

# Making a house a home



A **decade** of  
tackling fuel poverty

In partnership with **Cadent** and **nationalgrid**



**"It's that warm now  
I'm just happy...  
It's a happy  
household."**

**AWS customer,  
Derbyshire**



# Delivering social justice through affordable gas connections

## Introducing the work of Affordable Warmth Solutions



**Mike Foster**  
Chair of Affordable  
Warmth Solutions

**"I went into politics to address social justice issues and, for me, fuel poverty is without a doubt at the heart of debate about social justice in this country.**

**To have to live without the basic human right of a warm, dry home can have such a debilitating impact on every aspect of life and is a terrible and unacceptable injustice in modern society."**

**"In my role as CEO of the Energy and Utilities Alliance I am able to lobby government for policies that will make a difference to these people's lives. But it takes time. As chair of AWS, though, I can help us to have a more immediate impact - and that is a great privilege.**

"I had a huge amount of respect for Malcolm Wicks' tireless work on fuel poverty and I knew both him and John Healy, the second chair of AWS, well during my time as an MP. So, when I was asked to become chair of Affordable Warmth Solutions in 2017, for me, it was an invitation to follow in the footsteps of people that I hold in the highest regard. This role gives me the opportunity to combine my day job running a trade body for the gas industry, with my personal passion for addressing social justice issues. In many respects it feels like a hobby and a job rolled into one.

"Everybody is against poverty, instinctively. The question is, what do you do about it? The majority of people living in fuel poverty are living in poverty, full stop. We can't solve all of their problems – and, on the face of it we are only making a small difference to one aspect of their lives. However, by giving people the opportunity to live in a warm dry home, with a heating system that they can control and that they can flex in terms of its cost, this impact is magnified.

"I'm constantly struck by the passion of people involved in the energy sector to address the issue of fuel poverty. They really do want to make a difference. Often though, they are restricted in what they can do by the regulatory regime they work within, but organisations like Affordable Warmth Solutions can go direct to the heart of the problem and actively deliver solutions and so the partnership between AWS and energy providers is particularly important and will continue to be so, going forward.

**"Connecting people to the gas grid is one of the most cost-effective ways of dealing with fuel poverty. It offers cheaper bills and ticks a lot of boxes in terms of quality of life, health and savings to society as a whole. We've seen the tremendous benefits that it can have on their wider quality of life and opportunities - not only in terms of their physical health and mental health, but in terms of their ability to pursue their goals and dreams too."**



# The AWS story

## Highlights and achievements from our first ten years

In 2009, as part of energy industry regulator Ofgem's objective to connect 10,000 fuel poor households to the gas network within five years, National Grid agreed a target with Ofgem of providing new gas connections to 5,000 of these across its network and in some of the most deprived areas in England.

Affordable Warmth Solutions was established as a Community Interest Company, to deliver these new gas connections in partnership with National Grid Gas Distribution (now Cadent), and provide energy efficiency advice to help households save money.

Having met our initial target three years ahead of schedule, National Grid and, more recently, Cadent have supported us, through further investment, in offering vulnerable households free or heavily discounted gas connections and, through our partners, new or improved central heating systems, as well as cavity wall and loft insulation.

In 2017, following the sale of its Gas Distribution networks to Cadent, National Grid and Affordable Warmth Solutions established the Warm Homes Fund, through a voluntary £150 million contribution by National Grid. The fund is designed to work in partnership with local authorities, housing associations, registered social landlords and other organisations across England, Wales and Scotland, to address some of the issues affecting fuel poor households.

The Warm Homes Fund incentivises the installation of free first time heating systems in fuel poor households, by making grants which pump-prime other funds available locally and inspire organisations to come together to tackle the fuel poverty crisis.

At August 2019, over £100m has been committed in grants to community projects that will deliver first time central heating and related solutions to 42,000 fuel poor households. There are over 100 local authorities and registered social landlords currently contracted to deliver more than 150 projects – and over 6,000 installations already completed.



The fund has also generated an additional £106m for investment in fuel poor homes. We anticipate this will grow to some £200m by the end of the programme, making a total investment of at least £350m in tackling fuel poverty in the UK.

In 2019, Affordable Warmth Solutions celebrates its ten year anniversary, having connected more than 48,000 homes to mains gas, supported a further 42,000 homes through the Warm Homes Fund and invested more than £130 million into 500 community schemes across our various programmes.

**Our team has laid 288 kilometres of new gas mains, helping to achieve lifetime environmental savings of 3.5m tonnes of Carbon Dioxide and £200m in lifetime energy cost savings for households. The reduction in lifetime CO2 emissions is the same as taking 580,000 cars off the road, permanently.**

We are also working towards a future without fuel poverty by equipping the next generation with the skills they need to address these kinds of social issues. Through the Malcolm Wicks MP Memorial Fund, in memory of our first non-Executive Chair, Malcolm Wicks MP - who died in 2012, we've already helped 21 university students studying for a STEM (science, technology, engineering, maths) or social science degree, by providing funding towards their studies and work experience in Croydon, Yorkshire, London and Birmingham.

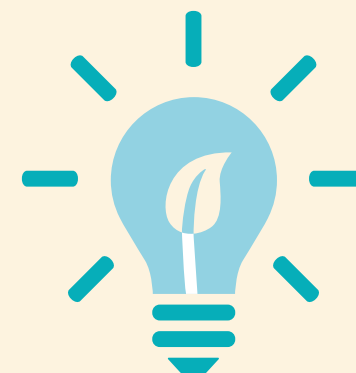
Despite all of this work, fuel poverty continues to hold millions of families in its grip and so the work of Affordable Warmth Solutions continues into its second decade, seeking to ensure that more and more families can afford to live in a warm, dry home.



