

# Appendix 07.04.07

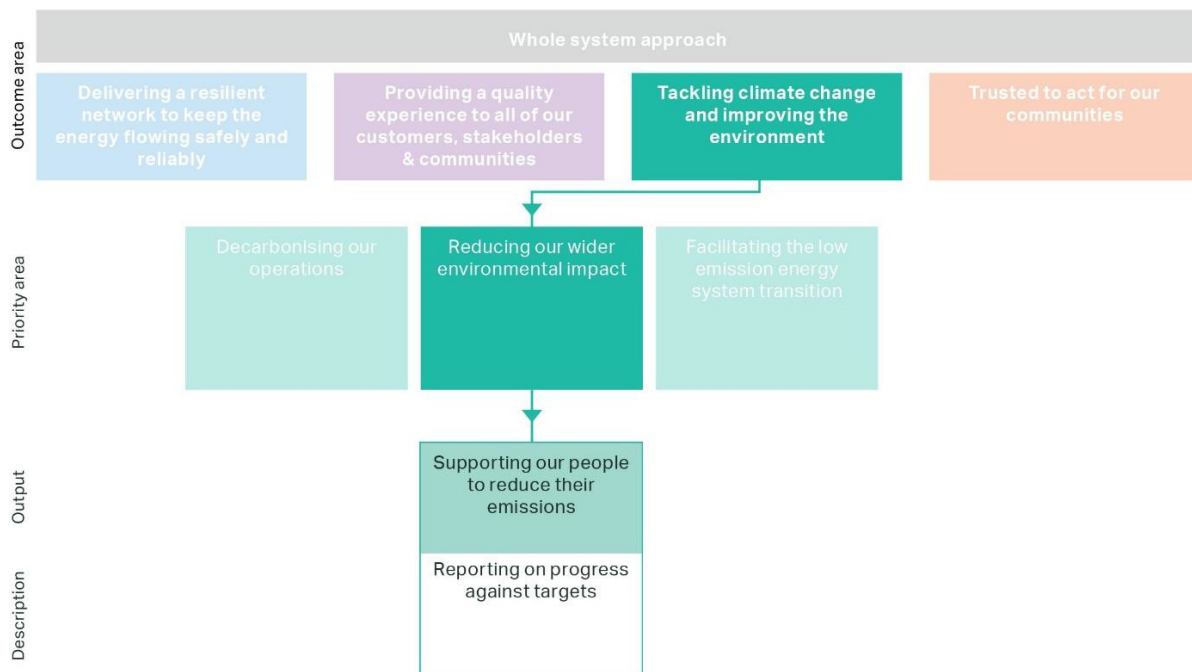
## Supporting our people to reduce their emissions

**This output case describes the way we will help our employees to reduce their carbon footprint.**

**During RIIO-2 we will support our employees to further reduce emissions by:**

- Providing free and unbiased advice and information and (insert something else here)
- Investing in Electric Vehicles (EV) charging infrastructure at office and depot locations (see also Appendix 07.04.04 on carbon neutral operations)
- Encouraging individuals to participate in our proposed corporate emissions offset scheme
- Investing in technology, apps, educational material and awareness programmes.

We will deliver:



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## How we have developed our proposals

1. **We considered the context** – Greenhouse gas emissions, and their impact on our global climate, is one of the most pressing issues facing society.
2. **We recognise that we can play a role in energising our employee base** - We believe it is important that we energise our employee base. Raising awareness of the issues faced by us all in the environment, empowers our people and harnesses large numbers of individuals in the workplace to deliver smaller scale change that collectively makes a positive contribution.
3. **This provided us with a clear problem statement** – How can we best mobilise our employees to work with us to reduce carbon emissions?
4. **We drew on our experience of pilot programmes** – Cadent has run small pilot programmes which have demonstrated the will and enthusiasm of our people to participate in initiatives to reduce their carbon or wider environmental footprint. We have shown that groups of engaged employees can deliver measurable reductions in environmental impacts in relatively short timescales and that changes outlive these short term initiatives.
5. **We looked at best practice** and observed that many companies run programmes which target employee impacts. Many of these aim to help employees make the right choices, including: green travel plans such as facilities for people to cycle to work including financial support and facilities to shower and change, the provision of infrastructure for virtual conferencing to avoid the need to travel, and support for low emission travel through installing EV charging infrastructure.
6. **We considered the areas in which our employees impact the environment**, including commuting to work and business travel, the use of non-renewable resources at work and home. Their energy consumption at home, the extent to which they minimise and segregate waste, their ability to act as low carbon ambassadors at home and in the community, and the scope for them to take positive action through volunteering with environmentally centred charities or other groups.
7. **We considered two options:**
  - Option 1 – continue with existing measures to reduce employee emissions, and
  - Option 2 – support our employees to further reduce emissions by:
    - Providing free and unbiased advice, information and information
    - Investing in EV charging infrastructure at office and depot locations
    - Encouraging individuals to participate in our proposed corporate emissions offset scheme
    - Investing in technology, apps, educational material and awareness programmes.
7. **We considered a range of research and analysis** – Through our engagement with customers and other stakeholders, we saw strong support for the role we can play in supporting green initiatives. Ofgem has also been clear that it expects gas networks to be ambitious in their work to deliver an environmentally sustainable network. We consider that Option 2 is best aligned to our aims.
8. **We confirmed our proposal in our October plan** and have tested this along with other aspects of the plan in our acceptability-testing process.
9. **We are seeking £1m in funding to deliver this** – However, we have calculated a net benefit of £4.1m in delivering these commitments.

