

### Groundwork - Awaretag

<b>Funding GDN(s)</b>	<b>Northern Gas Networks</b>
<b>For Collaborative VCMA Projects:</b>	Role of GDN(s) N/A
<b>Date of PEA submission:</b>	March 2023
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<b>Total cost (£k)</b>	*detailed separately
<b>Total VCMA funding required (£k)</b>	*detailed separately

## 1. Problem(s)

*This should outline the problem(s) which is/are being addressed by the VCMA Project*

The cost-of-living crisis is deepening and including wider sections of society. As we move into winter, we will see more people unable to afford heating resulting in more cold and damp homes. The impact of cold and damp homes on those with asthma will be significant as mould exacerbates the condition. Already, 5 million households have someone suffering from asthma and the condition affects nearly 10% of children.

With fuel poverty estimated to affect 7 million households by the end of the year, and between 1 and 2 million homes already suffering from mould and damp (many in the most deprived areas), the level of ill health and distress will rise. The most vulnerable are not always the most vocal. Physical and mental challenges, worry about landlord's responses, rural locations, temporary financial hardship, English as a second language, taking a stoic attitude to their condition, and being unfamiliar where to get help, means that they are seldom heard.

It is important that we do more to proactively get to this group of 'seldom heard' or 'difficult to reach' as they could be storing up issues that could overwhelm the NHS, Community Health, Housing Providers, Charities and Energy providers.

### 1.1 The solution

This project will form a partnership between Groundwork Yorkshire's Green Doctor service & Aware Technologies to target an estimated 400,000 social homes in the West Yorkshire region.

Aware Technologies ran a successful pilot project with Leeds City Council and Aware Technologies to use technology, predictions and people centred approaches, to seek out the most vulnerable customers, aid and measure the results. They applied the approach in a block of 81 flats to reveal and help personas that were not on the PSR or vulnerability lists held by the council. This block is only one of over 100 in the Leeds area alone.

This project will help the most vulnerable in an estimated 400,000 social homes in the west Yorkshire region.

The issues being addressed by this proposal include:

- Fuel Poverty reduction
- Financial hardship/debt reduction and income maximisation
- Mental Health and Wellbeing improvement
- Respiratory Health improvement
- Energy efficiency improvement in homes
- A 'just transition' to net zero
- Mould and Damp reduction

## References:

<https://www.asthma.org.uk/dd78d558/globalassets/get-involved/external-affairs-campaigns/publications/health-inequality/auk-health-inequalities-final.pdf>

<https://www.asthma.org.uk/support-us/campaigns/data-visualisations/#:~:text=How%20many%20people%20go%20to,every%20year%20in%20the%20UK.>

<https://www.asthma.org.uk/about/media/news/asthma-uk-study-1.1bn/#:~:text=A%20study%20from%20the%20Asthma,asthma%20in%20UK%20to%20date>

<https://cpag.org.uk/news-blogs/news-listings/fuel-poverty-updated-estimates-uk>

## 2. Scope and Objectives

*The scope and objectives of the VCMA Project should be clearly defined including the benefits which would directly impact customers on the participating GDNs' network(s), and where the benefits of the VCMA Projects lie.*

### 2.1 Shared Purpose

The overall aim of this project is for a partnership between Green Doctor, Aware Technologies, the Centre for Regional Economic and Social Research and Asthma & Lung UK.

This collaboration will bring together fuel poverty, income maximisation, and energy efficiency support, along with the measurement of the improvements in the housing, health and wellbeing of 1100 residents. CO safety will also be addressed through this project. The project will be based in the West Yorkshire region and will last for a period of 15 months (2 winters).

### 2.2 The objectives of this initiative are:

- Create an enhanced definition of vulnerability
- A catalogue of costed interventions and measured benefits to the property, health and wellbeing tracked over a 15-month period
- Use this catalogue as a blueprint for scenario planning around the rest of the UK to identify and reach the most vulnerable
- Sign up more homes to the PSR
- Reduce the risks of poor health caused by poor housing
- Increase the Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) overall score by between 3 and 7 points

The partnership with **Awaretag** enables the project to:

- Classify interventions and get precise measurements of the thermal performance of homes before and after an intervention using their self-install sensor technology
- Measure the risk of mould and damp before after an intervention using the 3D AI technology
- Use the data to calculate energy saved and comfort improved

