

Document Title	Stakeholder Engagement and Decision Log
Appendix Reference	Appendix 11
Document Description	A log of the stakeholders we have engaged with to inform key policy decisions across our business plan
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Notes to Ofgem	<ol style="list-style-type: none">1. We have undertaken a comprehensive Enhanced Engagement programme across 22 policy areas.2. We note Ofgem's guidelines for completing the log, including a 5-page limit and a minimum of font size 10.3. Given the extent of our engagement, we have not been able to capture the details in this log for all 22 policy areas.4. As such, we have created two logs; a primary log (named 'core'), covering the policy areas where our enhanced engagement programme most materially impacted decisions in our plan. THIS IS WITHIN THE 5-PAGE LIMIT.5. A second log (named 'additional'), capturing the details of our stakeholder engagement and impact on the plan for the remaining policy areas.6. We discussed this approach with our ISG, who proposed this solution.7. We note that Ofgem may not wish to review the second log, but have included it as optional evidence should they see value in reviewing it.

Document: RIIO-3 Stakeholder Engagement and Decision Log					
RIIO-3 Outcome	Policy Area	Type of Engagement Undertaken	Stakeholder Groups	Summary Feedback	Impact on Business Plan
The primary RIIO-3 outcome to which the engagement relates	The policy area or areas to which the engagement relates	How did you engage with stakeholders? For example, through webinars, roundtables, surveys, through third parties, representative bodies, trade associations etc	Which stakeholder groups were represented through the engagement and provide commentary on the relative balance of stakeholder voices. Were any relevant groups not represented?	What feedback and key messages did you hear from your stakeholders? Where different views were expressed, what were the relative weighting of these?	What impact has the feedback received had on your business plan? Provide specific examples of relevant decisions that have been influenced by the engagement. Where you have made a decision might be seen as counter to the feedback received, explain why this is and set out what measures you have taken to address the feedback received.
		<p>To determine the workload requirements This policy area has been largely stakeholder led, with two most influential stakeholders (HSE, DESNZ) engaged via consultations and regular meetings during the delivery of GD2.</p> <p>The HSE has been undertaking a periodic review of the Iron Mains risk replacement programme (IRMP) policy, which we have been feeding into and engaging on throughout 2023/24.</p> <p>DESNZ undertook a review of the benefits of the IMRP in 2023, which we and other networks fed into.</p> <p>To determine the work profile / deliverability We worked out the workload remaining to complete the HSE programme and engaged with the supply chain to determine how best to deliver it. We also engaged with our supply chain through ongoing operational meetings and forward planning workshops. These sessions involved Cadent's engineering experts, considering a range of safety, technological and other factors.</p> <p>Customer Engagement Given that this is the largest proportion of our cost base and a major contributor to a safe and reliable network, it was included throughout our customer research:</p> <ul style="list-style-type: none"> Regional deliberative workshops with over 90 customers. National quantitative survey with over 5,200 customers. Research to support customer testing relating to the overall value of the bill (Acceptability and Affordability testing with over 8,000 customers). This included both qualitative and quantitative methods (deliberative workshops, interviews (online and face to face) and surveys). 	<p>Stakeholders Including: Trinity, Ferns Surfacing, Flowaime Ltd, Fincher Utilities, PGL Pipelines, R&R Utility Solution, RWB Pipelines, Forefront Utilities, Terrafirma Pipelines, United Living Infrastructure Services, Network Plus, Costain, Radius Systems, Skewb, Go Traffic Management, GMM Utilities.</p> <p>Internal engineering experts</p> <p>Customers</p> <ul style="list-style-type: none"> Customers taking part in the regional workshops were representative of Cadent's regions. A statistically representative sample of customers across Cadent's regions took part in the National Survey. Customers from a range of segments were involved in the acceptability and affordability research. The research included customers in vulnerable situations, future bill payers, customers in fuel poverty, digitally disengaged and expert customers (involved in RIIO-2 research). Customers were statistically representative of the Cadent region. To ensure the sample profile matched the population, quotas were set and the domestic data was appropriately weighted regionally and by total. 	<ul style="list-style-type: none"> The HSE continue to mandate the completion of IMRRP. This requires us to have an approved programme to replace specified iron mains and associated service pipes within 30 metres of property by 2032. The periodic review of the IRMP policy by the HSE has resulted in some 'minded-to' statements for the expectations for the programme going forward, which we have aligned our plan against. The 2023 DESNZ review of the IMRP benefits concluded that there was consistent customer benefits from continuing with the programme, both from a safety and environmental perspective. With regards to workload profile and deliverability, we worked with our supply chain and considered the delivery challenges experienced during RIIO-2 to determine run-rates and profiling for RIIO-3. The expert view has been important both for presenting our scenario modelling and assumptions. The level of detail and assumption validation has been shared with the HSE and engineering experts ensuring the right approach for customers and acting in their best interests. Whilst the IMRRP is mandated, it is also important to continue monitoring the customer perspective. Consistently over the last 3 years, delivering a safe and reliable network has been a priority for customers (both households and businesses alike. For domestic customers 59% and 58% respectively). Customers universally prioritise the maintenance of a safe network and a reliable gas supply through mains pipe replacement. Customers feel a 'reliable gas supply' is a minimum service level Cadent should provide. When testing acceptability of the business plan, having a safe, secure and resilient supply is the most important and acceptable commitment area for customers, with 82% finding it acceptable; and 71% of customers stating that the overall business plan represents value for money. <p>Weighting of decisions</p> <ul style="list-style-type: none"> 90% Stakeholder - predominantly regulatory / policy related 5% Supply chain engagement 5% Internal engineering experts 	<p>Our plan commitment for iron mains replacement is directly aligned to the outcomes of the HSE and DESNZ reviews. That is to continue to replace all Tier 1 iron pipes within 30 metres of a property with new durable plastic pipes c.1,600km per year, workload, similar to RIIO-2, along with all Tier 2a pipes above the designated risk threshold.</p> <p>This will see us complete the programme at the end of the programme in 2032, leaving one year of replacement to complete the programme in RIIO-4. Hence, we will be completing approximately 83% of the remaining workload in RIIO-3. This allows us to meet our legal obligations. Our supply chain fed into our delivery plans.</p> <p>The outcome of the HSE review also directly aligns with our plans to roll out an Advanced Leakage Management Approach (which is supported by our Sustainability Challenge Group (SCG) and customers) and the interventions that will replace larger diameter and steel mains to reduce methane leakage.</p>
Safe, secure and resilient supplies	Iron mains replacement				
Safe, secure and resilient supplies	Emergency service	<p>Stakeholder Engagement</p> <ul style="list-style-type: none"> Review of stakeholder responses to Ofgem's Sector Specific Methodology Consultation (SSMC). Use of existing 'business as usual' data including C-Sat survey and analysis. Output from our 6-monthly Centres for Warmth best practice sessions. Feedback from 100s of expert stakeholders during several panel discussions at VCMA showcase events in 2023 and 2024, considering services beyond the meter and the role of GDNs. Challenge from our Customer Challenge Group (CCG), (Referred to as Independent Stakeholder Group (ISG) by Ofgem), especially in relation to the unique role that GDNs can play in helping to define what additional services GDNs could and should play 'beyond the meter', especially in light of the upcoming energy transition process (for vulnerable customers). <p>Delivery Partner Engagement</p> <ul style="list-style-type: none"> Ongoing engagement with the services deliver partners we deliver the services beyond the meter programme with (e.g. NEA. Groundworks UK, Green Doctors). Depth interviews with engineers. <p>Customer Engagement</p> <ul style="list-style-type: none"> Over 11,000 customers engaged on aspects of this policy area using a variety of qualitative and quantitative research methods including 7 regional deliberative workshops, 210 in-depth interviews (online and face to face), and quantitative surveys. This included broad and targeted research and commitment testing. We completed willingness to pay (WTP) analysis in relation to services beyond the meter. The research used a variety of stimulus, scenarios and modelling, which continuously built upon findings from previous research, refining and stress testing results. Topics covered include quality customer service, gas emergency number and reporting emergencies and emergency response. Longitudinal study with the general public including qualitative and quantitative components including qualitative ethnography, workshops, interviews, quantitative surveys. Topics explored were energy use, sustainability and fuel costs. 	<p>Stakeholders</p> <ul style="list-style-type: none"> Government bodies (HSE) Regulators (Ofgem) National Energy Action NHS Charities Trust GDNs Groundworks UK Cadent Foundation <p>Cadent Engineers</p> <p>Customers</p> <ul style="list-style-type: none"> Customers taking part in the regional deliberative workshops were representative of Cadent's regions. Customers from a range of segments were involved in willingness to pay and the acceptability and affordability quantitative research. Both surveys provided a statistically robust representative sample, with willingness to pay having both household and non-household customers, whilst acceptability included domestic customers and Cadent employees. Both sets of research included customers in vulnerable situations, future bill payers, customers in fuel poverty and digitally disengaged, with acceptability also including impacted customers (experience of an emergency, incident or supply interruption) and expert customers (involved in RIIO-2 research). 	<p>Informing Emergency Standards of service</p> <p>Ofgem have set out in their Sector Specific Methodology Decision (SSMD) document a proposal to maintain the current level of emergency service levels. We have noted the support from a range of stakeholders to Ofgem's SSMC, supporting retaining emergency standards and as such have not engaged directly on this topic. However, we have tested Ofgem's proposal with customers in several ways. We've analysed customer satisfaction and complaints data related to the emergency process and undertaken a range of customer focus groups, especially relating to our response at incidents, noting exceptional feedback. Through our acceptability testing, customers feel this commitment is very important and provides a vital service, with 82% of domestic customers finding the commitments to ensure a safe, secure, resilient supply acceptable and 87% feeling this is important.</p> <p>Informing Services Beyond the Meter Blueprint recommendation</p> <ul style="list-style-type: none"> Feedback from our Centres for Warmth best practice sessions indicate that customers are not servicing appliances due to the fact they just can't afford to. 47% of customers, think energy companies should change appliances for those most vulnerable is society (This was the 2nd highest response for what energy companies should be doing right now). Our WTP data shows that 54% of customers are supportive of improvements in service to replacing faulty gas appliances for customers struggling with financial hardship. There is evidence that customers would be willing to pay for those improvements. National Energy Action: In both their response to Ofgem's SSMC and through our own direct engagement with them, have expressed their support for the role of GDNs to expand the role of services in the home, especially given the uncertainties and additional challenges expected for vulnerable customers as we enter the energy transition process. Cadent engineers see it as important not to leave those in a vulnerable situation exposed with a faulty appliance and no way of navigating how to get someone trust worthy to address it for them. Customer satisfaction with our existing programme is extremely high at 9.8. <p>Weighting of decisions</p> <ul style="list-style-type: none"> 80% Stakeholder 20% Customers 	<p>We will maintain our emergency response standards. We will continue to respond to emergency calls within 30 seconds >90% and attend uncontrolled escape emergencies within 1 hour >97% and controlled escapes within 2 hours >97%.</p> <p>In addition to this, we will create and trial a 'services beyond the meter' blueprint for the role of GDNs to support improving safety in customers' homes and managing the energy transition.</p>
