

Cadent: Fourth Set of Responses – 09.01.23

Question number	Theme	Question	Local MP Response	Cadent Response	Status <i>(Does Group feel question has been answered)</i>
1	Selection Process	<p>How was Whitby selected for this trial?</p> <p>Was Whitby ‘put forward’ as a bid, by local MP as an option without consulting residents?</p> <p>Has the council given permission, and if so, on what basis?</p>		<p>We have created a dedicated factsheet explaining Why Whitby is being proposed for the Hydrogen Village programme.</p> <p>The programme remains at the consultation stage and feedback from residents and stakeholders, such as the Council and the MP, will help inform a decision by Ofgem and BEIS as to the location of the programme.</p>	
11	Cost	<p>What is the impact if we sell our property during the trial?</p>		<p>Please see the Your Questions Answered factsheet. ‘Will there be any changes to home insurance and house prices?’ is a question on this factsheet.</p>	
13	Cost	<p>Have you checked with mortgage lenders that they would provide mortgages on a house which is on a fuel trial?</p>		<p>Please see the Your Questions Answered factsheet. ‘Will there be any</p>	

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				changes to home insurance and house prices?’ is a question on this factsheet.	
15	Alternative Options	<p>What are the electric alternatives ? Electric radiators: Electric heat pumps: Induction hobs Replacement saucepans if needed to work with induction hobs Will these be provided by Cadent or be at residents’ cost?</p>		<p>Please see the Hydrogen Village Handbook in which the appliances are discussed at length.</p> <p>With regards to induction hobs, we are still at the proposal stage and feedback such as this will be considered for the final proposition.</p>	
16	Costs	<p>What are the cost implications for residents and will Cadent match the unit price for electricity instead?</p>		<p>We have created a dedicated Protecting Customers on Costs factsheet, which specifically references the current proposal for subsidising electricity.</p> <p>We are still at the proposal stage and will consider your feedback before making the final proposition.</p>	
18	Legal implications	<p>Will there be any impact to home insurance policies?</p>		<p>Please see the Your Questions Answered factsheet. ‘Will there be any changes to home</p>	

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				insurance and house prices?’ is a question on this factsheet.	
23	Plans & Strategy	What are the benefits of moving to ‘blue hydrogen’? And why not full green/renewable energy?		Please see the Your Questions Answered factsheet. ‘What type of hydrogen will be used?’ is a question on this factsheet.	
24	Plans & Strategy	What fuel does the production process use to produce the hydrogen?		Please see the Your Questions Answered factsheet. ‘What type of hydrogen will be used?’ is a question on this factsheet.	
40	Plans & Strategy	<p>If the feeling of the majority of residents is that the risks and uncertainty have not been removed can they veto the pilot?</p> <p>If there is no veto will their collective view be communicated to Ofgem as part of the decision making process Whitby or Redcar?</p>		Please see the Your Questions Answered factsheet. ‘Can I opt out of the programme if I’m unsure?’ is a question on this factsheet.	
43	Costs	<p>During and after the trial, when the time comes to replace appliances what choice is there likely to be and can we expect to see hydrogen appliances being more expensive than gas equivalents?</p> <p>Will there be any compensation for higher costs and if so, from who?</p>		During the two-year programme, we will be installing hydrogen appliances at no cost to residents.	

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				<p>We are working with appliance manufacturers alongside Government to ensure there is as large choice of appliances as possible, however due to the maturity of the market there is not likely to be as much choice as there is for natural gas appliances today.</p> <p>With regards to costs of replacing the appliances we have fitted after the programme, once they reach the end of their life, boiler manufacturers have advised that hydrogen boilers are likely to retail at the same price that natural gas boilers do today.</p> <p>Ultimately, a heat policy decision by BEIS and the mandate of hydrogen ready appliances will support manufacturers to work on appliance choice at scale. The Hydrogen Village programme will be key to gathering evidence for this.</p>	
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				<p>Given we believe appliances will retail at the same price as natural gas appliances, we have no plans for compensation for this. It is also still to be determined whether the area will stay on hydrogen or revert to natural gas at the end of the programme – we will provide more information on what happens at the end of the programme before you are asked to make any firm decisions about appliance choice (in late 2023/early 2024).</p>	
45	Plans & Strategy	<p>How has Cadent assessed the likelihood of the pilot being successful and have they made projections of how hydrogen would then be rolled out to adjoining areas, in terms of numbers of properties and areas of expansion?</p>		<p>The success of the programme will be assessed by Government on the ability to provide the necessary evidence to enable final decisions on the role of hydrogen in heating to be made in 2026. This includes a whole range of things from consumer perspectives, to the skills needed and the readiness of the supply chain, and of course the cost. This is a target set by</p>	

