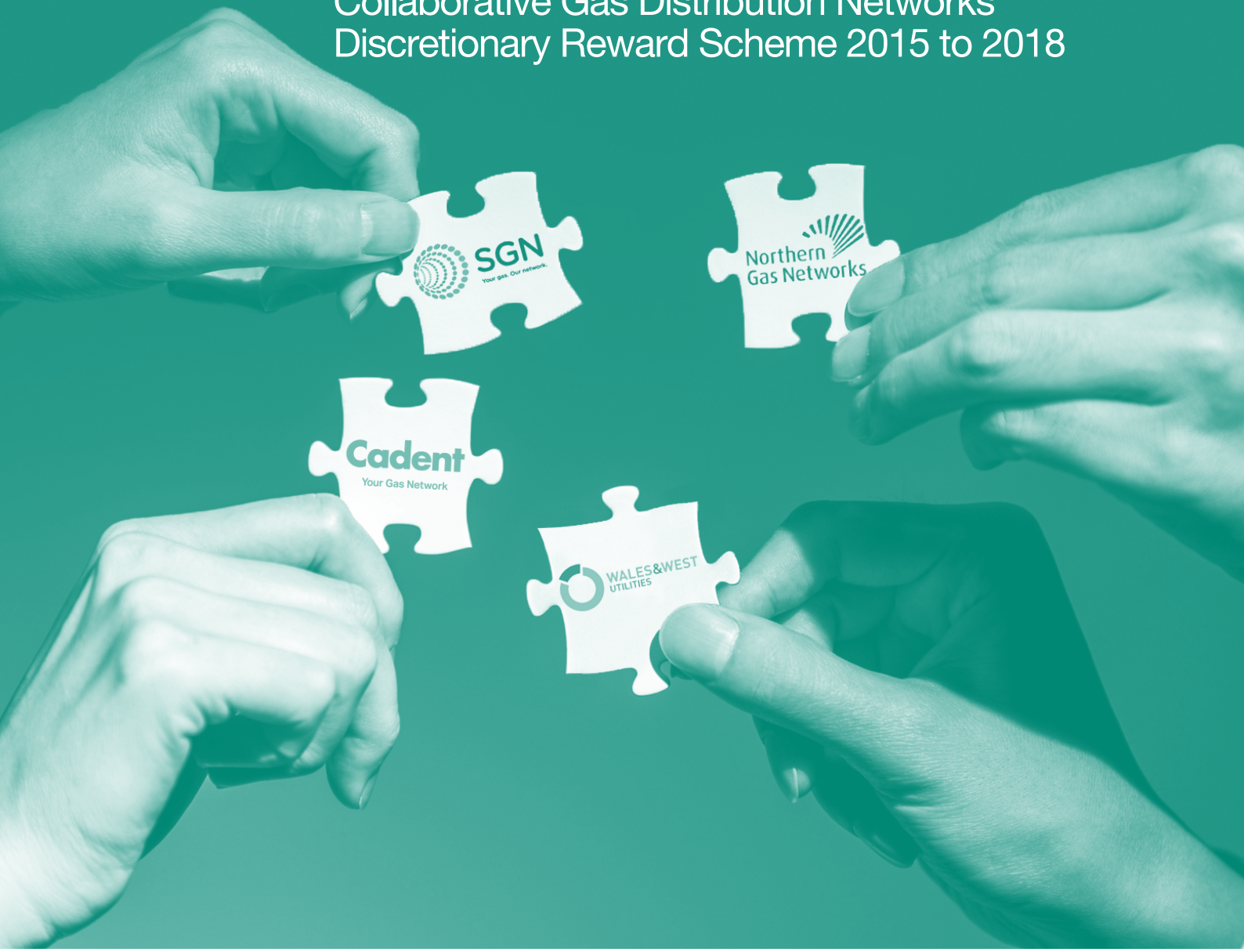
Working together – the power of four

Collaborative Gas Distribution Networks Discretionary Reward Scheme 2015 to 2018



Cadent Your Gas Network

Northern Gas Networks

SGN Your gas. Our network.

WALES&WEST UTILITIES

Contents

Working together - the power of four

Working together is the best way to help our current and future customers and stakeholders

The four Gas Distribution Networks (GDNs) – Cadent, Northern Gas Networks, SGN and Wales & West Utilities – collaborate to review and agree future work plans. This report covers these efforts from April 2015 to March 2018.

Our commitments remain the same:

- supporting and protecting our customers in the most vulnerable situations, including those at risk of fuel poverty
- raising awareness of the dangers of carbon monoxide (CO) poisoning in all its forms, its causes and symptoms and how to avoid accidental harm
- minimising our impact on the environment by finding new and innovative ways of working that benefit our stakeholders and customers.

While our goals haven't changed, our approach continues to evolve. Collaboration is increasingly important to us: we know that we can achieve much more working together than we can individually. Working together we can do the best for our customers, the environment and for the energy industry.

Collaborating means we use resources more efficiently and maximise our reach. For example, by trialling an initiative with one GDN before sharing the findings with the others for wider roll-out. On some initiatives, several GDNs will share the investment, allowing each to focus on a different aspect of the project. In other cases, all four GDNs can trial different approaches to the same issue and the results can be evaluated.

