



# Digitalisation Strategy

Turning data into trusted decisions for  
Britain's energy system

March 2026

**Securing Britain's Energy.**



# Contents

- A Message From Our CEO Jon Butterworth

## 1. Our Corporate Strategy

Why Digitalisation Matters Now

T2 Digital Transformation Journey

Digitalisation Is An Enabler Of Change

## 2. Our Digitalisation Strategy

Digital Means Trusted Data

Our Use Of AI In the Digital World

Security As A Foundation Of Digitalisation

Our Digitalisation Strategy – Driven By Stakeholders

Innovation Accelerates Digitalisation

Vehicles that Deliver Our Strategy

# Foreword



Jon Butterworth  
CEO

**At National Gas our mission is a straightforward one, to secure Britain's energy for today and tomorrow.**

With our 5,000 miles of pipeline, over 60 compressors and over 500 above ground installations, we move gas safely, securely and reliably up and down, and across the country through the National Transmission System (NTS). But alongside our physical assets our digital capability and information technology systems are integral and play a critical role in ensuring we keep homes warm, lights on and industry powered.

In 2024, we produced our first Digitalisation Strategy. We set out our ambition for the role of digitalisation, and our commitment to continuously review, refine and update our approach to meet the ever-evolving needs of our business.

Since then, we have continued to embrace digitalisation and technology to enhance operational efficiency, optimise asset management, and enable real-time monitoring of our network. Our IT portfolio delivers the systems that gather, store and process essential information to run our business, make decisions, and comply with legislation.

But the technological world does not stand still. We must keep pace with the development of new technologies, especially where they can help us deliver safely, innovatively, and effectively. We are committed to exploring and adopting new technologies wherever they present opportunities. We will look to keep abreast of the advancements in Artificial Intelligence (AI) so that we understand how they can be applied to our work to achieve outcomes that benefit our customers.

Over the coming year, we will be focusing our digital investments to:


- **Deliver** the asset plan – expanding on our asset data with digital twins that integrate to a new level the planning, building and operation of our assets.

- **Manage** network operations under increasing pressure through smarter modelling, forecasting and real time situational awareness.
- **Enable** emerging whole system management through interoperability with other energy system participants.

We cannot do any of this without our most important asset – our people. We will support them with the digital tools they need to deliver effectively and efficiently. We also plan to invest in the digital literacy of people and our digital training so that we can increase the confidence and capability of our people to use existing and new tools and technologies – all with aim of driving improved performance and enhanced productivity.

In the year ahead, I look forward to seeing our data and digitalisation work not only delivering value to our customers but also making sure that we can continue to operate a safe and efficient national energy network, while unlocking the benefits of the energy transition.



A wide-angle photograph of a large industrial gas processing plant. The scene is filled with complex machinery, including numerous large white cylindrical storage tanks, a dense network of pipes, and multiple levels of metal walkways and ladders. The facility is set outdoors under a clear blue sky. In the background, more industrial structures and a tall chimney stack are visible.

Our digitalisation strategy enables National Gas to operate critical national infrastructure safely and affordably through a period of system change, by turning data into trusted decisions and freeing our experts to focus on what matters most.

# 1 | Our Corporate Strategy

- Ensuring safe, reliable and affordable energy transmission while preparing to transition to cleaner, low-carbon sources.
- Scenario-led planning enables flexible, signposted decisions.
- Three Molecule Strategy: Optimise Natural Gas, Enable Hydrogen Readiness and Support Carbon Capture Infrastructure in Methane, CCU, Hydrogen and Metering.
- With Digitalisation as a core enabler: Data driven decisions, automation, interoperability and efficiency.



# Why Digitalisation Matters Now



The energy system is becoming more complex, requiring faster, data-driven decisions.



Three Molecule operation readiness depends on advanced modelling and asset intelligence.



