

# Our Digitalisation Strategy and Action Plan

Stakeholder update December 2020



## **Welcome to our Digitalisation Strategy**

## Stakeholder update December 2020

## We are committed to providing a safe, secure and affordable network over the long term

We will do this whilst playing a key role in the UK's transition to Net Zero carbon emissions. We see a significant role for digital in helping us deliver on these commitments, enabling our employees and stakeholders to contribute to the decarbonisation of the UK.

Our Board welcome this update to the Digitalisation Strategy and look forward to your feedback.

## Embracing digital

Digital is part of everything we do at Cadent, helping us shape the future of the energy sector. Our Digitalisation Strategy will enable us to deliver for our Customers, Colleagues and Communities. We would welcome your feedback so together we can shape the future of our industry.

I'm delighted to share our latest Digitalisation Strategy with you. It outlines our digital ambition and how we are embracing digital to deliver for our stakeholders and help shape the future of the energy sector.



Embedding digital

Our Digitalisation Strategy will form part of how we drive the business forwards; serving our customers, engaging our stakeholder community, running a reliable and resilient network, enabling our colleagues, improving the way we work and helping accelerate the journey towards Net Zero.



Our Digitalisation Strategy will be enabled by bringing Cadent and key partners together to design and deliver products and services that address customers' and employees' needs and support the wider community. We will build new capabilities across our business, making data open and accessible to jointly deliver the Net Zero goal.

I'm pleased to ensure that our Digitalisation Strategy is embedded in our business, driving better outcomes for our Customers, Colleagues and Community.



I'm proud to be part of shaping the future of the energy sector, enabled by the digitalisation of our business and the network we run, working in collaboration with our partners and stakeholders.

of

Steve Fraser Chief Executive Officer

Howard Forster Chief Operational Officer



## **Content** Our Digitalisation Strategy





## Cadent Today Who we are

### Transforming experiences for Customers, Communities and Colleagues

#### A new company with an essential role

We are the largest gas distribution company in the UK and we relish our role in providing an essential service that keeps the energy flowing. Over 80% of UK homes rely on gas for heating as well as large UK manufacturers, businesses and commerce who are all reliant on gas to fuel their operations. At peak times the gas network supplies over four times more energy than the electricity network.

#### **Delivering Net Zero**

It is critical that we address the urgent challenges of climate change to deliver Net Zero emissions for the benefit of current and future consumers.

The scale of investment and change needed to deliver this in a secure and sustainable way should not be understated. It is essential that government, regulators and businesses strike the appropriate balance of delivering the critical long-term needs of future consumers whilst considering affordability for existing consumers. The need to stimulate and incentivise the necessary investment and commitment in both public and private sectors will be critical to delivery.

We want to continue our leading role in driving and shaping practical ways to deliver clean gas to address the UK's Net Zero ambition. We have been at the forefront of developing practical pathways for clean gases such as biomethane, BioSNG and hydrogen through landmark innovation projects, working closely with our industry colleagues.

This ambition includes finding a solution to progressing with pioneering new projects such as HyNet where we are part of a consortium of different commercial, academic and entrepreneurial organisations working together. This will create and deliver a clean gas pathway using hydrogen, in order to decarbonise the North West region by the end of the next decade. This will create 5000 local jobs and stimulate industry whilst delivering significant carbon savings (1m tonnes) at a low cost, compared to alternatives.

#### Our communities



**Of gas customers** are served by our pipelines and we provide them with the energy they need to stay safe and warm.

## Homes, offices and businesses are served by our network.

**Gas Networks** operating across the North West, West Midlands, East Midlands, South Yorkshire, East of England and North London, providing services to a diverse range of customer and stakeholder groups.

Miles of gas pipes are maintained within our safe and reliable network across our four regions.

Each of our licence areas has its own geographical and social requirements and we are committed to improving the levels of our service. We have done this by creating a more localised customer-centric operating model that is able to respond to the specific needs of the communities we serve.

82k

#### North West – 2.7m Customers

Our North West network serves over 2.7m customers in the third most populated region of England. It consists of the counties of Cheshire, Cumbria, Greater Manchester, Lancashire and Merseyside, and has a mix of rural and urban landscapes.

#### Eastern – 4m Customers

The Eastern Network is our largest network, serving 4m customers across South Yorkshire, East Midlands and the East of England. It serves a diverse range of communities, from big cities to towns and rural areas.

#### West Midlands – 1.96m Customers

Our West Midlands network is centred on the UK's second largest metropolitan area of Birmingham and includes a number of smaller urban areas that effectively constitute local subnetworks within the network. It serves over 1.96m customers.

#### North London – 2.3m Customers

Our North London network, serving around 2.3m customers, extends from Central London, extending north of the River Thames, to High Wycombe in the west and Southendon-Sea in the east.

## Cadent Today Our Purpose and Vision

### Our vision, cultural and operational transformation

Our purpose Keeping the energy flowing

#### Our commitments

#### Quality customer experience

We promise to provide a service experience of the highest quality to all of our customers, tailored to their needs.

## Safe and resilient network

We are focused on delivering a resilient network to keep the energy flowing safely and reliably to all of our customers.





#### Our stakeholders inform our vision

We have developed and tested our plans with our customers and stakeholders, as well as responding to over 200 challenges from our Customer Engagement Group.



#### Continuous engagement

We have made commitments to continually engage with stakeholders. We will do this through a variety of channels and we will share and report progress on our plans.

This engagement will be delivered with ongoing oversight from our Customer Engagement Group, an online community and regional stakeholder communities.



We appreciate the scale of the challenge to deliver this ambitious plan over the next five years. We recognise that actions speak louder than words and we look forward to continuing to build on the progress we are already making in transforming experiences for our customers, colleagues and the communities we serve.

## Future Commitments

## **Our Commitments**

### **Our Commitments in the RIIO-2 Business Plan**

Based on engagement with Stakeholders we proposed the following commitments within our RIIO-2 Business Plan.

Keeping the energy flowing safely and reliably



A quality experience for all our customers and stakeholders



Tackling climate change and improving the environment



Trusted to act for our communities

*"Efficient costs driving a 10% reduction in customer bills and delivering a safe and reliable supply for less than 33p a day"* 

"Enhance services to make a real difference to customers in vulnerable situations driving a social value of over £537m"

"Creating practical solutions to deliver clean gas to meet the UK's Net Zero emissions challenge" "We will be fair and transparent, building trust in how we operate and making a sustainable difference in our communities"

Our customers expect us to maintain the exceptional levels of safety and reliability performance that we deliver today.

We are investing in the health of our assets, keeping the energy flowing safely and reliably whilst keeping investments at an affordable level.