		Safe, secure and resilient supplies			
Infrastructure fit for a low-cost transition to net zero	Environmental Action Plan (EAP)	<p>Stakeholder Engagement</p> <ul style="list-style-type: none"> Meetings with experts to understand priorities, share good practice, including government bodies (e.g. DEFRA), local planning authorities (e.g. GLA), environmental charities (and bodies), Carbon Trust. Surveys, focus groups, meetings and online discussion forums. Best practise sessions with users of similar technology in Germany, Netherlands and Italy. Sia Partners survey of customers Offsets and plastic pipe (500 responses). Meetings with biodiversity experts sharing plans and ideas to co create approach. Participation within multiple working groups including NESO, RESPS, boiler manufacturers, energy supplier, Electricity distribution businesses, National Gas in respect of the energy transition and future role of gas. GDN collaborative research with national stakeholders, carrying out in-depth interviews. <p>Cadent Employee Engagement</p> <p>Customer Engagement</p> <ul style="list-style-type: none"> Over 12,000 customers engaged on this outcome area using a variety of qualitative and quantitative research methods including 7 regional deliberative workshops, 210 in-depth interviews (online and face to face), and quantitative 	<p>Stakeholders</p> <ul style="list-style-type: none"> Expert stakeholders in specific areas including Carbon Trust (emissions targeting and reporting), TBL Services (science based carbon targeting), Sia Partners (nature based solutions and offsets), Biffa (waste management), Cadent's construction partners, including Morrisons and Network Plus (zero-carbon construction), Supply Chain Sustainability School (scope 3 emissions), DEFRA (biodiversity, climate resilience), Environment Agency (various topics), Soil Society (nature and biodiversity). GDNs: to collaborate on a range of topics, such as GDNs' role in the energy transition and timescales / technology to enhance leakage detection and analysis. Joint collaborative research was also undertaken with stakeholders. In 2023 we held our first Supplier Sustainability Conference, which was attended by over 150 of the largest companies in our supply chain, attended by our core construction partners, over 200 innovators and entrepreneurs, GDNs from over 15 different countries and leaders from more advanced sectors in utilising technology (e.g. Google, Amazon). Italgas in particular have been a key partner in supporting our learning of and rolling out of Picarro leakage detection. <p>• Boston Consulting Group have supported us with our modelling to define the</p>	<ul style="list-style-type: none"> Ofgem have proposed a continuation of the EAP methodology and reporting requirements (from RIIO-2 into RIIO-3). All key stakeholders responding to Ofgem's consultation on this have agreed. This sentiment is supported by our customers. We have seen repeatedly in our qualitative research when we present our commitments with respect to the environment that people want to know companies report against their targets, particularly where they are technical in nature. This builds trust and credibility, hence why accreditation is important and publishing results openly as a way to build trust. We have overlaid this requirement with the results of our annual GRESB, Sustainability and Morgan Stanley's sustainability benchmarks; all of which place Cadent's EGS management and reporting processes in the upper quartile (internationally) and we have used areas of best practice noted to ensure we remain here. Our acceptability and affordability quantitative study shows that domestic customers find the infrastructure for Net Zero to be important (77%) and Cadent's commitments acceptable (75%). <p>Weighting of decisions</p> <ul style="list-style-type: none"> 80% Stakeholder insights influencing decisions 10% Customers 10% Cadent Employees 	<p>We will produce an Annual Environmental Report to demonstrate with evidence our delivery of our EAP. In addition to undergoing assurance to maintain category leading performance in GRESB, Sustainability and Morgan Stanley's sustainability benchmark.</p>

		<p>surveys. This included broad and targeted research and commitment testing.</p> <ul style="list-style-type: none"> • We completed willingness to pay (WTP) analysis across two attributes of leakage - waste and carbon emission reductions. • The research used a variety of stimulus, scenarios and modelling, which continuously built upon findings from previous research, refining and stress testing results. Topics covered include general customer attitudes towards net zero and sustainability, waste, climate resilience, energy security, fuel poverty (and customer vulnerability), carbon offsetting, leakage reduction. • Longitudinal study with the general public including qualitative and quantitative components including qualitative ethnography, workshops, interviews, quantitative surveys. Topics explored were energy use, sustainability and fuel costs. <p>Literature Reviews</p> <ul style="list-style-type: none"> • In depth analysis of a wide range of publicly available resources, such as Future Energy Scenarios. 	<p>optimal use of the existing SLM and new DPLA to define our RIIO 3 enhanced leakage reduction proposal.</p> <ul style="list-style-type: none"> • The HSE have been heavily engaged in understanding the impact on our Safety Case in moving away from the SLM, especially moving to a proactive detection process. • On a joint visit to Germany with DESNZ, we were introduced to Thuga gas networks specialist in Germany. In addition to engaging with the Centre for Sustainable Energy and the co chair of the Belfast climate committee. • Political stakeholders - with energy leads of major political parties, local mayors and regional councillors. • Future role of gas - working groups, various funded studies and thought leadership, trials (e.g. hydrogen house and blending). • Biomethane - industry working groups, operational feedback. • We have consistently struggled to engage with organisation who specialise in environmental matters (e.g. Greenpeace, Green Alliance and WWF), with most having strict policies in place restricting their involvement with companies working with fossil fuels. As such, we have used the extensive experience and considerable challenge from our SCG to help bridge this gap. <p>Customers</p> <ul style="list-style-type: none"> • Customers taking part in the regional deliberative workshops were representative of Cadent's regions. Customers from a range of segments were involved in willingness to pay and the acceptability and affordability quantitative research. Both surveys provided a statistically robust representative sample, with willingness to pay having both household and non-household customers, whilst acceptability included domestic customers and staff. Both sets of research included customers in vulnerable situations, future bill payers, customers in fuel poverty and digitally disengaged, with acceptability also including impacted customers (experience of an emergency, incident or supply interruption) and expert customers (involved in RIIO-2 research). <p>Benchmarking</p> <p>Benchmarking through studies with Guidehouse and Sia Partners to understand good practice and set stretching targets.</p> <p>Groups not represented</p> <p>We identified a number of alternative stakeholders who we might have engaged with, such as Sustainability First, who we engaged with in RIIO-2, but felt as though our range of stakeholders was sufficiently broad.</p>	<ul style="list-style-type: none"> • The HSE has reviewed our Safety Case and mandated the shift to measured leakage - moving away from the SLM during RIIO-3. • Our SCG believe that Cadent must demonstrate leadership and ambition in materially reducing its impact on the environment, with a clear focus on leakage reduction, whilst working to demonstrate how the network could be used to transport greener gas such as hydrogen. • They, and our wider CCG accept that the most significant environmental improvement we can make is through targeted leakage and support a plan that delivers enhanced reductions beyond the mains replacement programme. • Public sentiment is positive towards Cadent working to at least meet government targets on methane emissions (73% agree with reducing by 30% by 2030). In our acceptability testing, customers see reducing carbon emissions as a key area of the business to spend on. Our quantitative study shows that domestic customers find the infrastructure for Net Zero to be important (77%) and Cadent's commitments acceptable (75%). • WTP for leakage is evident where customers see value in both reducing wasted methane in the system and saving carbon (addition benefits are seen with safety benefits and reducing the need for reliance on LNG imports). However, customers generally feel that they are doing all that they can reasonably afford to do in order to be environmentally conscious and that there is an expectation that others, including big businesses and the Government, will 'do the big things'. • To balance this potential customer/stakeholder conflict, we have overlaid two additional insight lenses: (i) a comprehensive CBA based on a societal level of benefit from our proposals (using Government Green Book Data) and, (ii) the public outcry from a lack of investment in the water industry (and how this could translate to a similar feeling with respect to methane leakage levels). • The Carbon Trust support our plans to achieve Science Based CO2 reduction targets and have fed into our EAP with proposed actions to improve our carbon reporting. • Sia Partners completed a strategic assessment of our approach to offsets - this included engagement with 27 stakeholders and 500 customers, which showed a consistent sentiment that we must focus on abatement before offsetting. • In addition, our customers are keen to see Cadent invest in technology and continue to innovate to enable environmental improvements. • At our Global Technology Conferences (2023 and 2024) we heard from c.200 innovators and entrepreneurs who we have engaged with to discuss, trial and roll out new technologies across our networks (e.g. BORE). The lessons learned have been applied to our Plan, along with the ability to create a pipeline of future innovations (into the NZUIOLI). • We have used feedback from our engineers and operational colleagues to understand the limitations of the current national infrastructure to support an EV fleet, prioritising our future roll-out accordingly and informing our plans for charging points across our core sites. • 70% of customers agree that decarbonising the fleet supports reaching NetZero. • Key contacts across our supply chain have informed us of limitations in them recording their emissions data, which has led to our commitment to help them to create robust measures, working principally with the Sustainability School. <p>Weighting of decisions</p> <ul style="list-style-type: none"> • 75% Stakeholder insights influencing decisions • 25% Customers 	<ul style="list-style-type: none"> • We have designed our Advanced Leakage Management Approach (ALMA) to include (i) Advanced Leakage Technology, (ii) Digital Platform for Leakage Analytics and (iii) Advanced Leakage Intervention Programme (ALIP) - moving from a largely modelled approach to measuring leakage to a measured approach. • We reviewed a range of options for the ALIP, and will deliver 750km additional mains replacement, reducing leakage by a further 10% over the period (with a payback by 2040). • In total, we will reduce our carbon emissions from leakage by 35% over the period. • We will reduce our business carbon footprint (excl. shrinkage) by 13% over the period. • We will openly report our CO2 reduction progress using science based targets. • Noting the additional challenges for customers in fuel poverty to undertake actions to improve their energy efficiency, we will directly support 200,000 households in fuel poverty with targeted energy efficiency improvements.