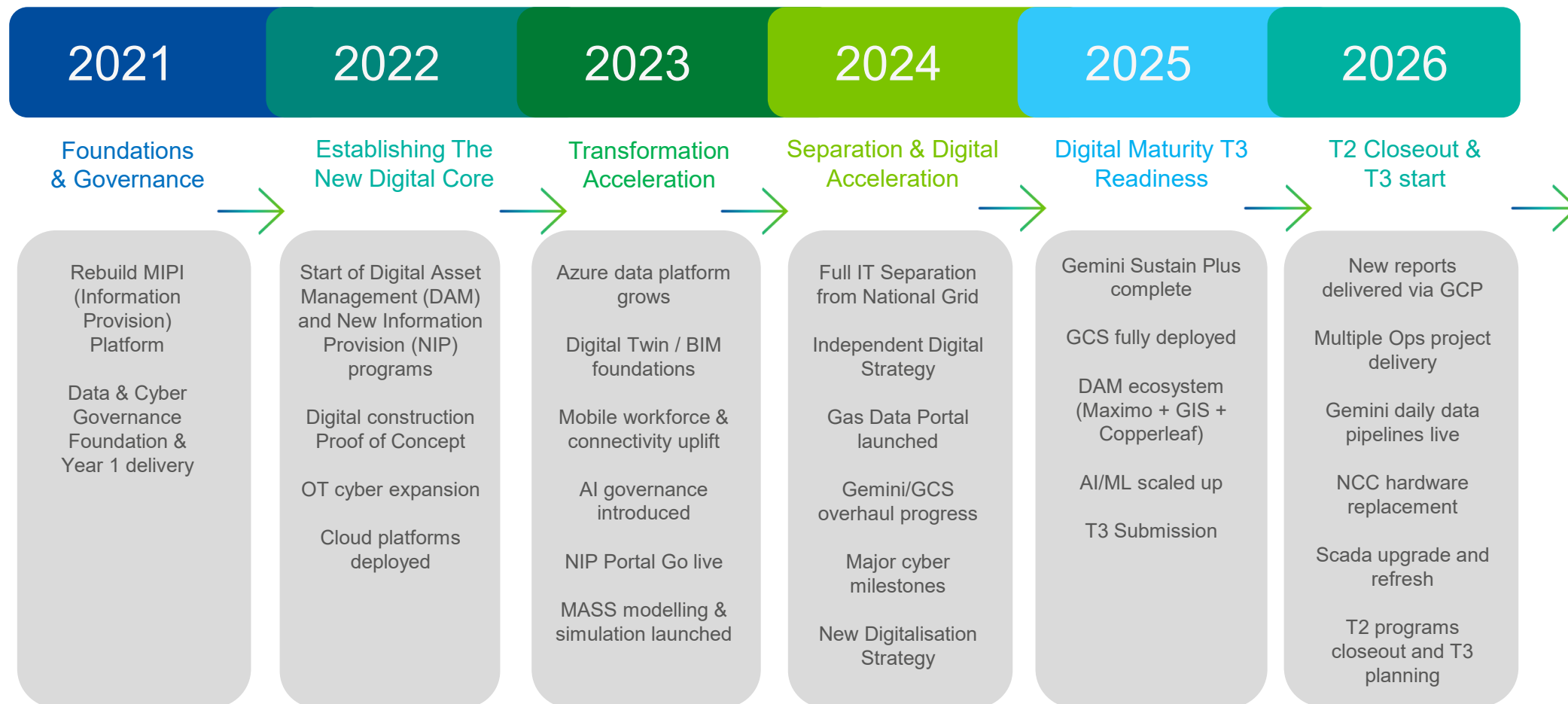
Stakeholders demand transparency, interoperability and trusted data.

## Our Vision for T3:

"Utilise data and technologies to better serve our customers and stakeholders, safely operate critical infrastructure and facilitate faster and data-driven decision making"