We are working to enable a blended network where we can enable new and green sources of energy.

Our customer strategy goes well beyond customer satisfaction and complaints handling improvements; we are striving to identify and understand the needs of all of our customers and stakeholders better.

Our aim is to create an accessible and inclusive service for all. We have set up a multi-faceted Customer Vulnerability Strategy helping to keep our customers safe, warm and independent in their homes and never leave them without gas. The gas network will play a key role in supporting the energy transition in the most secure, affordable and sustainable way.

We will continue to play a leading role in creating a vision of the pathways for energy system transition through our innovation projects.

Our network will evolve to support the use of clean gas such as hydrogen and facilitate renewable resources onto the network.

Through our engagement insight, we have an in depth understanding of our stakeholder expectations and where they value us going above and beyond.

We are committed to making a real and sustainable difference to the communities we support and demonstrating fairness in our approach.

We are committed to making our business performance more transparent to our stakeholders.

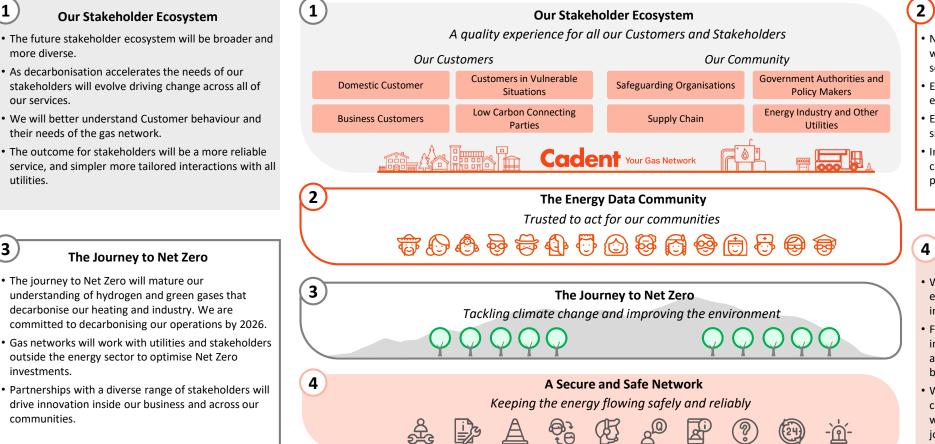
## **Our vision of the Future Energy Ecosystem**

## The Future Energy Ecosystem

1

3

The future role of the energy sector will be shaped through continuous engagement with our stakeholders. The journey towards Net Zero will expand our ecosystem and require us to develop new products and services utilising the rich data available within and outside of the energy sector.



#### The Energy Data Community

- New sources of data from outside of the energy sector will be easily available and used to tailor products and services to each stakeholder needs.
- Energy system information will be be found and exchanged easily.
- Engaging and serving our community will be made simple through the use of digital platforms and data.
- Innovation will occur across the sector driven by collaboration and data sharing to deliver new products and services.

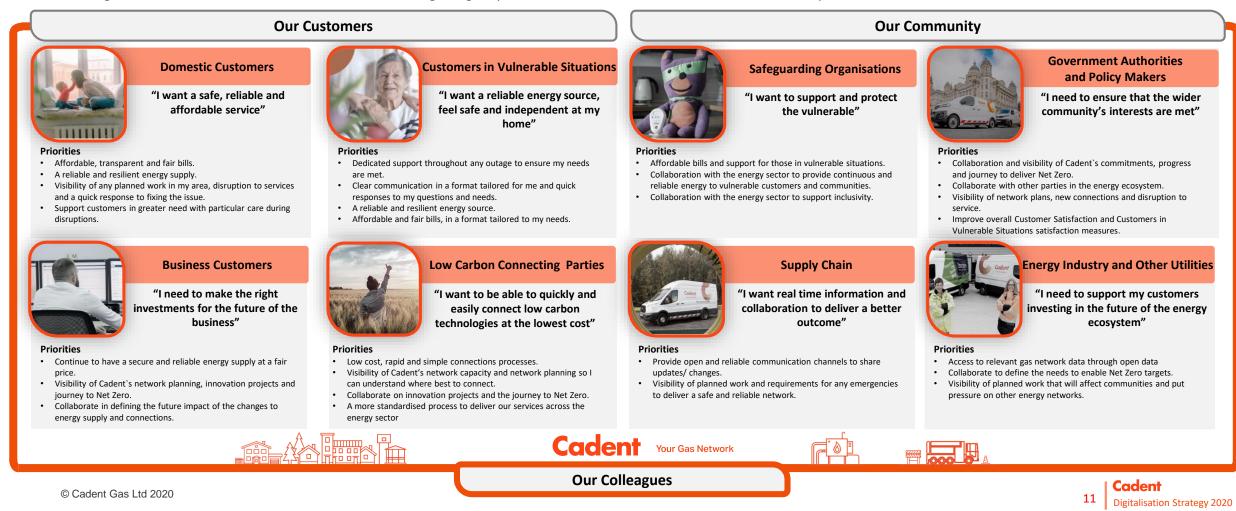
#### A Secure and Safe Network

- We will continue to work with stakeholders beyond energy (water, telco, transport etc,) to optimise our investment and minimise the impact to utility bills.
- Future investments in our network will continue to be informed by the leading experts in climate adaption and transition, changing energy needs and consumer behaviour.
- We will continue to invest in our cybersecurity capabilities protecting our systems and data and working in collaboration with others to ensure we jointly deliver a secure and safe network.

5

### Customers. Communities. Colleagues.

Our Digitalisation Strategy has been developed and will continue to evolve with our Stakeholders at the centre. Understanding our Stakeholders will enable us to invest in the right digital products and services to address their needs and priorities.



### **Our Customers**

We continue to engage our customers to understand their needs, feedback and priorities, enabling us to meet or preferably exceed their expectations. On this and the next few pages, we provide a short profile of each of our customer segments and how the investments we're making in digital will enable us to better meet their needs.

#### **Domestic Customers**



Today, we provide a safe and reliable gas network to **11 million homes** and businesses. We have three main points of contact with our customers – if they smell gas, when they need to be connected or disconnected to the network or when our street work may impact them.

In the future, we expect to need to work with our customers to ensure we transition to a Net Zero network, potentially running trials to connect them to future energy solutions.

#### Enabled by digital our Domestic Customers will have



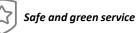
Easy access to Cadent using their preferred channel

- An offer of multiple channels ranging from automated self-service to mobile applications to quickly answered calls via our contact centre.
- Consistent and accurate information is provided in a format they understand.



Personalised interactions and services

- Relevant and accurate communication about outages or other forms of disruption.
- Regular updates when things change and offer solutions to any inconvenience we cause.
- Design and tailor services based on customers' needs and insights.