Infrastructure fit for a low-cost transition to net zero	Climate and carbon commitment				
Infrastructure fit for a low-cost transition to net zero	Sustainable use of resources			<ul style="list-style-type: none"> • In addition to the more general feedback from customers, which demonstrates a clear expectation that actively seek ways to improve the environment and limits the negative impact from our work, it is very difficult to engage with customers to receive meaningful insight on complex topics such as waste management and biodiversity. As part of our acceptability testing, customers viewed Cadent's commitment of waste reduction a positive overall contribution to the Net Zero aims and it is important for companies to consider. • We have therefore developed our proposals through engagement with and feedback from a range of expert stakeholders. • In relation to 'waste' we engaged across our supply chain to understand examples of good practice that could be applied across Cadent. • We also sought views from Biffa, our principle waste contractor. • Key feedback is that Cadent's current waste management performance benchmarks very well, inside the industry and with others with similar work patterns. • However, opportunities to reduce pipe waste were identified and noted that Cadent's approach to water management could be enhanced. • We were able to test some of our proposals in this area with customers, noting that 58% agreed that plastic pipe and recycling metal should be a focus regardless of cost, 44% net agree). • We also engaged with Cadent colleagues in this area; through the annual Employee Survey are keen to see more focus on single use plastics and a group of volunteers (from the Cadent New Talent cohort) are keen to take a lead on this. <p>Weighting of decisions</p> <ul style="list-style-type: none"> • 80% Stakeholder insights influencing decisions • 10% Customers • 10% Cadent Employees 	<ul style="list-style-type: none"> • We will reduce our proportion of landfill (currently 3%) by 2% year on year during the period. • First use aggregate will be less than 7% for any reinstatement works. • Reduction of over 1000km (50%) of PE Pipe waste. • Eliminating single use plastics (improve from 90% with ambition of 100% by the end of RIIO-3). • We will develop a plan to improve on site water efficiency, use and drive down consumption through behaviour change.
Infrastructure fit for a low-cost transition to net zero	Biodiversity management and natural capital			<ul style="list-style-type: none"> • For biodiversity, we engaged with specialists from the Soil Society, DEFRA, Sia Partners, Guidehouse and the Carbon Trust. • Sia Partners review of our offsetting strategy involved engagement with 27 stakeholders and 500 customers. Their review included a legislative, regulatory and societal lenses and recommended that we focus attention on carbon reduction rather than offsetting, but noted considerable opportunities to deliver community focussed nature based solutions working in partnerships with local land-owners. • Carbon Trust have supported us to understand how we can link the biodiversity work we do into our carbon calculations - ensuring that we prioritise actions on our sites with this view. • We worked with the Soil Society to assess options for joint work, especially seeking ways in which we might improve biodiversity levels on private land that Cadent's assets run through. We explored this with a sample of landowners, but there was not an appetite from any to engage further - we have therefore not proposed this in our Plan. • We work with DEFRA as leaders in biodiversity to plan our surveys and propose the most appropriate courses of action - their surveys to date have been used to inform the costs in our Plan. <p>Weighting of decisions</p> <ul style="list-style-type: none"> • 85% Stakeholder insights influencing decisions • 15% Customers 	<ul style="list-style-type: none"> • We will build on the progress made in RIIO-GD2 to complete external biodiversity recognition at key sites and the implementation of action plans. • We will achieve a biodiversity net gain of 30% across our key 78 sites. • We will demonstrate environmental benefits from planning and delivering construction projects in collaboration with local communities. • We will remove at least 20,000 tCO2e through at least one nature based partnership within our communities.

Infrastructure fit for a low-cost transition to net zero	Reducing environmental impacts from operations			<ul style="list-style-type: none"> We are actively exploring a range of new technologies and techniques, working with innovators and our construction partners, who bring good practice from across multiple sectors. We engaged with colleagues and members of our supply chain to review good practice for reducing carbon emissions through our major capital projects at our Supply Chain Sustainability conference in 2023. We have also engaged with the HSE to feed into a range of technical tests we are completing to demonstrate the structural integrity of certain asset types for which there is a very low tolerance level to date (e.g. items dropped having to be discarded). <p>Weighting of decisions</p> <ul style="list-style-type: none"> 90% Stakeholder insights 10% Cadent Employees 	<ul style="list-style-type: none"> During the RIIO-GD3 period we will shift to more reliable materials and services that can be reused, upgraded and repaired to reduce operational waste levels further. We will complete our first life cycle assessment of a streetworks mains replacement project, taking the outputs from the assessment to analyse the environmental impacts and create an action plan for RIIO-4. We will align our Procurement strategy to ISO 20400. We will expand our scope 3 emissions reporting following the Greenhouse Gas Protocol Scope 3 emissions categorisation.
Infrastructure fit for a low-cost transition to net zero	Net zero transitions in the energy system			<p>Role for the gas networks</p> <ul style="list-style-type: none"> The team supporting the NESO and RESPs will need to ensure that a whole system approach is well planned and communicated. 74% of customers currently can not see a clear vision and strategy for achieving net zero while 65% claim to be worried about the impact of climate change in their area. Collaboration is a vital success factor for both stakeholders and customers. Research with 8 leading European academics in net zero change shows consensus that leadership, communication and clear impact on the individual is vital to success of net zero change. 76% of customers and 82% of businesses agree collaboration is important in meeting net zero. A team working with NESO and RESPs is therefore needed. Our work with power-intensive businesses (e.g. glass manufacturers) has demonstrated that there are currently no alternatives to gas to power their businesses. Take up of heat pumps remains very low, relative to targets and our research demonstrates that even with significant financial incentives, customers are unlikely to invest in a heat pump (or any alternative technology to a gas boiler). Of 13k people surveyed, 3% are planning on changing their heating system in the next 5-7 years (12% are considering it, 66% have no plans). These insights, plus many more have fed Cadent's Future of the Gas Networks publication, which concludes a significant role for the gas networks for decades to come. <p>Energy Transition</p> <ul style="list-style-type: none"> There is no clear UK level strategy, plan or scenario for delivering the energy transition. In addition, there is limited collaboration between electricity and gas companies to jointly plan the transition. Research with stakeholders indicates stakeholders acknowledge there needs to be clear leadership from the government on the path to transition and the role of the gas network. However, some stakeholders want to see the gas network operators work closer with the electricity network operators to take greater leadership on this. There is no discernible trend of customers switching from gas to electric usage, and practices like home insulation do not necessarily result in reduced gas consumption. In the 2021 government census, 74% of households used gas central heating, 9% had electric central heating, 3% relied on oil central heating, and 1% had no central heating. These numbers are similar to the 2011 census proportions. Public sentiment is positive towards modernisation of the gas grid over decommissioning to tackle climate change. 78% of customers support the exploration of opportunities to repurpose gas grid, with only 34% of customers feeling the gas grid should be decommissioned and replaced with electric heating. Stakeholders feel the gas network has a vital role in the UK's transition to Net-Zero. Adapting the network to distribute low carbon alternatives like biomethane and hydrogen is seen as a crucial part of the transition the networks need to do. The most vulnerable in society are less likely to afford new solutions (30% of 3,000 fuel poor customers surveyed said they can't afford to change their heating systems in the next 5-7yrs). <p>Biomethane</p> <ul style="list-style-type: none"> There is significant demand to access the gas network from biomethane producers - over 50 live applications to Cadent at present. Customers see the use of biomethane as a positive step to reduce our environmental impact, with 70% of customers feeling positive about biomethane when its lower environmental impact is highlighted. This indicates this is an effective way to gain public support. Three-quarters of the public support Cadent's plans to expand biomethane sites and this is consistent across all groups of the public. <input type="checkbox"/> Through the biomethane forums we engage on, there is significant demand for new connections and a wide range of challenges that have fed directly into our biomethane roadmap described in our EAP <p>Weighting of decisions</p> <ul style="list-style-type: none"> 75% Stakeholder insights influencing decisions 25% Customers 	<ul style="list-style-type: none"> We will create a team to support engagement with the NESO and RESPs across our regions and to support with local area energy plans and whole system solutions. Cadent will support customers throughout the energy transition (i.e. moving away from reliance on fossil fuels to a cleaner, greener energy). This will include creating enough connections for biomethane producers to provide cleaner, greener gas, for heating around 2 million homes in the future. Our plans explain that whilst not planning for a move to Hydrogen, you are making no decisions in the plan that would preclude a more extensive move to H2 or biomethane in home heating. I.e. keeping options open for how the network is used to support the transition. <p>They include commitments to invest in modelling to evaluate where/how network could be decommissioned through the transition (refer to Digitalisation strategy).</p>
High quality of service from regulated firms	Customer Satisfaction	<p>Stakeholder Engagement</p> <p>Our starting point was to review Ofgem's minded to position in their SSMC.</p> <p>We have also undertaken a range of analysis into how C-Sat scores have changed since their implementation. This has included (ongoing) forensic operational analysis of the main drivers of good and bad C-Sat scores in each customer journey.</p> <p>We are founding members of the Fellowship for Responsible Business and worked with them to arrange a series of workshops to discuss best practice and undertake benchmarking with organisations operating across multiple industries (e.g. banking, retail, infrastructure, services, etc.).</p> <p>Customer Engagement</p> <p>Customers were engaged on quality customer service using a variety of qualitative and quantitative research methods including 7 regional deliberative workshops, 210 in-depth interviews (online and face to face), and quantitative surveys. This included broad and targeted research and commitment testing (this took place during acceptability and affordability testing with over 8,000 customers).</p>	<p>Stakeholders</p> <ul style="list-style-type: none"> Regulators (Ofgem) Fellowship for Responsible Business - workshops with Sainsbury's, Vodafone, Virgin, First Direct, Overbury, Atom Bank, Audi, United Utilities and c.10 other organisations across multiple sectors. GDNs <p>Customers</p> <ul style="list-style-type: none"> Customers taking part in the qualitative research were representative of Cadent's regions. Customers from a range of segments were involved in the acceptability and affordability quantitative research, providing a statistically robust representative sample including domestic customers and staff. The research included customers in vulnerable situations, future bill payers, customers in fuel poverty. 	<ul style="list-style-type: none"> We engaged on this quite extensively to inform our RIIO-GD2 proposals, at the time suggesting a number of additional measures be established (including one for I&C customers). These additional measures were rejected in Ofgem's final determination. Through engagement with Ofgem and other stakeholders in various working groups, it was clear that there was no intent to change these measures. As such we have not engaged with customers directly on the measures, but have continued to engage to understand how we can improve customers' experiences in all 3 customer journeys. Through our RIIO-3 customer engagement, we can see that customers still desire quality customer service and it is highly valued. 87% of customers believe high quality service is important and 4/5 of customers rate our commitment to deliver high quality service as acceptable. <input type="checkbox"/> We did, however, engage with CX leaders across multiple sectors, through our involvement with the Fellowship for Responsible Business (FRB) and designed an approach to measure C-sat for our worst served customers. We have proposed to measure this internally and feedback to Ofgem and other GDNs on the impact at the end of the period, to inform RIIO-GD4 considerations. Analysis of C-Sat data shows that all Cadent's regions have improved from the start of RIIO-1 and continues through RIIO-2. <p>Weighting of decisions</p> <ul style="list-style-type: none"> 90% Stakeholder insight <input type="checkbox"/> 10% Customers <input type="checkbox"/> 	<p>We support Ofgem's proposal to maintain the C-sat measures applied in RIIO-GD2 in the three existing customer journeys.</p> <p>Whilst we have worked with CX leads in other sectors to explore alternative (better) measures to C-Sat, we have not proposed to add an additional measure for 'worst served customers' in this period, but will review the impact of measuring this and propose it in RIIO-GD4 as we believe there is merit, especially as the number of gas connections reduces and the current measures reach their performance peaks.</p> <p>We will work with other GDNs to develop a measure for disconnections in line with guidelines from Ofgem.</p> <p>Our engagement (especially through BAU) provides continual insight to support how we deliver improved C-sat and this continues to feed operational decision making, allowing us to be confident in achieving the targets being set</p>

