

Cadent: First Set of Responses – 26.10.22

Question number	Theme	Question	Local MP Response	Cadent Response	Status <i>(Does Group feel question has been answered)</i>
5	Plans & Strategy	If it is not a success do Cadent convert us back to gas appliances for free?		<p>Yes. If at the end of the programme, the decision is to convert all homes and businesses back to natural gas, any changes required (such as installation of new like-for-like* natural gas appliances) will be made free of charge.</p> <p>If you have selected electric appliances, you will keep them.</p> <p>*like-for-like based on your original appliances</p>	
6	Plans & Strategy	If the pilot is a success what happens to the cost of hydrogen?		<p>Before customers are asked to make a firm decision as to whether they opt for hydrogen appliances or an alternative, we will provide more information about what happens at the end of the programme.</p> <p>We expect these firmer decisions to be made in late 2023/early 2024 and this will be supported by programmes Terms and Conditions.</p> <p>If the area continues to be supplied with hydrogen at the end of the programme, we will review what this means in terms</p>	

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				<p>of energy costs and whether subsidies need to remain in place to protect customers using hydrogen.</p> <p>As above, we will be engaging with residents on this and providing more information before you enter into any firm decisions.</p>	
7	Cost	What happens after two years when the government subsidy is rescinded?		Please see response to question 6. If any further clarity is required, please let us know.	
8	Cost	If problems arise during the fitting of hydrogen, or after, who is liable for rectification costs?		<p>Any rectification costs that arise during the fitting of hydrogen appliances or after would be the responsibility of Cadent and its programme partners for the duration of the project.</p> <p>All appliances will have a warranty.</p> <p>After the programme, appliance maintenance and repairs will be the responsibility of the owner/resident.</p> <p>Part of the programme exit strategy will include ensuring that there are suitable qualified local engineers who can service the appliances.</p>	

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9	Cost	Do we get refunded for time off work/inconvenience of having to be home while work is being done.		<p>In recognition of the time being given over to allow us to prepare for the programme, we are proposing to give residents and businesses the choice between three financial benefits – to cover home heat loss improvements, in the form of shopping vouchers, or as a charity donation.</p> <p>These options were developed during resident workshops* that were held in the summer.</p> <p>More details can be found in the Hydrogen Village Handbook, which have been distributed to all residents and businesses in the proposed programme area.</p> <p>We will also work with residents to minimise any time off work / inconvenience as a result of the programme.</p> <p>The current amounts detailed in the handbook are still at a proposal stage and if residents feel that it is too low, this can be fed back into the project.</p> <p>*a variety of focus groups were held online and in the Civic Hall to help develop the customer proposition proposals. An independent specialist research consultancy organised the</p>	
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				<p>sessions and recruited attendees from the area in a way that ensured voices could be heard from a wide demographic locally.</p>	
10	Cost	<p>What about any damage to paintwork/decor when new appliances are fitted.</p> <p>Will Cadent fix at their own cost, or compensate residents?</p>		<p>Working together we will 'make good' after installation and/or any maintenance and repairs, ensuring that décor is left to the standard in which we found it.</p> <p>(Please see Principle 5, page 16 of the Hydrogen Village Handbook)</p> <p>In-home hydrogen assessments are critical to understanding residents' appliances and properties, and therefore what remedial work might need to be completed in the future.</p>	
14	Alternative Options	<p>What are the alternatives if residents don't want hydrogen central heating? (LPG? Heating Oil?)</p>		<p>As outlined above, the Hydrogen Village Handbook sets out our proposed alternatives, that could be offered as part of the programme and things to be considered when making a choice between them.</p> <p>For natural gas boilers, the alternatives (other than hydrogen boilers) currently proposed are electric boilers, electric panel heaters and</p>	