- Collect respiratory health data through an electronic 'peak flow' diary of lung health
- Collect qualitative mental wellbeing scores using WEMWBS. Current academic use of this scale suggests that an improvement between 3 and 7 for the whole cohort is recognised as demonstrating an improvement in mental wellbeing
- Link housing quality, financial, comfort, health and wellbeing outcomes. Groundwork recognise that correlating improved asthma conditions to the improvements to the home through data alone may not be statistically robust enough. The project will augment the analysis with qualitative interviews to provide additional insight for the analysis
- Recommend an enhanced definition of vulnerability (housing, health, and wellbeing) and sign up more people to the PSR
- Extrapolate the data to an estimated 400,000 social homes and discover more vulnerable people that are not on the PSR and/or need to be contacted as it is likely there are hidden issues

The partnership with the **Centre for Regional Economic and Social Research (CRESR)** enables the project to:

- Receive guidance from one of the UK's leading policy research centres to understand the impact of social and economic disadvantage on places and people. Their expertise and thought leadership in tackling inequalities in homes and neighbourhoods, and creating greater economic wellbeing, will help this project reach the right levels of policy making in the UK
- Provide rigour in the research and evaluation approaches so that they stand up to academic and industry scrutiny. They are expert in performing research in a complex world and are able to guide on reflexive learning and critical examination of concepts, methods and applications
- Communicate findings at a local, regional and national government level in ways that can directly inform policymakers and practitioners by bringing the stories of the research findings and participants to life

The partnership with **Asthma and Lung UK** enables the project to:

- Reach 1000's of people with asthma who may not be on the PSR. Through their local groups, they can help groundwork pinpoint cohorts that are vulnerable and would like to take part in the project
- Design a web app to record the peak flow diary so the project can track lung function in line with tracking the performance of the house and wellbeing of the resident.
- Contribute to their UK wide campaigning to raise awareness of issues affecting people with asthma and developing practical solutions to these problems

## 2.3 Scope

**Green Doctor services** include both home visits and telephone advice support:

- Income Saving and advice:
  - Billing and metering issues, where possible switching to a more appropriate payment method
  - Energy Complaints and assisting them through to resolution
  - Identifying other assistance entitlement and referring to other support
  - Applying to Priority Service registers
  - A water bill health check
  - Applications for social water tariffs
  - Applications for water meters
  - Resolving issues with water debt
  - Installation of water saving devices
  
- Energy Use:
  - Correct usage and setting up of heating controls
  - Switching energy providers for a cheaper deal
  - Energy usage/ reducing energy bills through behavioural change, including appliance costs
  - Water saving and meter fitting for appropriate households
  - Liaise with energy companies to set up payment plans for debt and priority service registers
  - Install a range of small-scale energy efficiency measures including draught proofing, reflective radiator panels, energy saving lightbulbs, water and power saving devices and pipe lagging
  - CO awareness raising
  
- Health:
  - Preventing condensation, damp, and consequent mould growth
  - Referrals to other local support agencies and their services
  - Seasonal health and wellbeing advice
  - Basic needs assessment identifying other service needs, such as Fire Service, Neighbourhood Networks etc.
  
- Advocacy and support through:
  - Referrals to other services such as Fire Service, Adult Social Care, Food Banks, Health care professionals, Housing support teams, Debt support charities
  - Liaising and negotiating with energy suppliers to switch tariffs, remove or reduce existing fuel debt
  - Access to grants for debt relief to tackle ongoing fuel debt issues

- Access to grants for white goods and other home appliances for the most vulnerable households
- Liaising with Local Authorities for tenants in poor quality private sector housing where the landlords are unwilling to make improvements to the property.

### **3. Why the Project is being funded through the VCMA**

*This should include an explanation of why the VCMA Project meets the VCMA eligibility criteria. This is a requirement*

This project qualifies under the criteria for the VCMA funding, as it will support vulnerable customers in an estimated 400,000 social homes in the west Yorkshire region. Subjects such as understanding of energy use, energy bills, income maximisation and CO safety will also be addressed through this project and customers will be referred onto the PSR where eligible.

There will be no collaboration from other GDN's nor other funded sources.

#### **3.1 Eligibility criteria**

- This project will have a positive SROI
- This project will support NGN's Vulnerability Strategy by aligning with the financial hardship, physical health, and mental health themes
- Has defined outcomes as required (see outcomes section)
- Goes beyond NGN's licence obligations and price control funded mechanisms

### **4. Evidence of stakeholder/customer support**

*This should provide information of the customer engagement that has taken place in the development of VCMA Projects where appropriate. If there is no evidence of stakeholder engagement or customer support, this should justify why it was not appropriate to engage with stakeholders and customers.*

Within the Northern Gas Networks region, we serve 2.7 million gas-using households. The socio-economic characteristics of our region mean that we operate in many communities that are amongst the most economically deprived in the whole country. This was a key factor in our prioritising engagement with vulnerable and hard-to-reach groups of customers, telling them about our services, about what we do and how we could improve.