<p>High quality of service from regulated firms</p>	<p>Customer Vulnerability Strategy</p>	<p>Stakeholder Engagement</p> <ul style="list-style-type: none"> Strategic Deliver Partners - Informing our strategy and plan has been largely stakeholder led as we continue to work with our 80 strategic delivery partners to understand the challenges our customers face, define the scope of support Cadent can offer, design, test, implement and ultimately deliver initiatives to support customers in vulnerable situations. This is an ongoing and iterative process that has been in place for c.5 years Operational Partners - We meet at least monthly with our strategic delivery partners, reviewing existing initiatives (best practice to share and areas for improvements) and assessing future needs / opportunities Our 350 Centres for Warmth leads meet on a 6-monthly basis for best practice sharing sessions – these generate a range of insights that enable continual improvement, but also highlight potential gaps not filled by the Centres (or other routes) to feed future planning considerations The Annual VCMA Showcase Event is attended by up to 300 stakeholders (mostly experts working to support specific vulnerability needs) – this allows us to share good practice and challenges across all GDNs Targeted Round Tables - We have held a number of focussed round-table discussions with stakeholders with, for example to co-create the evolution of our Services Beyond the Meter programme, following our Energy Diaries customer research project Vulnerability Conference - In October 2024 we held our National Vulnerability Conference, attended by 170 delegates across the private, public and charity sector, along with a political and regulatory lens. This focussed on understanding the true depth of the cost-of-living crisis, hear of success stories to learn from and consider vulnerability challenges in the future Cross Industry events and round tables – such as the OFWAT / OFGEM vulnerability summit to align programmes with regulatory priorities GDN Working Group – to share good practice and create a joint vulnerability strategy focussing on where collaborative projects add greatest overall value Political Engagement – We have hosted c.20 MP / Regional Mayor visits across our vulnerability initiatives, engaging to understand local issues that we can support with <p>Cadent Employee Engagement</p> <ul style="list-style-type: none"> We encourage front line colleagues to feed ideas and suggestions into our Customer Vulnerability team. Their day-to-day experience of engaging with customers is invaluable and has contributed to the design of our Services Beyond the Meter programme and DAWS project <p>Customer Engagement</p> <ul style="list-style-type: none"> For our RIIO-2 Plan we engaged extensively to test customer priorities over a range of initiatives. Whilst useful, it was also limited, as few understand the complex nature of customer vulnerability (hence the focus on stakeholder engagement this time around). However, for our RIIO-3 plan we have used a range of customer research techniques (including Willingness to Pay analysis and deliberative workshops) to test the proposals we have developed with stakeholders. Longitudinal study with the general public including qualitative and quantitative components including qualitative ethnography, workshops, interviews, quantitative surveys. Topics explored were energy use, sustainability and fuel costs. 	<p>Stakeholders</p> <ul style="list-style-type: none"> Over 80 Strategic Delivery Partners, including AgeUK, Citizens Advice (national and local), National Energy Action, Groundworks UK, RNIB, RAD, Scope, Alzheimer's Society and YMCA Over 20 partnering organisations, including NHS Trusts, Fire and Rescue Services and Yes Energy Carbon Monoxide Partnership Ecosystem (COPE) – which we established in 2023 to enable a UK-wide coordinated approach to mitigating the risks of CO poisoning, sharing data, best practice and resources (over 100 separate organisations operating in this space) Research / PR and marketing organisations to inform how we engage with awareness campaigns to have the greatest impact Business Leaders – Usually customer vulnerability leads working in different sectors, including banking, water, construction, retail and technology Industry working groups – e.g. the Customer Safeguarding Working Group chaired by Cadent Political stakeholders - from all main parties and increasingly with Government ministers and local Mayors to both inform our strategies and their policy decisions Other utilities - both to inform plans, but also to coordinate how we operate to improve experiences for customers in vulnerable situations British Standards Institution (BSI) - auditing our approach to accessibility and supporting customers in vulnerable situations to achieve the industry standard Cadent's CCG and SCG <p>Cadent employees</p> <ul style="list-style-type: none"> Those engaging with customers in the front line <p>Customers</p> <ul style="list-style-type: none"> Customers from a range of segments were involved in willingness to pay and the acceptability and affordability quantitative research. Both surveys provided a statistically robust representative sample, with willingness to pay having both household and non-household customers, whilst acceptability included domestic customers and staff. Both sets of research included customers in vulnerable situations, future bill payers, customers in fuel poverty and digitally disengaged, with acceptability also including impacted customers (experience of an emergency, incident or supply interruption) and expert customers (involved in RIIO-2 research). 	<p>Understanding Needs – now and future</p> <ul style="list-style-type: none"> The cost-of-living crisis is very much still amongst us and likely to deepen (e.g. Winter Fuel Allowance removal) in foreseeable future. Over 30% of homes in the UK still do not have a working CO alarm. 20% of those eligible for the PSR are not registered, due to a lack of awareness along with customers not self-identifying as vulnerable. Emerging is the need to see companies replace appliances not just provide advice. 47% of customers, think energy companies should change appliances for those most vulnerable in society. There is a growing proportion of younger people in finding themselves in vulnerable situations, especially in relation to financial vulnerability. <p>Informing the Priorities in our Vulnerability Strategy</p> <ul style="list-style-type: none"> Expert stakeholders continue to support the four priority areas of our Vulnerability Strategy, noting the strategic link with Cadent's core operation and both the depth and breadth of the challenges faced by customers in vulnerable situations (in relation to energy). These are explained in detail in our Customer Vulnerability Strategy. There is a clear stakeholder consensus to explore how we can deliver additional services beyond the meter (in homes), especially focussed on energy efficiency improvements. They explain that Cadent needs to reflect on the energy efficiency / heating controls and systems of vulnerable people who will heat their homes of gas for decades. They see this a critical role for GDNs, noting that no other organisation has this key remit. Centres for Warmth are seen as a cornerstone of our strategy, helping to create local, relevant and trusted connections between support and those who need it the most. Regional charities in particular note the need for initiatives to be highly targeted and designed around the specific needs of local communities and opportunities to expand their remit to focus on interrelated issues such as health, education and wellbeing. There is a growing link between fuel poverty and health issues. There is a keenness from many expert stakeholders, including NHS Charities Trusts to extend the DAWS initiative beyond Birmingham and West Midlands. <p>Informing our funding proposals</p> <ul style="list-style-type: none"> Most (39/40) of the expert stakeholders responding to Ofgem's SSMC supported a continuation or increase in regulatory funding for GDNs to support customers in vulnerable situations, noting the success of VCMA projects to date and no signs of customer needs reducing. Stakeholders receiving funding through the VCMA see it as essential; unlike other funding it is 'flexible' in its application, long term (not annual as most other funding is), significant (enabling tangible difference). Many see additional value (beyond the funding alone) in the partnership working with Cadent – a business with core skills in project management, connections, stakeholder engagement, energy efficiency and engineering solutions and excellent access to customers in vulnerable situations. They see this as key to why Cadent's initiatives are so successful and hence us proposing no material reduction in funding. There is a strong consensus amongst them that initiatives currently being funded would have to be wound-down, should the VCMA funding be removed. For example, more than half of Citizens Advice's income support interventions in the NW would stop without this funding. <p>Customer Testing of Proposals</p> <ul style="list-style-type: none"> 8% of people believe energy companies have an obligation to support the vulnerable in society. Only 50% understand what support is out there and want to know more (which has fed into our continued awareness campaigns and how we work within communities, often through well-established trusted sources to share information and create connections). Through WTP most customers selected improvements across the four core areas (PSR registration, CO awareness, tackling fuel poverty and services beyond the meter) of our customer vulnerability strategy (with an increased bill contribution) with less than 20% opting for a reduced service (at a lower cost). More than half of our customers are concerned about their energy bills and see utilities amongst those that should be doing more to support customers struggling financially. <p>CCG</p> <ul style="list-style-type: none"> The Group have provided feedback on all aspects of our Customer Vulnerability Strategy and, in particular on the tone and clarity within it. Their feedback is consistent with many of the points above, but in addition they have challenged us to: <ol style="list-style-type: none"> Focus on how we collaborate with the other GDNs to ensure that projects we are leading on can be replicated nationally Include more direct measures of success for projects such as money saved for customers – ensuring we realise the limitation of SROI measures alone <p>Weighting of decisions</p> <ul style="list-style-type: none"> 75% Stakeholder insight 20% Customers 5% Cadent Employees 	<ul style="list-style-type: none"> Our Customer Vulnerability Strategy continues to focus on the same four priority areas as we have in RIIO-2. We have taken lessons learned from the 250 projects delivered to date to prioritise the initiatives that will roll into the next period (based on an understanding of need, impact, strategic fit and other factors described in our CV Strategy). We have proposed extensions to several key initiatives, including Centres for Warmth, DAWS (partnering with NHS Charity Trusts), where we and stakeholders have noted the most value / impact being generated. Stakeholder feedback is put under pressure of analysis against strategic aims as well, noting that there may be an inherent bias from those already receiving funding. We have balanced the feedback from stakeholders and customers that suggest maintaining or increasing funding in this area with Ofgem's SSMD which leans towards a reduction (noting overall impact on customers' bills). We have developed a strategy that will deliver greater impact (reach and breadth) but require less regulatory funding. Nevertheless, we have stressed the importance of maintaining the operation of the VCMA in a similar manner – allowing continued flexibility, strategic planning and certainty. We have placed greater focus on energy efficiency measures and linked these into initiatives that sit in our Environmental Action Plan and Quality Experience chapter, which will also see us create an industry wide 'blueprint' for the evolution of Services Beyond the Meter, working with a range of stakeholders and considering future requirements resulting from an energy transition process. We have agreed with other GDNs which initiatives we collectively deliver that could be funded through base allowances, rather than the VCMA and created a Joint Vulnerability Strategy that describes this. We have added several direct customer outcome measures within our commitments, in addition to SROI.