Continued focus on providing an affordable and cost-effective service as we transition towards Net Zero

- Easily accessible information, so customers understand our role, as well as the role they can play in becoming more sustainable.
- Support customers understand how they can access new sources of energy and decarbonise.

#### Customers in Vulnerable Situations (CIVS)



Today we provide an accessible and personalised service to Customers in Vulnerable Situations. However, only 26% of customers have heard of the priority services we provide.

We continue to work to understand the many and varied situations that can lead to permanent or transient vulnerability across the communities we serve.

We will help all our customers to understand the range of support options available so that we and others can better serve their needs. We are assessing the best ways to provide whole-home solutions to tackle and reduce fuel poverty.

#### Enabled by digital our Customers in Vulnerable Situations will have

24 < Enable channels suitable to their needs

their channel(s) of choice

Convenient access to support through

Collaborate with organisations

that support our Customers in

information about our network,

Vulnerable Situations so they have

outages and planned interruptions.

channels for proactive engagement

about planned work and disruptions.

Offering digital and traditional

home"

Identification and personalisation

Identification and localisation of our CIVS to deliver personalised and tailored products and services that are supportive of their specific needs

- Gather insights and data to understand different needs that allow us to plan and deliver more tailored products and services.
- To include proactive support for new connections, communications and solutions during outages.

## Continued focus on providing an

affordable and cost-effective service as we transition towards Net Zero

- Easily accessible information so customers understand our role in supporting the provision of more affordable energy.
- Invest in various engagement plans and channels to help customers understand how they can access or provide new sources of energy.

12 Cadent Digitalisation Strategy 2020

### **Our Customers**

We continue to engage our customers to understand their needs, feedback and priorities, enabling us to meet or preferably exceed their expectations. On this page we provide a short profile of our Business Customers and Low Carbon Connecting Parties and describe how the digital investments will enable us to better meet their needs.

#### **Business Customers**



Today, we provide a safe and reliable gas network to our **Businesses Customers with a target to have 99.9% service reliability**. Today we have three main points of contact with our customers – if they **have a new connection to make, make alterations or disconnect from the network, or they smell gas.** In the future, we will continue to work in collaboration with our business customers to deliver new products and services for the future of the energy sector.

#### Enabled by digital our Business Customers will have



## Easy access to Cadent using their preferred channel

 Offer of multiple channels from automated self-serve to mobile applications and personalised solutions to support the needs of our business customers.



#### Access to relevant network information

- Sharing information on network performance, capacity and other relevant insights to support business decision making.
- Collaboration and an open environment to help businesses make the right decisions for them.



#### Simple and efficient processes

- Simple and efficient experiences and process when businesses need to get in touch with us.
- Apply Robotic Process Automation to repetitive low value-added transactions, freeing up time to offer a personalised approach to complex processes.

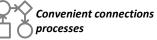
#### Low Carbon Connecting Parties



Today we have **more than 30 green energy sources connected** that feed green gases into our network. We continue to provide **new and more efficient access to our network trialing new partners, technologies and products across our four communities**.

Working in collaboration with Low Carbon Connecting Parties enables us to identify and deliver efficiencies and deliver the Net Zero journey.

#### Enabled by digital our Low Carbon Connecting Parties will have



Simple and efficient connections process

Offering customers both digital and

non digital processes for the end to

end connections journey.

options and solutions.

Support through the connections

process to provide connection

Information sharing

Access to relevant network information

- Sharing information on network performance and other relevant insights to inform decisions.
- Sharing of network information with wider industry stakeholders to enable a more rapid and lowest whole system cost transition to Net Zero.

**Reliable and Affordable** service

An open environment, collaborating to deliver Net Zero

- Collaboration and an open environment to help support both short, and longer term, investment decision making.
- Collaboration with wider industry stakeholders to deliver innovative solutions for Net Zero.

#### 13 Cadent Digitalisation Strategy 2020

### **Our Community**

The future of the energy sector will be shaped and delivered through collaboration across a broad community of stakeholders and we're playing a leading role in that transition. On this page, we provide a short profile of how we're working with Safeguarding Organisations, Government Authorities and Policy Makers and describe how the investments we're making in digital will enable us to better collaborate with them and meet their needs.

#### **Safeguarding Organisations**



We chair the industry-wide Safeguarding Customers Working Group, playing a pivotal role in providing better services to all customers, but especially those most vulnerable. Part of this is linking with existing services to help those in need.

Our engineers are well equipped to recognise vulnerabilities so, with a customer's consent, they share details with supporting organisations in their local area such as Age UK, the Fire Service, the British Red Cross; along with many others.

Enabled by digital our Safeguarding Organisation will have



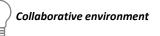
Open channels of communication with communities

- Offer of proactive information sharing through multiple channels.
- Ongoing communication to continuously capture the relevant needs of communities.



Personalised and tailored products and services that are supportive of the vulnerable and communities' specific needs

Offer of personalised and tailored propositions and channels to ensure they have proactive support for new connections. communications and solutions during outages.



An open environment, collaborating with other industries to support the vulnerable and wider communities

Collaboration with wider industry stakeholders to continue to deliver a reliable energy supply, and deliver joined up services for vulnerable communities.

#### **Government Authorities and**

#### **Policy Makers**



We work with Government Authorities (local, regional and national government) and Policy Makers to deliver to stakeholders, supporting those in greatest need, planning work in different regions and shaping the future of the energy sector.

We continue to make Cadent more transparent and open, sharing data and using others' data to drive better decision making across the energy ecosystem.

We collaborate with regulators to deliver on our commitments.



Simple, efficient and tailored processes

Offering tailored propositions for

those in vulnerable situations.

Tailored support and engagement

with specific needs.

during outages to cater for those



Enabled by digital our Government Authorities and Policy Makers will have

Access to relevant network information

- Sharing of network information both in real-time. to understand disruptions, and future looking, for longer term planning and the transition to Net Zero.
- Sharing of real-time performance against Cadent's Business Plan commitments.

#### Collaborative environment

An open environment, collaborating to deliver Net Zero

- Collaboration and an open environment to help support both short and longer term investment decision making.
- Collaboration with broader industry stakeholders to deliver innovative solutions for Net Zero.

#### Cadent **Digitalisation Strategy 2020**

### **Our Industry Partners and Supply Chain**

The future of the energy sector will be shaped and delivered through ongoing collaboration across a broad community of stakeholders and we're playing a leading role in that transition. In this section, we focus on our Supply Chain and the Energy Industry and Other Utilities and describe how the investments we're making in digital will enable us to better collaborate with them and meet their needs.

