

Wales & West Utilities Vulnerability & Carbon Monoxide Allowance (VCMA)

Project Eligibility Assessment (PEA)

Carbin Monoxide (CO) Alarms

WWU Led- Awareness Campaigns, CO alarms, WWU Operations

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4th January 2023

Updated March 2025

Eligibility criteria for company specific projects (other than condemned essential gas appliance repair and replacement)

In order to qualify as a VCMA Project, a project must:

- a) have a positive, or a forecasted positive, Social Return on Investment (SROI) including for the gas consumers funding the VCMA Project;
- b) either:
 - i. provide support to consumers in Vulnerable Situations and relate to energy safeguarding, or
 - ii. provide awareness of the dangers of CO, or
 - iii. reduce the risk of harm caused by CO;
- c) have defined outcomes and the associated actions to achieve these;
- d) go beyond activities that are funded through other price control mechanism(s) or required through licence obligations; and
- e) not be delivered through other external funding sources directly accessed by a GDN, including through other government (national, devolved or local) funding.¹

Eligibility criteria for company specific essential gas appliance servicing, repair, and replacement

In order to qualify as a VCMA Project, unsafe pipework and essential gas appliance² servicing, repair or replacement must meet the following criteria:

- a) a GDN has to isolate and condemn unsafe pipework or an an essential gas appliance following a supply interruption or as part of its emergency service role;
- b) the household cannot afford to service, repair or replace unsafe pipework or the essential gas appliance; and
- c) sufficient funding is not available from other sources (including national, devolved or local government funding) to fund the unsafe pipework or the essential gas appliance servicing, repair or replacement.

¹ If part, but not full, funding is available through an external funding source for an eligible project, VCMA funding can be used for the remaining amount.

² Essential gas appliances are gas fuelled heating systems (including gas boilers and gas fires), and gas cookers.

Information required for the registration of VCMA projects

Information required	Description																																													
Project title	Carbon Monoxide (CO) alarm projects																																													
Funding GDN(s)	Wales & West Utilities Ltd																																													
New/ Updated PEA	Updated January 2025																																													
VCMA Project contact name, email and number	Paisley Henderson paisley.henderson@wwutilities.co.uk 07970564577																																													
Total Cost (£)	£567,825.58																																													
Total VCMA funding required (£)	<p>£457,560</p> <p>Updated January 2025:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Alarm Spend</th> <th>Total Alarms</th> </tr> </thead> <tbody> <tr> <td>21/22</td> <td>£78,780</td> <td>6,000</td> </tr> <tr> <td>22/23</td> <td>£78,780</td> <td>8,000</td> </tr> <tr> <td>23/24</td> <td>£100,000</td> <td>7,616</td> </tr> <tr> <td>24/25</td> <td>£100,000</td> <td>7,616</td> </tr> <tr> <td>25/26</td> <td>£100,000</td> <td>7,616</td> </tr> <tr> <td>GD2</td> <td>£457,560</td> <td>36,848*</td> </tr> </tbody> </table> <p>*Total alarms from 23/24 onwards based on current contract with supplier CEF at £13.13 per unit</p> <p>Updated March 2025:</p> <p>The original PEA included forecasted figures and costs, but as demand has increased, we have added an additional £30,234.10 to reflect actual delivery and requests in line with our policies and procedures.</p> <p>The below table has been updated in line with calendar year budget to accurately reflect the annual allocation of CO alarms.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Alarm Spend</th> <th>Total Alarms</th> </tr> </thead> <tbody> <tr> <td>2021</td> <td>£78,780.00</td> <td>5996</td> </tr> <tr> <td>2022</td> <td>£101,946.16</td> <td>7764</td> </tr> <tr> <td>2023</td> <td>£121,422.00</td> <td>9247</td> </tr> <tr> <td>2024</td> <td>£114,091.08</td> <td>8689</td> </tr> <tr> <td>2025</td> <td>£122,975.58</td> <td>9366</td> </tr> <tr> <td>2026*</td> <td>£28,610.76</td> <td>2179</td> </tr> <tr> <td>GD2</td> <td>£567,825.58</td> <td>43,241**</td> </tr> </tbody> </table> <p>The table also includes £80,031.48 for CO alarms and leaflets purchased for distribution by Dorset & Wiltshire fire and rescue service; a long-standing partnership in collaborative with SGN.</p> <p>* 2026 alarm costs and totals for Jan-Mar 26 only **Total alarms based on current cost per unit of £13.13 with supplier CEF</p>	Year	Alarm Spend	Total Alarms	21/22	£78,780	6,000	22/23	£78,780	8,000	23/24	£100,000	7,616	24/25	£100,000	7,616	25/26	£100,000	7,616	GD2	£457,560	36,848*	Year	Alarm Spend	Total Alarms	2021	£78,780.00	5996	2022	£101,946.16	7764	2023	£121,422.00	9247	2024	£114,091.08	8689	2025	£122,975.58	9366	2026*	£28,610.76	2179	GD2	£567,825.58	43,241**
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Criteria