Knowing which initiatives are likely to have an impact helps us prioritise our future investment and influence industry best practice. Sometimes there are sound reasons not to go ahead with an idea, but we give all suggestions serious consideration and explain our reasoning. Now, when one GDN initiates a project, we look for ways to share the learnings from it so all our customers can benefit.

This joined-up approach means that important messages and ideas are shared across the networks. Working collaboratively allows us to identify early on if an initiative will result in wider success, avoiding duplication of individual effort, and allowing us to respond to issues promptly.

Each GDN has taken an area to lead on over the past three years, testing and refining different initiatives and allowing us to deliver great things over this DRS period.

We are genuinely committed to this work and aim to exceed what's expected of us.

Environmental outputs

Our commitment to minimise our impact on the environment and find new and innovative ways of working that benefit our customers and stakeholders

Britain's energy mix is changing and the way our gas networks operate needs to change too. We want to make sure the UK's gas infrastructure has a greener future, continuing to offer the affordable, reliable and secure energy supply our customers expect.

We aim to:

- minimise the impact of our day-to-day business on the environment
- make sure gas networks contribute to the UK's energy decarbonisation strategy
- help shape regulation and legislation that supports low-carbon initiatives.

We work as the Gas Innovation Governance Group (GIGG) to deliver collaborative innovation projects and explore technological, operational and commercial projects that help tackle the environmental impacts of our distribution activities.

Green Gas Book looks to future

We sponsored and helped inform *The Green Gas Book*, which sets out support for green gas in the UK's low carbon energy mix.

Published by the Parliamentary Shadow Energy and Climate Change Committees, the book promotes low-carbon gases such as biomethane, Synthetic Natural Gas (SNG) and hydrogen as valuable sources of secure, reliable and affordable energy that can help the UK meet its carbon reduction targets.

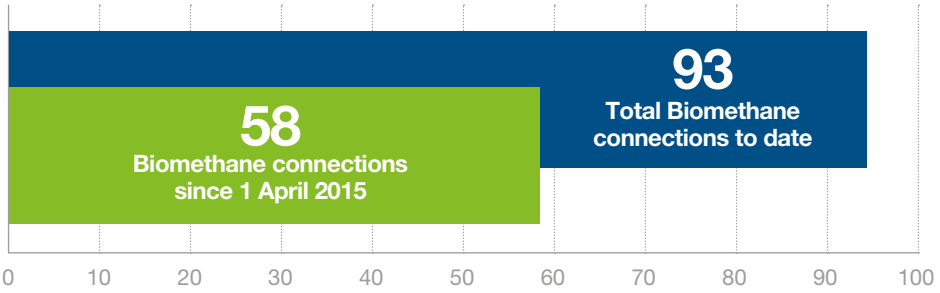
The launch was attended by parliamentarians, industry and think-tank representatives, including Calor, EUA and SERA/IPPR. The book has been widely distributed throughout the energy industry and government, and includes contributions from influential MPs who are engaged in the UK energy debate, including Rt Hon Caroline Flint, Dr Alan Whitehead and Lisa Nandy. It looks at how we might both decarbonise heat and keep the gas flowing, and what kind of policy changes a future government might adopt to make it happen.

Standardised connections benefit developers and the environment

The new voluntary standard of service (VSOS) we developed with the Institution of Gas Engineers and Managers during the last reporting period (2013 – 2015) is enabling many more biomethane connections to our gas networks. The standard was developed to support biomethane connections to ensure a consistent service and sharing of performance across the country.

We worked with the Distributed Gas Entry Group on the impact of renewable gas on our networks and explored how we can harmonise connection and commissioning.

We continue to share best practice and are currently seeing what we can learn from each other's exit agreements to potentially standardise and benefit the industry as a whole.



Total biomethane connections = 93
Total capacity = 598,339 homes
Biomethane connections since 1 April 2015 = 58
Capacity added since 1 April 2015 = 446,904 homes

+166%
+446,904

Since April 2015, we've increased the number of biomethane connections on our networks by 166%, adding capacity for an additional 446,904 homes.

The capacity of green gas connection in Wrexham is enough to decarbonise 15% of domestic heat in the town (~4,000 homes). The green gas connection was made easier by the voluntary standard, which will allow more communities to benefit in the future.

New standard supports decarbonised gas

Flexibility is essential if we are to meet the country's future energy needs, but there are worries that Schedule 3 of the Gas Safety (Management) Regulations is a barrier to changing to a lower carbon economy.

The Schedule 3 standard sets out the minimum standards that Gas Transporters must comply with, and without which they can't legally convey gas. As our stakeholders believe the composition of gas in the UK is likely to change, it is important that standards are revised to reflect this.

The Institution of Gas Engineers & Managers (IGEM) Gas Quality Standard Working Group, with input from all of the networks, is producing a standard covering UK gas quality specification to reflect the decline in UK Continental Shelf gas production and the wider reaching sources of gas. The revised standard will continue to ensure the safety and integrity of the network and downstream equipment.

It will help us meet our future energy needs with a mix of natural gas and/or other gases, renewables and low carbon sources.

A range of new distributed gas sources, in addition to biomethane, will be connected to the gas network in increasing numbers. These sources could have a significant impact on gas networks, and may require new commercial and regulatory arrangements.