10. **We will measure our employees' success** in reducing their emissions via an annual survey.

11. **What will the future look like after we embed our RIIO-2 commitments?** – We will have made a material reduction to the ongoing contribution our employees make to reducing carbon emissions.

The table below summarises our commitment in this area:

*Table 1 Our commitment*

<b>Output: Supporting our people to reduce their emissions</b>	
<b>Common / Bespoke</b>	Bespoke
<b>Output type</b>	ODI(R)
<b>Comment</b>	Reporting on progress against targets.
<b>Target</b>	Saving of 5,000 tonnes of CO <sub>2</sub> by the end of RIIO-2
<b>Cost implications (annual)</b>	Incremental costs of £1m
<b>Incentive range</b>	N/A
<b>CVP</b>	£4.1m

## 1. Defining Our Customers' Needs



We have set out a comprehensive set of commitments within our Environmental Action Plan (EAP) (Appendix 07.04.00). This mainly focussed on how we can reduce our carbon footprint, tackle waste and develop our whole system thinking approach to tackle climate change during and beyond RIIO-2.

This output case recognises that extended role that we can play in helping our people to reduce their emissions outside of the workplace through education, awareness and additional support programmes. We believe that in taking this approach it is also important that goals are implemented in a way that engages the employee base, raises awareness of the issues faced by us all in the environment we share and subsequently empowers our people and harnesses large numbers of individuals in the work to deliver smaller scale change that collectively makes a positive contribution. This can be measured and delivered alongside the actions taken at a corporate level and supports a clear line of sight between individual and company objectives.

To date, small pilot programmes have demonstrated the will and enthusiasm of our people to participate in well communicated programmes through which small changes to their behaviours at work and at home can reduce their carbon or wider environmental footprint. These small changes when delivered at scale, encouraged through incentives, and robustly measured, have the potential to result in real reduction in our collective footprint.

As a responsible business, committed to driving more sustainable outcomes for our environment and the communities we serve, we believe that it is incumbent on us to support our people in making the right sustainable choices. We believe we can do so through a combination of engagement, competition and incentive to make a step change in our collective environmental footprint through actions taken in the home, the workplace and in travelling between the two.

We also believe we can take this a significant step further by enabling our employees to take an active role in their communities to support others, including their neighbours in vulnerable situations, to achieve valuable carbon emission reductions. The energy sector is complex and as key players, independent of energy supply, we can act as trusted experts to guide and support our friends and neighbours.

### 1.1. What insights are shaping our thinking?

The Paris Agreement, the UK's Committee on Climate Change (CCC) and the Climate Change Act (2008) all stress the need for deep and urgent reductions in greenhouse gas emissions. Indeed, the CCC recently stressed the need for radical reductions before 2030 if irreversible climate change is to be avoided.

The UK Government, through its 25 Year Plan for the Environment has stated that "We must tread more lightly on our planet, using resources more wisely and radically reducing the waste we generate". The document calls for support from all sectors to support the achievement of this ambition and sets out a wide-ranging agenda for change.

Driving change requires concerted and targeted action to address the biggest environmental challenges and we have committed to internalise this need for change in our business plans. It is also important however that individuals within an organisation and the communities they serve are also aware of the business and environmental need for change, and feel empowered to take a role in supporting and delivering those changes.

1.2. Sources of insight



Table 2 Engagement activities

Phase	Date	Source name	Source description	Questions asked	# of stakeholders	Score
Historical Engagement	N/A	The UK's CCC	N/A	N/A	N/A	1.0
	2008	Climate Change Act	N/A	N/A	N/A	1.0
	2016	The Paris Agreement	N/A	N/A	N/A	1.0
	Jan-18	The 25 Year Plan for the Environment	N/A	N/A	N/A	1.0

