Our Digitalisation Action Plan

Stakeholder update June 2026

Cadent

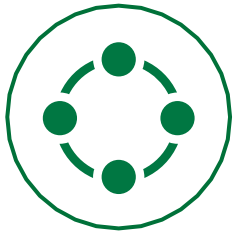
Your Gas Network

Welcome to our Digitalisation Action Plan June 2026

Our Digitalisation Action Plan (DAP) reflects the progress we have made in our digitalisation journey throughout the first half of 2026.

- This Document covers a transitional time as we move from one regulatory period to another. RIIO-2 ended March 2026, and RIIO-3 will run from April 2026 to March 2031.
- RIIO-3 has a five-year term, and our secured investments will be delivered over this. The majority of these are currently in a planning and discovery phase, and we will provide more detail over subsequent DAP releases.
- Actions have been classified according to the Digitalisation Themes defined in our March 2026 Digitalisation Strategy.
- We welcome this opportunity to provide transparency and increase the visibility of our work to stakeholders.

Our Digitalisation Themes:



Interoperability

Data & Digital Literacy

Open Data

Index of initiatives

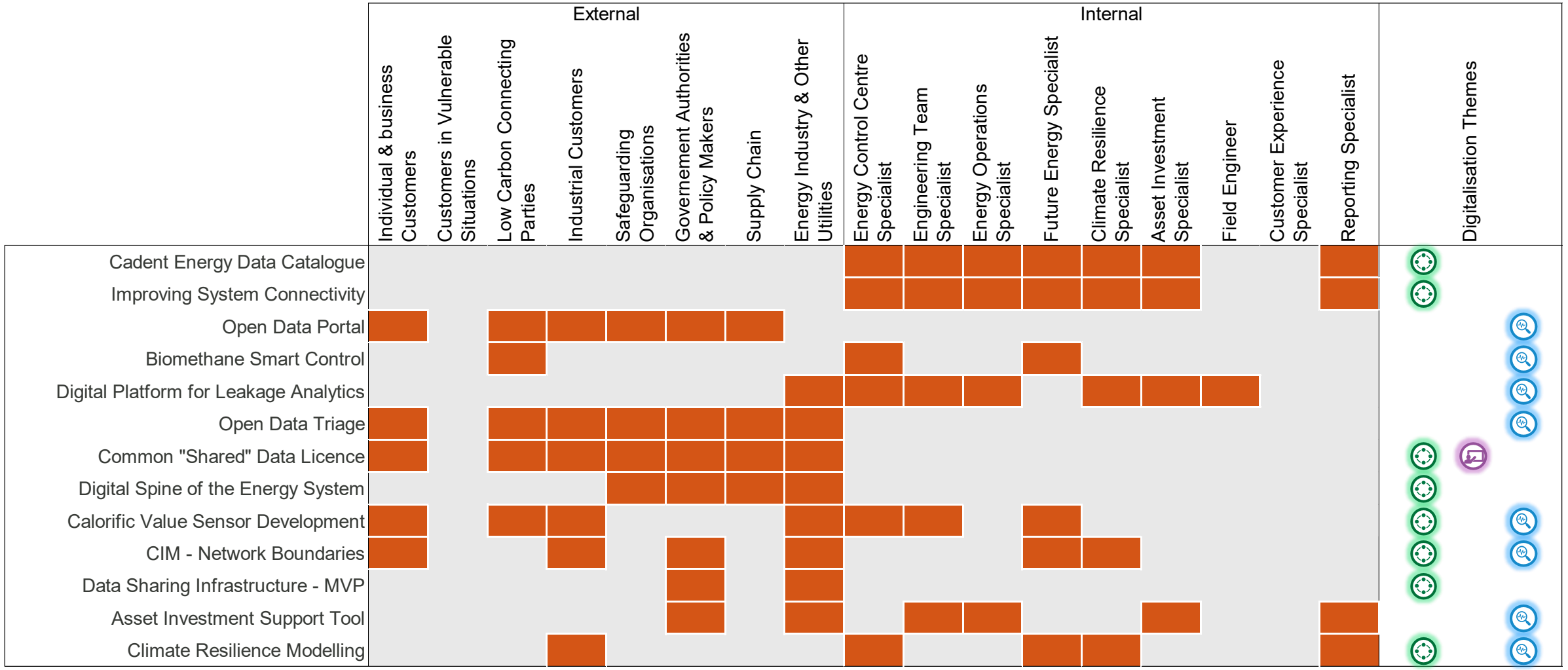
Complete

On Track – No identified risks

Dependency identified and mitigated

Cancelled/on hold – significant dependency

Our digitalisation projects will benefit our internal and external stakeholders



For more details on our stakeholders please refer to the Digitalisation Strategy

Progress since our last Digitalisation Action Plan

Since our last December 2025 Digitalisation Action Plan, we have made strong progress in delivering the core foundations of our digitalisation strategy. This includes successfully completing several key RIIO-2 initiatives, advancing a number of high-impact projects, and continuing to align with emerging industry frameworks.

Together, these activities position us well to transition into RIIO-3, where we will scale our capabilities and deliver greater value through enhanced data sharing, analytics, and whole-system decision making.

DELIVERED (RIIO-2 to BAU)

- Energy Data Catalogue – improved governance and visibility
- System Connectivity (APIs) – faster, standardised integration
- Open Data Portal – enhanced stakeholder access
- Leakage Analytics – proactive emissions detection
- Digital Spine readiness – mobilisation completed

ON TRACK / PROGRESSING

- Biomethane Smart Control – increasing green gas capacity
- Calorific Value Sensors – enabling accurate billing
- Common Information Model – standardising data
- Asset Investment Tool – improving decision making
- Climate Resilience Modelling – cross-sector insights

INDUSTRY ALIGNMENT

- Open Data Triage – aligned to guidance
- Common Data Sharing Licence – consistent experience

LOOKING AHEAD – RIIO-3

- Data Sharing Infrastructure (DSI) MVP
- Expansion of advanced analytics
- Interoperability and standards
- Digital-enabled decision making

Complete

On Track

Status in previous Action Plan

Cadent Energy Data Catalogue – a comprehensive record to allow better control and visibility of our data

Problem Statement