We want to learn from other countries where distributed sources of gas are already connected. The joint project aims to understand international best practices, learn lessons from the introduction of new gas sources, and identify any problems.

The project will help us to understand the implications of new distributed gas sources. It will also support efficient investment planning decisions and so will prevent any unnecessary costs for our customers.

The new standard has opened the door to projects all of us are taking a role in, to investigate the possibilities of how a range of low and zero carbon gases can help decarbonise the gas network. Utilising green gases, which alone are insufficient to decarbonise heat, indicate there is adequate bio-energy feedstock in the UK to decarbonise the gas feed to a boiler within a smart hybrid heating system.

Cadent has calculated the bioenergy feedstock availability to produce renewable gas from biomethane and BioSNG. Their central estimate of 108TWh/yr by 2050 would be enough to meet approximately one-third of domestic heat demand. Their upper estimate of renewable gas potential is 183TWh/yr.

Hydrogen can be produced using renewable electricity to split water into its component parts, a process called electrolysis or 'Power-to-Gas'. GDNs are exploring the potential to inject and blend this with natural gas to support the decarbonisation of heat – see HyDeploy on p04. Recent work in Europe shows that using hydrogen from electrolysis alongside captured carbon to produce renewable methane to inject into the gas network could support the decarbonisation of the industry.

Hydrogen can also be produced by splitting methane into its component parts, a process called steam methane reformation (SMR), which requires Carbon Capture and Storage or Usage (CCS/U). See Hydrogen gas for cities on p04.

Decarbonising transport

Through our membership of the Natural Gas Vehicle Network, we're collaborating with vehicle manufacturers, fuel providers and refuelling station installers to promote gas as an alternative fuel for vehicles.

While heavy goods vehicles constitute only 5% of vehicle miles travelled and just 2% of vehicles on the road, they emit 21% of total transport-derived nitrogen oxide and 16% of transport greenhouse gas emissions (UK government statistics).

Each of us is connecting green gas refuelling stations to our respective networks, to enable heavy goods vehicles and public service vehicles to reduce their carbon emissions and almost eliminate the impact of these vehicles on local air quality.

We're working together to identify locations on our networks to facilitate the roll-out of lower-carbon, more eco-friendly heavy transport, and support the improvement of air quality.

Diverse events examine future energy

Stakeholders have been learning about the future of the energy industry at a series of events organised by the four networks.

By hosting joint events we shared information about our energy futures, avoiding duplication.

These included:

- a joint event with the All Party Parliamentary Renewable and Sustainable Energy Group (PRASEG), focusing on gas delivery for customers and supporting the low-carbon economy
- a Future of Gas Awareness event, discussing the future contribution of the gas networks to the UK economy with Ofgem officials
- a session at the European Parliament to launch a report on green gas produced by all members of the Gas Futures Group
- a round table event in the House of Commons, with ENA and *Utility Week*, to discuss the future of heat
- a joint workshop with the Gas Innovation and Governance Group and Gas Futures Group to discuss gas futures research.

The Department for Business, Energy and Industrial Strategy (BEIS), advised by the recommendations of the Committee on Climate Change, previously had a stronger focus on all-electric future scenarios for heat (heat networks and heat pumps), but by joining forces and collectively engaging at these events, we've managed to broaden thinking by promoting our whole-systems approach to the decarbonisation of heat – focusing on the lowest cost, lowest carbon, least disruptive and most secure pathway to decarbonise heat.

BEIS thinking on different potential technology approaches now includes decarbonising the gas grid using hydrogen or biogas.

Building for our future

Planning future energy

We've been planning and mapping the future energy mix needed to keep the UK warm and working.

To help do this, we collaborated on a project that showed the benefits brought to the UK's energy consumers and economy by including gas networks in the future energy mix. This research study resulted in the creation of several future energy scenarios that we use to help shape a clearer vision of the gas industry in 2050. It will also help our customers understand how they can expect gas to be used and transported in the future.

Hydrogen gas for cities

H21

Led by Northern Gas Networks, in partnership with Wales & West Utilities, the H21 feasibility study looked at the possibility of converting Leeds, one of the UK's largest cities, to hydrogen using existing pipes and equipment. It concluded that it is technically possible, economically viable and could help meet the UK's decarbonisation targets.

Consequently, there were months of collaboration between all four networks to put together the Network Innovation Competition H21 project bid, with representatives from all four networks successfully securing £9m funding.

Hydrogen could be transported through the existing gas networks to some of the UK's largest cities by 2050 – our current programmes of replacing cast iron pipes with polyethylene means minimal new infrastructure would be required in the distribution system compared to alternatives.

Switching from natural gas to hydrogen could reduce carbon emissions, while using existing gas networks to transport hydrogen would avoid the problems of building new district heat networks or upgrading the electricity grid. Studies show that converting the UK gas networks to hydrogen would reduce UK emissions by c. 73%.

Alongside this, associated research will be required on CCS, which large-scale hydrogen production relies on to deposit carbon from the process of SMR.

Hy-Deploy

Led by Cadent in collaboration with Northern Gas Networks and the HyDeploy consortium, including Keele University, this project is the first in the UK to add hydrogen into a private gas network and obtain hard data on the impact. Initial safety checks and blend testing in households started in January 2018. The live trial aims to blend hydrogen (up to 20% vol.) with natural gas to achieve carbon reduction without having to change appliances.