<p><b>Historical Engagement</b></p>	<p>Aug-19</p>	<p>Cadent's Trust &amp; Transparency commitments - Executive Summary</p>	<p>We commissioned Enzen to compile a report on Cadent's Trust and transparency commitments. This provided us with a view of what other organisations are doing with respect to issues such as community funds, employee volunteering, and charitable giving.</p>	<p>N/A</p>	<p>N/A</p>	<p>3.0</p>
<p><b>Business Options Testing (BOT)</b></p>	<p>Jun-19</p>	<p>Cadent customer forum, round 4, Traverse</p>	<p>We held our fourth customer forum in Ipswich, London, Birmingham and Manchester to get customers' views on their priorities on a range of issues. This cross section of customers discussed with us various options (some proposed by us, some suggested by them) in a deliberative style session. Key topics discussed included: customer service, replacing pipes, reinstatement, interruptions, fuel poverty, carbon monoxide, decarbonising energy and becoming carbon neutral.</p>	<p>Participants were asked questions about a range of topics. On customer service, we explored what "great" looks like. We also asked about timeliness and communication with respect to reinstatements. We also tried to understand the level and type of service customers want during an unplanned interruption, including views on provisions, length of time without gas, and timeslots for getting the gas turned back on. We also asked for views on our options for addressing fuel poverty and carbon monoxide.</p> <p>With regards to resilience, we sought to understand what risks customers prioritise when replacing mains pipes and how this is influenced by bill impact as well as views on minimum standards of service.</p> <p>On the environment, we discussed: whether the theft of gas should be a priority (and who should benefit from successful recovery), whether connecting off-grid communities was a good way to decarbonise (and who should pay for this) and customer views on our plans to make our business operations carbon neutral.</p>	<p>200</p>	<p>2.0</p>

<p><b>Business Options Testing (BOT)</b></p>	<p>Aug-19</p>	<p>Future generations workshops, Traverse</p>	<p>We commissioned Traverse to hold workshops with 45 "future generations" participants (aged between 13 and 18) to understand their priorities. This mainly involved younger people to specifically ascertain their input, given that decisions that we make in RIIO-2 will ultimately impact them. They supported the views of other customer segments but stressed more urgency and a higher priority on our EAP. Most saw this area as a core requirement (on their hierarchy of needs), whereas other customers saw it less as core and more as a psychological need.</p>	<p>Customers were asked about their priorities. We also sought to understand how they thought Cadent should best decarbonise their assets and services, and minimise environmental impact, how Cadent should best approach pipe replacement, their views of new proposals for length of interruptions, provisions and compensation for Multiple Occupancy Buildings (MOBs), and their views of our proposals to protect customers in vulnerable situations (CIVS).</p>	<p>45</p>	<p>2.0</p>
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<p><b>Business Options Testing (BOT)</b></p>	<p>Aug-19</p>	<p>Workshops with English as a Second Language (ESL) customers and non-English speakers, Traverse</p>	<p>We commissioned Traverse to hold three workshops with ESL and non-English speaking customers: 22 Polish-speaking participants with English as a second language and 9 Bengali speaking participants. During this session we asked customers to tell us what role they thought that we should play in relation to carbon monoxide safety, provisions during an interruption and responding to climate change. They agreed that communication was critical with respect to interruptions. For provisions, all agreed oil filled radiators were important, but there were interesting differences too: the Bengali group prioritised hot meal vouchers &amp; kettles, both given low priority by the Polish group which favoured shower access &amp; hot plates. They confirmed that they believed, we as other big businesses should be acting responsibly and seeking to reduce our carbon footprint. The specific intention of this session was to ascertain the views of a different (typically hard to reach) group of customers to check if their views were consistent with other customer segments.</p>	<p>Customers were asked about their priorities. We also sought to understand their views on our business options in relation to carbon monoxide, provisions during interruptions, and decarbonisation.</p>	<p>31</p>	<p>2.5</p>
<p><b>Acceptability Testing</b></p>	<p>Oct-19</p>	<p>Verve business plan consultation</p>	<p>We commissioned Verve to gather views on our plans to reduce our carbon footprint from 25 customers. We did this through an online forum with customers and stakeholders to discuss the key components that we shared on our EAP. This included our intentions to support our employees to make a positive difference to tackling climate change.</p>	<p>Participants were asked about their awareness of Cadent, discussed the three outcome areas (environment, quality experience and resilience), discussed the bill impact breakdown (both at present and as a result of the plan), risks and uncertainties and innovation funding.</p>	<p>25</p>	<p>3.0</p>

Acceptability Testing	Oct-19	Phase 4 - Business interviews and surveys	We commissioned Traverse to test the acceptability and affordability of Cadent's proposed plan amongst business customers. This consisted of an on-line / face to face survey of 504 business customers and in-depth qualitative telephone interviews with 45 business customers. This showed that the plan had achieved high levels of acceptability and affordability from a business customer perspective.	Business customers were asked about the acceptability and affordability of Cadent's overall plan. If they said that the plan was unacceptable, they were asked to explain their response. If they said that it was neither acceptable nor unacceptable, they were asked what they would like to see in order to find it acceptable. Business customers were also asked to rate the acceptability of the outcome areas (environment, quality experience and resilience). Then, having learnt about the outcome areas, customers were asked as "informed customers" to rate the overall acceptability and affordability of the plan.	549	2.0
	Oct-19	Acceptability testing - final survey report on domestic customers	We commissioned Traverse to test the acceptability and affordability of Cadent's proposed plan amongst domestic customers. This consisted of surveying 4,446 domestic customers through on-line and face to face methods. This showed that the plan had achieved high levels of acceptability and affordability amongst domestic customers, including those who are fuel poor.	Customers were asked about the acceptability and affordability of Cadent's overall plan. If they said that the plan was unacceptable, they were asked to explain their response. If they said that it was neither acceptable nor unacceptable, they were asked what they would like to see in order to find it acceptable. Customers were also asked to rate the acceptability of the outcome areas (environment, quality experience and resilience). Then, having learnt about the outcome areas, customers were asked as "informed customers" to rate the overall acceptability and affordability of the plan.	4,446	2.0