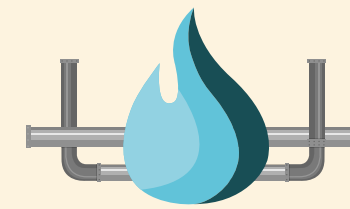
48,000 homes connected to the gas network



More than 500 community schemes completed or underway



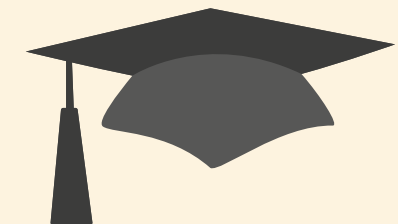
£200m in lifetime energy cost savings for households



288 kilometres of new gas mains constructed



A further 42,000 homes supported through the Warm Homes Fund



21 students provided with university funding and work experience



£350m investment in new gas connections and central heating systems in partnership with Cadent and social housing providers



£150m Warm Homes Fund in partnership with National Grid



Lifetime environmental savings of 3.5m tonnes of CO2 = 580,000 cars off the road permanently



583 referrals to Citizens Advice Coventry, leading to 183 people signed up to the Priority Services Register and £818,556 of potential additional income for vulnerable householders through cost savings and benefit entitlements



# Major milestones

## • 2008

- National Grid and OFGEM agree target of 5,000 new gas connections to fuel poor households by 2013.



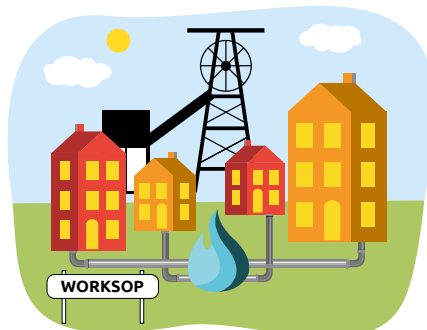
- Affordable Warmth Solutions is established and secures an arms-length service agreement with National Grid.

## • 2009

- AWS is awarded Community Interest Company status.
- First project gets underway at Kirkup Walk, Stoke-on-Trent in partnership with Stoke-on-Trent City Council.
- Malcolm Wicks MP appointed non-executive Chairman of AWS.



- Project to make gas available to 225 properties in former mining areas of Workson delivered in three months.



## • 2010

- AWS meets target of 5,000 new gas connections (three years early).
- AWS launches first Heat Network project in partnership with Black Country Housing, at Doveton House in Stourbridge, providing 24/7 heating solutions for 31 vulnerable residents.
- Phase 1 of 813 new gas connections for Stoke City Council-owned properties begins.

## • 2011

- AWS celebrates with its 1,000th customer, Jean Southern, a tenant of Wigan and Leigh Housing.



- The £4m project at Whaley Thorns, Langwith and Nether Langwith in Nottinghamshire gets underway, installing new gas connections to 900 properties.

## • 2012

- Folly Park, Bedfordshire project commences – construction of new gas infrastructure and updated heating systems to 95 residential park homes.



- Oak Street Estate project in Mansfield - in partnership with Mansfield Council, British Gas, AWS and npower - creates a Community Energy Savings Programme to replace coal powered system to 1,000 properties.

## • 2013

- AWS celebrates its five-year anniversary and achieves ISO9001 and ISO14001 accreditation.
- The Malcolm Wicks MP Memorial Bursary is launched.
- Rt. Hon. John Healy MP appointed non-Executive Chair of AWS.
- AWS works in partnership with Madeley Charity and Housing 21 to install a hydrogen fuel cell, BlueGen, a small scale electricity generator in the Madeley Centre, Staffordshire.

## • 2014

- 259 homes are connected to the gas network at the Belgrave Estate in Tamworth, Staffordshire, one of the UK's most deprived areas – through £423,000 funding by AWS and National Grid.
- AWS steps in at Christmas with a £1,000 donation and the support of their contractors, J Murphy & Sons, to fix a damaged gas main pipe at Widney School in Solihull. The donation also helped fund new IT equipment.



- National Grid and AWS launch the Energy Efficiency Innovation Award to identify and support innovation that will deliver energy efficient solutions in disadvantaged communities.
- National Grid and AWS undertake Comparative Study for Off Gas Grid Homes – identifying the 19-home community at Yarwell, Peterborough to be the recipient of an Air Source Heat Pump (ASHP).
- £115.5k in funding is committed by National Grid and AWS for construction of 1,000 metres of new low-pressure gas main and installation of new services to 95 prefabricated, two-bedroom bungalows in Bretton Avenue, Derby.

## • 2015

- DECC releases fuel poverty specific strategy - 'Cutting the cost of keeping warm - A fuel poverty strategy for England' and launches its Central Heating Fund - inviting local authorities, working with local partners like AWS, to apply for funding to address fuel poverty.



- A partnership between AWS and COHEAT sees the launch of 'the world's first truly integrated 5G heat network' at Trident Housing Association's Meeting Street Flats in Walsall.

- Britain's first ever Off-Gas Grid Map - showing all the postcodes not connected to the gas network - funded by National Grid and AWS, is unveiled



- by the Government's Fuel Poverty Advisory Group and DECC.
- AWS commences discussions with Coventry Citizens Advice Bureau led to the launch of a service helping households across the Midlands, East Anglia, North London and the North West to deal with fuel poverty issues. Support includes debt and energy efficiency advice, loft and cavity insulation and referrals to third-party agencies, for example, advice on health and wellbeing.

## • 2016

- AWS publishes report, in partnership with the Children's Society and National Energy Action, exploring the difficulties people face while living in fuel poverty and showing the difference that connecting homes to the gas network and installing new heating systems can make.

- AWS Managing Director Jeremy Nesbitt appointed as a leader on Ashoka's Globalizer programme, working on fuel poverty issues.



- National Grid and Affordable Warmth Solutions provide £45,000 in funding for a new gas supply to St. George's Church in Birmingham.

- National Grid and AWS complete 132 new gas connections at Alderley Terrace Estate, in Dukinfield, Greater Manchester.