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				<p>radiators, and air source heat pumps.</p> <p>Importantly, these options remain in the proposal stage and we welcome feedback from residents about the options they would like to see offered.</p> <p>LPG and heating oil are not currently options that we are looking to propose due to their carbon emissions.</p>	
17	Alternative Options	<p>Are solar panels / full green energy the way forward?</p> <p>Why has this not been considered?</p>		<p>We will need a mix of technologies to decarbonise home heating in the UK. This is likely to include heat pumps, heat networks and hydrogen.</p> <p>To assess the role hydrogen could play, the UK Government has committed to undertake a series of trials, including the one which we propose to hold in Whitby, which demonstrate the role of hydrogen for heating.</p> <p>In preparation for the programme, we have assessed a range of alternative offers, which can be reviewed in our handbook.</p> <p>Solar is not an option currently being considered as part of this initiative, however we are providing a range of other low</p>	

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				<p>carbon alternatives, such as heat pumps.</p> <p>As above, we are listening to feedback on the proposed offer set out in our handbook.</p>	
20	Plans & Strategy	If Hydrogen gas is more efficient and cost effective, why have the council not chosen an area of properties they own, rather than a privately owned area?		<p>The purpose of the Hydrogen Village programme is to see how an existing area of homes and businesses could be converted to hydrogen for heating and cooking, on a large scale. It's important that an area was chosen that was indicative of villages across the country.</p> <p>Evidence from the programme will be crucial in the Government deciding upon the future role of hydrogen for heating and cooking across the UK. It is therefore important that we can demonstrate how we can convert a range of house types to run on hydrogen for cooking and heating.</p> <p>The diversity of the housing stock in Whitby delivers on this criteria and is one of the key reasons Cadent put this area forward in its proposal to BEIS and Ofgem.</p> <p>Additionally, the project has mapped out which sections of</p>	

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				the gas network could be easily isolated.	
21	Health & Safety	How will leaks or faults be detected?		<p>The same familiar odorant will be added to hydrogen gas, as is added to natural gas today, so that a leak can be detected. In addition, you will also be able to access the same emergency number and service that would be available if a natural gas leak was detected (if you smell gas, call the National Gas Emergency Service free on 0800 111 999).</p> <p>As well as installing new appliances free of charge, we will also service and maintain your hydrogen appliances free of charge as part of the programme.</p>	
25	Plans & Strategy	Is the hydrogen blue or green?		<p>We are committed to a low carbon Hydrogen Village trial and will use green hydrogen.</p> <p>However, to ensure a resilient supply of hydrogen, we are currently looking at a number of sources, which are subject to commercial discussions.</p> <p>Similarly, today we ensure a resilient supply of natural gas by using a number of different sources; North Sea, Liquid</p>	

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				<p>Natural Gas (LNG), Interconnectors from Europe.</p> <p>Currently, none of the hydrogen options we are exploring are blue.</p>	
26	Plans & Strategy	Will it be a blended fuel or 100% hydrogen?		<p>A supply of 100% hydrogen will be supplied to the village.</p> <p>The Hydrogen Village programme is designed to gather evidence on how the existing gas network could be converted to work on 100% hydrogen for heating and cooking.</p>	
27	Health & Safety	A report concluded that home explosions are 4 times more likely with hydrogen than natural gas, what assurances can you give that you will fully mitigate this risk and how will this be achieved		<p>This is not correct. The Hy4Heat innovation programme includes an assessment on the safe use of hydrogen gas in certain types of domestic properties and buildings and has been independently reviewed by the Health and Safety Executive (HSE).</p> <p>One of the indications from the assessment is that "the use of 100% hydrogen can be made as safe as natural gas is when used for heating and cooking in certain types of houses</p>	