<b>Acceptability Testing</b>	Oct-19	Acceptability testing - focus groups with the general population	We commissioned Traverse to explore the acceptability of our plans and commitments in each of the three outcome areas (environment, quality experience and resilience) with 79 members of the public in regional focus groups. Participants were supportive of our plans for quality experience and resilience, but no consensus was reached on our environmental plans.	A group discussion was facilitated to discuss views on Cadent's plans in each of the three outcome areas and participants were also asked to complete a survey to rank levels of acceptability and affordability.	79	2.5
	Oct-19	Acceptability testing - customer forum	We commissioned Traverse to explore the acceptability of our plans and commitments in each of the three outcome areas (environment, quality experience and resilience) with 109 customers who had attended previous customer forums. Overall, participants found our plans to be both acceptable and affordable.	A group discussion was facilitated to discuss views on Cadent's plans in each of the three outcome areas and participants were also asked to complete a survey to rank levels of acceptability and affordability.	109	2.0
	Oct-19	Acceptability testing - focus groups with future customers	We commissioned Traverse to explore the acceptability of our plans and commitments in each of the three outcome areas (environment, quality experience and resilience) with 20 "future customers" (16-18-year olds) in 2 focus groups. Participants were supportive of our plans for the environment and resilience but questioned whether helping vulnerable customers was part our remit.	A group discussion was facilitated to discuss views on Cadent's plans in each of the three outcome areas and participants were also asked to complete a survey to rank levels of acceptability and affordability.	20	2.5

<b>Acceptability Testing</b>	Oct-19	Acceptability testing - interviews with CIVs	We commissioned Traverse to explore the acceptability of our plans and commitments in each of the three outcome areas (environment, quality experience and resilience) by interviewing 20 CIVs. Overall, our plans were supported, and all found the plans affordable.	Throughout the interviews the CIVs were explained the elements of the plan, asked to comment on whether they found each outcome acceptable, which elements were important to them, and whether they had any additional comments. They were also asked whether the new business plan was affordable.	20	2.0
	Oct-19	Acceptability testing - fuel poor focus groups	We commissioned Traverse to explore the acceptability of our plans and commitments in each of the three outcome areas (environment, quality experience and resilience) with 35 customers in fuel poverty in regional focus groups. Overall, participants were supportive of our plans in all three areas.	A group discussion was facilitated to discuss views on Cadent's plans in each of the three outcome areas and participants were also asked to complete a survey to rank levels of acceptability and affordability.	35	2.0

Criteria	Robustness		Relevance
The score shown is based on a combination of the robustness of the source information (judged on whether it was recent, direct and representative) and the relevance to this area.	<1.5	One or zero criteria met	Limited relevance
	1.5 – 2.0	Two criteria met	Significantly relevant and contributory
	>2.0	All criteria met	Highly relevant and contributory

Customers we engaged with expressed their overall support for efforts to reduce our impact on the environment in general.

This included feedback received during engagement with CIVS during which protecting the environment was selected by some customers as their most important outcome, as it protects everyone. This view is in line with what stakeholders told us at our regional workshop, stating that Cadent should take their environmental obligations more seriously.

Stakeholders engaged by the Energy Networks Association (ENA) mentioned that innovation in environmentally friendly solutions was one reason for positive views on gas networks. The stakeholder advisory panel has also discussed long-term commitments and targets for the environment, such as the use of carbon-based accounting methods, and the need to communicate these.

The August 2019 Enzen research report notes that for many companies, reducing greenhouse gas emissions benefits the bottom line because efficient practices reduce operating costs and help increase employee productivity. A recent study shows millennials especially see businesses as potential partners in helping them make the world a better place. All Gas Distribution Networks (GDNs) are actively seeking to reduce the impact of employees' carbon footprint. Most encourage them to use electric or hydrogen cars and EV charging points have been conveniently placed at most workplaces. Many are now promoting working from home or tele/video conferencing to reduce the need to travel. Companies in the UK and across the world not only look to lower their own operational carbon footprint, but actively encourage employees by awareness and training sessions to measure and reduce their personal carbon footprint too.

### **1.3. How engagement has shaped our thinking**

Cadent's people are enthusiastic and committed to do their bit to protect the environment. This is evidenced by the feedback we received from our employees during the Cadent Voices employee engagement session. It also aligns with the feedback from several of the wider customer engagement workshops where customer feedback demonstrates a strong support for these activities.

On the basis of this feedback we must support our people in their environmental ambitions.