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				<p>Government in their Ten Point Plan for a Green Industrial Revolution. The next step in this plan is a target for a Hydrogen Town conversion to hydrogen. The Government department responsible for this project has contacted gas networks recently for us to begin thinking about how we would go about starting to plan what wider roll out by entail. A copy of the Ten Point Plan can be found here:https://www.gov.uk/government/publications/the-ten-point-plan-for-a-green-industrial-revolution</p> <p>The recent Government letter about this can be found here: https://www.gov.uk/government/publications/hydrogen-heating-town-pilot-open-letter-to-gas-distribution-networks</p>	
46	Safety	Why has the only pocket of concentrated terrace housing in Heath Avenue and		No. A range of factors were considered when deciding upon this specific	

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		Dunkirk Lane been excluded. Is it due to safety concerns?		area of Whitby as a potential location for the programme. This included how easy it is to physically isolate this area of the gas network and how this impacts the wider network, the type of buildings and the opportunity to expand to other areas at the end of the project.	
47	Communication	<p>Why have Cadent not promoted public meetings and invited residents?</p> <p>Are Cadent deliberately pursuing “one to one” consultation to stifle debate?</p> <p>It seems that they will attend door to door promotion of the proposal, but not to promote public sessions.</p> <p>When is the next one and how can we see Cadent encouraging/contacting residents to attend? (They clearly have our addresses, and many of our email/telephone details)</p>		<p>The Hydrogen Village team organised a community event in December 2022. There are also public events lined up for January and February 2023.</p> <p>All residents have been notified of the events via a postal invitation, email and also social media.</p>	
47	Misleading information	Why do Cadent only promote the positives to residents, for example apart from one fleeting reference hidden away on their website they inform us that no carbon		Please see the Your Questions Answered factsheet. ‘What type of hydrogen will be used?’ is	

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		dioxide is produced when hydrogen is burned but never mention that it is produced as a by-product of the production of blue hydrogen. Why do they not use the terms blue and green hydrogen?		a question on this factsheet.	
49	Plans & Strategy	<p>Why pursue a pilot based on blue hydrogen in Whitby when the alternative in Redcar would rely on green hydrogen given both would achieve the aim of testing heating homes at scale with hydrogen but one would do so with cleaner hydrogen?</p> <p>Is the Whitby pilot more about developing the production of blue hydrogen at scale?</p>		<p>We are committed to a low carbon Hydrogen Village trial and will use green hydrogen. 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 Natural Gas (LNG), Interconnectors from Europe.</p> <p>Currently, none of the hydrogen options we are exploring are blue.</p>	
50	Incentives	<p>What incentives will residents get?</p> <p>Recently the government have stated that any area that agreed to allow</p>		We have created a dedicated Protecting Customers on Costs factsheet, which specifically references the	

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		<p>fracking will receive a substantial discount in their energy bills , surely if this project goes ahead we should be offered a discount on our bills?</p> <p>Additionally, the Fife pilot is offering people a financial incentive of £1000 to take part and is voluntary.</p> <p>Why should Whitby residents be forced to take part with the only incentive being new appliances (which is a requirement for the proposal to go ahead – so is not an incentive for residents)</p>		<p>incentives that residents will be able to benefit from if Whitby is chosen as the location.</p>	
51	Plans & Strategy	<p>The Whitby Hydrogen Village website intimates that residents will only have a certain time period to secure free replacement appliances.</p> <p>Will this be extended if residents have legitimate concerns that they are waiting to be addressed?</p>		<p>We have published a timeline of our current engagement and decision-making within the factsheet: Engaging with the community</p>	
52	Vulnerable residents	<p>What is the policy for assisting and protecting vulnerable householders?</p> <p>Can Cadent guarantee that they will not harass vulnerable residents before a decision has been made that Whitby is</p>		<p>We have created a dedicated Supporting our Customers factsheet that highlights the support on offer for vulnerable customers.</p>	