<p>High quality of service from regulated firms</p>	<p>Collaborative streetworks</p>	<p>Stakeholder Engagement</p> <ul style="list-style-type: none"> Stakeholder webinar, facilitated by Cadent, led by the Greater London Authority (GLA) as the unbiased administrator. Meetings with the Local Authorities <p>Customer Engagement</p> <ul style="list-style-type: none"> Over 16,000 customers engaged using a variety of qualitative and quantitative research methods including 13 deliberative workshops, in-depth interviews (online and face to face), surveys and workshops. The research included broad and targeted research and commitment testing (this took place during acceptability and affordability testing with over 8,000 customers). 	<p>Stakeholders</p> <ul style="list-style-type: none"> 73 Local Authorities (including the GLA) Regional Mayors GDNs in working groups A range of other utilities including Thames Water and UKPN through the RIIO-2 programme (of collaborative streetworks) <p>Customers</p> <ul style="list-style-type: none"> A statistically representative sample of customers across Cadent's regions took part in the National Survey. Customers taking part in the qualitative research were representative of Cadent's regions. Customers from a range of segments were involved in the acceptability and affordability quantitative research, providing a statistically robust representative sample including domestic customers and staff. The research included customers in vulnerable situations, future bill payers, customers in fuel poverty. <p>Groups not represented</p> <p>We considered additional engagement with groups such as Citizens Advice (who fed into RIIO-2 plans), bus passenger user groups (suggestion from our CCG) and some other utilities (e.g. Virgin Media) but concluded that we had sufficient input from sources we did engage with</p>	<ul style="list-style-type: none"> Disruption was a key focus for customers when we completed the enhanced engagement programme for RIIO-GD2. Disruption remains a key focus area as reinstatements is a major driver to reducing the C-Sat scores over all 5 regions. We know this aligns to road disruption from reading 4k verbatim comments and analysing the views of customers that give us a score of 1 in C-Sat. 69% of domestic customers support the expansion of collaborative streetworks, with the greatest support being outside of London. 62% of people said they had experienced streetworks disruption in the last 6 months so the topic feel relevant and emotive. Businesses in particular want notice and feel they can lose trade if customers can not access their premises easily. 4/5 feel collaboration across sectors makes sense and 73% think the current scheme is value for money and 69% are in favour of expansion (both of the latter measures were observed when giving price impacts). This was highlighted through a series of detailed customer research programmes when we were forming our proposals for the UK's first Hydrogen Village - customers' second main concern was disruption, by which they meant gas supply interruptions, physical impacts to their homes and the amount of road closures across their village. We have overlaid this key customer priority with lessons learned from working with multiple utilities, councils and town planners in our London Network through the existing collaborative streetworks incentive. We have seen multiple examples of reduced time in the road, alongside a range of other customer and environmental impacts. The GLA and several of the local councils have provided outstanding testimonies relating to the schemes we've run. We have engaged with Mayors and Councils in major cities across our networks and there is a real appetite for it to be extended into their regions. We have received signed expressions of interest from a number of stakeholders including Walsall, Greater Manchester Combined Authority and Cheshire West & Chester; along with survey responses supporting expansion from Essex County Council, Nottingham City Council (suggesting the East Midlands Combined Authority) and Shropshire Council. <p>Weighting of decisions</p> <ul style="list-style-type: none"> 60% Stakeholder insight 40% Customer insight 	<p>We will continue to advocate the extension of the collaborative streetworks incentive, and it's associated benefits, to other regions where a suitable organisation has expressed a willingness to take on the role of Central Coordinator during RIIO-3.</p>

<p>System efficiency and long-term value for money</p>	<p>Digitalisation</p>	<p>Stakeholder Engagement Workshops, meetings, forums with experts, conferences/summits, data sharing requests, open data portal engagement, supplier RFI (request for information).</p> <p>Customer Engagement Qualitative insight from over 90 customers via 7 deliberative workshops across the Cadent region. Topics covered include quality customer service.</p>	<p>Stakeholders</p> <ul style="list-style-type: none"> Sia Partner horizon scanning & comparison across GDNs from Gas Data and Digitalisation collaboration group. Digital twin considerations: Microsoft, AWS, SAP, ESRI, Databricks, Informatica Stakeholder engagement undertaken previously Ofgem working groups NCSC/Cyber security team at DESNZ Gartner ENA Data and Digitalisation steering group National Gas NESO Geospatial commission 3rd party organisations, LEAP and supply chain Internal stakeholders CCG <p>Customers</p> <p>Customers taking part in the regional deliberative workshops were representative of Cadent's regions. Customers from a range of segments were involved in the research including customers in vulnerable situations, future bill payers and customers in fuel poverty.</p>	<p>Our insights have informed us that:</p> <ul style="list-style-type: none"> Strategies focusing (where possible on) swift digital transformation boosts operational efficiency, cutting costs through improved decision-making, streamlined automation, identification of inefficiencies, safety enhancements, and environmental benefits by optimising resources and reducing waste. □ Data Best Practice should be becoming part of business-as-usual operations, but still expect to see significant spend to achieve compliance with Data Best Practice. We have engaged with Ofgem, DESZ and NCSC, other GDNs and National Gas, ENA DDSG, has helped us on our DBP journey through targeted collaboration, evolving thinking and adoption of best practice. Ofgem expect a major step during this price control period will be the need for improved internal data architectures to integrate with the planned development of a data sharing infrastructure. We have engaged with NESO (use cases and collaboration regarding DSI), 3rd party organisations who provide our strategic data platforms and solutions, Local Authorities and our supply chain who regularly use our Data Assets which has helped to understand the scale and scope of the investments required in RIIO-3. Future Energy explorer: We have engaged with other utilities, and SSEN, SGN, ENW and UKPN are wanting to incorporate the logic into their systems, asking for partnerships in different SIF and NIA projects to support. We are engaging with NESO and RESP Nov 2024. Customers are happy with the current approach to calling in a gas emergency via a phone call because customers are guaranteed an instant response and feedback Customers feel there could be an alternative option that runs alongside phone for example: video call, wechat with a person, an app which captures the customer's location (Regional Focus Group 2023). <p>Weighting of decisions</p> <ul style="list-style-type: none"> 80% Stakeholder insight 20% Customer insight 	<ul style="list-style-type: none"> Cadent will improve communication to customers including new digital channels and 24/7 access to the customer service centre. The digitalisation strategy underpins large elements of our business plan - e.g. reliance on data to target customers in vulnerable situations with the right interventions, and many of the customer interfaces to support ever increasing service levels. These are described in detail in the Digitalisation Strategy and signposted throughout the Plan The focus will be on 9 digital projects that create a digital progression including a data model for the gas network, automation, remote planning, improved interfaces and connections to enable data sharing in order to meet Ofgem, NESO, RESP and other stakeholder needs (see efficiency chapter 6). Overall modularity for a digital twin to create a step change for the future of energy and energy system design and optimisation. An important expression of the overall digital ambition is a user centric scenario planning tool "Future Energy Explorer" this will enable flexible use case development dependent on stakeholder needs such as LAEP planning, biomethane feasibility and will support our work as NESO is established bringing "gas" capability into full system planning. Insource digital skills to avoid unnecessary external expenditure, and inclusion of 59 new resources to support regional planning and engagement with the RESP in RIIO-3 (Workforce and supply chain appendix 17). Improvement in our Data Best Practice compliance as evidenced in our efficiency chapter 6. Collaboration with GDNs on common standards for data sharing, interoperability of gas data, etc has increased confidence in the figures we put forward in business plan due to collaboration with GDNs on common standards for data sharing, interoperability of gas data, etc. Data and digitalisation are underpinned by our cyber physical infrastructure/systems planning. Our data requirements (growing) require additional analysis and storage capabilities, requiring the CPI to support it.
<p>System efficiency and long-term value for money</p>	<p>Innovation</p>	<p>Stakeholder Engagement</p> <ul style="list-style-type: none"> Webinars, public forums, surveys and online meetings. Face to face depth interviews and phone interviews. Project reports from completed projects. Industry events such as Innovation Zero and Utility Week. Longitudinal study with the general public including qualitative and quantitative components including qualitative ethnography, workshops, interviews, quantitative surveys. Topics explored were energy use, sustainability and fuel costs. <p>Customer Engagement</p> <ul style="list-style-type: none"> Qualitative insight from over 90 customers via 7 deliberative workshops across the Cadent region. Topics covered include quality customer service. Online workshops with our GD2 expert panel. Willingness to pay research undertaken. Broad and targeted research and commitment testing (this took place during acceptability and affordability testing with over 8,000 customers). 	<p>Stakeholders</p> <ul style="list-style-type: none"> ENA ESO Power Grid Google & Amazon (benchmarking innovation culture) I&C companies and businesses Stakeholders in the Hydrogen Village GDN Collaboration GDN joint research with stakeholders <p>Customers</p> <ul style="list-style-type: none"> Customers taking part in the regional deliberative workshops were representative of Cadent's regions. Customers from a range of segments were involved in the research including customers in vulnerable situations, future bill payers and customers in fuel poverty. Customers from a range of segments were involved in willingness to pay and the acceptability and affordability quantitative research. Both surveys provided a statistically robust representative sample, with willingness to pay having both household and non-household customers, whilst acceptability included domestic customers and staff. Both sets of research included customers in vulnerable situations, future bill payers, customers in fuel poverty and digitally disengaged, with acceptability also including impacted customers (experience of an emergency, incident or supply interruption) and expert customers (involved in RIIO-2 research). 	<ul style="list-style-type: none"> Expert customers: We spoke to our customer forum, who are the most informed about the gas networks, regarding innovation funding and they were clear that Cadent should have a fund for innovation but are undecided on if Cadent should have more freedom to use the funding. The majority still in favour of regulated funding. ENA - Energy Innovation Summit 2024 – Energy companies playing back work taken forward from the Basecamp. Focus on the energy system transition, supporting customers in vulnerable situations and how gas and electric networks can work together. <p>There are 5 key areas from our engagement with stakeholders and customers that drive a need for continuing innovation:</p> <ul style="list-style-type: none"> Emergency Service priority: Regional stakeholder workshops indicate that customers prioritise 'good service' as "important", this is further upgraded to "critically important" in emergency situations. When we asked the general population, 75% of customers agree that energy companies have a particular responsibility for protecting the most vulnerable in our society – Think insight & Strategy 2023. Climate resilience: We have committed to ensure we have more detailed contingency plans for climate change resilience as people start to understand the interplay between gas and electricity in providing heat reliably. Customers can recall loss of gas due to extreme weather with events like "beast from the east" and although 79% understand their boilers need electricity to provide heating, fewer understand that 30% of stored gas is used to generate electricity (40% in discussions with business customers) and that the entire energy system is balanced across the fuel types to meet demand Disconnections: If disconnections are going to increase across the sector, innovation is required. We see that 51% of customers do not expect not to pay for this service. When shown various amounts 51% chose £0 with the most common amount chosen being £250 for 24% of customers (choices increased in increments to several thousands). Generally the topic is not well understood by consumer, so few know what to expect, therefore considerable investment will be required to educate consumers on both the need and what to expect. Technology advancement: When we asked the general population, 35% expect energy companies to fund research in new technology and low carbon heating (4th top answer when asked to pick top 3 actions of energy companies). Energy System Transition: Detailed discussions with 35 I&C businesses shows a solution to decarbonise heating with Hydrogen is crucial & 18 stakeholder groups agree that hydrogen is part of the net zero strategy for the UK. GDNs – Collaboration through Gas Industry Governance Groups – Shared thinking on new net zero pathways for users. Energy Networks Association (ENA) - Basecamp shared problem statements – decarbonising, forecasting, maximising existing infrastructure, net zero impacts, customer journey to net zero. <p>Weighting of decisions</p> <ul style="list-style-type: none"> 60% Stakeholder insight 40% Customer insight 	<ul style="list-style-type: none"> We have proposed a Network Innovation Allowance of £21.45m. We have reduced the fund by one third in comparison to current levels, reflecting the need to be mindful of charges to customer bills in a cost of living crisis. The 5 key areas from our engagement that drive a need for continuing innovation and have been included in the proposed NIA fund: emergency service priority, climate resilience, disconnections during transition, customer expectations of technology advancement, and pivotal research for the Energy System Transition. £7.7m is set aside to explore innovative methods to support identification of and conversion of assets, and we will consider the topic of disconnections such as the likely pattern of disconnections in order to have readiness planning. For NIA, we will leverage industry forum groups, events, and cross-network meetings as platforms to discuss and develop innovative ideas. Before beginning the project journey, we will share our problems with other networks to provide and opportunity to collaborate. We will continue with the current process for the Strategy Innovation Fund (SIF) as this is both collaborative and controlled, while providing important funding to enable innovation particularly for cross sector collaboration.