<p>Problem(s)</p>	<p>The Problem:</p> <p>We are committed to raising awareness of the dangers of carbon monoxide (CO) and educate customers on how to keep them and their family safe. We provide key gas safety information on how to safely maintain their appliances and how to reduce the risk of CO in their home.</p> <p>What is Carbon Monoxide (CO)?</p> <p>You can't see it. You can't smell it. You can't taste it. Carbon monoxide (CO) is a colourless, odourless, tasteless, poisonous gas that is released when any fossil fuel doesn't burn properly.</p> <p>Breathing it in can make you unwell, and it can kill. Even low levels of exposure, over a long period, can cause serious health issues.</p> <p>Severe CO poisoning causes approximately 60 accidental deaths per year in England and Wales (NHS). Exposure to carbon monoxide at sub-lethal levels cause non-specific symptoms, (e.g., headaches, nausea, dizziness). This means exposure to carbon monoxide could be under-reported.</p> <p>Low awareness of CO</p> <p>Research has shown that awareness of CO remains low and is lowest in young adults, with only a quarter understanding the risks or what to do if they suspect the presence of CO.</p> <p>Our figures in 2021 revealed that those who we interacted with had an average awareness of 4.8/10 in relation to the dangers of CO.</p> <p>The lack of prevention</p> <p>With the rising cost of living, the servicing of gas appliances becomes a lower priority for people. New research from independent body, Gas Safe Register, also shows one in three people (31%) have used excuses to get out of having their home gas appliances safety checked, despite over three quarters (79%) saying they would never make excuses if their loved ones' safety was at risk.</p> <p>Nearly 7 million homes in the UK – one in four – house potentially dangerous gas appliances, including boilers, cookers, and gas fires. If left unchecked, these faults can pose a threat to life from gas leaks, fires, carbon monoxide poisoning and explosions.</p> <p>Vulnerable groups most at risks</p> <p>As temperatures drop and people turn up their heating, new research from Energy UK's 'CO Be Alarmed!' campaign reveals that one in three</p>
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Criteria

	<p>Britons – over 17 million people – are at risk from carbon monoxide (CO) poisoning as they don’t have a CO alarm in their home – despite nine in ten (94%) saying they are aware of the risk.</p> <p>Research by Gas Safe Trust involving 2,001 people who care for or check in on an elderly or disabled loved one who doesn’t live with them revealed that 75% said safety was a key reason for checking in on their vulnerable loved one. Yet 92% don’t know at least one of the crucial signs that a gas appliance is unsafe.</p> <p>Legislation changes and the gaps</p> <p>All four UK governments have recognised the need to mitigate the risk of CO exposure in homes, by increasing the number of homes that will be required to install alarms.</p> <p>However, some gaps remain. Gas cookers are excluded from the regulations in England and Scotland. A report by National Energy Action found that of the 59% of homes which had a gas cooker, only 25% had the cooker serviced annually.</p> <p>The type of carbon monoxide alarm is only mandated in Scotland’s regulations.</p> <p>This a missed opportunity to ensure landlords and households purchase alarms that meet British Standards. Higher quality alarms which meet the relevant standard are less likely to cause false alerts. Alarms with sealed battery units are tamper proof, better value for money, and require minimal (if any) landlord or tenant maintenance. Owner-occupied households are outside the remit of regulations (<i>except for Scotland</i>)</p> <p>According to the English Housing Survey, in 2020, of the estimated 23.5 million occupied residential dwellings in England, 15.3 million (65%) were owner occupied. As owner occupiers are not included in England’s regulations (until a new appliance is installed under amended building regulations: Approved Document J), a lot of people will fall through the cracks.</p>
<p>Scope and Objectives</p>	<p>In our Business Plan for RIIO GD2 we made a commitment to reach at least 10,000 people a year through either face-to-face contacts, or by providing educational materials; demonstrating success by a CO survey of understanding before and after the engagement. We will target all ages and demographics with our messages.</p> <p>In addition, we committed to reaching 250,000 homes a year with CO awareness messaging through our usual communications for connections, planned and emergency work, and through social media channels.</p> <p>Our Ambition</p>