- It's critical that we have good visibility of our data and that we manage this appropriately to apply the right controls and measures to keep the data as healthy as possible.
- Our Energy Data Catalogue programme will set up the standards and blueprints for how we record and manage our Data Assets.

Expected Outcomes

- Centralising the metadata will mean that **our specialists** can explore our Data Assets and this will reduce duplication of effort. Our **data stewards** will have a single point where they can measure and record the key steps needed to maintain the data in line with best practice and Cadent policy.
- We will create clear and consistent templates to capture technical and non-technical metadata.
- We will create the standards to help the business populate these templates and the processes to maintain and keep them up to date.

Recent Updates

- Core repository and reporting systems are incorporated into our Data Catalogue tool.
- Work to incorporate connectivity to our main analytical system is in progress but will be completed under BAU.
- Metadata scanning against our core systems to ensure that the catalogue is maintained to a high standard going forward, and potential quality improvements will be assessed under BAU on an on-going basis.
- Core training has been undertaken for the Data Governance team on the cataloguing tool.

Key Milestones:

START: January 2023

07/2025 INTERIM STEP

Training on data management tool
Key staff trained in data management tool to support future use cases

03/2026 OUTCOME

Data catalogues of initial selected data systems completed
Population of the Energy Data Catalogue will continue as BAU for remaining data systems

END: March 2026

Complete

On Track

Status in previous Action Plan

Improving System Connectivity – reducing development time by creating adaptable data outputs to key systems

Problem Statement

- Currently most connections between systems are bespoke and costly in time and effort to develop. We will need to use data from different sources more often as the wider energy system continues to become more sophisticated and demands for data become more complex both in our systems and externally. A reuseable API (Application Programming Interface) will allow consistency of connection and reduce redevelopment.

Expected Outcomes

- We will assess the data in our systems and create multiple connections to them based on potential use cases, reducing development time and allowing trusted, tested connections which can be used multiple times. These reusable APIs will allow **our data specialists** to combine data from different systems more efficiently and allow them to support the demand for complex data for stakeholders.
- With more consistent development of the data connections that we build, and the ability to reuse them, we will be able to quickly connect our data through appropriate processes both **internally and to third-party data,** with the right levels of control in place to manage the data.