Document: RIIO-3 Stakeholder Engagement and Decision Log

RIIO-3 Outcome	Policy Area	Type of Engagement Undertaken	Stakeholder Groups	Summary Feedback	Impact on Business Plan
The primary RIIO-3 outcome to which the engagement relates	The policy area or areas to which the engagement relates	How did you engage with stakeholders? For example, through webinars, roundtables, surveys, through third parties, representative bodies, trade associations etc	Which stakeholder groups were represented through the engagement and provide commentary on the relative balance of stakeholder voices. Were any relevant groups not represented?	What feedback and key messages did you hear from your stakeholders? Where different views were expressed, what were the relative weighting of these?	What impact has the feedback received had on your business plan? Provide specific examples of relevant decisions that have been influenced by the engagement. Where you have made a decision might be seen as counter to the feedback received, explain why this is and set out what measures you have taken to address the feedback received.
Safe, secure and resilient supplies	Asset Health (NARM)	<p>Legislative Requirements and Methodologies There are numerous legislative requirements (e.g. Pipeline Safety Regulations and the Gas Safety and Management Regulations) - these underpin many of activities in our plan.</p> <p>Additionally, there is an industry defined methodology for measuring the remaining risk on the network, called the Network Asset Risk Metric Methodology (NARM). This monetises risk and enables us to assess interventions in terms of their impact on risk and criticality (to enduring supply).</p> <p>As such, workload is driven by a combination of legislative workload requirements and cost benefit analysis.</p> <p>Existing Industry Workstreams and Workshops</p> <ul style="list-style-type: none"> Stakeholders were engaged through established ways of working including cross-sector workshops and industry workstreams. GDN collaborative research with national stakeholders, carrying out in-depth interviews. <p>Customer Engagement We fed customer insight (willingness to pay) into the cost-benefit algorithm and we also considered deliverability to deliver the optimal programme. These are all covered in the Investment Decision Papers and the NARM workbook.</p> <p>As with mains replacement, this represents a significant element of our capital expenditure and therefore built this topic into our customer engagement programme. Over a three year period, over 19,000 customers were engaged on different aspects of this topic, using a variety of qualitative and quantitative research methods including more than 25 deliberative workshops, 450 in-depth interviews (online and face to face), 4 focus groups and 4 surveys. This included broad and targeted research (2,400), national survey (5,200), willingness to pay (2,900) and commitment testing (this took place during acceptability and affordability testing with over 8,000 customers).</p>	<p>Legislation and Data</p> <ul style="list-style-type: none"> The outcome was mainly determined though legislative requirements and asset condition based data. <p>Stakeholders</p> <ul style="list-style-type: none"> We engaged with Ofgem through their cross-sector workshops on the engineering justification papers, cost benefit analysis models and NARM methodology development. To determine deliverability we engaged with our supply chain and internal engineering team through monthly operational review meetings and forward planning workshops (e.g. consideration of Electronic and Instrumentation resource availability which is considered in our Workforce and Supply Chain Resilience strategy) Shippers were engaged through the Uniform Network Code Distribution Workstream. Local Authorities with a focus on those where greater workload is planned for RIIO-3. GDN joint research with stakeholders <p>Customers Customers from a range of segments were involved in the acceptability and affordability research. The research included customers in vulnerable situations, future bill payers, customers in fuel poverty, digitally disengaged and expert customers (involved in RIIO-2 research). Customers were statistically representative of the Cadent region. To ensure the sample profile matched the population, quotas were set and the domestic data was appropriately weighted regionally and by total.</p>	<p>The expectation from the regulators (HSE and Ofgem) is to maintain underlying risks levels at a similar level to that in RIIO-2, unless there is a specific need to deviate (e.g. their updated requirements on legislative compliance).</p> <p>Ofgem have specified a guideline of gas distribution investments (where not mandatory) having a cost benefit payback within 16-years and the NARM methodology continues to be developed through the cross sector industry workgroups (e.g. Ofgem's November consultation on the definition of clearly identified over-delivery).</p> <p>We have also engaged with shippers to discuss their requirements around fiscal metering at our above ground installations. For example any interactions with the measurement of gas flows and unidentified gas and shrinkage. They have been keen to ensure that we have accurate metering at our AGIs and hence avoid consequential implications on gas market settlements that have arisen from historic metering errors.</p> <p>For deliverability, we've engaged with local authorities and taken experience from RIIO-2 to assess what is achievable in RIIO-3. We also used output from operational meetings and planning sessions with our internal engineering experts and supply chain partners, which has fed directly into each of the Engineering Justification Papers.</p> <p>Whilst the outputs of customer research have not fed the decisions of the plan (which have been stakeholder led), we tested what is important to customers within the context of the distribution of gas to homes and businesses. Delivering a safe and reliable network is a priority (59% of customers agree) and customers universally prioritise the maintenance of a safe network. Customers feel a 'reliable gas supply' is a minimum service level Cadent should provide. Through the collaborative GDN research with national stakeholders, insight shows that ensuring the resilience of the gas network is also seen as the primary role of the network operators for most stakeholders; and seen as a core service which must be delivered.</p> <p>We tested acceptability of our commitments and overall plan. Having a safe, secure and resilient supply is the most important and acceptable commitment area for customers, with 82% finding it acceptable; and 71% of customers stating that the overall business plan represents value for money.</p> <p>Weighting of decisions</p> <ul style="list-style-type: none"> 90% Stakeholder - predominantly regulatory / policy related 5% Supply chain engagement 5% Internal engineering experts 	<p>Our plans set out targeted asset health interventions on the major asset groups to ensure we can meet our legislative requirements and deliver value for money by choosing the right blend of options.</p> <p>Within the plan there are asset projects, which have specific engineering justifications to address key asset health resilience risks, which under Ofgem's definition are classed as major programmes, for example London Medium Pressure mains replacement.</p> <p>As a result of our engagement with shippers, we have undertaken a number a number of specific actions to mitigate the risk of errors on the existing asset portfolio and we have also proposed a continuation of the RIIO-2 replacement programme to install ultrasonic meters at these sites in RIIO-3.</p> <p>As a result of our engagements related to deliverability, we have proposed to undertake feasibility studies in RIIO-3 to determine the optimal interventions, e.g. London subways and tunnels and the West Winch pipeline in our Eastern network.</p>

<p>Safe, secure and resilient supplies</p>	<p>Climate Resilience</p>	<p>We engage with a variety of expert stakeholders to support the development of our Climate Resilience Strategy - most engagements are ongoing through partnerships and contracts that we have in place with stakeholders:</p> <ul style="list-style-type: none"> • Environment Agency: They provide an ongoing service in relation to flood prevention, alerts and alarms to support operational decision making, but also provide a range of resources to inform our planning and prevention strategies. • Meteo: We have a long standing contract with Meteo to provide weather forecasting (mainly temperature related which drives gas demand), but have extended this to cover temperature, rain and precipitation. They have provided analysis to project how weather changes are likely to impact our network which feed our climate resilience strategy. • DEFRA: through our climate change adaptation process, which they feed back on annually, allowing continual assessment and improvement • TBL Services: We worked with the environmental consultancy to workshop risks and controls to inform our annual TCFD reporting. They brought in a range of good practice and challenge from working with asset intensive organisations across the world. • Marsh (insurance): We have engaged with them on two levels; first in assessing risks and controls to inform insurance premiums and secondly, they provide a range of insight and best practice advice from their experience working with (insuring) a wide range of clients • West Net: A German owned electricity and gas distribution business, with similar assets to ours, operating across Germany and Belgium. They experienced severe floods across their network in 2021 (5% of the network lost) and we have undertaken an extensive lessons learnt process to support our future climate resilience planning. • Meetings with a range of other stakeholders on a more ad hoc basis - see list in next column 	<p>Stakeholders</p> <ul style="list-style-type: none"> • Government bodies (DEFRA, DESNZ, HSE, CCC - Committee for Climate Change, National Infrastructure Commission, Environment Agency) • Regulators (Ofgem) • Met Office and Meteo • Marsh (insurance) • Resilience Direct • 24 Local Resilience Forums • Local Drainage Boards • Coastal Partnership East • Energy Networks Association (Climate Change Resilience Working Group, Gas Environment Group, Technical Standards Forum) • IGEM • Sustainability Challenge Group (SCG) • West Net Gas Network (Germany) • TBL services 	<p>Key feedback provides details over expected weather pattern changes (wetter and warmer) and the consequential potential impact on our network.</p> <p>West Net's experience of severe floods has allowed us to better understand the consequential impacts of such weather, including operational and financial impacts.</p> <p>Weighting of decisions</p> <ul style="list-style-type: none"> • 100% Stakeholder - predominantly regulatory / policy related 	<p>Based on the input, legislative requirements, and good practice provided, our strategy focusses on ensuring that gas continues to be supplied reliably to homes and businesses when there are unplanned events such as extreme weather. Detailed contingency plans are in place for all circumstances.</p> <p>As a result of ongoing feedback, our climate resilience strategy includes identified good practice such as climate scenario planning, adaptation pathways, metrics and indicators established.</p> <p>Our strategy is designed to mature our capabilities in managing long term climate risk, with an ambition to transition towards a proactive 'resilience by design' position. Further details on specifics are included within our Climate Resilience Strategy. This builds on feedback we received.</p>
<p>Safe, secure and resilient supplies</p>	<p>Physical Security and Cyber resilience</p>	<p>Stakeholder Engagement</p> <ul style="list-style-type: none"> • We engaged with DESNZ and Ofgem through a range of workshops and working sessions • We engaged with expert advisors through commercial arrangements and (paid for) reviews and benchmarking <p>Customer Engagement</p> <ul style="list-style-type: none"> • Research to support customer testing relating to the overall value of the bill (Acceptability and Affordability testing with over 8,000 customers). This included both qualitative and quantitative methods (deliberative workshops, interviews (online and face to face) and surveys). 	<p>Stakeholders</p> <p>There have been two key sets of stakeholders involved in supporting the development of our proposals:</p> <ol style="list-style-type: none"> 1. DESNZ and Ofgem to inform requirements (legislative and regulatory) 2. Expert advisors to help inform the development of Cadent's plans, using their expertise of working with multiple clients across the world <p>Customers</p> <ul style="list-style-type: none"> • Customers from a range of segments were involved in the acceptability and affordability research. The research included customers in vulnerable situations, future bill payers, customers in fuel poverty, digitally disengaged and expert customers (involved in RIIO-2 research). Customers were statistically representative of the Cadent region. To ensure the sample profile matched the population, quotas were set and the domestic data was appropriately weighted regionally and by total. 	<p>Cyber and physical security are topic that don't lend themselves to engaging on externally on risks and mitigations.</p> <p>Therefore we have engaged with experts from various technical consultancies and worked with the regulators and guidelines from the National Information Security Directive to develop proposals that ensure compliance with requirements and we (and our expert stakeholders) believe creates the optimal balance between risk mitigation and cost to achieve.</p> <p>Although customers are not a key triangulation point, mention of cybersecurity in the acceptability and affordability research elicited a fairly strong response that this is an important area for Cadent to address, as part of critical infrastructure.</p> <p>Weighting of decisions</p> <ul style="list-style-type: none"> • 100% Stakeholder insights - predominantly regulatory / policy related 	<p>We have set out our plans to meet the enhanced standard of the Cyber Assessment Framework to manage cyber and physical security. The plans reflect the risk assessment of critical systems and processes under the National Information Security Directive and the [Ministry of Defence's] requirements for physical security around designated Critical National Infrastructure. Our plans have been designed using input from cyber experts that we have consulted with.</p> <p>In addition, our commitment to using digital channels will also consider these expert guidelines, as we are committed to new digital channels and 24 hr access to customer service.</p>