## • 2017

- Cadent created by the sale of National Grid's gas distribution business.

- AWS and Citizens Advice in Coventry launch Fuel Poverty Day campaign to tackle fuel poverty.

- Mike Foster, CEO of the Energy and Utilities Alliance (EUA), appointed non-Executive Director and Chair of AWS.

- National Grid and AWS launch £150 million Warm Homes Fund.



- £2.9m awarded to Leeds City Region Warm Homes programme (700 homes) from the National Grid Warm Homes Fund.

- Government publishes the Clean Growth Strategy (2.5 million fuel poor homes in England improved to energy efficiency rating C or better by 2030).

## • 2018

- Cadent, AWS and project partner Happy Energy commence a £1.4m gas mains extension scheme in Warfield Park, Bracknell, to connect 485 park homes to the gas network - the largest community scheme of its kind in Cadent's North London Network.



- National Grid Warm Homes Fund makes award of £2.7 million to Flintshire County Council which will see the installation of gas-fired central heating systems and gas connections in 500 eligible households.

- Warm Homes Fund makes award of £1.85m grant towards a £3.3m scheme in Greater Manchester which will see the installation of gas-fired central heating systems and gas connections in 500 eligible households.

- Ofgem CEO Dermot Nolan visits Cadent and AWS project in Holden Close, Dagenham.



## • 2019

- Affordable Warmth Solutions celebrates its 10-year anniversary.

- Thurrock Council secured £450,000 to install gas central heating in private homes from the National Grid Warm Homes Fund.

- Argyll Community Housing Association awarded £5m from the Warm Homes Fund.

- National Energy Efficiency Awards 2019 – Best Boiler and Heating Project for Warfield Park, Bracknell.

# Fighting fuel poverty in partnership

“We need to see fuel poverty in its widest possible context”

Chris Bennett, Director - UK Regulation for National Grid, has been involved with Affordable Warmth Solutions for eight years. He looks back on his involvement on the achievements to date: “National Grid has a long and trusted relationship with AWS and the impact has been fantastic since the start.

“I joined the AWS board, to ensure National Grid was delivering on its regulatory commitments and we regularly met and exceeded our targets, but it was during visits to the sites that AWS was working on that I saw the impact of what we were doing – we weren’t just meeting targets, we were transforming people’s lives.

“After National Grid sold its distribution business to Cadent, it was looking to create a community programme with some of the proceeds and I suggested that we build on our work with AWS to increase the number of people that could be lifted out of fuel poverty. With the support of AWS this led to the creation of the £150 million Warm Homes Fund, which incentivises the installation of free first time heating systems in fuel poor households. Our aspiration is that, through match funding and other ways of leveraging the power of the fund through our delivery partners, it might eventually deliver up to £500 million worth of investment and support into tackling fuel poverty.

“For me, the future for AWS must be less about being tied to specific solutions and more about seeing fuel poverty in its widest possible context. As an industry sector we need to ensure that the regulatory framework gives organisations like AWS much more flexibility to tackle fuel poverty in the ways that work best. We need to be able to think holistically about how to solve the problem and have the right regulatory environment behind us. We need to look beyond gas connections at other solutions too, such as different types of fuel, the use of heat pumps etc.



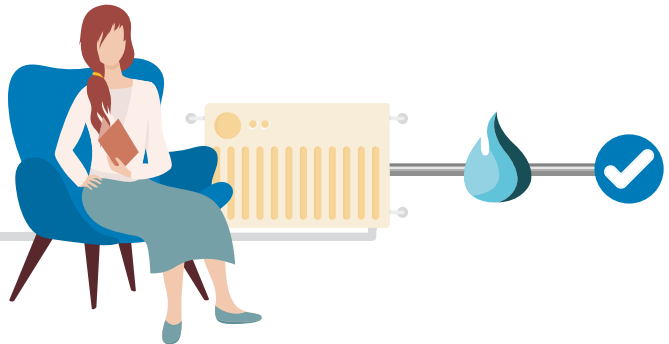
**National Grid investment of £150m**



**The largest ever private sector investment in energy efficiency throughout the country**

“By getting the regulatory framework right, we can give network companies and AWS the flexibility and freedom to identify the best possible outcomes and find the most effective way of delivering them.

**“I also want to see AWS continue to expand into new geographical areas too. It’s been fantastic to see the relationship built with Cadent, as their delivery partner on the fuel poor programme, expand into new parts of the UK, as well as through the work we are doing with them on the Warm Homes Fund and it’s essential that we continue to push our boundaries to help as many people as we can.”**



# How AWS works closely with Cadent and National Grid

“We need to help and support government to get the policy framework right”



**48,000 homes connected to the gas network**



**Lifetime environmental savings of 3.5m tonnes of CO2 = 580,000 cars off the road permanently**

Richard Court, Director of Regulatory Strategy for Cadent has been involved with AWS from the beginning and, as part of the original board, supporting the partnership between AWS and National Grid, continuing through the transition to Cadent.

“Affordable Warmth Solutions is about finding different and innovative ways to make a difference to those people in fuel poverty bringing together our role as a gas distribution company to extend our networks and give people the opportunity to live in a warmer more energy efficient home.

“AWS is Cadent’s principal delivery partner for its fuel poor programme, a role we took over in 2017 when National Grid sold their gas distribution business and Cadent was created.

“A warm home is something you take for granted, if you’ve got one. Having been out on site, many times, I am always struck by the difference AWS makes to the communities and people that it supports. I’ve been on sites in the north-west, in Wigan, in Stoke and in London, and I have had the opportunity to talk to people and see the fundamental difference it makes to their lives.

“AWS does a fantastic job installing gas connections and I’m always impressed with AWS’ safety record - and how they look after their contractors and their customers. We’ve had very few issues and the customer feedback is always great. It’s also not just about getting the job done - they support and help each community to understand the opportunity in front of them and manage their expectations of the process throughout. When presented with what looks like a completely free opportunity for central heating, some people are naturally suspicious and the way that AWS communicate and bring people on board is excellent.