This trial will lay the foundation for approval for hydrogen blending across the networks. The outcome will also be used to shape the hydrogen debate for the future role of gas across the industry.

Reducing the impact of our day-to-day operations

When it comes to shrinkage and leakage, we replace pipes as part of our standard operations but this alone is not enough – on average, 96% of our carbon footprint comes from shrinkage and leakage issues.

Since 2014, we have reduced the amount of gas leaking from our networks by 6.5%.

We're always looking for innovative ways to reduce the impact of this, especially when it comes to our mains replacement programme.

In our last joint DRS submission, we referenced low-dig technologies such as 500m coil pipe trailers and core and vac vehicles. These trailers allow us to use 500m coils of PE pipe, rather than 150m coils.

This means we can decrease the amount of PE wastage, reduce the number of trips to depots to replenish materials and also reduce the number of excavations and associated electrofusion joints due to the possibility of inserting 1,000m of pipe at each insertion point, instead of 300m.

Since 2015, networks have invested in and are using 79 of these trailers as business as usual, reducing plastic wastage by c. 20%.

Over the course of a year, a single coil pipe trailer can save 56 tonnes of carbon each year, which means that, as a group of networks, we've potentially saved around 4,256 tonnes every year between 2015 and 2018.

Following a successful NIA trial, the networks invested in 13 core and vac vehicles during this DRS period which take a small, replaceable 'core' from the road,

avoiding the need for large excavations and creating spoil, and reducing the time spent in the road.

Carbon monoxide outputs

We're committed to raising awareness of the dangers of carbon monoxide (CO) poisoning in all its forms, its causes and symptoms and how to avoid accidental harm

As distribution networks, safety is our number one priority; not just in our day-to-day operations but in the communities we serve. Carbon monoxide continues to be a major concern for our stakeholders, and we take a broad, but targeted, approach to raising awareness of the dangers of CO poisoning, its causes and symptoms.

We do this by:

- educating people about the signs and symptoms of CO poisoning, and explaining how they can stay safe
- identifying innovative approaches to improve both CO detection and awareness of the dangers
- working with stakeholders to shape policy and legislation on CO safety, which will reduce incidents of CO poisoning.

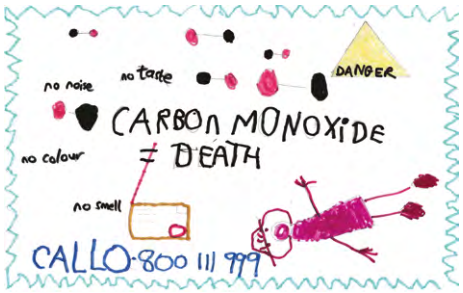
In recognition of the importance our stakeholders place on CO awareness, we've expanded the CO working group to include other industry partners such as Energy UK and suppliers such as nPower.

We deliver initiatives to raise awareness of the danger of CO exposure among high-risk groups, such as older people, younger people and people in vulnerable situations. We work with partners who can help us to gain access to these stakeholder groups such as charities, academia, local and national health authorities, NGOs, voluntary sector organisations and suppliers.

By maturing our partnerships and awareness delivery models, we have increased our reach and effected real behavioural changes while sharing resources and learnings about this important issue.

Spreading the safety message in schools

We've carried out a number of innovative programmes to reach school children and young people in engaging formats relevant for their age group and interests



CO safety competition takes off

A national CO Safety Competition for children aged between five and 11 – one of the groups most affected by CO – has reached 10 times more young people since it was expanded and relaunched by us three years ago.

Originally managed by the charity CO-Gas Safety, the competition asked primary school children to design posters to illustrate CO awareness. The aim is to help young people understand the symptoms, what to do and how to encourage parents and carers to avoid risks.

While it was successful in its early years, the competition was limited in its reach because of the charity's size and number of schools being engaged.

We realised what a positive impact this programme could have and in 2015 agreed with CO-Gas Safety to take over managing the competition. Since then entries have increased to nearly 1,000 – and our aim is to double that figure this year.

In October 2016 we relaunched the competition with each network agreeing to take the lead on a rotating annual basis. The first year was led by Cadent, and the following year by Wales & West Utilities, who produced unified branding in order to maximise awareness.

We invited entries in poetry, art and video form, not just posters as in previous competitions. It was rebranded as the CO Safety Competition – to remove the suggestion that it was only schools that could enter – and, in collaboration with ENA, the competition was promoted through social and traditional media.

As well as teaching children basic CO safety messages, the competition reaches parents, teachers and carers too.

Entries are received via various channels including directly to ENA, Safety Seymour days (see Safety Seymour goes to school) and GDN contacts.

A regional judging panel in each GDN chooses a winner from each age group to go through to the finals. A prize-giving ceremony announcing the two national winners is then held at the Palace of Westminster. Hosted by the All-Party Parliamentary Carbon Monoxide Group

(APPCOG) and its chairman, Barry Sheerman, MP for Huddersfield, the event is important in raising awareness on a national level and the winning entries are used to promote CO safety.

It's been a very good outcome for an investment of just over £7,000 a year and the initiative won Heating and Ventilation News Safety Initiative of the Year Award for 2017.