Each year, we undertake analysis of all the insight we've heard in the previous year to prioritise those issues our stakeholders most want to engage on. Over the past 12-18 months, we've done this in a number of ways.

From previous & current Green Doctor involvement in Calderdale Groundwork have worked with the main social housing provider – Together Housing, who they still receive referrals from, but they hope to develop this partnership further. They have also worked with The Halifax Opportunities Trust via their 'Hopeful Families' programme & have had discussions with the local council & Citizens Advice on how to best to support their programmes.

The proposed geographical area includes Leeds and Bradford. Leeds Council has one of the oldest and diverse stock of homes, Bradford features high in the asthma hospitalisation rates.

Groundwork currently have a referral partnership with Leeds council and work with over 2,000 of their social housing residents a year. They also partner with a number of other charities providing practical multi-agency assistance.

They recently ran a project with Leeds City Council and Aware Technologies (awaretag) to precisely measure the quality of homes, the potential impact on health and predict the type of help the occupants would need. They were able to target resources and work jointly with Leeds City Council repairs and maintenance, and housing teams to apply a combination of timely repairs, assistance with setting heating controls, and income maximisation. Groundwork were able to get qualitative feedback about ability to cope after the interventions. The quantitative data about the quality of the home and the improvement after an intervention, plus the qualitative data about wellbeing after the interventions, enabled them to look at all the social properties in the Leeds area (55,000). With the help of Awaretag they could predict what areas and homes would need more help. On the back of this they were able to run a successful campaign in a block of flats on how to use storage heating better.

Groundwork also have strong links with asthma and lung UK and receive referrals from them for members who need additional help to keep their home warm and dry.

#### **4.1 Customers in Vulnerable Situations (CIVS) Workshops 2020 -2022**

Asking our stakeholders what's important – using our wide range of engagement mechanisms from strategic workshops to customer perceptions, we asked stakeholders to prioritise what is most important to them. This included digital engagement in light of CV-19. During 2020 - 2022 we held multiple workshops with our stakeholders on the subject of CIVS. In our July 2020 workshop, stakeholders discussed new emerging issues due to Covid-19, what the impact of the pandemic has had on hidden vulnerability and how the pandemic impacted demand for essential services to support CIVS. Our stakeholders told us some of the main impacts had been associated with mental health issues and an increase in food/fuel poverty.

In January 2021 we held a specific fuel poverty workshop. During this workshop our stakeholders said it would be good for NGN to us partners to promote the Fuel Poor Network Extension Scheme (FPNES). They also said that fuel, food and general poverty are all linked and we need more streamlined ways of working together. Feedback told us that partners can help raise awareness of different funding available and in relation to this project, the linking up of organisations by way of a steering group will address that point. This project fully aligns with the need to help people in fuel poverty and those on low incomes, to enable them to gain the knowledge and understanding of how to manage their energy bills and stay safe, in order to prevent fuel poverty and health issues in the future. It also demonstrates linking up organisations to help customers in vulnerable situations across the Leeds and Yorkshire region.

During our November 2021 Energy Crisis / Partnership Working Workshop our stakeholders said the energy crisis will result in people not getting their appliances serviced every year, which increases the risks of CO poisoning. Since November 2021 and currently, we're in both an energy and cost of living crisis, which is further impacting vulnerable customers and increases all of these risks. People are continuing to have to make choices between heating, eating and looking after their health. The

servicing of appliances will continue to fall further down the list of customers priorities as a result of these two crises.

Each year we use our annual Customer Perceptions Research to understand the priorities of our customers. Amongst a set of general tracker questions i.e., same questions that are asked year on year, the evidence in the most recent research (February 2022), indicated that keeping bills as low as possible ranked more highly, than providing a safe and reliable supply of gas, for the first time. This is a clear indication, as to how concerned customers are about the rising cost of living and energy and the subsequent impact these will have on other bills.

In November 2022 we held a workshop on the PSR and data sharing. Our stakeholders said that while the customer journey has good comms in the early touchpoints, people's situations can change quite quickly (increasingly so now adays). Many people, let alone vulnerable customers, may not be organised enough to keep letters and contact numbers etc. It's important that at every single stage, customers are given a reminder about the PSR and an opportunity to access support and help if needed. They also said all of the partners need to support NGN in promoting the PSR through their communications on a regular basis, not just a one of article or update as it will continue to be a need for customers as their situations change This project will address this need as the customer will be communicated throughout a period of 15 month and if the customers needs change during this timeframe the customer will be referred onto the PSR.