**“Going forward, we have to leverage funding and make it work harder, to create more powerful solutions to fuel poverty - otherwise we will miss out on the really big opportunities to make a difference. We need to help and support government to get the policy framework right and identify funding models that work well for people. Scotland has a much more joined-up approach to tackling fuel poverty at the moment and, through our policy work, this is something that we need to see happen in England too.**

“For me, the key to the next decade is to go beyond looking at fuel poverty on a scheme-by-scheme basis and, instead, align our resources with those of other partners - bringing together different types of grants and funding opportunities to create the maximum possible impact. It could be that, in the future, AWS becomes a central funding body managing resources from a wider number of sources - using it to tackle fuel poverty in the best possible way. Cadent have supported AWS in trialling a scheme of this nature in Staffordshire, at the moment, in partnership with the council, EON, the Warm Homes Fund and ourselves (Cadent). If it is successful, perhaps this is something that can be replicated nationwide?”







# The personal, social and economic effects of fuel poverty



## Case study 1 The Belgrave Estate, Tamworth

The Belgrave Estate in Tamworth, Staffordshire, is in the top 20 percent most deprived areas in England.

The estate consists of mainly terraced houses, with a small proportion of flats - some in private ownership and some owned by the local authority.

Prior to 2014, the estate was not connected to the gas network and residents were forced to rely on inefficient and expensive storage heaters. As a result, families found themselves living in homes that were cold and often damp too, with the children who lived on the estate describing how they would get the dog to sit on their feet to keep them warm, wear a full set of clothes in bed under the duvet and fleece blankets, or how they saw siblings suffer from asthma and other health conditions exacerbated by these living conditions.

There were other impacts too – longer-term personal, social and economic ones. Such as the shame felt by families at having damp patches on their walls, or rooms too cold to invite visitors into – both tell-tale signs of poverty that they preferred to hide. One young woman reflected on how she had missed important school assessments because her hands were too cold, in the evenings, to do her homework.

Despite all of this, the residents living at the Belgrave Estate paid a high price for the heating they did use. **For some families, fuel costs represented more than 40% of their income during the winter months.** Children reported lending money to their parents to help pay for the heating.

National Grid and Affordable Warmth Solutions worked with Tamworth Borough Council to develop a financial package that would result in gas being made available throughout the estate with local residents. Following a feasibility study, £423,000 of funding was made available to the project by applying the National Grid Fuel Poor Voucher.

In Spring 2014, AWS held a number of community events and engaged with tenants and homeowners to share with them the plans and a few months later, working in partnership with T&K Gallagher, we began laying circa 2,400 metres of new low pressure gas mains.

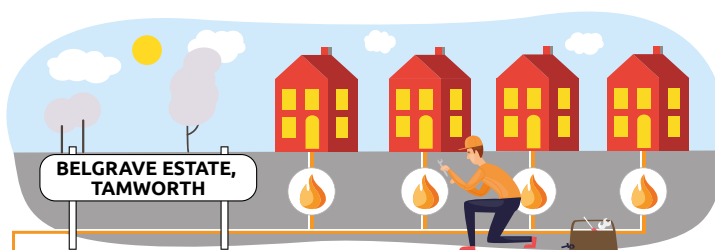
It was a complex project, with significant challenges in locating underground cables and having teams working at multiple locations, so the project was split into six phases. In total, 259 properties were connected to the mains gas network.

Tamworth Borough Council agreed to fund the installation of new heating systems and, to ensure every home had an opportunity to convert to gas heating, and AWS committed a further £385,000 funding to enable 108 private owner occupiers to benefit from the installation of new heating systems.



**Rob Barnes, Corporate Director, Communities and Housing for Tamworth Borough Council, said:**

"This project has been an excellent example of the way in which partnership and innovation can benefit local communities. Tackling fuel poverty is a key priority for the Council and we have been pleased to work with National Grid and Affordable Warmth Solutions to ensure that residents are able to exercise choice in relation to the fuel type they use. I'm extremely grateful to all those involved for the commitment they have shown in delivering the work effectively and to the satisfaction of our residents."



Looking back at the project, six years later, AWS Managing Director Jeremy Nesbitt said: "The Belgrave Estate remains one of the most complex schemes we've ever delivered. The positive changes to family life brought about through the investment by ourselves, National Grid and Tamworth Council, together with the skill and commitment of our contract partners T&K Gallagher, was truly remarkable and I'm still immensely proud of these achievements."

"We all have a responsibility to tackle fuel poverty and this kind of collaboration is crucial to making it a reality. There are still too many communities in Britain living in this kind of deprivation and the more partnerships we can strike with local authorities to change that, the better."

Given the complexity of the project and the scale



of transformation achieved for the residents, the project was chosen as a case study, commissioned in collaboration with National Energy Action and The Children's Society, to improve understanding of the challenges faced by people living in fuel poverty and the positive impact that new heating systems can make.

The report was launched in early 2016 and continues to help shape the policy debate in parliament around fuel poverty as well as helping to educate local authorities, housing associations and other potential partners of the diverse, long term benefits of addressing fuel poverty issues within their local areas.

Read the report at:  
[www.childrenssociety.org.uk/what-we-do/resources-and-publications/making-a-house-a-home-providing-affordable-warmth-solutions](http://www.childrenssociety.org.uk/what-we-do/resources-and-publications/making-a-house-a-home-providing-affordable-warmth-solutions)

## Before AWS's involvement

"When its cold in the house, because (our younger brother) was a premmy baby, and the cold normally sets him off, he starts like going blue and stops breathing."

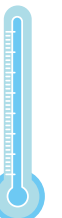
Young resident



"Sometimes...you are shivering. You know what I mean? I get sore hands as well...and my lips go blue like if it's cold. Colds, you get colds, flu and that."