Criteria

	<p>To keep people safe by; raising awareness of the risks of CO arising from both appliances connected to the mains gas network and other sources, to effect behaviour change to safeguard all those at risk, and to provide access to suitable CO safety devices for people who may struggle to access one themselves.</p> <p>To create alignment & consistency around PSR awareness and safeguarding service(s) messaging that supported priority customer needs. We set out to create sustainable community projects and partnerships, to deliver mutually beneficial and fair outcomes while maximising effective reach</p> <p>Objective:</p> <p>Actively look to reduce the number of households in our network without CO alarms and raise awareness of the dangers of CO.</p> <p>We will do this by:</p> <ul style="list-style-type: none"> • Working with trusted partners by providing them with CO alarms and awareness information resources to provide free of charge to customers in vulnerable situations. • Utilise our resources in EMS during our emergency call outs to replace faulty and expired CO alarms for our vulnerable customers or provide an alarm if there are no working ones at the property • Provide training to partners and colleagues on key CO information and our support measures be to be able to educate customers on and refer for any additional support • Encourage customers to spread the word on the dangers of CO and encourage their friends and family members to get a CO alarm and know the signs • Record the awareness before and after the visit using our online form to demonstrate a % increase in awareness
<p>Why the Project is being funded through the VCMA, and how this aligns to GDN's VCMA Strategy</p>	<p>CO awareness and our work to minimise risk and prevent harm is explicit in the definition of the Vulnerability and Carbon Monoxide Allowance (VCMA).</p> <p>The VCMA supports the GDNs individual business plans and ambitions and can be utilised for VCMA projects focusing on supporting vulnerability and carbon monoxide safety initiatives. The requirements are stipulated as to:</p> <ul style="list-style-type: none"> • provide support to consumers in Vulnerable Situations and relate to energy safeguarding, or • provide awareness of the dangers of CO, or • reduce the risk of harm caused by CO; <p>How does our project meet these criteria?</p>

Criteria

	<p>By providing CO alarms and accompanying safety information we are both providing awareness of the dangers of CO, and reducing the risk of harm caused by CO.</p> <p>By working with the partners and colleagues in our area we are satisfying the WWU project specific needs by working with organisations who only operate in our geographical area.</p> <p>The second criteria met through this project is to provide support to consumers in Vulnerable Situations and relate to energy safeguarding. By signposting for our additional support measures and services through partners and colleagues we can provide tailored support to vulnerable consumers depending on their needs.</p>
<p>Evidence of Stakeholder/ Customer support</p>	<p>WWU Stakeholder Research</p> <p>The need to identify different target groups and their needs was highlighted by a community energy stakeholder in the discussions. This was built on by charity representatives stressing the need for accessibility, whether through home visits or social media outreach. A versatile approach was favoured by participants in the breakout session. There were calls for a considered approach to digitally excluded customers, as well as to those experiencing language barriers.</p> <p>Stakeholders at a regional community workshop emphasised the importance of GDNs forming the right partnerships and ensuring that these were truly adding value. There was a consensus that rising energy prices and the increasing cost of living represented a serious emerging problem that would put many people at risk. Charity representatives stated that the pandemic had had a major impact on the mental health of the general public, which would be exacerbated by financial troubles. Emergency services and charity participants believed that low-income homeowners could be missed.</p> <p>In our business plan, we provided extensive evidence of support from stakeholder for us to continue to raise awareness of CO however stakeholders were split on our role in providing CO monitors. We have reached a consensus where our CO alarms are only provided to priority customers, mainly in private homes. The definition of a 'priority customer' links with those customers who would qualify for the Priority Services Register (PSR)</p> <p>External Research</p> <p>A carbon monoxide alarm is the only certified source of detection, but nearly 70% of UK households are without a working carbon monoxide alarm. As millions of Britons face higher gas bills, there is a danger that a reduction in income will push regular appliance servicing and high-quality carbon monoxide alarms further down the priority list.</p>

Criteria

	<p>Which? independent lab tests raised awareness of the importance of having a certified CO alarm in your home. Around four in 10 of the carbon monoxide detectors tested failed to go off in at least one of our carbon monoxide detection tests. A customer with an alarm of this poor standard may think they are safe when in fact they're at risk of the alarm not notifying at the detection of CO until it reaches fatal levels.</p> <p>With energy prices soaring, more than a third of homeowners switched off their heating earlier than usual during the early part of this year to save on bills, according to research. And, after the cold snap earlier this month, this may have left nearly 8 million households braving the cold at home due to increased money worries.</p> <p>Gas Safe Register research suggests that, as well as switching off earlier than usual, nearly a third (31%) will skip booking their annual gas safety check, due to the cost-of-living crisis. This is despite a majority (77%) being aware that regular servicing can help gas appliances run more efficiently, and in turn save money on household bills.</p>
<p>Outcomes, associated actions, and success criteria</p>	<p>Outcomes, associated actions, and success criteria</p>