#### **4.2 Customer Engagement Group (CEG)**

This group provides an independent oversight into the actions we take to support CIVS. Checking we've got it right – using a range of engagement mechanisms to assess and challenge our response to stakeholder feedback, ensuring we are responding in the right way. This has offered us robust challenges into how we deal with CIVS which meets the needs of our stakeholders.

#### **4.3 Vulnerability Strategy AAA Framework**

Within our Vulnerability Strategy we have developed, with the help of our stakeholders, the 'AAA' framework. This helps us support our customers in vulnerable situations. Awareness, Accessibility and Action. By adapting this principles-based approach into our AAA framework, we will ensure that all customers are treated fairly and consistently. The themes of rurality, financial hardship and mental health as part of this project, align to NGN's strategy.

### **5. Outcomes, associated actions, and success criteria**

*Details of the VCMA Project outcomes and the associated actions to achieve these, interim milestones and how the Funding Licensee will evaluate whether the project has been successful. Each action should have a proportion of the funding allocated.*



## 5.1 Outcomes

The project will be over 15 months to enable data to be collected over 2 winters. The project will start in November 2022 and end February 2024

Groundwork currently receive referrals to visit 50 households a week in the West Yorkshire region – up to 3,000 a year. They will use this activity and referrals with Asthma and Lung UK to recruit 1100 households to take part in this study.

The cohort will be from a mix of property type, tenure type, property age, occupant age, income range, families with children under 5 in the West Yorkshire region.

- Make referrals to the PSR
- Provide CO awareness to customers
- 100 households to be the long term trial group
- The project will measure the performance of their home, their health condition, interventions we put in, the savings they make, the reduction in energy used and the mental wellbeing over the 15 months
- This group will be recruited in November 2022 so that we can follow them for 2 winters
- 200 face to face visits

### Success criteria

- All vulnerable customers referred will have a greater understanding of the importance of gas safety and the dangers associated with carbon monoxide via the CO awareness survey
- 1000 households will be invited to use an app that contains questionnaires about their health and wellbeing, and contain suggestions to make a change based on the data collected from the long-term group of 100
- 50 sensor kits will be rotated for some properties for a period of 4 weeks to see whether the predictions about the condition of the home and the improvements that can be made to the home and their health, are correct
- The group of 100 will receive one initial visit (funded by an existing arrangement) and 2 additional visits in the 15-month period
- The sensor kits are designed to be self -install and reusable.
- In total Groundwork will provide 150 kits and web app access to information and collection of questionnaires for 1100 people
- The project will intend to collect housing structure performance data from a total of 850 homes during the winter and summer period. The summer period is important to understand how well homes manage the hot weather and the energy needed to keep the home cool. The thermal efficiency data will also give an indication of which homes will suffer in the winter

## 6. Project Partners and third parties involved

*Details of Project Partners or third-party involvement*

The project partners involved are Groundwork Yorkshire, Aware Technologies and Centre for Regional Economic and Social Research (CRESR).

## 7. Potential for new learning

*Details of what the GDN(s) expect to learn and how the learning will be disseminated.*

This partnership brings together the issues impacting people from being in fuel poverty & the associated effects that cold and damp homes have on respiratory health and wellbeing. Although elements of this has been researched in the past, there has not been a study that pulls together quantitative and qualitative evidence.

Groundwork expect to be able to create a digital catalogue of what interventions work best for a given set of circumstances and calculate a social return on investment for each one. This will be made available to local authorities, housing providers and energy companies across the UK.

This learning can then be shared in other geographical areas.

## 8. Scale of VCMA Project and SROI calculations

*The Funding Licensee(s) should justify the scale of the VCMA Project – including the scale of the investment relative to its potential benefits. As part of this, it should provide the SROI calculation.*

This project has a positive SROI return.

### **VCMA Project start and end date**

*Detail start and end date of the VCMA Project and, where relevant, the VCMA Project that preceded this initiative.*

November 2022 – 31<sup>st</sup> March 2024

### **Geographic area**

*Details of where the VCMA Project will take place. If the VCMA Project is collaborative, the Funding Licensee area(s) in which the project will take place should be identified.*

The project will take place in the geographical area West Yorkshire.

### **Approved by**

Eileen Brown  
Customer Experience Director