My mum gets really dry skin on her hands what cracks... and they bleed. You can see it's really sore. Your body just aches, because you are cold."

Young resident



## After AWS's involvement

"It used to be cold. You used to walk in with icicles coming from your nostrils and now you walk in from the cold, it just feels like the icicles have melted...it feels like I am in a volcano...it's like a ball of fire, lava...a volcano exploding."

Ryan, young resident

"He (my son) has breathing difficulties. He hasn't been so ill this winter; to be honest I don't think we've even been to the doctor's once this year."

Resident

"It's cosy now...Christmas was amazing. It was more, what's the word? Homely. The house smelt of coffee and cinnamon and it was just...warm."

Amanda, resident





## Case study 2

### Community Gas Scheme, Walsall Housing Group



## 149 warmer homes created - despite blizzard conditions

### Background

The three-storey Walsall Flats development was built around 1970, with electric storage heaters installed to provide the main form of heating. They are located in an area of high deprivation.

### Project overview

Working in partnership with Walsall Housing Group, Affordable Warmth Solutions installed new gas mains and services to the 149 flats which enabled new energy efficient gas heating systems to be installed.

The project was funded by Affordable Warmth Solutions through the National Grid Fuel Poor Voucher programme, with an additional £520,000 funding provided by the Community Energy Saving Programme (CESP) – secured by the Walsall Housing Group.

### A challenging installation

Unforeseen delays to the project start date left a tight eight-week deadline for installation of the 149 new gas connections. Any additional delays threatened the CESP funding and so time was of the essence.

An innovative new polyethylene riser system was specified, as opposed to a conventional steel one to facilitate faster construction and, at any one time, there were up to 20 contractors working on the site, co-ordinated by AWS Project Officer, Peter Edwards, who kept residents up to date with progress and ensured any disruption was minimised and communicated in advance.

A key challenge was gaining access to flats, which is always a significant issue in multi-occupancy, high rise developments. In addition, the teams encountered the coldest March in 50 years, with significant snow falls, high winds and frozen grounds. However, despite the appalling weather, only nine working days were lost due to the poor weather and the installation was completed on time, enabling the installation of new energy efficient central heating systems to the properties.

### Key facts

- 149 new gas connections
- 982 metres of low pressure gas mains laid
- 300m of riser pipework installed
- Eight-week installation
- c£850,000 total project value



**"It's that warm now  
I'm just happy...  
It's a happy  
household."**

Resident



## Case study 3

### Off-grid gas, Warfield Park, Bracknell

## AWS delivers one of the UK's largest gas retrofit installation projects to Park Homes

### Background

Warfield Park in Bracknell is one of Britain's longest established residential park home estates, with LPG heating systems mainly being used in all homes - resulting in many of the 485 residents struggling to afford to keep their homes warm.

### Project overview

In July 2018, under OFGEM's Fuel Poor Network Extension Scheme, funded by Cadent, Affordable Warmth Solutions commenced the gas mains extension scheme to provide a cheaper, more affordable, source of heating to all residents – the largest community scheme in Cadent's North London Network.

Once the gas mains were laid, Project partner Happy Energy installed or converted homes to new energy efficient gas central heating systems, all at no cost to the resident. Many residents also received new boilers.

### Freedom of choice

The ambitious scheme was delivered in phases of 50-60 homes at a time by AWS approved contractor T&K Gallagher and was delivered ahead of schedule thanks to the support and co-operation of the residents and a twin focus on health and safety and good communication, which allowed the project to run smoothly, despite its complexity.

Once natural gas was connected to the properties, all appliances within the properties were converted from LPG to use natural gas, which was completed as the connections were installed. In addition, a series of workshops, delivered by fuel poverty charity National Energy Action, provided tariff advice and energy efficiency advice to help residents get the best out of their new heating system.

### Key facts

- 485 new gas connections
- 7600 m of new gas mains laid
- Total project value - £1.7million



### Post award celebrations after being recognised for the work at Warfield Park



**"This was a perfect example of  
Cadent, AWS, T&K Gallagher,  
Happy Energy, Bracknell Forest  
Council and Warfield Park all  
working together for the benefit  
of the entire community.**

**The new natural gas main  
enabled residents to shop  
around for the best gas supply  
deal and make significant savings  
on their energy bills.**

**Some residents  
reported a  
50 percent  
reduction  
on their  
gas bills."**



Barry Sumner,  
Managing Director of Warfield Park



## Case study 4

High Hoe Road,  
Bracebridge



### New connections prevent residents from slipping into fuel poverty

#### Background

The High Hoe Road and Bracebridge Road areas of Bassetlaw in northern Nottinghamshire comprises a mixture of 104 one and two bedroom bungalows in which lived a number of elderly, and in some cases vulnerable, tenants.

In 2002, ground source heat pumps had been installed to provide the heating and hot water supply. These units were coming to the end of their working life and were proving to be extremely unreliable, breaking down on a regular basis which resulted in high maintenance costs. In some cases, residents were also spending additional funds on electric storage heaters to improve heating to their properties, putting them at immediate risk of falling into (or further into) fuel poverty.

#### Project overview

Affordable Warmth Solutions and long standing client, A1 Housing, worked together to investigate the possibility of bringing gas to the properties, consulting with residents to establish their satisfaction levels with the ground source heat pumps. More than 80% of residents who participated said they were either very dissatisfied or dissatisfied and so, with £180k funding available through AWS by applying the Cadent Fuel Poor Voucher, a new gas infrastructure was constructed - at no cost to A1 Housing or the residents.

#### 100% satisfaction

In May 2018, AWS working with approved contractor T&K Gallagher, commenced laying circa 900 metres of new low-pressure gas main completing the works within two months. A1 Housing then offering individual tenants the opportunity to have a new gas-fired combi boiler installed in their homes.

Due to the positive working relationship between AWS and A1 Housing, the project was completed smoothly and residents were kept updated throughout. Following the installation, a customer feedback survey delivered a 100% positive response rate from the tenants.