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		<p>the chosen location?</p> <p>Why is Cadent door stepping and ringing elderly people to persuade them to allow a gas check?</p> <p>They have done this even when a carer has contacted the company and been assured that they will not do this.</p>			
54	Plans & Strategy	<p>How and why were the area borders defined?</p> <p>Is it a coincidence that there is no social housing or have there been conversations with Housing Associations and they have declined to take part?</p>		<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</p>	

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				<p>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>Indeed, a range of factors were considered when deciding upon Whitby for the location of the programme. This included how easy it is to physically isolate the gas network and how this impacts the wider network, the type of buildings, and the opportunity to expand to other areas at the end of the project.</p>	
56	Plans & Strategy	What scenario planning has been done to anticipate different circumstances and needs of businesses, vulnerable homeowners, private landlords, empty properties, properties in probate, properties with owners in care or sick		<p>We have created a dedicated Supporting our Customers factsheet that highlights the support on offer for vulnerable customers.</p>	

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59	Environment	What effect will the CO ₂ storage under the Mersey have on the ecosystem?		<p>Please see the Your Questions Answered factsheet. 'What type of hydrogen will be used?' is a question on this factsheet.</p> <p>Carbon capture is only required in the production of blue hydrogen and there are currently no plans to use blue hydrogen for the programme.</p>	
60	Environment	What is the expected impact of emissions, such as NO _x from burning hydrogen?		<p>Please see the Your Questions Answered factsheet. The issue of NO_x is addressed in the 'Is Hydrogen Safe?' question.</p>	
62	Plans & Strategy	<p>Are local schools included within this proposal, a</p> <p>Have parents who live outside the Hydrogen village area been consulted?</p> <p>Any increase in NO_x from school boilers will impact on their children's health and if so, are they in favour?</p>		<p>There are four schools that are part of the programme, Christ Church Primary School, Whitby Heath Primary School, Whitby High School and Our Ladies Primary School, all of which have been contacted and are part way through an Industrial and Commercial (I&C) survey.</p> <p>The aim was to have all the I&C surveys completed</p>	

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				<p>before Christmas. However due to resource being pulled back into core operations this will now be early January.</p> <p>Please see the Your Questions Answered factsheet. The issue of NOx is addressed in the 'Is Hydrogen Safe?' question.</p>	
63	Environment / Plans & Strategy	<p>(if the proposal is a success) is the move to blue hydrogen a stepping stone to get to green hydrogen? And if so, how likely is it that there is a move to green hydrogen and by when?</p> <p>If the move to green hydrogen isn't feasible in the very near future, why would residents back this proposal?</p>		<p>Please see the Your Questions Answered factsheet. 'What type of hydrogen will be used?' is a question on this factsheet.</p>	
65	Gas Supply	<p>Will the current gas shortage affect the scheme or will the gas supply to the scheme be prioritised over other people?</p>		<p>We are committed to a low carbon Hydrogen Village programme and will use green hydrogen - this makes hydrogen by splitting water into hydrogen and oxygen. We do not anticipate the current natural gas crisis impacting on the supply of hydrogen for either the</p>	

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				primary supply or the other supplies being evaluated.	
68	Post Trial	<p>Will residents' appliances be replaced back to gas (either their old appliances or new)?</p> <p>Will they have the option to, particularly if they do not like them?</p>		<p>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 natural gas appliances) will be made free of charge.</p> <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, including appliance choice. We expect these firmer decisions to be made in late 2023/early 2024 and this will be supported by Terms and Conditions.</p>	
69	Compensation	<p>Will participants be able to claim compensation from Cadent gas if their house is devalued due to being part of the trial?</p>		<p>Please see the Your Questions Answered factsheet. 'Will there be any changes to home insurance and house</p>	