# We will build on the success of our T2 Digital Transformation Journey



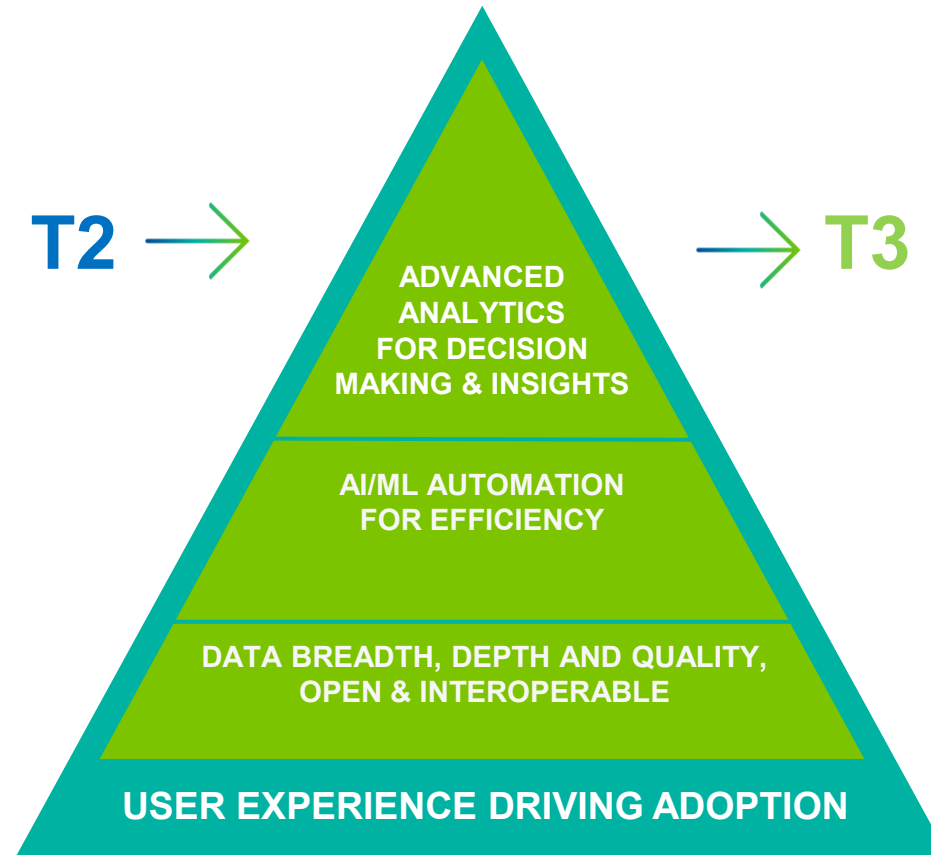
# Digitalisation is an Enabler of Change



## LOCAL KNOWLEDGE CULTURE

A project-based organisation (low volume, high complexity) requiring experts to enable processes. Experts do all levels of work (complex and menial). Decisions based on experience and judgement (subjective and variable).

T2



T3



## DATA DRIVEN ORGANISATION

Disaggregated repeatable actions (high volume, low complexity), using data and advanced tools to right-size skill requirements and increase effectiveness. Experts only do expert work. Decisions are objective and repeatable.

## 2 | Our Digitalisation Strategy

Building on T2 progress, in T3 our Digitalisation Strategy will:

- Facilitate access to complete, accurate, trusted and wide range of datasets to support analytical capability development.
- Enhance visibility of our assets through their lifecycle to improve asset management capabilities.
- Leverage digital technologies to simplify and improve effectiveness of processes and/or improve efficiency of our workforce.
- Selectively utilise frontier technologies including analytics and AI to enable enhanced and automated data-driven decision making
- Implement simple and consistent data architecture and system design to improve data quality and enforce data security.



Digitalisation is supported by **Data, AI and Security Strategies** and nourished by constant innovation, driven by effective stakeholder engagement

# Digital Means Trusted Data

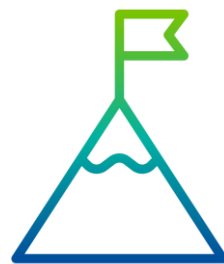
We have progressed our data best practice maturity through T2 and this continues through T3. This is a long-term journey that drives improving data value through the application of standards, scale and quality of data, user data literacy and access, and data interoperability.

Our strategy for Data over the coming RIIO period focuses on four strands:



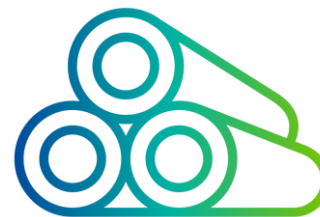
## TALENT

We will hire and retain the best data talent from the industry and beyond.