Recent Updates

- This project implemented a selection of live APIs for Asset and Engineering data.
- Since the APIs created through this project were implemented, they have been used to streamline the delivery of several other developments within Cadent.
- Implementing these APIs has provided valuable methodology and lessons learned so that they can be expanded if necessary in future.
- More information relating to this work can be found in the Non-Operational IT Capex Re-opener Final Determinations

Key Milestones:

START: April 2025

07/2025 INTERIM STEP

Analysis of connection between storage and processing systems – selected Asset data
Analysis completed

07/2025 OUTCOME

High level design approval
We have created the blueprint by which we will create all the connections

11/2025 OUTCOME

Low level design approval
We have created the detailed plans for delivery

12/2025 OUTCOME

Production release of Asset data API
We will implement the APIs to support Asset data

02/2026 OUTCOME

API to support engineering works
We will implement the APIs to support engineering works

END: March 2026

Complete

On Track

Status in previous Action Plan

Open Data Portal – a digital service to make our data available to stakeholders

Problem Statement

- Ofgem introduced Data Best Practice Guidance, a key part of which is making our data open and discoverable for stakeholders. The evolving energy system landscape and technological innovation means we face increasing and more complex data demands from our stakeholders.
- We need a more effective and efficient way of **providing our stakeholders** with the data they need.

Expected Outcomes

- Our current solution required manually managing Data Assets, releasing them on request. It was slow and difficult for stakeholders to interact with.
- Our new Open Data Portal allows Data Users to self-serve Data Assets in a variety of formats, with visualisations and supporting documentation embedded. This makes our data more discoverable and accessible.
- We will continually review and expand our range of Data Assets to meet evolving **Data User** needs.

Recent Updates

- We launched our new Open Data Portal in October 2024 and have continued to develop it since then.
- Initially, our main focus was to provide basic functionality with core Data Assets and since then we have redeveloped the pages to make them easier to navigate across different devices, incorporated feedback forms and configured the platform to let us serve Data Assets of different levels of control.
- Key deliveries this DAP Period:
  - Back-end systems to support geospatial automation have been completed.
  - Architectural patterns have been created to automate ingestion of different data types and these will be implemented as needed under BAU.
  - Portal capability to implement ReciteMe and Data User engagement surveys have been added and these will be rolled out under BAU.
- This is a RIIO-2 aligned project and has now transitioned to BAU.

Key Milestones:

START: January 2023

12/2025 INTERIM STEP

Code management function implemented

Code quality assured and promoted to code repository

12/2025 INTERIM STEP

Source data automation and ingestion

New pathway to bring geospatial source data into back-end system automatically which is analysed and prepared into Open Data Assets

12/2025 OUTCOME

Data Assets are refreshed end to end automatically

Geospatial based open Data Assets are refreshed from source to portal automatically

03/2026 OUTCOME

Capability of the portal is improved

ReciteMe is enabled

Data User surveys added

END: March 2026

On Track

On Track

Status in previous Action Plan

Biomethane Smart Control –
modelling and monitoring our network to maximise the injection of Biomethane

Problem Statement

- Biomethane is a green gas which is created from organic material; offering a low carbon alternative to natural gas.
- Biomethane injection into our network is optimised where there are lower pressures, but without for our customers. This limits the number of potential sites where we can inject biomethane. the right monitoring and controls, this could threaten security of supply

Expected Outcomes

- We will create models which will help us identify the most efficient way to inject more biomethane gas into our network to support our **Low Carbon Connecting Parties.** This model will be supported by smart pressure and flow monitoring devices identifying more opportunities to inject biomethane more often and reducing the impact of seasonal changes in demand.
- We will install pressure control devices, including the first implementation of a compressor on a gas distribution network to help us create optimal conditions for biomethane by controlling the pressure of gas on the network.
- We will use these techniques on two biomethane injection sites to let us prioritise the use of biomethane over natural gas, showing an increase in the volume of gas injected through these sites.