Though this element of our business plan we will increase our people's awareness of the environmental and sustainability issues and better equip them to take an individual role in supporting change within our organisation but also supporting them to help deliver change in their communities. Within Cadent we have shown that groups of engaged employees can deliver measurable reductions in environmental impacts in relatively short timescales and that changes outlive these short term initiatives. Employee groups also drive 'bottom-up' change which lead to efficiencies and cost reductions alongside the environmental gain.

The positive engagement and support gained within Cadent will equip our people to build initiatives within community groups and schools, for example, helping to build awareness and support further action. This is key to supporting small changes which when delivered at scale can make a big difference and will respond to needs from stakeholders for more visible and practical leadership from large organisations to empower local community action.

Supporting our employees to reduce their emissions will contribute to this ambition. It will also improve awareness of the environmental challenges facing society and better equip our people to act as ambassadors and champions for emissions reductions in their families and communities, helping to deliver a wider change.

## 2. Assessing the Measurement Options



While we measure both our business waste and business carbon footprint we have not to date measured our employee's emissions. The introduction of EV charge points at our offices and in the homes of some of our First Call Operatives (FCOs) will enable us to assess the carbon reduction resultant from employees moving from petrol or diesel cars to EVs. The additional carbon reduction resultant from actions taken by other Cadent employees changing their habits including in relation to travel, diet and home heating will not be measured but may be assessed with the help of employee self reporting via a staff survey.

### 2.1. Assessing best practice

Best practice in the management of greenhouse gasses, setting reduction targets and managing waste, which are typically the most important environmental aspects to a GDN are set out in our separate output cases 'carbon neutral operations' (Appendix 07.04.04) and 'zero avoidable waste to landfill' (Appendix 07.04.06). Cadent is proposing step change programmes regarding how it tackles these, aiming for zero avoidable waste and carbon neutrality in its operations.

In terms of managing the impact of employees, we observed a number of different approaches. Many of these aim to help employees make the right choices, including:

- Green travel plans such as facilities for people to cycle to work including financial support and facilities to shower and change
- Infrastructure for virtual conferencing to avoid the need to travel
- Support for low emission travel through installing electric vehicle charging infrastructure

Many organisations are removing unsustainable choices, including single-use plastics in catering outlets, promoting paper free operations and introducing caps on cars and other vehicles available through company car or salary sacrifice schemes.

At Cadent, we have already taken a number of these best practice steps. We have introduced vehicle emission caps and incentivised low emissions vehicle selection through a green voucher scheme. We have extensive virtual conferencing systems available to all, we will have removed all single use plastics from our offices and depots by the end of this year and have run a number of employee environmental initiatives.

In early 2019, Cadent's graduate cohort introduced a well communicated voluntary employee-wide sustainability challenge. Over 300 employees joined the challenge (three times more than than anticipated). Through a combination of competitive targets and modest prizes in just four weeks the participants achieved a combined carbon saving of over 11 tonnes and saved 250kg of waste, £4000 avoided costs and an estimated 280,000 litres of water.

This is a small-scale demonstration of the difference that a group of committed people can make in a short period of time. If these changes are scaled up to 4000 employees across 5 years the outcomes above would scale to nearly 9000 tonnes of emissions saved. However, we are aware that most employee engagement and initiatives like the sustainability challenge are rarely adopted holistically. A 100% uptake across our employees is very unlikely to be achieved but effective communication and tailored support to our people and the communities they serve have provided the basis for an ambitious aspiration to target people-scale change. Therefore, we are committing to integrating these measures as a feature of our business plan.

Key areas in which our employees impact the environment through greenhouse gas emissions and waste include:

- Commuting to work and business travel
- Use of non-renewable resources at work and home, including plastics
- Energy consumption at home
- Minimisation and segregation of waste
- Acting as low carbon ambassadors at home and in the community
- Positive action through volunteering with environmentally centred charities or other groups.

Therefore any output related to supporting our people reduce their emissions should achieve the following objectives:

- Encourage and support employees to play their part in reducing our environmental impact
- Provide the right environment and tools for employees to take action
- Encourage employees to act as champions in their communities for reducing emissions

The options we have considered reflect these areas.

*Table 3 Options to support our people*

<b>Option 1: Continue with existing measures to reduce employee emissions</b>			
<b>Elements</b>	<b>Description</b>	<b>Pros</b>	<b>Cons</b>
Current approach	We could continue with our existing measures that support employees to reduce their emissions. This includes encouraging low carbon vehicle uptake, and a range of employee run initiatives.	<ul style="list-style-type: none"> <li>• This would not involve additional investment and would be simple to maintain.</li> <li>• We have already demonstrated the potential benefit of employee-based initiatives.</li> </ul>	<ul style="list-style-type: none"> <li>• We believe there are strong societal and environmental reasons to accelerate our emissions reduction in this area.</li> <li>• This option does not take full advantage of new technology, for example electric vehicles and supporting infrastructure.</li> </ul>