#### Key facts

- 104 new gas connections
- 900 metres of new gas mains laid
- Total project value - £180,000



**"Heating is BRILLIANT!  
I'm really, really grateful.  
We used to sit under  
duvets and have oil  
heaters on, but now we  
can walk around in our  
bikinis!"**

Bracebridge Avenue resident



**"Ensuring that tenants have  
access to the most affordable  
heating and do not slip into  
fuel poverty is a key issue for  
the council and A1 Housing.  
We were thrilled to be able  
to offer tenants access to  
gas mains and  
I would like to  
thank Affordable  
Warmth Solutions  
for this crucial  
funding."**

Cllr Steve Scotthorne,  
Cabinet Member  
for Housing,  
Bassetlaw District Council



## Case study 5

Bretton Avenue,  
Derby



### Elderly residents enjoy central heating for the very first time

#### Background

The 95 residents of Bretton Avenue, Derby, are mainly elderly and vulnerable residents who, until the intervention of AWS in 2014, relied on expensive and inefficient storage heaters to heat their properties.

#### Project Overview

In conjunction with Derby Homes, National Grid and AWS investigated the possibility of bringing gas to the estate, which would involve laying circa 1,000m of new low pressure gas mains and installing 95 new services to the prefabricated, two bedroom bungalows. Applying the National Grid Fuel Poor Voucher, enabled the construction of new gas infrastructure at no cost to Derby Homes or the homeowners.

On completion of the external works, AWS liaised with Derby Homes on the programme to install new gas heating systems to the homes. We identified 23 private households who, without financial support, would be unable to install new gas heating systems. In the absence of any third party support for these households AWS agreed to fully fund the installation programme, at a cost of a further £90,000.

#### Overcoming challenges through partnership working

One of the key challenges of the project involved closing Bretton Avenue, which is a main road. AWS worked closely with Derby Council Highways department and local residents to ensure that their needs and requirements were met during the road closure, including identifying any particularly vulnerable residents who may require assistance from emergency services. The bus stop on Bretton Avenue was also relocated to a suitable agreed location.

Another challenge for the installers was the presence of ACMs (Asbestos Containing Materials) within the 50-year old properties, which meant a very delicate installation process for AWS approved installers. Many residents had never used gas central heating before, so whilst the installation had to incorporate lots of energy efficient features, the systems had to be easy to operate. The potential savings in running costs were calculated to be, on average, £659 per year for each property - and the project also led to a reduction in CO2 emissions of 5,123kg per year.



**"This project has enabled our tenants to benefit from a heating system that they can afford to use and is easy to control."**

**The street was one of only a handful in the city that did not have a gas supply and everyone on the street is very happy with the project."**

Kendal Hodder,  
Energy efficiency Officer  
for Derby Homes



#### Key facts

- 95 homes connected to gas central heating
- 1,000m of new low pressure gas mains laid
- Decrease of 5,123kg per year in CO2 emissions
- Average savings of £659 in running costs
- Total project value £205,500



# The Malcolm Wicks MP Memorial Fund

**“As a new Member of Parliament, I am left to face this challenge: whether we can bridge the gap between the pomp and circumstance of Parliament and the poverty and pain in many of our communities.”**

**Malcolm Wicks MP, maiden speech to Parliament, 1992**

The late Malcolm Wicks MP served the constituency of South Croydon in the House of Commons for twenty years. He was a well-respected minister in the Labour governments of Tony Blair and Gordon Brown, fighting to address the scourge of fuel poverty in the role of Minister for Energy under both prime ministers.

After leaving government in 2008, Malcolm Wicks continued to pursue his passion for addressing social impact of energy policy, becoming the Prime Minister's special representative on international energy issues and, in 2010, was appointed the first Chair of Affordable Warmth Solutions.

A year after his untimely death, in 2012, a Memorial Fund was established, by Affordable Warmth Solutions, to honour his memory and continue his legacy. The fund is designed to provide students with funds to support their living expenses at university and also provide work experience placements within the fuel poverty / energy industry.

To apply for an award, students have to write an essay on the social impact of energy policy, fuel poverty, energy efficiency or tackling climate change, and are then interviewed by representatives from Affordable Warmth Solutions and National Energy Action (NEA).

To date, the Memorial Fund has or continues to support 21 students in their studies – with many of them focusing on disciplines that will actively help in the fight against fuel poverty. Each student receives up to £1,500 per academic year. Placements are carefully selected and aligned to socially aware organisations, including those operating in the energy sector. Where placements are arranged, students can receive an extra £1,000.



**£100,000+  
in grants  
awarded**



**21  
students  
supported**



## Croydon (2013 – 16) – Status - Complete

The first students to benefit from the fund were from Croydon, Malcolm's former constituency. The three students - Temi, Hallema and Arrosa - have now completed their time at university and their three summer placements with National Energy Action. All were awarded upper second degrees in their chosen subjects.

As well as the bursary, the students also benefited from the placements with NEA including learning essential research skills, an industry placement at UK Power Networks and supported NEA's policy and advocacy work. The students also visited Cadent's gas distribution centre at Hinckley where they learnt more about the role of the gas networks.

Following their time at university, Temi, Hallema and Arrosa have gone from strength to strength. Haleema has completed a MA at Imperial College studying Energy and the Built Environment and hopes to start a career in the energy sector, Temi is hoping to become a clinical psychologist and Arrosa is aiming towards a career in human rights advocacy.

**“My placement helped me investigate Carbon Monoxide poisoning data and compile a report based on this analysis. My report was used to target policy makers involved with writing laws on health and safety when using equipment that produces Carbon Monoxide.”**

Student - Yorkshire



## Yorkshire (2014 – 17) – Status - Complete

Following the success of the first awards in Croydon, six students from schools within Yorkshire were selected from the application process to receive a Malcolm Wicks Fund bursary.