Recent Updates

- Delivery of the smart pressure sensors into the network is continuing to plan, although there has been a marginal extension of the design phase for the smart pressure metering to ensure that these are configured in an optimal way. As a result, this has moved anticipated delivery of this step from July 2026 to September 2026.
- It is not anticipated that the delay on smart pressure controls will impact the completion of the flow measurement equipment stage, with completion still on track for the project overall in December 2026.
- More information can be found here:
- Biomethane - Cadent Gas Ltd; Optinet; More information about Biomethane

Key Milestones:

START: May 2022

12/2024 INTERIM STEP

Smart pressure technology available for installation in high pressure network

09/2026 INTERIM STEP

Installing smart pressure controls at above-ground-infrastructure
Dynamically manage pipeline pressures increasing capacity for biomethane injection

10/2026 INTERIM STEP

Installing flow measurement equipment
Improve the visibility of the operation of the network, specifically at periods of low demand

12/2026 OUTCOME

Deployment of model and measurement technology to give increased volume of biomethane supplied at project sites

END: December 2026

Complete

On Track

Status in previous Action Plan

Digital Platform for Leakage Analytics – identify methane emissions through non-physical methods by modelling with sensor data

Problem Statement

- 98% of our carbon emissions are because of methane emissions from our network. This impacts the customers' bills, the environment and the safety of our network for everyone.
- Detection of emissions through traditional means can be difficult with access limited to buried assets.

Expected Outcomes

- We will create a sophisticated model which can identify where emissions are happening in our network from the sensor data we have available.
- We can also incorporate the data gathered under the Advanced Emissions Detection Project previously reported.
- We will be able to detect and report methane emissions with more accuracy to allow our networks to act more proactively.
- We will create a strategic innovation funded project to model, analyse and report on emission data on parts of our Eastern and North London networks.

Recent Updates

- This has been developed as a Strategic Innovation Fund project with further investment sought to expand delivery to the rest of Cadent's networks in RIIO-3.
- This innovation-based project has successfully completed.
- Future development will take place to enhance, expand and to deploy DPLA into other networks. Updates on these activities will be reported in subsequent DAP updates.

Key Milestones:

START: September 2023

12/2025 INTERIM STEP

Ofgem indicates approval of extending the Digital Platform for Leakage Analytics (DPLA) Programme

DPLA has been confirmed as a RIIO-3 investment

03/2026 OUTCOME

Completion of SIF beta phase

Development of several advanced analytic models that help measure leakage in East Anglia and North London areas

END: March 2026

Dependency

On Track

Status in previous Action Plan

Open Data Triage – reviewing the Open Data Triage Playbook to support a common experience

Problem Statement

- Ofgem's Data Best Practice Guidance requires us to classify our data through the Open Data Triage process, to support data sharing effectively with the right controls in place.
- The Open Data Triage Playbook was created by Energy Networks Association (ENA) to help support the interpretation of the DBP Guidance, but it needs to be updated to remain current.

Expected Outcomes

- Through the appointment of a third-party, and collaboration of the different energy networks, the Open Data Triage Playbook will be reviewed and updated.
- This collaborative approach should encourage energy networks to apply a consistent approach to data triage, so that the experience of **Data Users** when requesting a similar Data Asset is consistent.

Recent Updates

- The gas networks left the Energy Network Association (ENA) at the end of December 2024, which included participation in ENA projects and workstreams.
- The Open Data Triage Playbook Refresh workstream has completed and a new edition has been published by the ENA.
- We have completed our initial reviews and are now assessing data triage in-light of recent consultations and the wider Data Sharing Infrastructure workstream to ensure that an enduring solution is implemented.
- As such this initiative has been marked as "Dependency" in the short term while we assess the impact of potential changes.

Key Milestones:

START: September 2024

10/2025 INTERIM STEP

ENA publishes the new edition of the Open Data Triage Playbook

03/2026 INTERIM STEP

Cadent review of ENA Open Data Triage Playbook and new draft of Open Data Triage Process created
Sufficient timescales allocated to support trials and approvals of the new process

12/2026 OUTCOME

Cadent Open Data Triage processes are updated with consideration of the improvements made to the ENA Open Data Triage Playbook
The Cadent Open Data Triage process has been revised and approved. Supporting information has been generated to ensure Data Stewards and Data Owners understand any new requirements

END: December 2026

On Track

On Track

Status in previous Action Plan

Data Sharing Licence – Common "Shared" Data Licence – a common experience for stakeholders across all networks

Problem Statement

- Ofgem introduced Data Best Practice Guidance, a key part of which is making our data open and discoverable for stakeholders.
- Data Assets which are triaged as "Shared" require additional controls. Every network has its Data Sharing Agreement to do this, making the process cumbersome for stakeholders.