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		<p>What input has been obtained from independent service providers such as surveyors and estate agents on house value and ease of sale before and during the project?</p> <p>“We do not expect” but the question is what if it does?</p> <p>If there is a decrease in property values due to the scheme, what compensation will be offered?</p>		<p>prices?’ is a question on this factsheet.</p>	
70	Costs	<p>What will happen to the price of bills after the scheme? They are anticipated to rise significantly.</p> <p>Will there be a transition period of rising prices, or will it be immediate?</p>		<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. We expect these firmer decisions to be made in late 2023/early 2024 and this will be supported by 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</p>	

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				<p>costs and whether subsidies need to remain in place to protect customers using hydrogen.</p> <p>We will be engaging with residents on this and providing more information before you enter into any firm decisions.</p>	
71	Costs	<p>Will residents be able to shop around for hydrogen like we currently do for gas?</p> <p>Can assurances be made that there will be a competitive energy market for residents? i.e., will residents be able to choose a provider and not be reliant on a single company that could exploit the lack of competition?</p>		<p>During the programme, we expect customers will have the choice to switch providers throughout the duration of the Hydrogen Village programme in the same way they do now.</p>	
73	Environment	<p>Will the Whitby scheme be environmentally friendly? There is concern that the use of 'Blue Hydrogen', will mean the scheme makes no progress towards being environmentally friendly – what are the</p>		<p>Please see the Your Questions Answered factsheet. 'What type of hydrogen will be used?' is a question on this factsheet.</p>	

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		long-term plans should the scheme be successful?		We have also created the Why is the Programme Important factsheet that explains the programme can help shape the path to net zero.	
77	Plans & Strategy	On what metrics will like-for-like replacements be made? How transparent will these swaps be? Will people have chance to choose in terms of style/design?		Please see the Hydrogen Village Handbook in which appliances are discussed at length.	
80	Costs	Residents have identified that those not willing to switch to hydrogen will have to move to either a heat pump or just electric appliances. Will the cost of these changes also be covered by Cadent?		We have created a dedicated Protecting Customers on Costs factsheet, that confirms the fitting of alternative solutions will be covered by the programme.	
81	Compensation	Will there be any compensation (other than the free equipment and installation) for the disruption that this will doubtless cause residents?		We have created a dedicated Protecting Customers on Costs factsheet, which specifically references the incentives that residents will be able to benefit from if Whitby is chosen as the location.	

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82	Plans & Strategy?	On what legal basis does Cadent have the right to enforce these changes on residents' homes? Are there avenues to object against what is happening?		<p>There will be no obligation for residents to move to hydrogen and those not wishing to take part in the programme will be offered an alternative at no cost to them.</p> <p>Today, Cadent can enter a property if there are concerns for safety when transporting natural gas. Cadent will require similar powers to enter a property if there is a concern for safety when using hydrogen or converting to it. The specific detail of the Energy Security Bill in relation to this can be found by following the link below: https://www.gov.uk/government/publications/energy-security-bill-factsheets/energy-security-bill-factsheet-enabling-the-hydrogen-village-trial</p>	
83	Health & Safety	What is the NOx output of hydrogen		We have created the Keeping you Safe and Warm	

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	<p>Linked to 21 and 60</p>	<p>appliances compared to existing boilers and hobs? Will NOx emissions be monitored? If so, how? If not, why not? What mitigation can there be against any increase in NOx in homes, businesses and schools?</p>		<p>factsheet that addresses the point regarding NOx emissions.</p>	
<p>84</p>	<p>Environment</p>	<p>What long term monitoring will take place on the stored CO2? If it starts to leak, how can that be fixed? Has an environmental assessment been made taking into account the fact that CO2 released underwater is most likely to increase the acidity of the local sea water?</p>		<p>We understand this question refers to the HyNet project and appreciate residents may have questions about this. However, HyNet and the Hydrogen Village are entirely separate projects running independently. HyNet is led by a consortium of global organisations focused on producing hydrogen to decarbonise the surrounding industry. The Hydrogen Village programme is a Government initiative to convert 2000 homes and business, demonstrating the</p>	

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				<p>conversion of the gas pipework to run on hydrogen to evidence the use of low carbon hydrogen for heating and cooking.</p> <p>Information and questions relating to the HyNet project can be registered with them via their website www.hynet.co.uk.</p>	
86	Plans & Strategy / Costs	If residents decide during the trial that they are unhappy with Hydrogen or the appliances provided will they still have the option to switch to electric heat pumps?		If a resident expresses that they are unhappy with their hydrogen appliances during the programme, we will work closely with them to understand why they are unhappy and come up with a proposed solution. We will review such instances on a case-by-case basis.	
88	Environment	<p>Are supporters of this project aware of the Cornell University paper “How green is blue hydrogen” by Robert W. Howarth</p> <p>00000,Mark Z. Jacobson https://onlinelibrary.wiley.com/doi/10.1002/ese3.956) which concludes “the</p>		Please see the Your Questions Answered factsheet. ‘What type of hydrogen will be used?’ is a question on this factsheet.	