Competition entries give a clear message about the dangers of carbon monoxide.

Safety Seymour goes to school

We're also reaching younger children in other ways: for example Safety Seymour, the purple bear, is helping to teach them about the dangers of CO.

The campaign was developed by Cadent and shared with the other GDNs in early 2017. It targets five to seven-year-olds in school years 1 and 2 and aims to educate them in an enjoyable way.

Children of this age are vulnerable to the danger of CO, but relatively powerless. Because the campaign involves taking Seymour home, we are able to educate parents, and carers, who have the power to act on the safety messages by buying a CO alarm and having their appliances serviced every year.

Seymour is targeted at CO hot spot areas, where there are a high number of reported CO incidents. There is a day-long interactive session at each school where the children learn all about CO, what the symptoms are and how to avoid it.

The class borrows Seymour and each pupil takes him home for the evening and records the adventures he has at their house, including a safety treasure hunt, which involves identifying potential sources of CO in the home. There's also a questionnaire for parents. When they return their adventure sheet and questionnaire, the children receive a certificate and gift.

Each of us uses the campaign brand and consistent messaging while adapting it for our own region. For instance, Northern Gas Networks has reduced the full-day course and is trialling it as a half-day session, sharing feedback with the other GDNs.

The programme continues to go from strength to strength. Cadent trained 32 people from the other networks to deliver sessions, including 18 from SGN, while Northern Gas Networks went on to train a further 14 of its own colleagues, and Wales & West Utilities trained 11 of their colleagues. Collectively, we have raised awareness with more than 5,100 children by delivering sessions in 155 classes in more than 100 schools.

'Tunes not fumes' for young festival goers

After an online poll of festival goers revealed that over one in three surveyed (37%) said they'd use a gas cooker inside a tent; a fifth (19%) said they would use a cooking appliance to warm up a tent if it was cold; and one in seven (15%) said they'd bring a BBQ inside a tent to finish off the cooking if it was raining, we launched the #tunesnotfumes campaign to raise awareness of CO among this high risk group of young people aged 18 to 24.

Following the success of Northern Gas Networks game iCOP, we worked together to develop iFest, an entertaining and innovative online game, which warns of the specific CO dangers present at festivals and lets visitors to the website search through tips and learn about the risks of carbon monoxide poisoning and how to stay safe. To date, iFest has been played more than 5,500 times.

Launched in 2015 to coincide with the summer festival season, iFest was promoted on Twitter with the hashtag #tunesnotfumes, and targeted this hard to reach group by promoting the game at university freshers' fairs, via student unions and in service stations along routes to major music festivals, in addition to giving away festival survival kits that included CO alarms to use in tents.

We know this innovative campaign approach, led by Northern Gas Networks, was successful because over the first summer festival season (June to September 2015) game play peaked; overall 3.4% of players returned to play again, with the average player engaging for 1m15s, meaning users tended to play the game through to the end. It has been most popular in major festival locations London, Leeds, Birmingham, Liverpool and York, and we continue to pay for the game to be hosted, so people can continue to play it.

Stakeholder collaboration reaches a wider audience

Whether it's through working with government or charities, we're always looking for new partners who we can work with to engage more people

Spreading the word in Parliament

We're helping to spread the vital message about CO awareness by sponsoring the All-Party Parliamentary Carbon Monoxide Group (APPCOG), which exists to raise awareness within Parliament of the threat of carbon monoxide poisoning, to inform policy making and help improve safety measures across the UK.

In fact, we're the organisation's largest sponsor, and feed into its activities such as promoting CO safety through events in Westminster and valuable discussions in Parliament, influencing change and carrying out research.

Our continued contribution to its work means the vital message about CO awareness reaches the widest possible audience. A holistic approach links grass-roots activity with policy and, where appropriate, CO with other issues such as fuel poverty.

With our support, from 2015 to 2018, APPCOG has:

- organised and collaborated on over 80 stakeholder meetings and events
- launched four parliamentary reports and nine panel discussions
- engaged with more than 20 peers and MPs as members of APPCOG
- promoted CO awareness at music festivals during June 2017 in support of the #tunesnotfumes campaign, with two members of the APPCOG secretariat travelling to the Glastonbury and Download festivals to meet organisers and discuss the specific dangers of CO for festival goers
- launched the *Carbon monoxide Poisoning: Saving Lives, Advancing Treatment* report, which set out 26 different recommendations to raise awareness of CO poisoning among healthcare professionals
  - secured coverage on the MailOnline website that highlighted the impact of CO on pregnant women and unborn children: the MailOnline is the most visited English-language newspaper website in the world
  - letters from APPCOG Chair Professor the Baroness Finlay of Llandaff were sent to Health Minister Jeremy Hunt MP and Dame Sally Davies, Chief Medical Officer for England, with copies of the report, resulting in a decision from NHS authorities to formally review the report
  - in collaboration with the subgroup Co-med, APPCOG are in the process of creating a multilingual GP leaflet for distribution to medical professionals to help them detect and treat CO poisoning better and distinguish it from flu
- published the *Carbon monoxide Alarms: Tenants Safe & Secure in their Homes* report in November 2017, looking at issues around improving current regulations and advocating that landlords must provide a CO alarm in properties containing any fuel burning appliance, as opposed to just solid fuel appliances.