## LEADERSHIP

We will lead by example, sending out clear messages and instructions to our staff



## CONNECTEDNESS

We will align our key data structures through application of data best practice principles and technologies, to ensure interoperability and integrity of those blended datasets required to succeed in T3

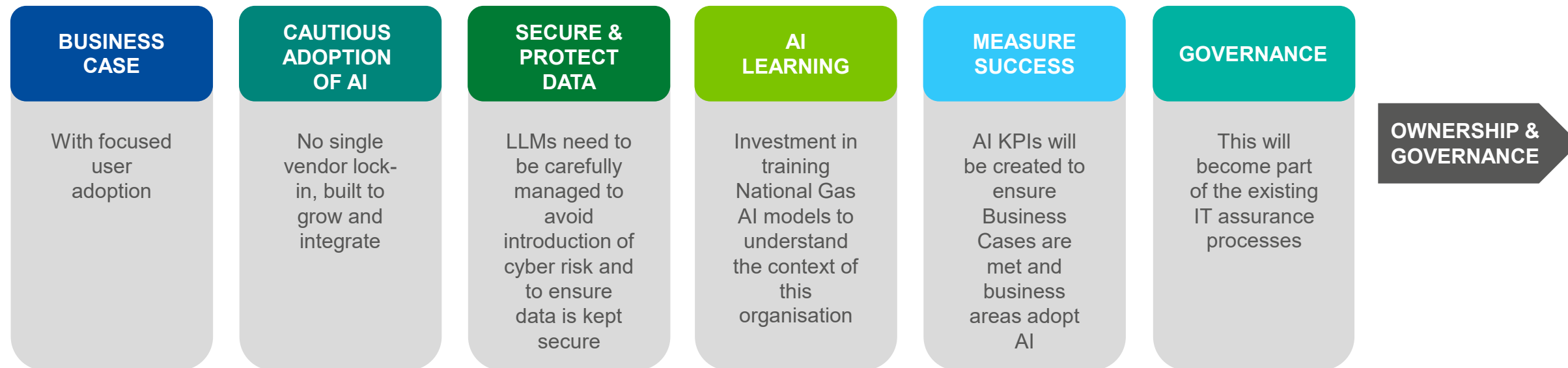


## CUTTING EDGE

We will make targeted, ethical use of artificial intelligence to understand and improve data quality

# Our use of AI in the Digital World

We plan a cautious adoption of AI, driven by SaaS inclusion of AI e.g. Salesforce, ServiceNow, Maximo, M365, but also, through development of National Gas Large Language Models (LLM) to help make better decisions. Avoiding vendor hype and delivering real value.



National Gas will maintain its own principles and guidelines to avoid being driven towards any single AI vendor. Incremental adoption with integration of AI (Agentic flows) avoids technology driven change, remaining business outcome focused.

# Security as a foundation of Digitalisation

The mission of our security organisation is to protect our people and assets to ensure the business is able to provide security of supply to our nation. By managing threats to the organisation, we safeguard the systems that enable our business to function safely and effectively, as entrusted by our stakeholders.



## Security Operations Centre

Centralised monitoring, prevention, detection, and response to physical and cyber security incidents



## Enterprise IT

Secure cloud-first environment which provides business IT – applications, devices, and networks



## Risk Governance, Regulatory Compliance

Clear approach to risk management, aligned with industry and government regulations



## Security Platforms & Engineering

Embedding “Secure by Design” into all developments, whether hardware, software, networks or data storage



## Security Programmes

Management of time, cost and quality within risk profile requirements



## Physical Security

Barriers, access and detection controls to protect our people, assets and property



## Operational Technology

OT systems criticality reflected in segregation from IT networks and designed to ISA62443