Expected Outcomes

- The Energy Networks Association (ENA) initiated a workstream to create a common Data Sharing Licence to be used where a Data Asset is triaged as "Shared".
- As the licence, or core terms of it are common, **stakeholders who wish to access data from multiple energy networks** will find the experience consistent.

Recent Updates

- The ENA workstream to develop a Common Data Sharing Licence has completed and this has published between its members.
- We have engaged with ENA, despite leaving at the end of December 2024, so that we can implement the common licence for shared data which they have developed.
- We are actively participating in the development of the Data Sharing Infrastructure and will review the outputs of this workstream over the next few months to ensure that any changes to the licence we implement are compatible with this as well, to minimise disruption for our stakeholders.

Key Milestones:

START: September 2024

01/2025 INTERIM STEP

Cadent leaves the ENA
Cadent can no longer participate in the development of a new licence for shared data

05/2026 INTERIM STEP

Review ENA's common shared data licence
Cadent has engaged with ENA and been granted details of the common licence, with an intention to commit to this framework.

10/2026 INTERIM STEP

Review DSI requirements for licencing
As DSI continues development, ensure that planned changes to licence are consistent

10/2026 OUTCOME

Cadent launches a new Data Sharing Agreement compliant with the ENA common licence for shared data

END: December 2026

Complete

On Track

Status in previous Action Plan

Digital Spine of the Energy System – assessing potential use cases for gas network data with the Data Sharing Infrastructure (DSI)

Problem Statement

- The evolution of the energy market and the challenges of achieving Net Zero means data will need to be shared more often between more parties.
- Implementing data sharing between parties requires contracts and agreements on how data will be transmitted and in what form, slowing down the delivery of critical information.

Expected Outcomes

- Ofgem has identified a need for a common environment where data can be provided from one party to another under a centralised trust framework to support **industry stakeholder data needs.**
- This Data Sharing Initiative will need collaboration between similar parties to develop common Data Assets which can be delivered in a consistent manner.
- An interim governance entity has been appointed and a pilot undertaken to prove the proof of concept. While work to build the DSI is a RIIO-3 activity the magnitude of the work means planning needs to start as soon as possible to ensure a successful delivery.

Recent Updates

- The DSI delivery is a RIIO-3 investment and is anticipated to be delivered between 2026 and 2031.
- The focus of this Digitalisation Action Plan update have been focused on developing the capabilities required to support the successful implementation for DSI prior to the formal NESO led project starting in RIIO-3.
- Our work prior to the start of RIIO-3 to develop and understand suitable use cases has been successful, and as of May 2025 we have proposed and had approved a use case for Customer Satisfaction data as an initial development.
- Through collaboration with the other Gas Networks, we have developed processes to describe data though a Common Information Model. These learnings will be used to support the development of Data Products in DSI.

Key Milestones:

START: December 2024

03/2025 INTERIM STEP

Collaboration between Gas Networks to assess potential use cases for the DSI

Initial possible use cases for the DSI are discussed between gas networks and NESO

07/2025 INTERIM STEP

Review of insight from pilot

NESO shares output of pilot and gas networks review lessons learned

12/2025 INTERIM STEP

Development of a mobilisation plan

Gas networks work with NESO to create a mobilisation plan for a POC

05/2026 OUTCOME

Proof of concept use case prepared

Subject to agreed timescales, gas networks undertake a proof of concept of data to be shared over the DSI

END: March 2026

On Track

On Track

Status in previous Action Plan

Calorific Value Sensor Development – enabling more accurate billing of energy

Problem Statement

- Biomethane is a green gas which is created from organic material; offering a low carbon alternative to natural gas and offering UKGD the ability to blend Bio with Natural Gas.
- Biomethane injection into our network can change the calorific value of gas in a local area.
- Calorific values (CV) are not currently measured on a local basis to allow shippers to charge customers for the energy they consume, instead of the volume of gas.