The six students used the bursary funding in a variety of ways. For one student, from a low-income, single parent household, the funds helped to make studying at university possible, enabling them to live in the vicinity of university, close to their studies. Others funded books or fieldwork trips that they could not otherwise have afforded – or to offset unavoidably expensive accommodation and transport costs.

Once again, the assistance provided by the bursary to each of the students, has helped them to successfully complete their studies at university, with five securing 2:1 degrees and one student securing a first class honours degree.

## North London (2017 – 2020) – Status - Live

The third Memorial Fund programme was launched in North London in 2017.

A common theme from all students involved is that the bursary has helped them worry less about finances, meaning they have had more time to focus on their studies. One of the students currently studying with support from the scheme is the first member of his family to go to university.

These students are still studying and have now completed three of the summer placements, including researching health-related fuel poverty schemes.

The students hope to graduate in 2020 with the exception of one who is graduating in 2021 as they are including a placement year in their studies.

## Birmingham (2020 – 2023) – Status - Live

Launched in Affordable Warmth Solutions' anniversary year, a further six students, this time from Birmingham and the surrounding areas, will be selected and supported by the Malcolm Wicks Memorial Fund for support from the start of the academic year in September 2020, until they graduate in 2023/4.

As well as the annual bursary, the students now have the opportunity to gain valuable work experience, which will help them stand out from the crowd when looking for employment, once they have concluded their studies.



Launch of the Malcolm Wicks MP Memorial fund



Four of the fund recipients

**“Life changing. It has definitely allowed me to focus on my uni-life more and go on field trips instead of working round the clock just to make ‘ends-meet’ financially.”**

Student - Croydon



**“The bursary provided me with the ability to buy the necessary books that aren't readily available in the library so that I could have the same resources as the majority, allowing me to not fall behind in any modules early on. My living costs in general were given a major help due to the bursary and as a result reduced my stress on finance allowing me to focus more on my degree.”**

Student -  
North London





# Looking to the future

**"I want us to make ourselves redundant – with the job done"**

**Jeremy Nesbitt**  
Managing Director of  
Affordable Warmth Solutions

## What does the next ten years hold in the challenge to tackle fuel poverty?

"With around four million households still struggling with unaffordable and inadequate home heating, UK has a sizeable way to go in its ambition to rid this country of fuel poverty and we have to be realistic about the scale of the challenge before us.

"While it can sometimes feel like an unsurpassable goal, our partnership with Cadent and National Grid – together with the relationships we've built with local authorities, housing associations and other local delivery partners – has already helped to lift tens of thousands of people out of fuel poverty and given a better chance in life as a result.

**"I have seen the truly terrible conditions that some families are living in and I know the tangible difference our work makes. So I am extremely ambitious for the second decade of Affordable Warmth Solutions. Ideally, I want us to make ourselves redundant."**

"That requires us to be ambitious and innovative, not only as an energy sector, but as a country in terms of how we tackle fuel poverty. It is an unacceptable injustice that, in the 21st Century, we still have millions of people having to empty large buckets of coal and ash every day, or struggling with old, inefficient and expensive electric heating systems in order to feel warm and dry in their homes.

"We need support from the government and the industry regulator to create a regulatory environment that enables us to think more holistically and work more creatively, in the future, to tackle the problem - designing solutions from a wide range of heating options according to need.



"We also need more flexibility when it comes to the criteria people need to meet to be eligible for our support. One of the biggest challenges we sometimes face is that people can be just outside the parameters to qualify for our help, but a slight change of circumstances – such as a job loss, additional child or a price increase in the fuel tariff - can suddenly make heating their home unaffordable. By that time, our work may be done in their area and they may have lost the opportunity to benefit from a gas connection or new central heating system.

"We need a greater degree of flexibility in terms of who we can deliver support to, otherwise we can miss important opportunities to help those families for a generation.

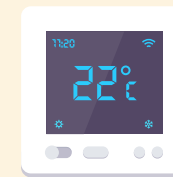
"This flexibility will become increasingly important as we work collectively as a sector towards a future without fossil fuels.



"The burning of natural gas for heating already contributes 14% of the UK's greenhouse gas emissions and this will only increase as we connect more people to the gas network. Gas Distribution and Transmission network companies, energy providers and organisations such as the Energy and Utilities Alliance, led by our chair Mike Foster, are working to explore alternatives such as hydrogen and biomethane. Much of their work focuses on what moving to these alternative sources could mean, not only in terms of their supply and consequent need for changes to the UK's gas infrastructure to accommodate them – but what their introduction would mean for consumers in terms of affordability. We must ensure the UK's future energy policy works to support a low carbon future – but without exacerbating fuel poverty.

**"Going forward, I also want to see us building partnerships with more housing associations and local councils. We now work with dozens of local authorities – but I want it to be many more and I urge councils to contact us to see how they can benefit. The National Grid £150m Warm Homes Fund and investment by Cadent in new gas connections is designed to inspire tangible, powerful and long-lasting change for vulnerable households. The challenge for us in the next decade is to identify additional sources of funding and invest it in more of these households, in order to give them a better quality of life, as quickly as possible."**

"Mine is an incredibly rewarding role, but it comes with big challenges too. Our combined programmes with Cadent and National Grid have helped 90,000 households over the past 10 years. How many of the millions of fuel poor homes in the UK still suffering from cold and damp can we transform in the next ten - and what kind of difference can we make to the lives and potential of the people who live in them?"