Safe, secure and resilient supplies	Workforce & supply chain resilience	<p>Stakeholder Engagement</p> <ul style="list-style-type: none"> Regular meetings and working session with EU skills council, including other similar organisations to discuss a range of topics. <p>Cadent Employee Engagement</p> <ul style="list-style-type: none"> With Cadent employees to understand their engagement levels and support the development of plans to improve the EVP through our annual Employee safe and well survey. Employee and trade union representative groups: Management engagement group, Cadent staff forum, Field force forums, Inclusion community groups, resilience committee - these run monthly and provide an opportunity to engage on upcoming changes (Cadent or other) and share good practice. 	<p>Legislation</p> <ul style="list-style-type: none"> New fatigue legislation by Government <p>Benchmarking</p> <ul style="list-style-type: none"> Benchmarking the FTE for whole systems <p>Stakeholders</p> <ul style="list-style-type: none"> Glenigan Energy and Utility (EU) Skills Council Innovate UK Research and Innovation (UKRI) IGEM ENA: Energy Innovation Basecamp Re Generate (industry expert) to support people getting into work. West Midlands employment alliance including Severn Trent, Ernst and Young, Balfour Beatty, Timpsons, DWP (Department Work and Pensions), Amazon & Greggs, Youth Future along with IGEM, ENA Basecamp and Innovate UKRI to encompass our innovative vision GDNs <p>Cadent Employees</p>	<p>Growth, attraction and retention</p> <ul style="list-style-type: none"> Glenigan are predicting a 16% increase in Construction Industry over the next 3 years, and they do not expect that it will slow after the 3 years. □ Construction contracts are due to be awarded imminently across a range of sectors including water and electricity (in line with investment drives) - impacting supply and our actions related to attraction and retention.□ The employment angle of energy security is perceived positively with customers linking creation of more jobs with 'job security'. Innovate UKRI is helping us connect with UK SMEs to grow the development of new products and services. New fatigue legislation and new standard on cyber are policies set out by relevant government departments have fed our strategy. <p>Equity, Diversity and Inclusion</p> <ul style="list-style-type: none"> Cadent safe and well survey shows the managers have reported a need to improve competency around supporting employee mental wellbeing and having difficult conversations for a health & wellbeing focus - there is much focus on this in our strategy as a result. The continued importance of inclusion. This has been used with internal data captured on sickness, absence, attraction and retention. External evaluation of all the above has been undertaken by EU Skills verses all Utilities hence why we are Employer of the Year. We will continue to maintain these high standards particularly receiving recognition for removing barriers to entry for field force as a hugely ambition recruitment lever for inclusion (i.e. for academic qualifications which limit diversity). <p>Weighting of decisions</p> <ul style="list-style-type: none"> 90% Stakeholder insights influencing decisions 10% Cadent Employees 	<p>Our plan contains a commitment to train our workforce on tier 2 diameter pipe to reflect our change in workload mix to deliver the re worked mains replacement programme considering the competition in the industry and needs to attract and retain</p> <p>To invest in new shift patterns to enable legislation change on fatigue for our workforce. Our workforce resilience strategy highlights additional resources to effectively manage fatigue in line with the HSE requirements.</p> <p>Our plan will invest in new skills to enable full energy system delivery and planning for a digital and net zero world, including, enabling the connections and transport for low carbon gas such as biomethane, hydrogen blend and other low carbon solutions & upskilling all employees on cyber. We are, for example, requesting funding for 59 resources to support in energy planning to engage with regional system planners, NESO, etc.</p> <p>To protect skills and jobs by managing the supply chain competition challenge with competing infrastructure requirement of water, transport and electricity upgrades. We will increase suppliers through a range of formal and informal events, ensuring that final contract strategies fully consider the supplier experience as well as fulfilment of our business objectives. We will move away from traditional "arms-length" framework models to ensuring guaranteed volumes and secured commitment, giving certainty to (and from) the supply chain. We are also focusing on future talent through our 'Future Fieldforce' and 'future engineers' programmes, highlighted in Appendix 17</p> <p>Deliver ambitious targets on improving Equity, Diversity and Inclusion within Cadent (representing the communities we serve and untapped talent pools contributing to overall UK</p>
High quality of service from regulated firms	Complaints handling	<p>Ofgem's minded to position</p> <p>We have reviewed Ofgem's minded to position to maintain the current complaints measure and agree that this should be maintained for RIIO-3.</p> <p>Customer Engagement</p> <p>Qualitative insight from over 90 customers via 7 deliberative workshops across the Cadent region. Topics covered include quality customer service.</p>	<p>GDN Working Sessions</p> <p>We have participated in a number of GDN working sessions (along with Ofgem) to consider alternatives or adjustments to the existing complaints measure.</p> <p>Customers</p> <ul style="list-style-type: none"> Customers taking part in the regional deliberative workshops were representative of Cadent's regions. Customers from a range of segments were involved in the research including customers in vulnerable situations, future bill payers and customers in fuel poverty 	<p>We have not undertaken any detailed new customer engagement on this policy area, having done so to develop our RIIO-2 proposals. However, through our focus groups across the 5 regions, we explained our performance measure and scores to customers and asked them to comment on them. In all workshops there was almost universal agreement that the existing commitments on complaint handling exceeded or met their expectations.</p> <p>Through our FRB workshops (described above) we were able to conclude that we have created a genuinely leading target for complaint closures within 24 hours, which customers during our RIIO-2 enhanced engagement explained was their primary focus for customers. With this feedback, along with clear performance data showing that Cadent's and other GDNs' complaints performance continues to improve year on year, with more than 80% of all complaints resolved within 24 hours, we proposed to our Customer Challenge Group (CCG) and Executive Committee to support Ofgem's minded to position, with agreement from both.</p> <p>Weighting of decisions</p> <ul style="list-style-type: none"> 90% Stakeholder insight□ 10% Customers 	<p>We have proposed to maintain the same measure as has been in place since the start of RIIO-GD1.</p> <p>We undertake forensic analysis of complaints data and use this to inform decision making that has helped drive the significantly improved (and industry leading) complaints scores.</p>
High quality of service from regulated firms	Guaranteed Standards of Service (GSOP)	<p>Stakeholder Engagement</p> <ul style="list-style-type: none"> GSOP annual review <p>Customer Engagement</p> <ul style="list-style-type: none"> Qualitative insight from over 90 customers via 7 deliberative workshops across the Cadent regions where we looked at quality customer service and existing measures. 	<p>Stakeholders</p> <ul style="list-style-type: none"> Citizens Advice through their annual review on GSOP Other GDNs <p>Customers</p> <ul style="list-style-type: none"> Customers taking part in the regional deliberative workshops were representative of Cadent's regions. Customers from a range of segments were involved in the research including customers in vulnerable situations, future bill payers and customers in fuel poverty. 	<p>We were part of a cross industry review of existing measures at the start of the RIIO-GD2 period. We have deliberately not engaged at length on this subject to inform RIIO-GD3 proposals, partly because of this. However, we did ask customers for their feedback on the existing measures in our regional workshops. The main feedback we received related to the lettering process, which was felt to be outdated and unlikely to be read, without letters being addressed to a particular person (i.e. not to the 'homeowner').</p> <p>It is clear from our own analysis that there is very little correlation between GSOS performance and C-Sat (therefore indicating that the GSOS measures are not key ones for customers). We recognise that there could be significant changes to the industry (less connections, more focus on disconnections, etc.) and therefore propose to undertake a study during the period and suggest enhancements for RIIO-4.</p> <p>Weighting of decisions</p> <ul style="list-style-type: none"> 90% Stakeholder insight□ 10% Customers 	<p>We have proposed to maintain the GSOP measures as is (in RIIO-GD2), but will undertake a study (including engagement with expert stakeholders) and propose changes for the next price control period (on behalf of the industry).</p>

<p>High quality of service from regulated firms</p>	<p>Unplanned Interruptions</p>	<p>Stakeholder Engagement</p> <ul style="list-style-type: none"> • Meetings with Citizens Advice, who have completed a number of independent studies in this area to understand their findings and views • GDN Meetings <p>Customer Engagement</p> <ul style="list-style-type: none"> • Insight was gathered using both qualitative and quantitative methods including 13 deliberative workshops, surveys, 21 focus groups, face to face interviews, online workshops. This included a national survey, broad and targeted research and commitment testing (this took place during acceptability and affordability testing with over 8,000 customers). The research used a variety of stimulus, scenarios and modelling, which continuously built upon findings from previous research, refining and stress testing results. 	<p>Stakeholders</p> <ul style="list-style-type: none"> • Citizens Advice • Other GDNs <p>Customers</p> <ul style="list-style-type: none"> • A statistically representative sample of customers across Cadent's regions took part in the National Survey. • Customers taking part in the targeted research were representative of Cadent's regions. • Customers from a range of segments were involved in the acceptability and affordability quantitative research. The survey provided a statistically robust representative sample and included domestic customers, staff, customers in vulnerable situations, future bill payers, customers in fuel poverty, digitally disengaged, impacted customers (experience of an emergency, incident or supply interruption) and expert customers (involved in RIIO-2 research). 	<ul style="list-style-type: none"> • Feedback from customers during our RIIO-2 enhanced engagement programme told us that customers believe existing interruption durations to be acceptable. • This was reaffirmed during multiple types of customer research for the RIIO-GD3 plan. • Through focus group sessions with customers who had experienced longer term interruptions (usually during a major incident), we have fed learning (especially around how to improve communication) into our business processes. • We also reviewed 1000s of pieces of customer feedback in C-Sat returns, complaints and real time feedback loops (e.g. Rant and Rave) to assess whether there was a correlation between the length of gas interruptions and satisfaction / sentiment levels. There was a very low correlation, supporting the direct feedback from customers and hence our proposals not to change interruption targets. • In 2023/24 through the C-Sat surveys we saw (evidence point – RRP): Very high overall satisfaction on the unplanned interruptions survey, ranging from 9.55 to 9.70 across all GDNs (9.55-9.67 across Cadent networks). Likewise, high customer satisfaction with the speed of supply restoration during unplanned interruptions, ranging from 9.42 to 9.70 across all GDNs (9.42-9.62 across Cadent networks). This is significantly higher than the (good) scores we get on the corresponding (speed of restoration) question on the planned works survey, ranging from 8.85 to 9.29 across all GDNs (8.85-9.05 across Cadent networks). This is also higher than aggregate customer satisfaction across all three surveys, which ranges from 9.16 to 9.33 across all GDNs (also 9.16-9.33 across Cadent networks). So lowest satisfaction on unplanned interruptions speed of supply restoration (9.42) is better than highest aggregate satisfaction (9.33). • Stakeholder – Ofgem: Ofgem has always been consistent that the intention of the financial output delivery incentive (ODI-) on unplanned interruptions is to ensure of no deterioration in the average duration experienced by customers. Evidence points: RIIO-2 SSMD (GD Sector Annex) para 2.136, RIIO-2 FDs (GD Sector Annex) - unplanned interruptions section, RIIO-3 SSMD (GD Annex) para 4.151. <p>Weighting of decisions</p> <ul style="list-style-type: none"> • 80% Stakeholder insight • 20% Customer insight 	<ul style="list-style-type: none"> • Whilst not responding to the insights we have obtained, but as required by Ofgem, we have proposed a common Minimum Performance Level (MPL) and Excessive Deterioration Level (EDL) for non-multiple occupancy building (non-MOB) unplanned interruptions. • We have also provided network-specific MPLs and EDLs for both multiple occupancy building (MOB) and non-MOB unplanned interruptions, that respond to our insights. • In all cases we will continue to deliver beyond these minimum standards on unplanned interruptions for MOBs and non-MOBs. • On the rare occasion when a gas supply is interrupted at a customer's property, Cadent will ensure the supply is back within 10 hours (on average).