#### **Supply Chain**



Our supply chain is an essential component in the energy ecosystem, so we will continue to leverage and collaborate with each other to innovate across the end-to-end value chain of the energy sector. Through data sharing and the use of AI and predictive analytics, we expect to co-create new products and services that will benefit our Customers, Communities and Colleagues. Our collaboration will bring efficiencies to businesses, decrease

operational costs and reducing the impact of delivering our essential work.

#### Enabled by digital our Supply Chain will have



Access to relevant network information to enable decision making driven by data

- Sharing of information on work requirements and locations.
- Sharing real-time asset data driving improvements to safety.
- An environment and tools that enable innovation through joint working.

Tailored communication

Tailored communication channels to support their needs

• Offer of open and reliable communication channels to share updates and changes.



Live updates and information

- Access to real time planning changes to remain informed
- Enable our supply chain to provide updates to enable end to end visibility.
- Enable visibility of live updates to customer support functions to provide customers with real-time information.

#### Energy Industry and Other Utilities

## "I need to support my customers investing in the future of the energy ecosystem"

We work in collaboration across peers in the energy sector (Distribution and Transmission Network Operators) among others on the broader sector (e.g. water, infrastructure and transportation industries).

As we continue to **become more open**, **sharing data**, **collaborating on planned work** to deliver better customer experience, **drive innovation** and **develop best practices**, it is essential that we **build trusted relationships across our ecosystem**.

#### Enabled by digital the Energy Industry and Other Utilities will have

## 24 - Information sharing

Access to relevant network information

- Sharing of network information both in real-time, to understand disruptions, and future looking, for longer term planning and the transition to Net Zero.
- Collaboration with wider industry stakeholders to deliver innovative solutions for Net Zero.

Collaborative

environment

Collaboration and an open

decision making.

deliver Net Zero

An open environment, collaborating to

environment to help support both

short and longer term investment

## A whole systems approach to reduce

Whole system approach

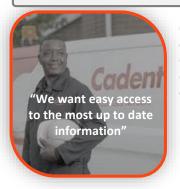
A whole systems approach to reduce disruption and costs

- Collaboration to understand the impact of interruptions on other utilities.
- Reduced disruption and cost through sharing planning and investment information.

### **Our Colleagues**

Our colleagues are the beating heart of our business. In this section we focus on our Customer Service teams and Field Engineers and describe how the investments we're making in digital will enable them to better serve our customers, manage the network and enjoy their careers as part of our team.

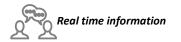
#### **Customer Service**



Our **Front Office** teams are the face of our business and interact with customers on a daily basis, answering queries and resolving any issues. Our **Back Office** staff manage all our internal processes to ensure we deliver a high level of network performance and service to our customers and communities.

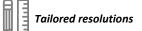
Enabling our Customer Service teams with the right digital tools and helping them adopt digital ways of working will help us deliver an even better service to our customers and communities.

#### Enabled by digital our Customer Service agents will have



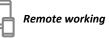
Access to real time information and updates to best serve our customers

 Enable a single view of the customer, where there is a single source of up-to-date information.



Access to information which allows us to tailor responses to customers' needs

- Simple and easy processes to enable personalised responses.
- Provide solutions and dynamic tools empowering Customer Service agents to deliver a first-time resolution.



Deliver a great customer service even when working remotely

- Working remotely has no impact on our ability to access information and deliver tailored customer service.
- Deploy the right tools and capabilities needed to deliver a great customer outcome.

#### Field Engineers



Our **Field Engineers** manage both the **day to day planned maintenance** of our network, as well as **responding to any network issues when they arise**. These teams are highly mobile, working in challenging on-site conditions with variable work depending on the job.

Providing our field engineers with digital tools and helping them adopt digital ways of working will mean they can deliver the best possible outcome for each job and increase our first-time resolution performance.

#### Enabled by digital our Field Engineers will have

24 - Real time information

#### Decision making tools

Support and training

Access to real time information and updates about jobs to deliver the best outcome

- A single source of up-to-date information about the job and related insights.
- Simple and easy to use tools for updating and correcting information.

Access to, and sharing of, information to resolve issues first time

- Plan and deliver work based on specific insights
- End to end digital experience to obtain job, asset and network information that inform decision making on site.

On the job training and support

 Tailored support and insights to improve performance and adopt new tools and techniques.

© Cadent Gas Ltd 2020

### **Our Colleagues**

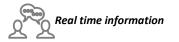
In this section we focus on our Network Planning and Regulatory Reporting teams and describe how the investments we're making in digital will enable them to better manage the network, meet our commitments and enjoy their careers as part of our team.

#### **Network Planning**



Our Network Planning teams plan the investments that keep the network running today and plan for the long-term future whilst also ensuring we enable new connections onto the network. Enabling our network planners with the right digital tools will mean they can make better planning decisions, both in the short and longerterm.

#### Enabled by digital our Network Planners will have



Access to real time information about the network to plan

- Digitalisation of the network model with sensors providing live information.
- Enable real time information gathering across the end to end network, and from 3<sup>rd</sup> party assets

Predictive tools

Ability to predict potential network issues and develop plans to prevent them happening

- Information and insights to drive future planning decisions by using data and predictive analytics
- Better understand how our assets, pressures and our network overall can be optimised as a system



Ability to plan for potential future scenarios

- Integrate information from third parties and other industry players to model potential future scenarios
- The ability to develop and evaluate different scenarios so they can manage uncertainties of our investments

#### **Regulatory Reporting**



Our **Regulatory Reporting team ensures that we continue to meet our commitments to our customers and communities.** Sharing up to date, realtime information and delivering high quality reports to authorities is essential to build trust and meet our requirements.

The digitalisation and visualisation of data alongside dynamic reporting can enable our regulatory reporting team to simplify processes, support authorities and ensure we are compliant with regulations.

#### Enabled by digital our Regulatory Reporting team will have

4 - Automated reporting

internal decision making

date information

Ability to provide simple and automated

Reporting based on the most up to

reports both for the regulator and

Real time information

Access to real time information about the network and current performance

 Assessment of how this information impacts regulatory requirements Information sharing

Access to and sharing of relevant network information

- Sharing of information to support collaboration with third parties and across the energy ecosystem
- Sharing of real-time performance against Cadent's Business Plan commitments

## **Defining our Business Priorities**

### The needs of our stakeholders have shaped our business priorities

In the process of understanding our stakeholders' needs we defined a set of business priorities that we will invest in to deliver on our commitments.

Que

Build trust with Customers and Stakeholders

Working with our Customers and Stakeholders we better understand their individual needs and use data to tailor interactions and our services.