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		<p>greenhouse gas footprint of blue hydrogen is more than 20% greater than burning natural gas or coal for heat”</p> <p>What peer-reviewed evidence do they have to refute this?</p> <p>If it cannot be refuted what possible justification is there for producing blue hydrogen for use in Whitby village or anywhere else?</p>			
91	Health & Safety	<p>I have a log burner and one of my concerns is that because hydrogen can cause more leaks and is more volatile would it put us more at risk with having a real flame fire?</p>		<p>We have created the Keeping you Safe and Warm factsheet that explains how hydrogen can be used for residential heating securely.</p>	
93	Plans & Strategy	<p>Full timeline of events of what decisions are need from residents and when, and at what point a notice of intent is collected, and when they become legally bound by a decision</p>		<p>We have published a timeline of our current engagement and decision-making within the factsheet: Engaging with the community</p>	
92	Environment	<p>Need flow of fuel process to understand how 100% green</p>		<p>We are committed to a low carbon Hydrogen Village trial and will use green hydrogen. However, to ensure a resilient supply of hydrogen,</p>	

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				<p>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 Natural Gas (LNG), Interconnectors from Europe.</p>																									
<p>94</p>	<p>Environment</p>	<p>The Hydrogen Village Handbook delivered to all residents states that Hydrogen Boilers are “Typically the cheapest alternative to natural gas boilers during the programme” This leads me to ask four questions of you:</p> <p>What data sources have you used to come to this conclusion?</p> <p>What energy prices have been used to come to this conclusion, Natural Gas Price, Discounted Hydrogen Gas Price, Full Market Hydrogen Gas Price or something else?</p>		<p>A: The comparison of heat pump and gas running costs can be done based on current gas and electricity prices under the cap that was implemented by Ofgem, the energy regulator, in October-22:</p> <table border="1" data-bbox="1489 1021 1825 1125"> <thead> <tr> <th></th> <th>Unit Rate Price of Energy</th> <th>Heat Demand</th> <th>System Efficiency</th> <th>Input Energy</th> <th>Total Cost</th> </tr> </thead> <tbody> <tr> <td>Gas Boiler</td> <td>05.33</td> <td>10,410</td> <td>87%</td> <td>12,000</td> <td>630</td> </tr> <tr> <td>Air Source Heat Pump</td> <td>34.04</td> <td>10,410</td> <td>265%</td> <td>3,867</td> <td>1,311</td> </tr> <tr> <td>Cost Difference</td> <td></td> <td></td> <td></td> <td></td> <td>681</td> </tr> </tbody> </table> <p>Source: Ofgem Based on 12,000kWh/yr and gas boiler efficiency of 87% RECC Calculated Calculated</p> <p>So, we'd expect running a heat pump for a year to cost around £100 more than for a gas boiler.</p> <p>The actual difference does depend on the efficiency of</p>		Unit Rate Price of Energy	Heat Demand	System Efficiency	Input Energy	Total Cost	Gas Boiler	05.33	10,410	87%	12,000	630	Air Source Heat Pump	34.04	10,410	265%	3,867	1,311	Cost Difference					681	
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		<p>What is the cost difference of running these boilers on Hydrogen versus Natural Gas boilers?</p> <p>What happens after the trial?</p> <p>Please don't refer me to Page 17 of the handbook for the answer to question 4 as it does not state whether residents will be made to pay full market hydrogen prices after the trial or not.</p>		<p>the heat pump. A study of more than 2,000 UK installations by Renewable Energy Consumer Code (RECC) found that UK heat pump performance had not improved in the last 10 years of development.</p> <p>The analysis demonstrates that an average ASHP operates with an efficiency (COP) of c.2.65 with one in three having an efficiency of less than 2.5.</p> <p>During the trial, hydrogen will be supplied to consumers using hydrogen boilers at the same price as natural gas. Regarding what happens at the end of the programme, 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 this.</p>	
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				<p>We expect these firmer decisions to be made in late 2023/early 2024 and this will be supported by 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 about what happens at the end of the programme and providing more information before you are asked to enter into any firm decisions.</p>	
95	Environment	<p>You have announced that the Whitby Village trial will now be carried out using Green Hydrogen instead of Blue Hydrogen.</p> <p>Given Cadent responses to numerous questions about why Whitby was</p>		<p>We will not be seeking an alternative location. A whole range of factors were considered when deciding upon Whitby as a potential location for the programme. This included how easy it is</p>	