Gas Safety Week collaboration increases our reach

We don't just work with government, we also join forces with industry, the third sector and academia to reach wider audiences with greater impact.

One example is Gas Safety Week, and in 2017 our combined social media campaigns meant that, as a group, our messages and videos reached over:

- 23,000 people on Twitter
- 68,000 people on Facebook.

23,000
68,000

Charities benefit from CO Fund

We're always looking for innovative ways to raise awareness about the dangers of CO across our networks.

To support this strategic activity, we launched a CO Charity Fund to further our reach and involve new audiences. Based on Northern Gas Networks' Community Promises Fund model, the Carbon Monoxide Charity Fund invites UK charities and organisations to apply for funding to support CO-related initiatives.

In its first year, we awarded grants of up to £2,000 from a fund of £10,000 to three applicants. Based on applicants' feedback we held off opening the 2018 fund until March, avoiding the winter period to encourage an increased number of applications.

The cross-GDN panel liked The Dominic Rodgers Trust's innovative proposal to send CO safety messages direct to fans' smartphones during a Manchester United vs. Huddersfield Town football match. The broadcast took place on 3rd February 2018, reaching over 70,000 football fans at the match.

Collaborative communication

Sometimes there are more direct ways to get our message out to the people who need to hear it

Building a video library

We're building up a video library of CO safety videos produced by individual GDNs. We agreed from the outset to provide unbranded versions of our videos for use by all four of us in our day-to-day activities.

These are also available free to APPCOG members.

As well as using our resources efficiently, this approach supports consistent messages across the country:

- Wales & West Utilities – COdebreakers
- Northern Gas Networks – CO @ festivals and uses Gas Networks Ireland's 'Tommy McAnairey' advert at film festivals
- Cadent – Safety Seymour, CO Safety

COdebreakers

Safety Seymour

Tommy McAnairey

CO advert in *UK Landlord* magazine

New regulations passed in 2015 require that private landlords in England and Scotland install a CO alarm in properties, but only in rooms that contain a solid fuel burning combustion appliance.

Although currently there are no similar requirements in place in Wales, we felt strongly that the importance of installing CO alarms was brought to the attention of all the nation's landlords through adverts encouraging them to install alarms in their properties, regardless of the property location or type of fuel source in use.

We ran full-page adverts alongside fuel poverty adverts in *UK Landlord* magazine, produced by the National Landlords Association, on 10 occasions during 2015-17 and now run them quarterly. Thirty thousand copies of the magazine are issued, reaching an audience of more than 31,500 local authorities, private landlords and registered social landlords.

Creating consistent messages to change behaviour

Working together helps us reach more people, trial more innovative ideas, measure them in a consistent and meaningful way, and avoid duplication of effort.

Building on our agreed approach with Ofgem to provide consistent messaging around CO awareness, we have increased our commitment to distribute CO surveys, massively improving baseline knowledge about the dangers of CO. Between 2015-18, our schemes delivered 278,351 survey responses compared to 14,777 in 2013-15 – an increase of 1784%.

Collectively, in 2015-18 we've also:

- distributed 71,360 CO alarms to customers vs 14,715 in 2013-15 – an increase of 385%
- achieved an increased average rating of CO awareness following our interactions with customers on a scale of 1-10, rising to 8.92 from 8.61 in 2013-15.

By measuring the impact of our awareness campaigns when providing CO alarms and having engaging conversations to educate people about CO, we've also achieved a 33.2% increase in CO awareness as a result of our interactions showing an increase in base knowledge thanks to our programme of awareness campaigns.

Social outputs

Our commitment to support and protect our customers in the most vulnerable situations, including those at risk of fuel poverty

Fuel poverty affects 21% of homes across the country[1], and as socially responsible companies we are committed to playing our part in significantly reducing the effects of fuel poverty and supporting customers in vulnerable situations.

To tackle this complex issue, we set up a fuel poverty working group in 2014 to collaboratively identify and proactively work on initiatives for customers in fuel poverty. Additionally, the Safeguarding Customer Working Group (SCWG), also led by the GDNs, looks at the wider issues around safeguarding and vulnerability and works to find co-ordinated, industry-wide ways to identify and help customers across the UK.

Together we:

- raise awareness of the issue and the support that's available
- share best practice to make sure we provide the right solutions
- work nationally to make sure that all customers in vulnerable situations can find support
- work with partners and stakeholders to bring about positive change.

[1]*According to NEA research funded by GDN collaborative initiative*

Campaigning for change

We've been working with partners and stakeholders to raise the profile of the Fuel Poverty Network Extension Scheme and find ways to increase connections to more fuel poor customers

ofgem
Making a positive difference for energy consumers

NEA
Action for Warm Homes

Department for Business, Energy & Industrial Strategy

energy saving trust

Link between fuel poverty, cold homes and poor health

Is there a link between poor housing and ill health? The report *In From the Cold* confirms this to be the case, and we've been campaigning to raise the profile of the Fuel Poverty Network Extension Scheme (FPNES) which helps tackle the issue by providing free or discounted gas connections.

We've been highlighting the lack of funding in England and Wales for in-house measures to help those in fuel poverty, proposing changes to Energy Company Obligation (ECO).