- Continue to develop our Business Intelligence capability so we better understand our stakeholder's needs and can engage them in the best possible way.
- Have open discussions using collaboration tools with our stakeholder groups.
- We will use data to drive our actions and decisions.



#### Visualise and model our network in new ways

We will combine our asset and live network information to provide a 'digital system map' that is used by our business and is made available to our stakeholders.

- Develop a digital twin of our network that models capacity, risk, pressure and future energy scenarios.
- Visualise our network assets and capacity so we can share this with our stakeholders.
- Provide products and services to our stakeholders that help them accelerate decarbonisation.
- Align to broader standards for developing digital twins.



- Enable employees to work efficiently and safely
- Tailor information shared with, and captured from, employees based on their work and the stakeholders they interact with.
- Capture the right information, at the right time in a way that the business can trust. Repetitive and low value tasks are automated.
- Share the right information for the job at hand, and make it easy for our employees to work efficiently and safely.
- Combine network, employee and external data sources to ensure we operate safely for our employees and our communities.
- Empower our employees with the tools and data they need to deliver work and resolve stakeholder queries at the first attempt.



#### Use technology and data to drive decision making

Operational and asset investment decisions use analytics based on a single source of truth. Stakeholder impact, environmental footprint, asset health and network risk are combined to make the optimum investment decisions.

- Plan our mains replacement programme, so that is causing the least disruption, through our actions and those of other utilities.
- Use a real time visibility of asset condition to prioritise maintenance activities and manage our workforce in a safer and more efficient way.
- Make the best decisions for the environment as a result of capturing a wide range of sustainability data.



#### Better understand our assets

Use emerging, smart devices to better understand our network in realtime, using analytics to model our network over the long term.

- Increase monitoring of our low-pressure network using low cost Internet of Things (IoT) devices
- Better understand the energy delivered by our network as we distribute new green gases, including hydrogen.
- Manage our network in real-time, adapting to changes in demand profiles and climate change. We will do this in coordination with other energy utilities, sharing best practice and learning from each other.



#### Deliver Net Zero with a whole system approach

Embed a whole system approach to enable Net Zero in the most affordable way.

- Share our network and demand scenarios with other utilities to identify the most efficient whole system investment strategies.
- Share our network information with new providers of green gas and hydrogen and help them connect to our network.
- Using data and new collaboration tools, work with our supply chain to deliver a better outcome for customers.

## We will continue to engage with our Stakeholders

### A journey that will continue

We have developed a set of personas that we are using to inform our Digitalisation Strategy, these have been developed using our day to day contact points and RIIO-2 engagement. We will continually improve the insight we have into our stakeholder needs to inform our Digitalisation Strategy and Action Plan.



## What we have planned for the next 18 months

- We will develop more detailed and robust personas, making greater use of data and research to support and tailor our products and services and refine our strategy.
- We will engage stakeholders using different methods and through a variety of parties to understand the evolution of our stakeholder' needs over the next five years.
- We will continue to work on the personas representing our colleagues to help support our shift towards a digital culture and way of working.

### How we will use Personas in the next 18 months



## Our Digital Action Plan



### **Defining Digital**

Across the world, digital is disrupting industries, from media and entertainment, to retail, banking, transportation, hospitality and many more, so it is right that we should both understand and embrace the potential of digital to help us shape the future of the energy industry here in the UK.

Digital businesses are customer-obsessed, highly automated, increasingly intelligent and extremely efficient. They are built on scalable digital platforms and fuelled by data. They use advanced analytics and artificial intelligence to improve customer experience, automate business process and deliver operational effectiveness.

Digital businesses are also frequently driven by a culture and way of working which is more agile, open, collaborative and empowering, creating an environment in which their employees can innovate and thrive. It is with this frame of reference that we have defined our ambition for digital.

#### Digital definition:

Digital will improve what we do, shaping the experience of our customers, employees and stakeholders ensuring no one is left behind whiles helping us run an efficient, resilient and secure network.

Digital will enable ways of working which are more agile, open, collaborative and empowering, creating an environment in which our employees innovate and thrive. Digital should be transformational, it is a fundamental shift in thinking and strategy that drives a step change in business performance.

### **Our Digital Ambition**

Given the breadth of the opportunity for digital within our business and the energy industry, our ambitions for digital span over two time horizons. We have important objectives to deliver on during RIIO-2, and significant potential value to unlock beyond RIIO-2 as we look to the future. Our ambitions for digital are:



### RIIO-2 – the next 5 years

- Digital helps us deliver our commitments in the most efficient way.
- It accelerates our efforts to collaborate across our ecosystem and deliver benefits for our stakeholders.
- It enables us to transform the experience of our customers, in particular customers in vulnerable situations.
- We empower our customers to shape our actions that impact them.



#### Beyond 2026

- Digital is a major enabler for us to deliver efficiencies across the energy sector.
- It creates direct benefits for our all our stakeholders and enables new opportunities across a wider ecosystem.
- Digital enables us to be a leader in the energy sector, driving innovation and the journey to Net Zero.

## **Our Digital Framework**

### **Introducing our Digital Framework**

Developing our RIIO-2 business plan helped us understand what our stakeholders most value and how we should best respond. Their priorities have helped us define our digital framework – one that's based on four simple pillars supported by a set of practical measures that will help guide our decisions and enable us to measure progress.

Enhance the Experience of our Customers

Delivering for our Customers and Communities

We will tailor our products and services to meet customers' needs today and in future, recognising each customer's unique needs and circumstance.

We respond to emergencies quickly, proactively and with information customers value. We communicate proactively using their channel of choice.

#### How we will measure progress:

- Reducing customer effort and friction.
- Delivering a real-time service.
- Pro-actively communicating.
- Using the channel of choice whilst recognising unique circumstances.
- Designing products and services that deliver excellent experiences for our stakeholders.



Simplify the Life of our Employees

#### Delivering for our Colleagues

Providing the right information, tools and training so our colleagues can work efficiently and safely.

They use and help develop solutions that are intuitive and that automate **non-value-add activities.** Our employees focus on the most valuable work **through a continuous learning approach** and embrace change and new experiences as a learning opportunity.



### Optimise our Operations

#### **Delivering Operational Efficiency**

Improving our operational performance and driving efficiencies across our network, assets, communities and customer touchpoints.

Supporting business decisions by applying insights and predictive analytics to take the next best action.



Explore and Innovate

Delivering for the Future

Developing the capabilities to support the journey to Net Zero.

Work in collaboration with stakeholders exploring new products and services through the sharing of data.

Attract and retain talent, building high performing, empowered teams and transforming ways of working.

#### How we will measure progress:

- Enable a blended network supporting the journey to Net Zero.
- Attract and retain the next generation of diverse talent.
- Continue to monitor and evaluate new trends and ways of working.
- Continuously re-think existing services.
- Embrace new approaches and technologies.