Option 2: Support our employees to further reduce emissions			
Elements	Description	Pros	Cons
Information	<p>Build a one-stop-shop resource bank providing hints, tips, information on insulation, renewable energy (including tariffs), footprint calculators and easy impact reduction recording facilities.</p> <p>Also provide freely available best practice (e.g. Carbon Trust) personal carbon footprint calculators provide good opportunities to raise awareness of personal impact and steps to reduce it.</p> <p>Coupled with free, unbiased advice information, training and subsidised access to emissions reduction equipment this is likely to engage significant portions of our people. The provision of opportunities to buy-in to corporate offset programmes that are verified to the highest standard will also provide low impact routes for employees to reduce their net emissions, potentially to match Cadent's ambition of net-zero.</p>	<ul style="list-style-type: none"> <li>• Supports a growing focus on engaging our people and communities in driving new sustainable outcomes.</li> <li>• A step change in our environmental performance as measured by our employees' emissions.</li> <li>• The investments we are proposing are intended to be positive from a cost benefit perspective, leading to business efficiencies over time.</li> </ul>	<ul style="list-style-type: none"> <li>• Whilst the intention is for investment to be cost benefit neutral, there may be a risk that these benefits are not fully realised within RIIO-2.</li> </ul>
Low emissions vehicles	<p>Incentivise the procurement of low emissions vehicles through a progressively shrinking emissions cap and green voucher schemes providing discounts.</p> <p>Invest in EV charging infrastructure at office and depot locations to encourage greater uptake of electric vehicles. (Costs in Output Case 07.04.04 Carbon Neutral Business.)</p> <p>Issue (for qualifying FCOs) and subsidise installation of EV charging points in people's homes, at a cost of £1m over the RIIO-2 period.</p>	<p>Supports our people in making more sustainable decisions by filling the perceived gap in charging infrastructure with better access at work locations.</p>	<p>Requires new tools and equipment to measure the environmental benefits as a result of employee actions.</p> <p>Personal contributions may</p>



Offsets	Encourage individual participation in our proposed corporate emissions offset schemes	Simple process to implement and measure.	appear to be lost in the wider offsetting programme.
Systems and training	<p>Invest in technology, apps educational materials and awareness programmes to support the transition to low impact community at Cadent.</p> <p>Provide training and support to employee groups such as apprentices, graduates, and recent retirees to act as community ambassadors for low carbon, efficiency, or other low impact activities.</p> <p>Embed systems to record this activity and where possible quantify and record the results at a community level.</p>	<p>Low overheads with multiple opportunities to partner with charity and community groups to deliver shared benefit.</p> <p>Improved participation of our people in their communities, driving a positive impact.</p>	The outcomes must be measured to show the benefits.

## 2.2. How the options deliver against our objectives

*Table 4 Options appraisal against objectives*

	<b>Option 1:</b> Continue with existing measures	<b>Option 2:</b> Support our employees to further reduce emissions.
To encourage employees to play their part in reducing our environmental impact		
To provide the right environment and tools for employees to take action		
To encourage employees to act as champions in their communities for reducing emissions		



### 2.3. Customer preference

In combination with the benchmark scaled from the work of our Graduate Sustainability Challenge further opportunities are provided through working with our wider community and customers. The average household carbon footprint is generally estimated at around 5 to 8 tonnes per year<sup>1</sup>.

If we could reduce each household's carbon footprint by 1 tonne per year through the measures above (which we estimate is realistic by the end of the price control), then this would save around 5,000 tonnes of CO<sub>2</sub> per year, based on our 4,000 direct employees.

Cadent supports a successful employee volunteering scheme much of which delivers social value from community based projects. Incorporation of community emissions reductions or environmental improvement projects will widen the scope and accessibility of volunteering schemes for our employees. We have also launched our charitable Foundation to support our customers and communities. This has the potential to add additional project that employee volunteers could be engaged in and provide additional measurable change.

Based on the assessment of options above, together with customer and stakeholder insight, we decided to propose all elements of option 2 to customers for consideration given the combined potential they provide to help our employees' reduce their impact on the environment.

This supports the strong feedback that we received from our employees during the Cadent Voices employee engagement session and aligns with the feedback from several of the wider customer engagement workshops.

In addition, expert stakeholder interviews confirmed support of our overall aims and plans in the EAP, but occasionally challenged us to go further. This represents a direct response to this challenge.

### 3. Assessing Performance Levels



The options assessed above demonstrate that we can mobilise our workforce to support Cadent's ambition and deliver real and measurable savings in emissions and overall environmental impact.

There is significant cost associated with our proposals to encourage low emissions vehicles, which we estimate could reduce our employee emissions by up to 2,000 tonnes per year (including our FCOs). This translates to a value of the carbon removed of over £120k per year, at the current value of the shadow price of carbon.

In terms of information provision, systems and training and offsets, we are not proposing any additional costs in our plan, since this relates to facilitation and information provision rather than investment by Cadent itself.

Our aim is to measure the impact we have had by asking employees to fill out a survey annually through the RIIO-2 control.