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		<p>selected one of the key reasons was the proximity of Whitby to the Stanley complex where the Hydrogen was to be produced. Given this change of Hydrogen type and production location does this not invalidate the criteria on which Whitby was originally selected and will, therefore, Cadent be seeking an alternative location in the proximity of the new Hydrogen production facility?</p>		<p>to physically isolate the gas network and how this impacts the wider network, the type of buildings and the opportunity to expand to other areas at the end of the project.</p> <p>The North West more widely is s poised to be one of the primary regions for the development of a decarbonised, hydrogen-based energy market for the UK and we are currently looking at a number of local sources for the supply of hydrogen to the village.</p>	
98	Environment	<p>The HyNet project was setup to implement a Hydrogen network using Hydrogen produced by Essar at their Stanley site, this will be Blue Hydrogen. This press release states that the sam Hynet network will be used fro this Green Hydrogen. The implications of this are that the HyNet network will contain a mix of both Blue and Green Hydrogen.</p>		<p>Please see the Your Questions Answered factsheet. 'What type of hydrogen will be used?' is a question on this factsheet.</p>	

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		<p>Will Whitby Village be supplied with this mixed hydrogen from the HyNet network or will it be supplied using an isolated network to ensure only Green Hydrogen is used during the trial?</p> <p>What guarantees will Cadent provide that during the trial, and beyond, that Whitby Village will only be provided with Green Hydrogen and not Blue or mixed Hydrogen?</p>			
100	Plans & Strategy	<p>What information is being collected, by whom, and who is being sent to</p>		<p>Details of the feedback process can be found in the Engaging with the community factsheet.</p>	
102	Plans & Strategy	<p>After the pilot - if it is not successful what is the process of switching back?</p> <p>Do you get your old appliances back & installed free of charge or will new natural gas products be fitted?</p>		<p>We have created a dedicated Protecting Customers on Costs factsheet that explains what could happen at the end of the programme with regards to cost e.g. of installing natural gas appliances.</p>	

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103	Environment	<p>Cadent quoted 100% carbon capture on TV for blue hydrogen. Do they still stand by that, given it's not been achieved anywhere yet?</p> <p>What is a realistic target?</p> <p>What evidence can be used to back this up?</p>		<p>Please see the Your Questions Answered factsheet. 'What type of hydrogen will be used?' is a question on this factsheet.</p>	
105	Plans & Strategy	<p>Have you got any dates for the transition to Green hydrogen?</p> <p>And the plan to decommission the plant to change gas into hydrogen which has not been built yet?</p>		<p>Please see the Your Questions Answered factsheet. 'What type of hydrogen will be used?' is a question on this factsheet.</p>	
106	Communication	<p>How can the scheme expect the general public/residents to be able to interpret Cadent information, without science or engineering qualifications?</p> <p>More needs to be done to provide guidance to the residents that does not solely come from the company who has</p>		<p>The Hydrogen Village team has conducted a comprehensive engagement programme, the timeline of which can be found on the Engaging with the community factsheet.</p>	

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		a financial interest in the pilot going ahead.			
109	Plans & Strategy	Will the pilot be stopped if the residents don't want it? What will be the % that would mean the pilot would not go ahead?		Please see the Your Questions Answered factsheet. 'Can I opt out of the programme if I'm unsure?' is a question on this factsheet.	
111	Plans & Strategy	What is the protocol around properties that have landlords. What if the tenant doesn't mention it to the house owner/landlord? Or if the landlord does not respond?		At this stage in the programme, we are gathering information to present to BEIS and Ofgem. We will take all practical steps to engage the decision makers for every property before conversion takes place and natural gas is no longer supplied to the property.	
114	Information	Require full transparency together with an independent expert/team so we don't just have answers from cadent/British Gas		The Hydrogen Village team has conducted a comprehensive engagement programme, the engagement timeline as well as details on the feedback process can be	