### How we will measure progress:

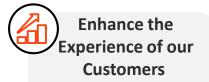
- Build digital skills in our workforce.
- Our tools are intuitive and automated.
- Our culture values data and is used across our business.
- Our future workforce integrate into our business, partnering seamlessly with our existing colleagues.

#### How we will measure progress:

- Increase our data collection through asset and process digitalisation.
- Develop predictive analytics and scenario modelling.
- Enhance Health and Safety using technology and data to support our safety focussed culture.

## **Enhance the Experience of our Customers**

### We are on a continuous and evolving journey to deliver for our Customers and Communities



Delivering for our Customers and Communities

We will tailor our products and services to meet their needs now and in future. We recognise customers unique needs and situation.

We respond to emergencies quickly, proactively and with information they value. We communicate proactively using their channel of choice.

### A journey that has already started, we have and will continue to invest in the following initiatives

Priority Service Register (PSR)

The PSR is a way of customers in vulnerable situations can inform us of their situation and additional requirements that they may have. We can then tailor the services we offer and how we offer them.

#### What we have done

Cadent led a project to establish a single PSR across all energy companies and ultimately creating a single set of 'needs codes' that have been applied for the whole industry.

#### The value we delivered

This means that no matter which organisation a customer registers with, their needs codes are made available across the industry to enable all energy companies to adapt their processes to better support all customers.

Priority Service Register (PSR)

We have mapped customer vulnerability risk factors in our regions, their prevalence and concentrations. These include 'personal characteristics' e.g. disability, and customers' wider 'situations' which may be relevant e.g. fuel poverty and affordability, internet access, building and tenancy type.

#### What we have done

We have developed a 'needs analysis mapping tool' with the Centre for Sustainable Energy. This tool relies on publicly available data, purchased data and our own data (including PSR) to visually map the concentration of people with different vulnerability risk factors.

#### The value we delivered

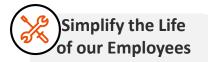
We have tailored and prioritised our services, improved the customer satisfaction in our communities and understood which communities benefit most or are impacted most by our decisions e.g. reinforcement activity and prioritise the partnerships we enter into. We can also now organise relevant events to engage a particular group of customers (both directly and through trusted parties).

### In RIIO-2 we will focus on the following priorities to deliver a great outcome for our Customers and Communities

- Single view of the Customer: Coordinate our customer engagement channels (CRM/web/social/text/chat) to deliver a seamless experience. We will improve the overall experience with a particular focus on customers in vulnerable situations and enabling self-service.
- Contact Centre of the Future: We will implement new, highly resilient capabilities to our contact centre. This will include enabling a robust home working platform for our employees as well as improved reporting, call recording and speech analytics.
- **Customer Insights:** Using real-time data gained from our customers we will segment and analyse each interaction, including their use of our services, feedback and behaviours. We will enhance and develop new products and services based on accurate and up to date customer data.
- **Open Data and Data Sharing:** Establish processes and tools to make us the leaders in the energy industry, enabled by open data sharing combined with tailored services for our stakeholders. Leveraging data we will innovate to deliver an excellent customer experience across the energy ecosystem.
- Customer Pipeline Querying: Providing our customers with an improved and simple service for querying the location of our pipes and assets. We will enable a self-service tool so our stakeholders can assess and reserve capacity.
- Customer Service Updates: Using real-time operational data and improved communications to provide customers with proactive updates to services and situations that may impact them. We will be able to improve first time resolution rates and make a positive impact on the experience each customer has with us.

## **Simplify the Life of our Employees**

### We are on a journey to make our Colleagues lives simpler so they can work efficiently and safely



Delivering for our Colleagues

Providing the right information, tools and training so our colleagues can work efficiently and safely.

They use and help develop solutions that are intuitive and that automate **nonvalue-add activities.** Our employees focus on the most valuable work **through a continuous learning approach** and embrace change and new experiences as a learning opportunity.

### A journey that has already started, we have and will continue to invest in the following initiatives

Data visualisation and dashboards

In January 2020 we started a programme to empower our data visualisation capability. Our team focused on the development of dashboards that aligned to our new operating model.

#### What we have done

Successfully developed a range of report visualisations for 30 performance metrics, >200 report pages with >1000 KPIs from over 100+ data sources.

Both the strategic dashboard and the operational reporting tools created provide self-service insight into performance.

#### The value we delivered

We enabled stakeholders to engage and visualise our business in a more intuitive way to make key decisions driven by data.

We delivered standard reporting with real time data for 28 areas and explored the role for gamification.

We have enabled efficiencies allowing more time for value added activities.

Safety, Health and Wellbeing and Security platform

We have launched a new SHES Management System which brings together our existing Policies and Management Standards into a single integrated, coherent and simplified management system covering all four specialist areas.

#### What we have done

We have condensed 76 documents into 26 Management Standards and reduced each document by over 60% with the key information a reader needs to know at the front.

#### The value we delivered

We have simplified and make more accessible our SHES policies and standards to support our employees and enable improved reporting to external parties

### In RIIO-2 we will focus on the following priorities that will deliver a great outcome to our Colleagues

- Boundaryless Productivity: Identity Access Management (IAM) will provide a seamless and secure working experience for our employees that allows them to work SATAWAD (Secure, Any Time, Any Where, Any Device). We will have a more efficient remote workforce that can continue delivering for our Customers and Communities regardless of a change in circumstance.
- Seamless Collaboration: Build on the deployment of collaboration tools (such as Microsoft Teams) to provide employees with more dynamic collaboration tools.
- Democratisation of Data: Employees will have the knowledge, tools and access to data to develop their own reports and insight.
- Automation of Manual Processes: Utilise Robotic Process Automation (RPA) to realise a balance of immediate benefits whilst also maximising our operational efficiency over the longer term.
- **Cognitive Automation:** We will combine our RPA capabilities with analytics and machine learning to accelerate the digitisation of our business.
- Predict and Prevent: Using Artificial Intelligence (AI) and Machine Learning (ML) for predictive and preventative maintenance and improving customer service.
- Simplify our HR Operations: To maintain a technical competent and diverse workforce we will deliver a simply and tailored experience of all HR related activity. It will also provide insights into our current and future workforce composition so we can identify training and recruitment needs in a more targeted way.

## **Optimise our Operations**

## We will continue our efforts to digitalise our business, delivering efficiencies for consumers whilst enabling Net Zero



Optimise our Operations

### A journey that has already started, we have and will continue to invest in the following initiatives

Delivering Operational Efficiency

Improving our operational performance and driving efficiencies across our network, assets, communities and customer touchpoints.