<p>Infrastructure fit for a low-cost transition to net zero</p>	<p>Net zero transitions in the energy system (Hydrogen)</p>	<ul style="list-style-type: none"> • The Cadent region has been split into geographies based around locations of likely hydrogen demand. These 5 regions (HyNet-Northwest, East Coast Hydrogen – North East, Capital Hydrogen - South East, Cumbria - Cumbria, Hydrogen Valley – West Midlands and East of England) have established stakeholder communities and working groups to enable the development of a planned needs case. • Engagement has been undertaken through, surveys of industrial companies to collect data, webinars to explain the purpose of the programme, and direct interaction with interested parties including universities, local authorities, businesses, industrial groups, power generators and trade bodies (such as Hydrogen UK, British Ceramics, Confederation of Paper Industries etc). 	<ul style="list-style-type: none"> • One example is the Hydrogen Valley stakeholder group led by Cadent and National Gas and supported by Genserv as the secretariat. Another is the East Midlands Hydrogen group (Part of East Coast Hydrogen) which is led in collaboration with the East Midlands Combined Country Authority, supported by HyDex and other key stakeholders in the region. These include Toyota, Uniper, the Institute of Technology, the Manufacturing Technologies Centre, the East Midlands Freeport, the University of Nottingham and the Midlands Net Zero Hub. • These group's workstreams focus on specific themes such as industrial fuel switching, hydrogen production, and hydrogen distribution etc. • Bilateral engagements between Cadent and large users of natural gas have enabled the collection of data as to the location and volumes of future industrial and power generation hydrogen demand. It has also shown how production and hydrogen storage can be provided with minimum pipeline infrastructure to enable a resilient hydrogen supply. • The larger gas consumers that Cadent has spoken to include sectors such as ceramics, steel, pharmaceuticals, food processing, glass, bricks. Due to the practicalities of numbers smaller business who use gas today have not been targeted through this engagement. (140 companies across 200 sites) • Cadent is also gathering hydrogen production and storage forecasts from developers that can be matched against demand. • The data on demand, storage and supply has provided inputs to the feasibility studies for new and repurposed pipelines for hydrogen. 	<ul style="list-style-type: none"> • The industrial stakeholders need hydrogen to decarbonise. Many have evaluated the option of full electrification and whilst parts of their operations can be electrified, much cannot. • Hydrogen is as close to 'plug and play' for them in comparison to other routes to decarbonise and therefore comes with significant fuel switching cost benefits. • Many cannot access electrical connections in a short enough time scale to meet their decarbonisation goals. • Access to hydrogen is important to enable a switch away from natural gas and the production of low carbon products. • They need certainty of when the infrastructure is coming (pipelines and storage) so they can plan the investment that they need to make in getting their factories and processes ready for hydrogen. • Many have successfully tested, through innovation projects, the viability of hydrogen fuel in the manufacture of their products (e.g. does a hydrogen-fired kiln produce the same quality of ceramics). 	<ul style="list-style-type: none"> • Although Ofgem are likely to be the regulator for hydrogen pipelines in the future, our business plan assumes that future funding to support the feasibility and Front-End Engineering Design for new pipelines will be determined by Government. We have had no indication of what this may look like as yet nor from when it will be available. • We remain concerned that there will be no funding routes to maintain the stakeholder relationships and detailed design needed for the next stages of work on hydrogen pipelines that is critical to the successful delivery of both the Clean Power 2030 target and wider UK industrial decarbonisation.

Ofgem overlay	Intergenerational fairness and accelerated depreciation	<p>Stakeholder Engagement</p> <ul style="list-style-type: none"> • Online meeting with Citizens Advice. <p>Customer Engagement</p> <ul style="list-style-type: none"> • Insight was gathered from over 4,400 customers using both qualitative and quantitative methods including 7 deliberative workshops, surveys, depth interviews and online workshops. This included an online survey on funding sustainable energy (2022) as well as more broad and targeted research. The research used a variety of stimulus, scenarios and modelling. 	<p>Stakeholders</p> <ul style="list-style-type: none"> • Consumer groups i.e. Citizens Advice commentary. <p>Customers</p> <ul style="list-style-type: none"> • A representative sample of customers across Cadent's regions took part in the survey on funding sustainable energy. • Customers taking part in the targeted research provided a statistically robust representative sample and included domestic customers, businesses customers in vulnerable situations, future bill payers, customers in fuel poverty, digitally disengaged and expert customers (involved in RII0-2 research). 	<p>Most customers want to protect their own finances (through bills remaining as low as possible for as long as possible) which largely translated into opt for paying less now, but there were hopes amongst customers that if payments were delayed these payments may not be needed in the future. Customers generally preferred payments to be deferred, favouring to wait and 'take a chance' on delaying payments until 2031 in hopes that the impacts from the cost-of-living subsidising and also with hopes that the increased costs may not be needed in the future e.g. due to changes in government legislations. With more thought during qualitative discussions, customers have more questions, complex discussions and start to think about the implications.</p> <p>However, through a quantitative methodology customers tended to lean towards paying a smaller amount now, seeing the now option as the better option.</p> <p>Customers in fuel poverty are more likely to not give a definitive answer (no preference, need more information etc.) than customers not in fuel poverty (39% cf. 28%). However, the overall preference is the same – with a preference for applying an increase now the preferred option among both groups (in fuel poverty, 48%; not in fuel poverty, 54%).</p> <p>When customers were informed about the practicalities of a future gas network supplying fewer people with those left on the network potentially left to cover the bill, likely containing those in vulnerable situations and future bill payers (including those who may not yet be born), customers were more sympathetic towards the potential impact paying later would have on future bill payers. There was a larger proportion of customers who oppose bill increases for future bill payers (40%), compared to bill increases for the vulnerable (32%), highlighting a potential greater concern for future bill payers as they currently do not have any voice or direct stake, so should be protected/ supported through not having an unmanageable burden in the future.</p> <p>When given the choice for the bill to be on the electric or gas bill, consensus is that it should stay on the gas bill as customers believe that it would not be fair for people not using gas to be paying for it. A number of customers were (marginally) more supportive of a new green tax, including future bill payers – feeling it to be a more transparent way of approaching the issue. While customers liked the idea of a windfall tax in principle, many assumed that the costs would simply be passed from suppliers to customers anyway.</p>	Ofgem will make this decision.
Ofgem overlay	Bill Options	Insight was gathered through commitment testing, which took place during acceptability and affordability testing with over 8,000 customers. c.4,000 customers were shown a lower cost scenario and c.4,000 were shown a higher cost scenario. Separately, 8,000 customers engaged quantitatively over a 3 year period across the country.	Customers from a range of segments were involved in the research. The survey provided a statistically robust representative sample and included domestic customers, customers in vulnerable situations, future bill payers and customers in fuel poverty.	<ul style="list-style-type: none"> • Acceptance, affordability and value for money are all higher for customers in the lowest cost scenario. The higher cost scenario saw a 3% drop in both acceptance and affordability. • Although the quantitative score shift is minor for the percentage of people seeing value for money, the discussion groups showed that customers expect improvements to service for increased costs. As depreciation of assets is the driving force for the variance in the two cost scenarios, with no observed improvement to service for customers this charge would not be value for money. Customers seem tolerant of some of these charges (see above depreciation commentary) but they also see the energy market will keep changing so mention that this could all change again. • Acceptance is observed in part as many customers have become use to high prices and changes (we have been tracking the proportion of customers that feel powerless to energy price rises for the past 3 years) the affordability challenge is real and should be considered. 51% feel anxious about energy bills, 40% see energy bills impacting everyday life, 38% feel powerless to reduce bills, all sentiments are coming down since the start of cost of living, but divisions across the demographic groups are evident and as these sentiments have been permanently present in society for over 3 years, this leads us to believe people in the UK are accepting of the things they can not afford, particularly as costs are going up across many products and services. 	Cadent recommends cost scenario 4 for accelerated depreciation and have documented this within the plan, along with reservations for moving to a higher depreciation level (option 2).