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				<p>(detached, semi-detached and terraced houses of standard construction), that were studied." The full details of the assessment, its findings, and its limitations, can be found here: https://www.hy4heat.info/wp7</p> <p>We will also be working closely with the HSE to ensure hydrogen can be used safely in homes.</p> <p>This is something that you can discuss as part of your in-house assessment or in the Hydrogen experience centre</p>	
28	Costs	Who will pay for the annual services on appliances / boilers during the trial?		Maintenance and repairs of all hydrogen appliances will be provided free of charge throughout the programme.	
29	Costs	Hydrogen is extremely expensive to produce. What will be the cost per unit to customers compared to current gas and will this expensive cost be passed onto the consumer?		<p>We are entirely committed to ensuring that residents of the Hydrogen Village programme won't pay a penny more for hydrogen than they would for natural gas during the programme.</p> <p>Before customers are asked to make a firm decision as to whether they opt for hydrogen appliances or an alternative, we</p>	

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				<p>will provide more information about what happens at the end of the programme.</p> <p>We expect these firmer decisions to be made by residents in late 2023/early 2024 and this will be supported by the programmes Terms and Conditions.</p> <p>If the area continues to be supplied with hydrogen at the end of the programme, we will review what this means in terms of energy costs and whether subsidies need to remain in place to protect customers using hydrogen.</p> <p>As above, we will be engaging with residents on this and providing more information before you enter into any firm decisions.</p>	
30	Resident ramifications	What if we don't want it and refuse access to property?		<p>At this stage of the programme, our focus is on engaging with the community and completing home surveys where we are able to. We will take on feedback from residents who do not wish to be involved in the programme and present this to Ofgem and the Government.</p> <p>No customer will be forced to</p>	

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				<p>take a hydrogen boiler.</p> <p>If Whitby is selected for the programme, natural gas will no longer be supplied to the area from 2025. We will therefore need to work closely with every resident to ensure they have access to safe and working appliances.</p>	
31	Resident ramifications	Can I opt out or do I end up with no gas?		<p>By 2050, the UK needs to reach net zero. Currently most UK homes and businesses rely on natural gas, a fossil fuel, for heating and cooking, which accounts for about 23% of our overall carbon dioxide emissions. The Government, therefore, want to see how a village can operate completely off natural gas.</p> <p>Under current plans, homes and businesses will be given a choice between replacing their existing natural gas appliances with either hydrogen appliances or using an alternative energy supply such as electricity.</p> <p>The options presented in your Hydrogen Village Handbook were informed by discussions with local residents but remain in the proposal stage – we welcome your feedback on this.</p>	

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32	Legal implications	<p>Will the residents be offered any guarantee that we will not be disadvantaged in any way?</p> <p>Health & Safety?</p> <p>Costs?</p> <p>Not just for the duration of the trial - but also afterwards.. if we remain an outlier to 'traditional' gas</p>		<p>There are various elements to this question, which we will break down as follows.</p> <p>Will residents be disadvantaged?</p> <p>One of our core objectives is that residents involved in the Hydrogen Village programme should not be disadvantaged. Indeed, as a responsible Gas Distribution Network (GDN), we have a commitment to protect our customers.</p> <p>Will residents be disadvantaged in terms of cost?</p> <p>Please see our response to question 29. In addition, all installation, maintenance and repairs of hydrogen appliances during the programme will be made free of charge.</p> <p>Please see Principle 1 – Page 15 of the Hydrogen Village Handbook.</p> <p>All electrical appliances will have a warranty and responsibility of maintenance / repairs will fall to owner and not the programme.</p> <p>Currently, electrical costs will</p>	
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				<p>not be subsidised as part of the programme; however, we are willing to listen to feedback on this, and if customers believe they need a subsidy built into the proposal, that is something we can review.</p> <p>After the project, residents who remain on electrical appliances are unlikely to be able to revert back to natural gas appliances.</p> <p>Will residents be disadvantaged in terms of Health & Safety? Gas Distribution Networks (GDNs) will work to ensure hydrogen can be used at least as safely as natural gas in Hydrogen Villages, liaising with the Health and Safety Executive (HSE).</p> <p>During the programme, our fully qualified engineers at Cadent and British Gas will ensure your hydrogen appliances are working safely, providing free maintenance and repairs throughout.</p> <p>Before customers are asked to make a firm decision as to whether they opt for hydrogen appliances or an alternative in 2023/24, we will provide more</p>	
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				<p>information about what happens at the end of the programme. Indeed, what happens at the end of the programme will be determined by factors such as cost and availability of qualified engineers. We will not leave customers in a position where they do not have access to these services.</p> <p>If the area reverts to natural gas at the end of the programme, we will install natural gas appliances free of charge.</p>	
33	Plans & Strategy	How is the Hydrogen Village different from the Hynet Project?		<p>HyNet and the Hydrogen Village are entirely separate projects running independently.</p> <p>HyNet is led by a consortium of global organisations focused on producing hydrogen to decarbonise the surrounding industry.</p> <p>The Hydrogen Village programme is a Government initiative to convert 2000 homes and business, demonstrating the conversion of the gas pipework to run on hydrogen to evidence the use of low carbon hydrogen for heating and cooking.</p>	
38	Plans & Strategy	When is the go live date?		We expect the decision between Whitby & Redcar to be made in	