Supporting business decisions by applying insights and predictive analytics to take the next best action. Data Foundation Programme

Our data management maturity has been benchmarked to provide a common understanding of our data position in April 2019 resulting in formalising the investment required in data space. A data roadmap was developed to deliver 'Foundation' level improvements in data management practice that are already delivering benefit and subsequently will lead us to 'Data Driven' state over the course of RIIO-2 period.

#### What we have done

- We have stablished the roles of Data Owners and Data Stewards with a Data Governance Framework to ensure we have clarity on ownership and accountability.
- We have set up a central Data function to work within the organisation on adoption of Data Governance, Data Quality and Data Architecture best practice and develop data policies, standards and metadata artefacts to manage our data more effectively taking into account guidance from Ofgem's Data Best Practice.
- We have a clearly defined roadmap of activities to improve transparency and accessibility of our data including data quality improvement initiatives, adoption Presume Open principle and developing Open Data Triage process in accordance with the recommendations from ENA
- We are working on enhancing our reporting and increasing the level of automation in our processes and building analytics and cloud capabilities including recruitment.

#### The value we delivered

- We use our data to provide tailored services to our customers, recognising their needs and engaging over their preferred channel.
- We are building towards a 'single view' of our interactions with them allowing us to streamline their experience with us.
- We have made big steps to having a trusted and holistic view of our asset data
- Data capture is becoming simpler for our operational teams and we are now able to centrally capture and prioritise the areas requiring improvement Data available to all of our employees and customers in a format that is suitable for them.

## In RIIO-2 we will focus on the following priorities that will deliver a great outcome for Consumers

- Smart Network and Assets: Lay the foundations for enhanced visibility, control and management of our network and assets through the use of smart IoT sensors and empowered edge technologies.
- Data Warehouse and Data Lake: Create a central, structured and governed store for all of our data, that can drive our ambitions to make our data open. This will provide a basis for data science and advanced analytics.
- Open Data: Work with the business to identify initiatives to improve areas of lower data quality and to create a 'trusted by default' approach that drives the products and services offered to our stakeholders.
- Operational Insights: Implementation of an advanced analytics platform to deliver improved operational data and insights through natural language querying (NLQ).
- FSM Field Service Management: Enabling new ways of working, gains in overall
  efficiency and improvements to job satisfaction, customer experience and
  information quality by improving the tools we provide our field engineers.
- Augmented Digital Twin: The addition of holistic information to produce a 'realworld' augmented view of our live network.
- **SCADA Platform Refresh:** Ensure the reliance of our SCADA platform and ensure it is fit for purpose as we increase the scale and granularity of network monitoring.

## **Explore and Innovate**

### We have started a journey to deliver the future of the energy sector that will continue and evolve



Explore and Innovate

Delivering for the Future

Developing the capabilities to support the journey to Net Zero.

Work in collaboration with stakeholders exploring new products and services through the sharing of data.

Attract and retain talent, building high performing, empowered teams and transforming ways of working.

### A journey that has already started, we have and will continue to invest in the following initiatives

HyDeploy

To reach Net Zero we will certainly need hydrogen, alongside other energy sources and better insulated homes and smarter use of energy. We aim to see electricity and green gas working together in partnership.

#### What we have done

HyDeploy is a pioneering hydrogen energy project, led by Cadent to help reduce UK CO2 emissions and provide hydrogen to homes across the UK. Since November 2019 it has been providing blended hydrogen to 100 ordinary homes on the Keele University campus. **The value we delivered** 

HyDeploy is successfully demonstrating that blending up to 20% volume of hydrogen with fossil gas is a safe and greener alternative to the gas we use now. And it's doing this using customers' existing appliances to keep any disruption to a minimum.

Future Gas Programme

We have been working on creating advocacy among stakeholders, planning the transitions and working on safety factors.

#### What we have done

Advocacy: We have developed a series or engagements (eg, the Platts Hydrogen Markets in Europe and the Conservative Party Conference) working with partners in various aspects such as hydrogen-ready boilers.

Transition: Working on a digital service project with Arup and Google. Focusing on the planning and logistics of converting cities and regions to Hydrogen

Security: working on the reporting mechanisms and security aspects.

#### The value we delivered

Created awareness among key stakeholders, build partnerships with key players to develop digital models to enable transition and shaping the safety measures with government authorities and regulators.

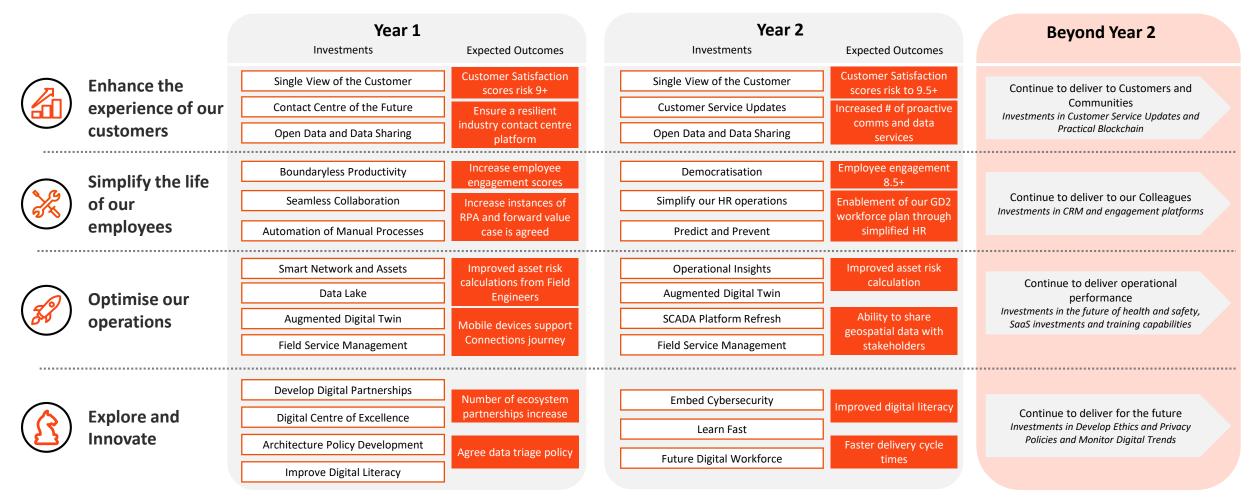
### In RIIO-2 we will focus on the following priorities that will enable us to deliver to the future of the energy network

- **Develop Digital Partnerships:** Build a collaborative relationship across Business and IS function. Seek out digital specialists who have the agility to exploit the most relevant digital trends and technologies.
- Digital Centre of Excellence: Begin to lay the foundations for creation of a digital CoE. Collaborating with our digital champions, local universities and wider stakeholders to promote innovation and learning.
- Architecture Policy Development: Creation of the architectural and technical policies to support a digitally agile organisation, this will include our approach and policies to deliver to Data Triage.
- Improve Digital Literacy: Work with Training and Operations to develop the tools and guidance to enable a digital, data driven workforce.
- Embed Cyber Security: Ensure cyber security and data privacy is integral to every digital initiative, both up-front and throughout. Educate our workforce in cyber security.
- Learn Fast: Embed a continuous learning approach (learning from failures). Instead of focusing on failing fast, we should instead promote the mantra of continuous, incremental learning.
- **Future Digital Workforce:** Identify skills shortages and provide opportunities for reskilling along with strategies for attracting new talent.