Expected Outcomes

- By developing low-cost, easily deployable calorific value sensors and installing them in our network, we will be able to more accurately assess the energy content of the gas we transport to customers, regardless of its source.
- Customers will benefit from fair and transparent billing reflecting the energy used rather than the volume of gas supplied.
- This collaborative effort between Cadent, SGN, WWU, and GNI is funded through Network Innovation Allowances to test several sensor technologies for accuracy and the ease with which it can be installed prior to implementation into live gas networks.

Recent Updates

- Phase one laboratory testing phase has completed successfully, which evaluated CV accuracy, against specific bottle gases.
- Phase two is underway which expands these tests to meet sustained accuracy over time.
- Overall, the project is progressing to schedule, with strong engagement from all partners and a clear pathway established towards completing laboratory testing and planning in-field testing.

Key Milestones:

START: August 2025

12/2025 INTERIM STEP

Start phase one Laboratory testing of calorific measurement sensors
To define performance criteria of the sensors and comparison with existing technology

03/2026 INTERIM STEP

Completion of phase one laboratory testing of the sensors

04/2026 INTERIM STEP

Start of phase two laboratory testing including integration of deployment method

08/2026 INTERIM STEP

Completion of phase two laboratory testing of the sensors

09/2026 INTERIM STEP

Review laboratory trial outcomes to plan in-field testing of sensors

END: August 2027

On Track

NEW

Status in previous Action Plan

Common Information Model for Gas Data – Network Boundaries

collaborating with other networks to create consistently structured Data Assets to support Data Users

Problem Statement

- Forthcoming whole energy system projects such as Regional Energy Security Planning (RESP) have identified a need to understand which gas network is responsible in each area. There is presently no commonality between gas networks in how we represent this data.

Expected Outcomes

- Presently, all the gas networks are publishing their own data in their own formats.
- We will work with other gas networks to create a standard format and structure for Data Assets relating to our network boundaries.
- What this work will not do, however, is to attempt to align boundaries for each network so they do not overlap.

Recent Updates

- We have collaborated with the other Gas Networks and created a draft of what the appropriate content of the network boundary data should contain.
- We have created draft technical and ontological metadata, which has been populated in a new draft of the Gas Networks Interoperable Technical Data Standard.
- We will now develop a new Data Asset to show our boundaries under the new schema and publish this on our Open Data Portal.

Key Milestones:

START: April 2026

04/2026 INTERIM STEP

Review existing boundary data content

Establishing which fields are deemed as useful to stakeholders from different perspectives

08/2026 INTERIM STEP

Agree new format and populate into the Gas Networks Interoperable Technical Data Standard

Metadata is created and has been updated into the GNITDS

10/2026 OUTCOME

Data is published to the new standard on Cadent open data portal

END: March 2027

On Track

NEW

Status in previous Action Plan

Data Sharing Infrastructure MVP – tracking our development and involvement with NESO's DSI project

Problem Statement

- Secure and timely data sharing between energy system operators is essential. However, current arrangements are fragmented, relying on multiple systems and bilateral agreements, creating inefficiencies, scalability challenges, and potential risks to coordination and decision-making.

Expected Outcomes

- Ofgem has appointed NESO as the interim DSI coordinator, responsible for implementing the MVP DSI solution.
- All networks are participating in the MVP development process and will create the core mechanics of the Data Sharing Infrastructure.
- While initially limited to a simple use case, the deployment of the modular components of DSI will allow us to exchange increasingly sophisticated data between parties.

Recent Updates

- The DSI delivery is a RIIO-3 investment and is planned to be delivered between 2026 and 2031.
- While prework took place during RIIO-2, these were limited to workshops and information, under RIIO-3 we will commence implementation in line with NESO's timescales.