Other collaborative activities have included:

- SGN and Cadent hosted a joint stakeholder event in London, focusing on fuel poverty and customers in vulnerable circumstances
- all GDNs provided keynote speeches at National Energy Action (NEA) and conferences and forums in Scotland and Wales
- attending external events such as the Faculty of Medical Health annual conference
- representation on the Department of Work and Pensions' Safe Warm Homes group, providing updates on key issues on behalf of GDNs
- taking a lead in an 'off gas grid' advisory group, chaired by Cadent and attended by SGN on behalf of all GDNs, reporting to the Committee on Fuel Poverty
- collaborative stand at the NEA conference and a Fuel Poverty Energy Efficiency Group (FPEEG) event, raising awareness of our community activities
- key sponsors of the NEA *Focus* magazine including providing feature articles on fuel poverty activities and an advert on FPNES.

Working to come 'In From the Cold'

BEIS launched the £25m Central Heating Fund (CHF) for 2015/16 for local authorities (LAs).

We worked in partnership with LAs to identify qualifying households and encourage them to apply to the CHF in conjunction with a new gas connection, where successful applications varied greatly across the networks. This led to 1,979 new central heating installations across the gas networks.

As a result of the CHF not being extended, we commissioned National Energy Action (NEA) to prepare a report called *In From the Cold* (see above) to support an application to the government for a £37.5m central heating fund to support the Fuel Poor Network Extension Scheme in England and Wales. This was unsuccessful but led to positive discussions with BEIS on potential changes to Energy Company Obligation (ECO) funding, to target it at first time central heating systems for fuel poor customers.

1,979

Fuel poverty connections with internal measures via CHF

Central heating funds would aid the fuel poor

Working with suppliers on Energy Company Obligation (ECO) funding could have a positive impact on fuel poor connections in England and Wales.

The GDNs and suppliers have discussed the shortfall in ECO funding for first time central heating system installations and looked at ways to help Fuel Poverty Network Extension Scheme (FPNES) customers receive ECO funding.

- Although data protection arrangements have stalled the introduction of a national programme, we are running a trial with an individual supplier, through partner organisations referrals, to help customers bridge the funding gap. This trial aligns with ECO and FPNES to improve housing stock and reduce fuel poverty
- We worked with BEIS to reach out to suppliers to encourage their participation in the trial, hosting round-table discussions with a number of suppliers.

Our discussions have helped identify ECO funding for in-house measures and the shortfall needed to cover the whole cost of central heating systems. We suggested that ECO moves away from Carbon Reduction Targets and ring fences the amount of money needed to cover the full cost of central heating systems and support fuel poor connection targets.

Discussions with Ofgem and BEIS have been positive, and under ECO3 it is anticipated that greater alignment of ECO and FPNES will be achieved.

As result of National Grid selling its gas distribution network, a £150m Warm Homes Fund was established to invest in new central heating systems for fuel poor homes without gas connections. All of us are working closely with key stakeholders to help organisations apply to the fund and to 'blend' these funds with existing programmes.

We're backing independent gas connections

We've developed a number of partnerships to encourage independent gas transporter (iGT) and utility infrastructure provider (UIP) projects in social and private housing.

Following a successful project by Cadent, all four GDNs are working with a UIP to liaise with housing associations to identify where customers could benefit from a mains gas connection, where successful applications varied greatly across the networks. This has led to greater competition in the connections market, with more opportunities for organisations to conduct fuel poor connections.

Although a change in the iGT process proposed by the GDNs at the mid-term review was not adopted by Ofgem, we have continued to work with iGTs. Availability of funding for in-house measures in Scotland has meant SGN has completed a further 269 fuel poor connections at a cost of £300,000. Elsewhere, we have struggled to identify viable projects, with only a handful of one-off connections made due to a lack of funding availability for in-house measures.

Working to help alleviate fuel poverty

We worked with local authorities, housing associations and partners on Ofgem's mid-term review of the Fuel Poor Network Extension Scheme (FPNES).

We consulted with key stakeholders to understand the potential change in number of fuel poor connections and this helped us to revise our targets and influence policy to support the fuel poor strategy.

Mid-term changes from Ofgem to the FPNES allow us to recover costs incurred in supporting District Heating Schemes (DHS) when a connection to the gas network is required. While remaining as a single fuel poor connection this change recognised the important role the DHS can play in lifting multiple customers out of fuel poverty and that in doing so the cost to GDNs will be beyond that of a single domestic fuel poor connection.

Since April 2015, there have been over 35,000 fuel poor connections across the Gas Distribution Networks.

Collaborating on fuel poverty

Gas Distribution Networks (GDNs), Government departments and agencies are working together to tackle fuel poverty by providing alternative sources of help.

As an example, we've been collaborating with BEIS and the Energy Savings Trust (EST) to provide a referral scheme for customers who contact them but are unsuitable for the Warm Home Discount. However, some could benefit from the Fuel Poverty Network Extension Scheme (FPNES), and this project provides EST with the means to refer these customers to a source of help that could help lift them out of fuel poverty.

Since the scheme was launched in May 2015, around 700 customers have been referred to a central fuel poor partner through a dedicated phone line, resulting in 186 fuel poverty connections.