**"We don't need to use (the fleeces, blankets) now."**

**Before they used to come down with them wrapped round them and then get dressed under the fleece and fight over the fire."**

Customer,  
Staffordshire



**"My 91-year-old mother and I can't thank you enough for the opportunity to change from solid fuel to gas heating."**

**Mum can't believe how wonderful it is to be warm and cosy all the time without making a fire every day and bringing coal in."**

Customer,  
Derbyshire

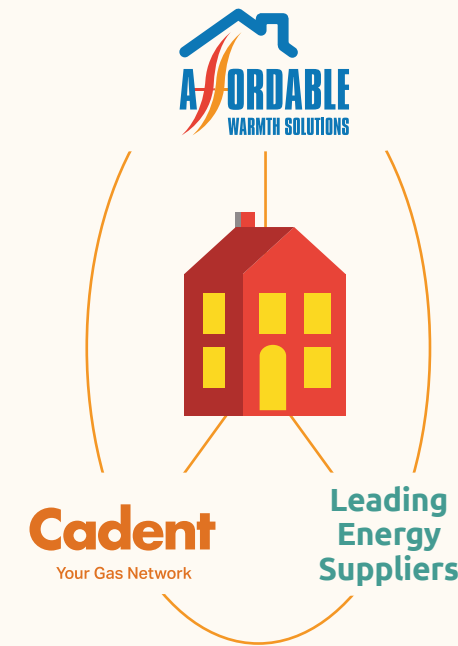




# Work with us

## Help us eradicate fuel poverty

There are several ways in which **Affordable Warmth Solutions** can provide assistance to vulnerable households. With more than 4 million households still struggling with fuel poverty we urge all our stakeholders to signpost our services to all those who might need our help.



### Privately owned or rented properties

There are around 4 million householders facing the misery of fuel poverty – the recent increase in this number is due mainly to the rise in energy prices and energy inefficient homes.

Through our relationship with Cadent, AWS works in partnership with leading energy suppliers and other key strategic organisations, to target some of the most vulnerable 'non-gas' homes and communities across Cadent's gas distribution network areas.

We offer qualifying householders free or heavily discounted gas connections and through our partners new or improved central heating systems; cavity wall and loft insulation.

These help to reduce householder energy consumption and, at the same time, have a positive effect on the environment.

### Local authorities and housing associations

Through our partnership with Cadent, which owns and operates the largest gas distribution network in the UK, AWS partners with local authorities, registered social landlords and housing associations to assist vulnerable communities through the funding of new connections to the main gas network that can facilitate the installation of new central heating systems.

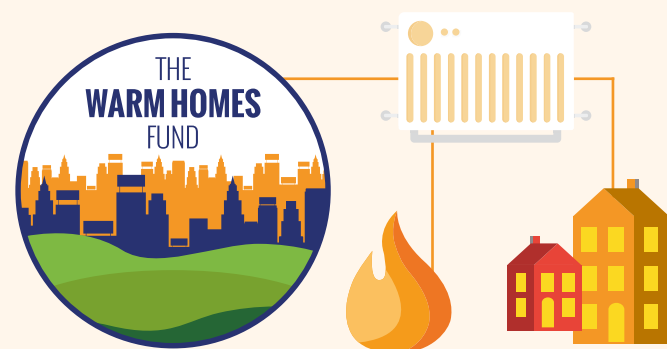
Local authorities, registered social landlords and housing associations interested in exploring a potential project with us should contact AWS Managing Director Jeremy Nesbitt on 0121 592 0181 or complete the online contact form on our website: [affordablewarmthsolutions.org.uk](http://affordablewarmthsolutions.org.uk)

### The Warm Homes Fund

National Grid and Affordable Warmth Solutions established the £150m Warm Homes Fund (WHF) in 2017 to support local authorities, registered social landlords and other organisations working in partnership with them, to address some of the issues affecting fuel poor households.

The WHF is a £150 million fund, administered by AWS across England, Wales and Scotland, which incentivises the installation of affordable heating solutions in fuel poor households who do not use mains gas as their primary heating fuel.

The aims of the fund are to reduce bills, increase comfort in non-gas fuel poor households, and improve health outcomes for some of the most severe levels of fuel poverty.



### The fund is split into three broad categories:

- **Category 1:** Urban homes and communities – new gas heating systems which provide space heating and domestic hot water. It can also include heat network solutions. Under this category, new gas connections are undertaken by Gas Distribution Networks and funded through the Fuel Poor Network Extension Scheme. The WHF is therefore targeting the 'in-house' systems.
- **Category 2:** Rural homes and communities – some of the most severely fuel poor households are those without a mains gas connection in rural locations. This category primarily focuses on 'non-gas' solutions which may include air source heat pumps, oil and LPG.
- **Category 3:** Specific energy efficient/health related solutions – this may involve national or regional programmes which bring together relevant organisations and charities to promote energy efficiency and/or health related programmes in relation to fuel poverty. A recent addition to Category 3 is the eligibility of park home properties.

To maximise the impact of the WHF, all properties are expected to be insulated to the recommended industry standards and bidders and their partners are encouraged to seek additional funding to ensure these standards are met.

Further information about the bid process and the requirements for a successful bid, please visit [affordablewarmthsolutions.org.uk/warm-homes-fund](http://affordablewarmthsolutions.org.uk/warm-homes-fund)

**"We believe everyone should have a good quality and safe place to live. Being able to heat your home as cheaply as possible is an important part of that. I would encourage anyone who is interested to get in touch to find out more."**

Cllr Barry Johnson, Cabinet Member for Housing, Thurrock Council, Essex

**"I don't seem to be as stressed about bills now."**

Resident



**"My son - he's not had as many colds, he's just better, it's just so much better."**

Resident

### Qualifying criteria

#### There are two ways of qualifying for a gas connection voucher:

Be in fuel poverty based on the latest Government definition;

or

Be eligible for support under the Energy Company Obligation (ECO), including Local Authority Flexible Eligibility.

Householders should complete a **New Gas Connection Application online assessment form** at [affordablewarmthsolutions.org.uk](http://affordablewarmthsolutions.org.uk) or speak to an AWS advisor on 0121 592 0181.

Find out more about the work we do: [affordablewarmthsolutions.org.uk](http://affordablewarmthsolutions.org.uk)







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Visit: **[affordablewarmthsolutions.org.uk](http://affordablewarmthsolutions.org.uk)**

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