## **Our Roadmap**

### **Our planned investments**

We have planned the following investments for RIIO-2 that will be reviewed as the final determination is issued



## **Managing Delivery of our Digitalisation Strategy**

### We are establishing the governance, operating model and behaviours to deliver our Digitalisation Strategy

#### How we govern and develop our strategy:

Our Board are committed to the role of digital in delivering for our stakeholders. We have committed to providing quarterly updates on our progress and outcomes. We will also report to our Audit Committee who have oversight of our data and digital approach..

Through development of our RIIO-2 Business Plan we have hugely valued the role of our Customer Engagement Group. They have helped shape the early stages of our Digitalisation Strategy, and we will continue to use them as a source of challenge and support as we work with stakeholders on our Digital Action Plan.

Within Cadent our Chief Operations Officer – Howard Foster, is responsible for delivery of our Digitalisation Strategy. He is supported by Kate Jones, our Chief Information Officer, as well as the wider Executive Team. This broad senior level sponsorship is possible through the alignment of our Digitalisation Strategy to the commitments made within our Business Plan for the next 5 years.

We also understand the value of external benchmarks and opinions to challenge and build upon our Digitalisation Strategy. Alongside our work with Gartner to provide benchmarking of our capability we are welcoming input from stakeholders to shape our next update to Digitalisation Strategy and Action Plan.

#### How we ensure we deliver our digital investments:

In 2021 we are establishing a quarterly Digital Working Group that will bring senior figures from across our business together to share insight, review priorities and steer the delivery of our digital investments at a strategic level. This group will be responsible for development of our Digitalisation Strategy and Action Plan.

The Digitalisation Strategy Working Group will be supported by a well established governance framework that enables the delivery of new capabilities into our business. Our 'Solution Delivery Framework' is based upon best practice and tailored to fit the culture and requirements of Cadent. It provides methods, processes, tools and templates to evolve existing, and embed new, capability into our business.

As we have increased our focus on digital investment, we have developed Agile@Cadent. Our Method is based on the Scaled Agile Framework (SAFe) that promotes alignment, collaboration and delivery across a large number of agile teams that enables Cadent to incorporate Agile at scale aligned to the ambition in our Digitalisation Strategy.

#### Ensuring data supports our Digitalisation Strategy:

Our Data Foundation Programme places significant value in Data Governance. Its aims are reducing business risk, embedded the value of data within our culture and establish leading data management practice, including adoption of the EDTF recommendations.

Our approach to data governance is described within our Information Management Framework, and owned by a dedicated Data Governance lead. This document will continue to evolve as we develop our approach to data triage and increase the data we make open.

To ensure our data is fit to support both our business activity and stakeholders needs we have established two key roles. The first are our Data Owners, each of our Directors now has a formal accountability for data across the business. We also have established Data Stewards, who drive our data strategy into our day to day activity and culture. Our Stewards interact within a dedicated Community of Practice.

To ensure we continually mature our data management capabilities we have committed to completing an independent data maturity assessment on annual basis. Our next assessment will close the improvement activities we have planned for FY20/21.

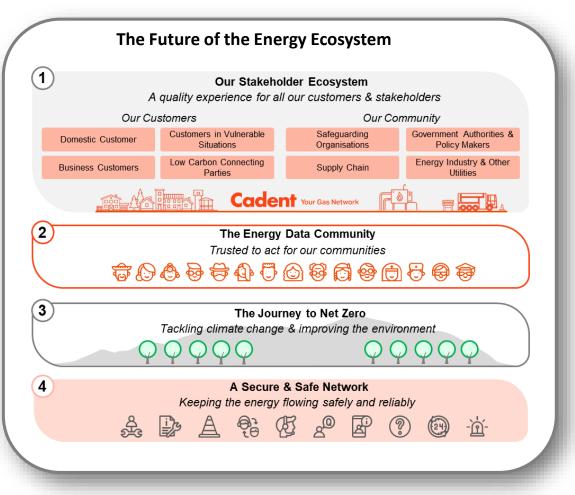
# Open to You

## **Open to You**

### We have established a variety of partnerships across the energy industry and wider to help deliver our strategy

1

3



#### Our Stakeholder Ecosystem

- CEG: Cadent Independent Customer Engagement Group, have provided review, challenge and steer on our Digitalisation Strategy.
- Safeguarding Customers Working Group: Cadent chair the industry wide group which includes a focus on understanding and meeting the needs our most vulnerable customers.



#### The Journey to Net Zero

- Centre for the Protection of National Infrastructure (CPNI): supported RIIO-2 Cyber Resilience plan.
- Centre for Digital Built Britain (CDBB): helps build our understanding of digital twins.
- Liverpool City Region Combined Authority, our joint work on decarbonisation strategies is shaping the products and services that Local Authorities value.



### The Energy Data Community

2

4

LIVERPOOL CITY REGION **ENA: Energy Network Association Data Working Group**, we are an active contributor to our industry working group.

**Xoserve:** underpins competition in the gas shipper/supplier market. We work very closely to ensure data supports the needs of customers, shippers and networks. We collaborate to improve the data available on customers in vulnerable situations and on new applications such as the Data Discovery Platform.



#### A Secure and Safe Network

- National Underground Asset Register (NUAR): is a pilot project to create a secure data exchange platform to provide of digital map of underground assets. Cadent, alongside other utilities is a leading contributor.
- Supply Chain Sustainability School: provides Cadent and its suppliers with resources and tools and templates, workshops and dashboards that transform our businesses towards becoming more Economically, Environmentally, Socially and Financially sustainable."



## **Open to You**

## Keeping the conversation flowing

Facebook

Twitter



Being open and transparent is part of our culture, we would welcome hearing from our customer, communities, colleagues and regulators to improve the value we deliver. Your comments and suggestions on our Digitalisation Strategy would be valued.

feedback

There are multiple ways you can engage with us and share your views and comments Comment on Commen

LinkedIn

Send us your feedback by post