SGN chairs a monthly conference call between all parties and EST reports on customer activity and referral rates so annual numbers can be compared. As well as enabling fuel poor connections, the project is strengthening links between the GDNs, BEIS and EST which in turn benefits our customers.

Technology finds fuel poor households

Technology is helping to identify potential fuel poverty connections and show customers how they can find energy solutions for their homes.

A major breakthrough in identifying off gas grid and fuel poor customers has been the continued development of the Off Gas Grid Mapping system. It was initiated, developed and funded through Cadent's partnership with Affordable Warmth Solutions (AWS), working with government departments and technology company Klin.

The system has been expanded through support and co-operation from all of us to share gas network location data across their networks. Cadent and AWS are maintaining and funding the system. With Energy Performance Certificates (EPC) data and local authority boundaries being incorporated, we are collectively helping over 400 registered users to identify and target fuel poor households.

Engaging to save energy

While working to reach more fuel poor customers we've also been looking at ways to help them make energy efficiencies

Engaging with communities

Carbon cafes were part of Northern Gas Network's Green Doctor project, carried out by charity organisation Groundworks, offering customers advice on energy matters.

During the sessions, customers in vulnerable circumstances were identified for more specific assistance, including home visits by the Green Doctor to install low cost energy saving measures.

Taking the learnings from this project SGN has engaged Groundworks in its southern network to host 'carbon cafes' providing energy advice.

For both networks, Groundworks conduct Green Doctor home visits to install low cost energy saving measures such as LED light bulbs, water savers and radiator reflectors.

Another project, Warm Hubs, was delivered by Community Action Northumberland (CAN) in rural borders areas for Northern Gas Networks. From an initial pilot this now has some 20 active Warm Hubs supporting customers off the gas grid.

Both projects are reaching customers in vulnerable circumstances and have provided venues for people to learn about energy, safety and wellbeing.

Customers are also given specific advice on becoming registered on the priority service register and advised on installing CO alarms and locking gas cooker valves.

SGN has engaged CAN to deliver the project in its southern network in association with local group Action Hampshire. The initial pilot is delivering two Warm Hubs, with a further six Warm Hubs being planned during phase two of project.

Wales & West Utilities and Cadent have used similar methods of engaging with customers such as 'rural coffee caravans' or local community halls, working with trusted local partners like Care & Repair to engage with customers and provide services ranging from energy advice, health and wellbeing, and installing fuel poor gas connections.

Cooker valves keep customers safe

Living with dementia poses all sorts of problems – but a new locking cooker valve has made life a little safer for gas customers.

The idea of installing a gas safety locking device came from the charity Dying to Keep Warm, to help people with dementia and their families stay safe in homes with a gas supply. The lock is fitted to the internal gas pipework leading to the cooker or hob and, when locked, prevents the gas flowing until the valve is opened by a key. This ensures that gas cannot be left on accidently and the hob and cooker can't be used inappropriately.

565

valves have been fitted to help customers stay safe in their homes

Following a successful pilot by SGN, all four networks now promote the locking cooker valve, which has gone on to win numerous national safety awards.

As GDNs, we receive referrals from organisations including the emergency services, local authorities and charities such as the Alzheimer's Society asking us to fit the valves and we work with these organisations to make people aware of the service. We also receive requests from individuals or family members through our websites.

Since the pilot in 2015, 565 valves have been fitted to help customers stay safe in their homes and we continue to facilitate further collaboration through the ENA Locking Cooker Valve working group.

A focus on customer first

Communicating with customers who have different needs has been a key focus for improvement

Priority Services Register gets connected

Making sure we provide customers with the appropriate level of service they need is important to us. Over the past three years, we have worked relentlessly with the DNOs to ensure that as a customer in a vulnerable situation you only have to register once for all parties to have visibility of individual needs.

The connected Priority Services Registers now include new data flows so that PSR data can be kept and shared across the energy sector.

This means that information is as accurate and effective as possible, allowing us to identify and tailor our services to meet individual needs, for example, helping customers who have extra communication, access or safety needs.

Working together with the DNOs, shippers and suppliers via the Safeguarding Customer Working Group (SCWG), chaired by Cadent, we developed 27 consistent needs codes which are now used by all energy companies.

The initiative involved extensive collaboration over the past three years through SCWG, to ensure the solution worked for everybody. The connected registers will ensure a customer's situation is fully understood, their data is secure and that they are treated appropriately.

Now customers only need to be added to the register once for all electricity and gas companies to have access to their details, improving the customer experience.

17,867

Since the partnership with the DNOs began, we have registered 17,867 people on the PSR.

Partnership with Royal Association for Deaf people (RAD)

New videos are letting deaf and hearing impaired customers know what to do if they smell gas, lose power or want to join the Priority Services Register.

Over the last two years, we've worked closely with Royal Association for Deaf people (RAD) to create three videos using signing. The films were finished in December 2017 and shared across the Safeguarding Customer Working Group (SCWG), allowing all members to upload them to their websites.

The videos were commissioned after RAD informed us there was a gap in our communications for our deaf customers.

They were project managed through the SCWG. We have also funded a sign language translator service which can be used by all four networks to communicate with customers who use sign language as their main form of communication.

865

Across all GDNs, the videos were viewed 865 times.

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