







GDN Collaborative Vulnerability & Carbon Monoxide Allowance (VCMA)

Project Eligibility Assessment (PEA)

Services Beyond the Meter

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Date- March 2023

1.1	n 1 - Eligibility criteria for company specific projects (other than condemned essential g nce repair and replacement)	jas
In orde	r to qualify as a VCMA project, a project must:	
VCMA	Eligibility Criteria	Criteria Satisfied (Yes/No)
a)	Have a positive, or forecasted positive Social Return on Investment (SROI), including for the gas consumers funding the VCMA project;	YES
b)	i. Provide support to consumers in vulnerable situations, and relate to energy safeguarding, or ii. Provide awareness on the dangers of CO, or Reduce the risk of harm caused by CO;	YES
c)	Have defined outcomes and the associated actions to achieve these;	YES
d)	Go beyond activities that are funded through other price control mechanism(s) or required through licence obligations; and	YES
e)	Not be delivered through other external funding sources directly accessed by a GDN, including through other government (national, devolved or local) funding.	YES
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In orde	ement projects r to qualify as a VCMA project, unsafe pipework and essential gas appliance servicing, repair ement must meet the following criteria:	
In orde replace	r to qualify as a VCMA project, unsafe pipework and essential gas appliance servicing, repair	
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a) b) c) Sectio	r to qualify as a VCMA project, unsafe pipework and essential gas appliance servicing, repair ement must meet the following criteria: A GDN has to isolate and condemn unsafe pipework or an essential gas appliance following a supply interruption or as part of its emergency service role; The household cannot afford to service, repair or replace the unsafe pipework or essential gas appliance; and; Sufficient funding is not available from other sources (including national, devolved or local government funding) to fund the unsafe pipework or essential gas appliance servicing, repair or replacement. In 3 - Eligibility criteria for collaborative VCMA projects It to qualify as a collaborative VCMA project, a project must: Meet the above company specific and boiler repair and replace (if applicable) project	YES YES

Information Required	Description
Project Title	Services Beyond the Meter
Funding GDN(s)	Cadent Gas / Northern Gas Networks
Role of GDN(s) *For Collaborative	Cadent Gas- Project Lead
VCMA Projects only	Northern Gas Networks- Project participants
Date of PEA Submission	TBC
VCMA Project Contact	Cadent Gas- Sam Graham, sam.graham@cadentgas.com, 07966981964
Name, email and Number	Northern Gas Networks- Steven Dacre, SDacre@northerngas.co.uk, 0778733867
Total Cost (£k)	Year 2
	£606,751.48 - Broken down below
	CADENT GAS - £523,293,89
	Engineers training £254,080.35
	Tools and equipment £44,948,00
	Work management costs £39,000.00 (x2 Network Lead's)
	• Engineering time on jobs £127,578.01
	Assessment and training facilities £57,687.53
	NORTHERN GAS - £83,457.59
	Engineers training
	£27,175.67 • Tools and equipment
	£44,017.92 • Assessment
	£12,264,00
	Year 3
	Note: Forecasted cost for job delivery only
	£585,995.01- Broken down below
	CADENT GAS - £523,293,89
	• Engineering time on jobs £221,568,00
	NORTHERN GAS - £62,701,12
	• Engineering time on jobs £22,400,00
	Year 4

	Note: Forecasted cost for job delivery only
	£585,995.01- Broken down below
	CADENT GAS - £523,293,89
	• Engineering time on jobs £435,640,00
	NORTHERN GAS - £62,701,12
	• Engineering time on jobs £44,800,00
	Year 5 –
	Note: Forecasted cost for job delivery only
	£585,995.01- Broken down below
	CADENT GAS - £523,293,89
	Engineering time on jobs £889,380,00
	NORTHERN GAS - £62,701,12
	• Engineering time on jobs £89,600,00
Total VCMA Funding Required (£k)	£585,996,01
Problem(s)	Our emergency engineers enter thousands of homes across our footprint each year, attending any customer reported Gas or Carbon Monoxide (CO) emergency. Our primary focus completing this work is to ensure the customer and property are safe.
	When attending the above we come across a large proportion of customers living in vulnerable situations, this group of customers often don't have the means to maintain safe working gas appliances. In most cases where we have attended their property due to a gas emergency, we will have established the need to isolate the gas supply. This would mean that any gas appliances in the property will be left "safe" but inoperable, likely leaving the customer without heating, hot water and cooking facilities.
	This can cause a lot of undue stress with customers not knowing who to turn to for help. Some will just go without and there is a risk that others might attempt a self-reconnection of a dangerous gas appliance, which could lead to a whole host of dangers. Both Cadent and NGN engineers are keen to provide an excellent customer experience during each household visit, but they know that in when simply focussing on making the gas network safe (primary role within the licence conditions), it is possible that some customers would be left vulnerable without gas; far from an outstanding customer experience.