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				found on the Engaging with the community factsheet.	
113	Plans & Strategy	Where was the consultation with the residents? We were just told & not asked if we wanted to take part in an experiment.		We are currently in the consultation period, a timeline of engagement with residents can be found in Engaging with the community factsheet.	
116	Plans & Strategy	What is the exit strategy?		<p>A really important aspect of our current engagement programme is listening to your views about what should happen at the end of the programme – when the area will either continue to be supplied with hydrogen or revert to using natural gas.</p> <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. We expect these firmer decisions to be</p>	

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				made in late 2023/early 2024 and this will be supported by Terms and Conditions.	
117	Information	On what basis are Cadent/British Gas/Government supporting this so strongly? (based on independent studies, none have found Hydrogen (whatever colour) to be a long term feasible solution		<p>In setting the UK Net Zero target, the UK Government have published a series of strategies that support and enable this transition. This includes the Hydrogen Strategy and the Heat and Buildings Strategy. These strategies outline a focus on electric solutions such as heat pumps that can be deployed now, and also a full review of hydrogen amongst others.</p> <p>Hydrogen is being considered for a number of reasons following input from independent organisations like the Committee on Climate Change. The rationale for exploring hydrogen can be summarised as:</p> <ul style="list-style-type: none"> • The need to provide a solution for every 	

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				<p>building - some being particularly difficult or costly to provide an electric solution;</p> <ul style="list-style-type: none">• The need to provide a resilient energy supply because the full electrification of buildings for heat that relies upon intermittent renewable power is yet to be fully understood and costed;• The need to provide more customer choice;• The exploration of the value of utilising existing gas pipelines to enable net zero to be achieved. <p>To this end, the UK Government is supporting a number of projects to demonstrate technologies</p>	
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				that can be used to reach net zero and the Hydrogen Village programme is an example of this.	
119	Costs	Require written guarantees that during and after the pilot, there will be no losses/negative impacts to residents, covering: - Any loss of house value will be compensated - Loss of sale of house will be compensated - Residents will not be paying higher house insurance - All remedial work will be covered - Residents will never pay higher fuel costs - Guarantees of safety & maintenance		We have created a dedicated Protecting Customers on Costs factsheet, that explains how we intend to achieve one of our fundamental principles that no customer should be financially disadvantaged for taking part in the programme.	
FB122	Cost	Is there any compensation for any loss in property values?		Please see the Your Questions Answered factsheet. 'Will there be any changes to home insurance and house prices?' is a question on this factsheet.	
FB123	Costs	What are the cost impacts to residents, if any?		We have created a dedicated Protecting Customers on Costs factsheet, that explains how we intend to achieve one of our	

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				fundamental principles that no customer will be financially disadvantaged for taking part in the programme.	
FB126	Plans & Strategy	Cadent tell us that hydrogen is hydrogen whether it be blue or green. Why then pursue a pilot based on blue hydrogen in Whitby when the alternative in Redcar would rely on green hydrogen given both would achieve the aim of testing heating homes at scale with hydrogen but one would do so with cleaner hydrogen? Is the Whitby pilot more about developing the production of blue hydrogen at scale?		Please see the Your Questions Answered factsheet. 'What type of hydrogen will be used?' is a question on this factsheet.	
FB127	Incentiven	The Fife pilot is offering people a financial incentive to take part and is voluntary. Why should Whitby residents be forced to take part and with the only incentive" being a new boiler (which has to be provided for the pilot to take place)?		We have created a dedicated Protecting Customers on Costs factsheet, which specifically references the incentives that residents will be able to benefit from if Whitby is chosen as the location.	
FB128	Costs	Will residents pay more for hydrogen than natural gas after the pilot?		We have created a dedicated Protecting Customers on Costs factsheet that goes into detail about what will	

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				happen at the end of the programme.	
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