Key Milestones:

START: April 2026

05/2026 INTERIM STEP

Agreement of common use case
GDNs have proposed a data set to use while developing DSI functionality

07/2026 INTERIM STEP

Technical discovery and design
Engagement with NESO for data product design and system HLD

11/2026 INTERIM STEP

Environment build and modular deployment
Building the DSI interface tool

11/2026 OUTCOME

Data Product development and publication
First exchanges of data over DSI

END: May 2027

On Track

NEW

Status in previous Action Plan

Asset Investment Support Tool

digital solutions to optimise Asset Investment scenarios

Problem Statement

- Presently the development of any modelling scenario is manually intensive which restricts efficiency.
- The existing modelling process focusses on cost but omits other factors such as service integrity and loss of gas.

Expected Outcomes

- This delivery will come in three phases:
- Phase One – implement core capabilities focussed on Network Asset Risk Metrics (NARM) models
- Phase Two – include Non-NARM assets and improve modelling capability
- Phase Three – optimisation and streamlining, additional value models incorporated

Recent Updates

- This initiative is part of Unified Asset Investment Portfolio Management (AEJP-5)
- Discovery took place under end of RIIO-2 and we have successful implemented phase one of our planned deliverables.
- Future development will expand the capability and enhance the modelling agility, decision making and improve dashboard metrics for better visibility and assessment.

Key Milestones:

START: April 2026

04/2025 INTERIM STEP

Phase One – procurement and connectivity
Procure tool and provide with NARM asset data

05/2026 OUTCOME

Phase One – MVP of asset investment tool to develop core capabilities
Tool implemented and examined with NARM assets

07/2026 INTERIM STEP

Phase Two – requirements gathering and sanction
Develop tool configuration with non-NARM assets

12/2026 OUTCOME

Phase Two – Extension of investment support with advanced modelling techniques
Improving investment modelling with predictive analytics

END: April 2027

On Track

NEW

Status in previous Action Plan

Climate Resilience Modelling -
collaborative innovation project to identify cross asset owner vulnerabilities to climate change

Problem Statement

- Utility companies are interconnected but presently have no visibility of the upstream or downstream interdependencies on other infrastructure providers.
- Climate events are becoming more extreme and improved strategic planning is needed to ensure our network remains resilient.

Expected Outcomes

- Developing a new data sharing architecture, where visibility of assets is limited, but understanding of interdependency on other utilities' assets is clear.
- Centralised model development, to assess impact of different climate events on our sites.
- Economic modelling of failures to provide justification for investment planning to create additional resilience.

Recent Updates

- This project is being led by UKPN.
- Cadent is a participant in CReDo – a cross-utility innovation project to assess climate resilience readiness.
- A User Trial has been completed on test data, which has supported the development of initial models.
- Extensive stakeholder engagement and cross-party testing has taken place to understand the functionality and effectiveness of the User Trial. This will inform future development.
- Expectations are that the User Trial based on a POC will now move to an MVP; Cadent will continue to support CReDo with access to our data and expertise.

Key Milestones:

START: September 2024

09/2024 INTERIM STEP

SIF Beta Started

- Data gathering requirements
- Initial develop of the User Trial platform
- Provision of Test Data

03/2026 INTERIM STEP

User Trial completed

Lessons learned from this will inform future development of the CReDo

03/2028 OUTCOME

Completion of SIF Beta

END: March 2028

Our previous Digitalisation Action Plans:

Date of publication	Link
December 2025	Digitalisation Action Plan – Dec 2025
June 2025	Digitalisation Action Plan – June 2025
December 2024	Digitalisation Action Plan - Dec 2024
June 2024	Digitalisation Action Plan - June 2024
December 2023	Digitalisation Action Plan - Dec 2023
June 2023	Digitalisation Action Plan - June 2023
December 2022	Digitalisation Action Plan - Dec 2022
June 2022	Digitalisation Action Plan - June 2022
December 2021	Digitalisation Action Plan - Dec 2021
December 2020	Digitalisation Action Plan - Dec 2020

Open to You

Being open and transparent is part of our culture, we would welcome hearing from our customers and communities to improve the value we deliver.

Your comments and suggestions on our Digitalisation Action Plan are valued.

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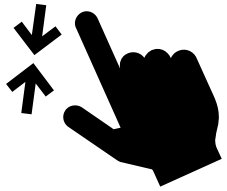

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