In some instances, especially with reports of CO, we leave the supply isolated due to being unable to test and confirm appliances are safe. Sometimes the cause of the alarm activation could be a faulty alarm or the incorrect use of an appliance. This would mean we leave the supply isolated, and the customer would have to employ a Gas Safe engineer to confirm the appliances are safe. This can be extremely costly and difficult for the customer to find an engineer with the correct skillset.

Scope and Objectives

The whole concept of Services Beyond the Meter is to offer vulnerable customers a way to keep themselves safe, warm and independent in their own home giving them access to support that wasn't previously there. Where we have attended a Natural Gas or Carbon Monoxide emergency and isolated the gas supply, we now have the means to return and test the appliances to confirm safe operation and ultimately restore the gas supply to the customer's property.. Please see the below process flow:

- 1. Emergency call received from the customer.
- 2. Emergency engineer attends site and following our policies and procedures needs to leave the customer off supply.
- 3. Emergency engineer recognises sign of vulnerability on site (vulnerability trained).
- 4. They offer the customer the choice of an upskilled engineer to attend site to test the appliances for safety.
- Appointment is booked in with the customer usually within 24hrs of the emergency call.
- 6. Upskilled engineer attends site and works downstream on the customer gas installation and appliances.
- 7. Gas installation and appliances are tested and confirmed safe.
- 8. Gas supply and appliances re-established leaving the customer on supply and safe.
- 9. If an unsafe issue is highlighted on the installation and / or appliance. We can now leave that single appliance isolated and refer into our charity partners to complete any further works.

Along with testing for CO we are also utilising the upskilled engineers' downstream qualifications to complete further downstream work which includes:

- Pipework faults, trace and repairs which fall out of our current license conditions.
- Safety inspections of gas appliances that haven't been checked within 12 months.
- Servicing of appliances

Installation of Gas cooking appliances

All the above services are offered to customers who are on or qualify to be on the PSR register.

Phase 1 - 21/22 Phase 2 - 21/22 Phase 3 - 22/23 Submit a deviation and gain Utilise our training centre in Expand work across whole business footprint approval from engineering Hitchin to accommodate the services / policy to training and upskilling of the EM, EA, WM, NW. undertake fumés additional competencies investigation work and other that our engineers require Upskill approximately 40 services beyond the meter to do this work type. additional resources to work types complete Services Work alongside our IS Beyond the Meter work Take several engineers from types. process teams to create a different locations in the work type for our engineers Employ a Network lead in EM, EA, WM. To oversee networks and re-assess to raise these work orders them on their competencies via their field force devices. to work on appliances and Removing the manual side the safe operation of downstream of the Gas of the process in creating Services Beyond the another work order. Meter in their own geographical area. Once re-assessed we will Evaluate the pilot and upskill the engineers to hold address any blockers. **Embed Services Beyond** CMDDA1. Document and build on the the Meter into core systems. Train the engineers internally and send Prove there is value in a Provide engineers with externally for initial GDN undertaking this work energy advice training to assessment for CMDDA1. and proving there is a directly deliver with the positive SROI. customers while on site. Brief operational & customer teams on the process prior Work along side Northern Continue to prove the to go live. Gas networks and assist in value in delivering these their roll out. work type at local and national levels

Pilot the process in parts of the Eastern network and the North West Network with a small number of engineers. Test the process and identify any blockers and document the successes.

 Use existing manual task to create a further work type and capture data from the pilot to form a new work task for wider roll out of the project

Why the Project is Being Funded Through the VCMA

This project is directly helping the challenges being faced by customers in vulnerable situations every single day and especially in light of the cost of living and energy crisis which is being felt across the UK. This project forms part of our work which supports customers living in fuel poverty, helping them stay safe, warm, and independent in their homes.

We have assessed the project eligibility against the criteria laid out in the VCMA governance and it meets them all. The scope of this project goes well beyond the work we would class as business as usual, and we believe its pushing the boundaries in way which a GDN can support its most vulnerable customers.

When one of our Engineers attends an emergency report of Carbon Monoxide the mostly likely outcome will be the customer being left off supply. This is our standard licence conditions executed. By isolating the supply at the meter outlet leaving the customer without heating, hot water and potentially cooking facilities.

This can leave the customer in a very vulnerable situation with nowhere to turn which could lead to other safety issues like:

- Customer self-reconnection
- They continue to live without heating or hot water due to affordability issues.
- Employment of rogue traders
- Pay day loans to fund

Evidence of Stakeholder/Customer Support

We have conducted extensive stakeholder and customer feedback to hone and shape our strategy for supporting customers living in vulnerable situations in RIIO-GD2.