## Trusted Advisor

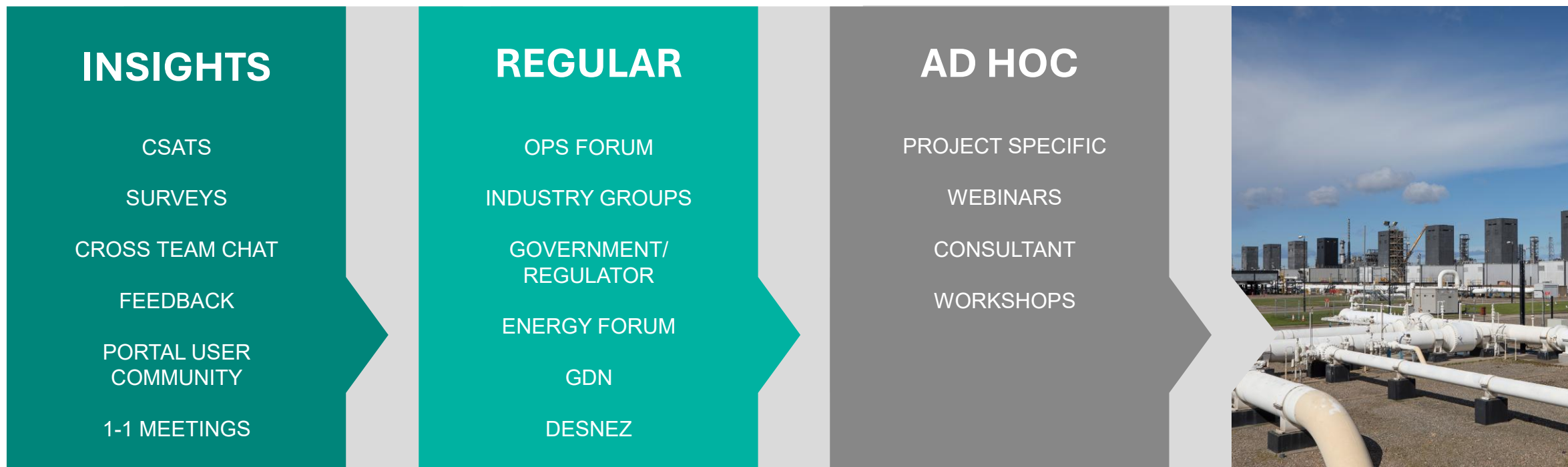
Positioned as trusted advisor by both internal and external stakeholders, leading on future security needs



# Our Digitalisation Strategy

## Driven By Stakeholders

We continue to refine our approach to increase engagement and to facilitate two-way communication in line with DSAP principles.



# Innovation Accelerates Digitalisation

The Innovation team have delivered demonstration/proof of concept projects for IT under their Digital Systems and Simulations theme. Concept projects have progressed into production in RIIO- T2 and this will continue through RIIO-T3.

Initiatives	RIIO - T2	RIIO - GT3
Digital Twin	Collaborative Visual Data Twins (CVDT ) showed features such as model navigation and live data visualisation using our FutureGrid facility as a demonstration location	Progression from proof of concept to business-as-usual implemented solutions
HyNTS Dataset	Digitising paper records and feeding an analytical tool to assess asset repurposing (Hydrogen and Natural Gas) decisions	Tool embedded into the business process, flagging sections of networks for Hydrogen repurposing
AI	AI model was trialled to create new hydrogen Policies and asset hierarchy	The innovation team will continue to work in this fast-moving space throughout RIIO-T3 to showcase the responsible, safe use of AI in our business processes to deliver value



In T3, the Innovation team will focus on Horizon 1 and 2 concepts that will be implemented into the business in future regulatory periods, including topics such as quantum computing and sensing and the control room of the future.

# Vehicles that Deliver our Strategy

## Our Digitalisation Portfolio

Programmes unlocking business value through **transformation**

Incremental **evolution**

### KEYSTONE

Asset management  
& lifecycle  
optimisation

From asset data to  
confident decisions

### ATLAS

A 'single pane  
of glass' for  
engineers

Everything you need in  
one view

### LIGHTHOUSE

Digital front door  
where trusted data, AI  
& automation come  
together

Remove friction from  
everyday work

### NAVIGATOR

Evolving our network  
and management  
capabilities

Real time guidance for  
reliable operations

A secure **foundation**

### THE BEDROCK

Robust IT asset health ensuring our core capabilities evolve  
to meet the business needs

Keeping the basics  
brilliant everyday



**A digitally enabled  
infrastructure operator**