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				<p>approximately the second half of 2023.</p> <p>If Whitby is selected as the location for the Hydrogen Village programme, we expect the go live date to be in 2025.</p>	
39	Plans & Strategy	<p>Residents are being expected to bear disruption, risks and uncertainties by being included in this pilot. What will be done to fully mitigate the disruption and remove the risks and uncertainties before, during and after the pilot? If risks remain surely Cadent should inform residents of these as part of the consultation process?</p>		<p>As with any new programme, we understand that residents and businesses will have concerns and questions.</p> <p>As outlined above, we would like to reassure residents that we are working closely with the Health & Safety Executive to ensure hydrogen gas can be delivered and used at least as safely as natural gas in homes and businesses.</p> <p>We will also work with our partners at British Gas, BEIS, Ofgem, Cheshire West and Chester Council, and Citizens Advice Cheshire West – and with you, as residents – to minimise risks and disruption associated with the programme.</p> <p>Ultimately, it is imperative to us as a GDN that we keep our customers safe, warm and independent in their homes – the programme will not be allowed to proceed if we cannot ensure this.</p>	

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				<p>The project team are currently working with our Community Working Group – including KG & TH – to mobilise group sessions.</p>	
41	Plans & Strategy	<p>What level of dis-satisfaction on the part of residents would cause our MP to withdraw his support for the scheme?</p> <p>Cadent tell us that the resident's views at the end of the pilot will be communicated to the Government as part of the assessment process, why then are our views not considered prior to the commencement of the pilot?</p>		<p>Cadent cannot answer the first question on behalf of the MP.</p> <p>In response to the second question, we are gathering and listening to residents' feedback every step of the way, whether that be through our conversations with residents on the doorstep, at the in-home hydrogen assessments, discussion workshops, and in the feedback questionnaires we are asking residents to complete. All of this is taking place prior to the programme commencing.</p> <p>The project team are currently working with our Community Working Group – including KG & TH – to mobilise group sessions to constantly evolve engagement and communication methods.</p>	
42	Plans & Strategy	<p>What guarantees are there beyond the pilot, that the cost of servicing and maintenance will be on par with current costs?</p>		<p>We will provide more information about what happens at the end of the programme next year, before customers are asked to make a firm decision</p>	

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		Effectively, will we have little choice beyond British Gas?		<p>as to whether they opt for hydrogen appliances or an alternative in late 2023/early 2024.</p> <p>Indeed, what happens at the end of the programme will be determined by factors such as cost and availability of qualified engineers. We will not leave customers in a position where they do not have market choice or face excessive costs.</p> <p>Importantly, training competency frameworks have been developed so that training providers can train local tradespeople. We expect to be able to upskill existing heating engineers to work on hydrogen appliances with relative ease, as we do with other existing fuel types today.</p>	
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