Key Stakeholders engaged for this project:

Gas Safe Register | Head of Stakeholder & Large Business Relationships

"This is a great idea as there is circa 140,000 registered engineers on the Gas Safe Register yet there are only circa 2,000 of them that carry the CMDDA1 qualification. Having the ESP (emergency service providers) engineers being able to react to this work, it will be a great outcome for consumers in vulnerable situations where a trusted competent engineer can deem what remedial work, if any, is required".

HSE | Downstream Senior Gas Investigation Policy Officer

"This is great area of work to explore to reduce the impacts of CO on Gas consumers. If Cadent engineers can carry out this work, then why wouldn't they as they're the first responders on site".

BEIS | Policy Advisor

"What a great idea to go a step further to support your customers in vulnerable situations. It's great to see Cadent taking an initiative in this area of work and utilising their field operatives to give a better customer experience".

NEA - National Energy Action | Project Management & Policy Team

"This is potentially a great lifeline for the people who wouldn't be able to afford a Gas Safe Registered engineer to reinstate their supply after an investigation has taken place. Nor would these consumers have an engineer to call in the first place. Using

your existing workforce to help the people who need it the most can only result in a positive outcome for all involved".

Citizens Advice | Customer Engagement Team

"You can provide a better service for your customers who would usually be left without Gas. Providing this service to your customers in vulnerable situations is really showing that Cadent are focusing more on their customers than ever before. We would like to see this happen".

Customer and stakeholder insight / feedback around CO

Stakeholders recognise the value of Cadent's work on CO and want to see networks adopt innovative new approaches to eradicate the dangers E.g., targeting dangerous appliances, repairing / replacing where appropriate.

Strategy / policy

"Ofgem / Industry bodies want to see networks go above and beyond the minimum level of service and deliver services with a strong social return on investment to protect the most vulnerable.

Customers in vulnerable situations workshop

During NGN's November 2021 Energy Crisis / Partnership Working Workshop, stakeholders said the energy crisis will result in people not getting their appliances serviced every year, which increases the risks of CO poisoning.

NGN CO Research August 2022

Customer self rating of CO awareness, captured during the recent CO research project 2022

In 2022, around 6 in 10 customers felt they have good awareness of Carbon Monoxide (CO). This was significantly higher than last wave in 2020.

Older customers, especially those retired, as well as males have higher levels of claimed CO awareness when compared to those younger or females.

Customers in Bradford recorded lower awareness than East Riding and Wear. Home owners are more likely to have better awareness of CO than those who rent or live in shared accommodation.

Overall, Cadent and NGN have both received strong stakeholder and customer support to justify their investment of VCMA funding into this collaborative project

Outcomes, Associated Actions and Success Criteria

We aim to re-instate our customers' supply after we have made safe (as per current licence obligations) following a report of CO alarm activation / suspect of fumes, or a fault on the customers installation.

The aim for this is to be done either the same day, the next working day, or a date to suit the customer. Success is re-instating the customers gas supply within a working day and to not leave the customer in a vulnerable situation by having an isolated gas supply or ensuring the customer doesn't self-reconnect their supply.

Additionally, we will issue customers a new CO alarm to those who don't have one or require a replacement as well as raising their awareness relating to Gas Safety, CO, the PSR, and any support that will benefit them.

The below data details the outcome of the visits made to the customers properties following initial isolation and the subsequent outcome following the attendance of our upskilled engineers.

CMDDA1 Outcomes

- 649 Co investigations completed
- 442 Left completely live and in use
- 181 Single appliance isolated (main source of heat left on)
- 26 left capped at meter outlet (referred on to charity partner)

Under normal BAU activities all these jobs would have been left isolated at the meter outlet leaving the customer off supply.

We aim to leave all the customer we visit through SBTM activities in a more positive situation as a result of our visit.

Project Partners and Third Parties Involved

Kane International, Kane House, 11 Bessemer Road, Welwyn Garden City, Hertfordshire, AL7 1GF

Northern Gas Assessment services, Unit 3b, Denaby Lane Industrial Estate, Coalpit Road, Doncaster, DN12 4LH

Potential for New Learning

Areas for new learning throughout this project include:

- Potential scope for GDNs to work downstream of the gas meter to provide further support to customer living in a vulnerable situation.
- Take learning and success from the project and look to mirror in other processes and across the wider industry.
 - Train and upskill our engineers to identify in greater detail appliances that are at risk of CO
 - Identify appliances that are most common in customers' homes who are
 vulnerable and the ones that are at risk of CO. This will allow us to take a
 proactive approach to these appliances when we come across them in other
 homes.
 - Upskilled workforce to identify vulnerability in customer
 - Have a workforce that can work on appliances in other process's that may be involved in the future like Hydrogen.