This will provide us with a percentage and absolute reduction in carbon emissions and will be verified by comparison with and the use of industry standard carbon emissions estimates for domestic activities and appliances. For example, the annual average reduction in emissions from a household switching fuel source for their car or switching from an oil to a gas fired central heating boiler.

We will consider making this a condition of our proposed investment in EV infrastructure to encourage uptake.

<sup>1</sup> Estimates vary – for example: <https://www.theccc.org.uk/wp-content/uploads/2016/07/5CB-Infographic-FINAL-.pdf>

## 4. Customer Testing



It is important that we undertake triangulation to reconcile the views of customers, our staff team, Government, Ofgem and our leadership and shareholders to consider which option we should take forward.

To do so we have undertaken customer engagement which has demonstrated that customers are interested in environmental protection and 83% thought that green company policies were very or quite important.

At the future generations workshops, 45 participants were asked to rate certain ideas to reduce emissions. "Subsidise installation of electric vehicle charging points at employees' homes" scored the lowest of the 14 environmental measures considered, arguing it would have a relatively small impact and only benefit those who could afford an electric car. "Supporting employees who volunteer for environmental causes" also received a low prioritisation, as individual-focused ideas were considered less important than company/system-wide changes.

At one of the workshops for ESL and non-English speakers, participants felt that electric vehicles are still too "niche" and expensive and believe electric charging stations will be available at other public locations, so funding should not be focused here. Participants commented that training staff to be environmentally friendly should be a 'core commitment' that customers should not have to pay for. One group ranked this measure highly because they believed it would harness 'environmental enthusiasm' of younger employees.

When the 200 participants were asked about EV charging points at the 4<sup>th</sup> customer forum, there was opposition to the idea of providing these at employees' homes due to the cost and risk of staff leaving. There was, however, a recognition amongst some that these would be needed if Cadent wanted to roll EV vehicles to night workers.

Community engagement activities were received positively by some but there were questions about what this would involve and how it would be measured. Employee engagement was an important element of a good sustainability policy. One expert said that a focus on volunteers rather than training people in a paid role may be less effective.

The proposed plan was generally regarded as very ambitious by customers. Incentivising employees to use electric vehicles, for example by investing in EV charging infrastructure, was viewed positively and resonated with customers. The experts also welcomed initiatives around incentivising employees to get electric vehicles. However, it was noted that there was scope to go further, for example by disincentivising high emission vehicles.

This ambition is also reflected in the direction provided by our Customer Engagement Group who have indicated their desire that Cadent match this ambition and put in place targets that not just prevent environmental damage but also improve the environment.

In this instance it is essential to also have a good understanding of the commitment of our staff to reducing their emissions.

Given that during 2019 over 5% of our employees proactively participated in an voluntary employee-wide sustainability challenge demonstrates the desire of our people to become involved in activities to reduce their environmental impact.

It is also important to look to the leadership provided by Ofgem and the Government. In this regard Ofgem's direction is clear, that we should be ambitious in our work to deliver an environmentally

sustainable network. This direction also clearly aligns with the overarching Government policy ambitions on carbon reduction.

On the basis of broad support from our customers, policy makers and very importantly in this instance, our own employees, we are confident that our desire to be ambitious in supporting our employees to reduce their emissions is appropriate.

#### **4.1. Acceptability testing**

As part of the October 2019 quantitative acceptability testing undertaken by Traverse 85% of business customers surveyed said that they found the environmental aspects of Cadent's business important. Domestic customers provided a similar response, with 83% of those surveyed reporting the environment section of the plan to be acceptable.

At our acceptability testing focus groups with the general population, there was no consensus on Cadent's environmental commitments.

Positive knock on effects were identified by participants at our acceptability testing focus groups with the general population in relation to Cadent's education commitment: 'provide information to customers and staff to assist them in reducing their household emissions'. Participants suggested that this commitment could work to change behaviours beyond the company. However, a few participants felt that consumers are already bombarded with energy saving information and Cadent should not contribute to this problem.

At our acceptability testing focus groups with future customers, there was a mix of opinion on how ambitious Cadent's environmental plans are. Some believed that Cadent was setting a positive example, encouraging their staff and customers to change behaviours. Others were sceptical, believing that the government should take the lead and that Cadent should set earlier deadlines for the targets, even if they are smaller targets.

## 5. Our Commitments



The commentary above demonstrates how Cadent has developed and tested options to help our employees and the communities they serve deliver a measurable change in their carbon and wider environmental footprint with a clear commitment.

We have included the following action in our Environmental Action Plan (Appendix 07.04.00).