Criteria

	Anticipated Project outcomes (the difference it will make)	Associated Actions (what we will do to achieve the outcome)	Success Criteria (How we know the outcome has been achieved)
	<ul style="list-style-type: none"> Customers are provided with an accredited CO alarm that meets health and safety standards 	<ul style="list-style-type: none"> Specialist accessible CO alarms available for customers who need them Provide our stock of CO alarms to customers in vulnerable situations free of charge 	<ul style="list-style-type: none"> CO awareness levels increase post CO alarm and advice provision.
	<ul style="list-style-type: none"> People feel more in control knowing the dangers of CO to be able to keep them and their families safe and able to share that information in their community Customers are better informed of the role that WWU play in keeping their communities safe and have a better awareness of who to contact if they suspect CO 	<ul style="list-style-type: none"> Raise awareness of the dangers of CO and what action to take to prevent and report it Provide supporting literature with our alarms that contains key safety information and WWU referral details Collect data via our online forms around awareness before and after 	<ul style="list-style-type: none"> A clear increase in awareness measured through the CO questionnaire and customers pledging to take further CO mitigating actions – e.g., informing family and friends of the risks.
	<ul style="list-style-type: none"> Customers are referred for additional support measures through one link 	<ul style="list-style-type: none"> Refer qualifying and consenting customers to the PSR 	<ul style="list-style-type: none"> Monitor the sign ups through these methods
Project Partners and third parties involved	Educational Messages, Referrals for Support Measures & Free CO Monitors: <ul style="list-style-type: none"> Community Partnerships EMS Colleagues Providing the additional support measures: <ul style="list-style-type: none"> Warm Wales WWU DNOs and other utilities (PSR) Other VCMA partners 		
Potential for new learning	Ongoing learning and sharing of insight on best ways to target different demographics, and the impact of different media formats.		

Criteria

	<p>Attend regular conferences and CO group meetings to ensure we are up to date with the latest legislation and key research.</p> <p>Host review meetings with our partners and colleagues on their progress to ensure effectiveness and share best practice.</p> <p>Keeping up to date with the latest needs codes for the PSR and other important support measure updates to ensure they are being referred correctly.</p> <p>Keeping up to date with the latest alarms and more accessible ones – changes in legislation – new funders of CO alarms (Welsh government)</p> <p>Types of materials given with alarm (handy guide) and channels of engagement (engineers and partners visit) – review whether they are effective for customers</p>											
<p>Scale of VCMA Project and SROI calculations, including NPV</p>	<table border="1" data-bbox="523 763 1353 896"> <thead> <tr> <th colspan="2">5-year Results</th> </tr> </thead> <tbody> <tr> <td rowspan="4" style="text-align: center;">Economic</td> <td>Total cost</td> <td style="text-align: right;">£392,525.80</td> </tr> <tr> <td>Total gross present value</td> <td style="text-align: right;">£812,678.13</td> </tr> <tr> <td>NPV</td> <td style="text-align: right;">£420,152.33</td> </tr> <tr> <td>SROI</td> <td style="text-align: right;">£1.07</td> </tr> </tbody> </table> <p>SROI Updated January 2025:</p> <p>We have taken the forecasted numbers expected throughout the delivery period and calculated the following SROI over the duration of the project:</p> <p>Total Gross Present Value = £989,137.36 Net Present Value = £580,380.83 Positive SROI per £1 spent = £1.42</p> <p>Please note that the updated SROI calculation was completed using the GDN-shared SROI rulebook released in September 2024, which produces stricter and more accurate results compared to previous models.</p> <p>SROI Updated March 2025:</p> <p>We have taken the forecasted numbers expected throughout the delivery period and calculated the following SROI over the duration of the project:</p> <p>Total Gross Present Value = £1,186,217.56 Net Present Value = £674,928,94 Positive SROI per £1 spent = £1.32</p> <p>Please note that the updated SROI calculation was completed using the GDN-shared SROI rulebook released in September 2024, which produces stricter and more accurate results compared to previous models.</p>	5-year Results		Economic	Total cost	£392,525.80	Total gross present value	£812,678.13	NPV	£420,152.33	SROI	£1.07
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VCMA Project start and end date	April 2021- March 2026
Geographical area	Wales & West Utilities whole network area
Internal governance and project management evidence	<p>Updated January 2025:</p> <p>The WWU CO Alarms project proposal has been reviewed through various industry working groups including:</p> <ul style="list-style-type: none"> - GDN Vulnerability Working Group (monthly) - GDN Carbon Monoxide Working Group (monthly) - VCMA Steering Group - Customer & Communities Steering Group <p>This project is also supported by stakeholders (as outlined above). The project will be managed and led by WWU and will consist of:</p> <ul style="list-style-type: none"> - Monthly MI and reporting reviews - Ongoing reviews throughout the duration of the project regarding delivery of outcomes - this will feed into lessons learnt and shared best practice to ensure the project is successful in delivering value for money and maximising outcomes for customers and communities. - Annual budget reviews & alarm distribution forecast

WWU sign off

Name	Role	Signature	Date
Nigel Winnan	Customer and Social Obligations Strategy Manager	<i>Nigel Winnan</i>	11/03/2025