Scale of VCMA Project and SROI Calculations

Scope

Throughout the year of 2022 / 2023 we have been building a firm structure to deliver Services Beyond the Meter safely and effectively across our complete footprint North West, East Midlands, East Anglia, West Midlands and North London. Each area manager now has 2x upskilled engineers to complete Services Beyond the Meter activities in their area. We have also ring fenced a Network Lead who is responsible and accountable for all Services Beyond the Meter work types. This structure ensures a strong audit process, supervisory and due diligence when undertaking these additional tasks

We have also upskilled 12x Northern Gas Networks engineers at our training centre which have all gone to an external assessment centre in Doncaster and successfully passed their assessments.

Since the start of the project, we have trained and assessed a total of 64 x engineers for Cadent Gas and Northern Gas Networks this is where most of the costs are incorporated. Naturally there are front loaded costs at the start of the project for the training centre, tools and training.

The bulk of Services Beyond the Meter work is Carbon Monoxide / Dioxide Atmosphere Testing. We are also completing pro active safety checks of gas appliances for some of the most vulnerable customers in our society, which are referred into us via our local charity partnerships.

Year to date 22 / 23 we have completed:

CMDDA1 checks: 649

Appliance safety checks: 20

Pipework trace / repair / replace: 24 (SROI Calculations to be confirmed)

Cooker replacement: 8

SROI

We have had SROI calculations completed for CMDDA1 and appliance safety checks please see the below forecasts:

Year 2

CMDDA1- £846.00 per job x 649

• 5-year gross present value - £549,054,00

• 5-year SROI- £421,850,00

Appliance safety check- £469.00 per job x 20

• 5-year gross present value - £9,380,00

• 5-year SROI - £7,380,00

• Total SROI (Net)- £429,230,00

Year 3

• CMDDA1- £846.00 per job x 1000

• 5-year gross present value - £849,000,00

• 5-year SROI - £652,432,73

• Appliance safety check- £469.00 per job x 250

• 5-year gross present value - £117,250,00

• 5-year SROI - £92,250,00

• Total SROI (Net)- £744,682,00

Year 4

CMDDA1- £846.00 per job x 2000

• 5-year gross present value - £1,698,000,00

• 5-year SROI- £1,304,860,00

 Appliance safety check-£469.00 per job x 500

• 5-year gross present value - £234,500,00

• 5-year SROI - £192,000,00

• Total SROI (Net)- £1,496,860,00

Year 5

• CMDDA1- £846.00 per job x 4000

	5-year gross prese	ent value -	£3,396,000,00	
	5-year SROI -		£2,606,720,00	
	Appliance safety c	heck-	£469.00 per job x 1000	
	5-year gross prese	ent value -	£469,000,00	
	5-year SROI -		£368,900,00	
	Total SROI (Net)-		£2,975,620	
	2			
	Cadent Services Beyond the Meter Sf		see the attached SROI calculations for s Beyond the Meter	
VCMA Project Start and End Date	Project start date: 1 th April 2021			
	Project end date: 1st April 2	026		
Geographical Area	Cadent Gas			
	North West West Midlands East Midlands North London East Anglia			
	Northern Gas Networks			
	* * * * -			
Remaining Amount in the Allowance at Time	Remaining funding left in th	e Licensee'	s/ Licensees' funding pot.	
of Registration	· ·	(£2,364,736	ing 2022-2023 RRP 6.51 total forecasted costs 2022-2026)	
Cas Natwork Vulnarabilit	Remaining following this pr		CMA) Governance Document - PFA Control	

Gas Network Vulnerability and Carbon Monoxide Allowance (VCMA) Governance Document - PEA Control Table

In order to ensure that a VCMA project is registered in accordance with the Ofgem VCMA governance document (incl. project eligibility assessment), the below table should be completed as part of the project registration process.

Stage 1: GDN Collaboration Group PEA Review

Date completed: Review completed by:

Job title:

GDN:	Name(s):
Cadent	Sam Graham
NGN	Steve Dacre
SGN	
WWU	

Stage 2: GI Date review Review con Job title:	complete	anel Review ed: /:		
GDN:	Nai	me(s)		
Cadent	Phi	l Burrows		
NGN	Eile	een Brown		
SGN				
WWU				
Step 3: Par	ticipating	GDN individual signatory sign-o	ff	
GDN		Name(s)	Signature(s)	Date
Cadent:			Signature(s) Philip Burrows H	30.03.2023
NGN:	Eileen Brown		El Bon	30.03.2023
SGN:				
SGN:				
WWU:	oad PEA		fication Email Sent to Ofgem (vcma@c	ofgem.gov.uk)
WWU: Step 4: Upl				ofgem.gov.uk)