*Table 5 Our commitment*

Output commitment / EAP Action	Measure definition	Benefits to current customers	Benefits to future customers	SROI/WTP value over RIIO-2 period
<b>We will work with our employees to help them and their communities deliver an aggregated reduction of 5000 tonnes CO2e a year by the end of RIIO-2.</b>	Increase in employees self reported CO2e reduction	<ul style="list-style-type: none"> <li>Reduced CO2e emissions</li> <li>Provision of environmental information and education to employees, their families and their communities</li> </ul>	<ul style="list-style-type: none"> <li>Reduced CO2e emissions</li> </ul>	£4.1m

This commitment interacts with two other environmentally focused commitments. The related documents address shrinkage including theft of gas, scope 3 or embedded emissions that arise from our procurement of goods or services, particularly plastic pipe and fittings for our mains replacement programme, use of transport fuels by our contract partners and decarbonising our business operations through a commitment to reach a net-zero business carbon footprint. Our Environmental Action Plan (Appendix 07.04.00) provides a consolidated picture of how we will address our wider impacts, our commitments and outputs.

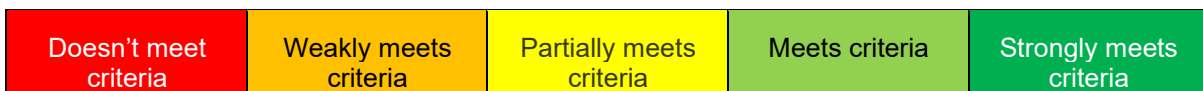
Ofgem has noted that the electricity and gas transmission sectors are considering whether to include Business Carbon Footprint reporting as a reputational incentive and are consulting as to whether similar measures should apply to GDNs.

Our proposed output is beyond the scope of this and focuses on extending our impact to the emissions produced by our employees. We have evaluated these proposals against our outputs framework to determine the most appropriate and effective option.

Table 6 Regulatory treatment

Regulatory treatment	Criteria	Rating	Further explanation of assessment
<b>Reputational ODI</b>	Demonstrate this is important to customers and/or stakeholders	Green	Reducing emissions is high on the government agenda, and important more broadly for society.
	Funded elsewhere in our plan, or inappropriate for funding	Green	This output and our proposed targets will be funded within our baseline Business Plan costs.
	Can robustly measure performance improvement	Yellow	This output and our proposed target rely on input from our employees in order to measure progress. Whilst tools such as carbon footprint calculators are readily available, the decentralised recording of data may have implications for overall robustness.
<b>Financial ODI (Output Delivery Incentive)</b>	Demonstrate this is important to customers and/or stakeholders and they are willing to pay	Green	As described for Reputational ODI.
	Not funded elsewhere in our plan	Red	This output and our proposed targets will be funded within our baseline Business Plan costs.
	Can robustly measure performance improvement	Yellow	As described for Reputational ODI.
<b>Price control deliverable</b>	Specific deliverable with clear timeline and targets	Red	This output does not relate to a specific deliverable. Instead, it relates to further performance improvement by encouraging our employees to support emission reductions in RIIO-2.
	Demonstrable benefit to customers which they support	Light Green	This output will contribute to further reductions in our emissions, alongside our other commitments to be come a net zero carbon business. Our customers and environment will benefit from more sustainable outcomes.

Regulatory treatment	Criteria	Rating	Further explanation of assessment
Licence Obligation	Absolute minimum, with significant customer harm if we do not deliver it	Red	This output does not relate to a minimum standard. Instead, it relates to an ambition to further improve our wider contribution to emissions through our employees.
	Applicable to all GDNs	Yellow	Whilst other GDNs may also focus on reducing emissions, the proposals we have made for this output are bespoke to our business.



**We are therefore proposing a reputational ODI for this output.** This recognises that the costs to deliver our ambition are already included in our baseline Business Plan costs and will incentivise us to continue making improvements in RIIO-2.

## 6. Delivering Our Commitments



In order to deliver the infrastructure to enable the deployment of EVs for FCOs, we will require charging infrastructure at our sites. Therefore, we have a front-loaded deployment schedule for charging points. The deployment of charging points is initially focussed in London since the initial trial deployment of EVs is in that network. Further detail in relation to this deployment is provided in our Carbon Neutral Operations output case Appendix 07.04.04.

Performance related to the other aspects of this case will be undertaken via reputational incentives and there are no financial incentives proposed.

Through RIIO-1 we have developed a detailed understanding of our employees carbon impacts through their business travel. Our programme to incentivise low emission vehicle choices has succeeded in reducing the average emissions of our company and salary sacrifice vehicles down to 93g/km from over 110 g/km in 2016. This is lower than the emissions for an average driver, as quoted in DEFRA's emission conversion factors of 170 g/km in 2019. On aggregate, we therefore have a detailed benchmark for our employee business mileage related emissions.

In order to participate in Cadent's scheme to support employee emisison reductions and qualify for support to purchase home EV charging points they would first be required to complete a detailed individual carbon footprint calculation, especially related to all business, commuting and average social/domestic mileage. Employees would then be required to report changes in fuel consumption between fossil fuels (diesel or petrol) and changes in electricity consumption to support low emission driving.

In working with the wider community a tailored carbon or environmental footprint tool would be required to enable data collection through the life of any project or initiative.

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These two sources of detailed performance information at a corporate and individual level will therefore be available to support clear and transparent measurement of progress towards our aspirational target of 5,000 tonnes CO<sub>2</sub>e saving.