Digitalisation Strategy & Action Plan

June 2026

NESO
National Energy System Operator

Foreword

Welcome

Britain's energy system is changing fast.

As we decarbonise, electrify and bring in more participants, the way we plan and operate the system must keep pace.

This means more than building new infrastructure. We need strong digital foundations so the system can work as one — securely, efficiently and at scale.

At NESO, we operate today's electricity system and design tomorrow's energy system. Digitalisation underpins both.

It helps us manage growing complexity, strengthen resilience and deliver better outcomes for consumers — supporting a reliable, clean and affordable system.

The June 2026 Digitalisation Strategy and Action Plan (DSAP) is an iterative update to our December 2025 publication. It strengthens alignment with our 2026–2031 Corporate Strategy, linking our purpose and roles to how digital capability supports delivery.

It also refreshes the Action Plan to reflect progress and set out the priorities and investment needed next.

Over the past six months, we have strengthened our role in enabling digitalisation across the energy sector, including our appointment as Interim Coordinator for the UK's Data Sharing Infrastructure. This supports secure, consistent data sharing — improving system visibility, decision-making and outcomes for consumers.

Digitalisation is not an end in itself. It enables our people to work more effectively, improves access to high-quality data and supports better operational and planning decisions.

Progress depends on collaboration across industry, government and regulators. This strategy will continue to evolve as the system — and our role — develops.

This DSAP sets out how we will play our part: operating the system securely today, while building the digital capability needed for the energy system of the future.

Shubhi Rajnish
NESO Chief Information Officer

Contents

The Digitalisation Strategy & Action Plan consists of three parts:

1. NESO Strategy

About NESO's vision, purpose, and alignment with our corporate strategy.

2. Digitalisation Strategy

How our people, process, tools and technologies deliver on our Strategic Priorities.

3. Digital Charters & Action Plan

Providing initiatives, roadmaps and insights for how we achieve these ambitions.

Our Strategy

Our purpose defines our role in the world. Our vision sets the direction for where we're headed. And our values guide how we work every day with each other, with our partners, and with the communities we serve.

NESO Purpose and Values

Over the past decade, the energy system has undergone unprecedented change, with the pace of transformation expected to accelerate further. NESO's Strategy is grounded in a clear sense of purpose and shared values, reflecting our role as a trusted, independent system operator and planner. This role requires not only technical excellence, but also leadership in driving change. Our purpose, vision, and values provide the foundation for the behaviours and decisions that enable progress.

To support this, we developed and approved our 2026–2031 Corporate Strategy, setting our strategic direction for the next five years and defining how we will measure success. In developing the NESO Strategy, we have considered how we will respond to trends in the sector and how we will mature the capabilities that enable us to deliver on our eight activities, or roles. Our bi-annual regulatory business plans provide further detail on specific Performance Objectives and Major Deliverables that NESO will deliver, with the current period covering 2026-2028.

Our purpose defines our role in the world. Our vision sets the direction for where we're headed. And our values guide how we work every day with each other, with our partners, and with the communities we serve.

Our purpose is to forge the path to a sustainable future for everyone.

Our vision is a future where everyone has access to reliable, clean and affordable energy; our work will be a catalyst for change across the global community.

For more detail on our Strategy, the NESO1 Plan and our eight roles, visit:
What we do | National Energy System Operator

Last updated: June 2026

Accelerate Progress
We deliver better outcomes at pace when we take accountability, are courageous and progress the bigger picture.

Be Curious
We achieve more when we demonstrate a growth mindset, being curious, asking questions beyond and within our organisation to develop, learn and innovate.

Build Trust
We build trust when we listen to and understand the needs of our colleagues, consumers, customers and stakeholders, are transparent with our actions and deliver on our commitments.

Create Belonging
We perform at our best when we can be our true selves, embrace diversity and are truly inclusive.

What we do

NESO plays a central role in shaping Great Britain's energy system through eight core roles that connect actors, markets, and technologies.

Our energy system is planned and operated in a way that considers the interactions across electricity, gas and other forms of energy. We also think of the relationships with other sectors, such as water, transport, telecommunications and industry.

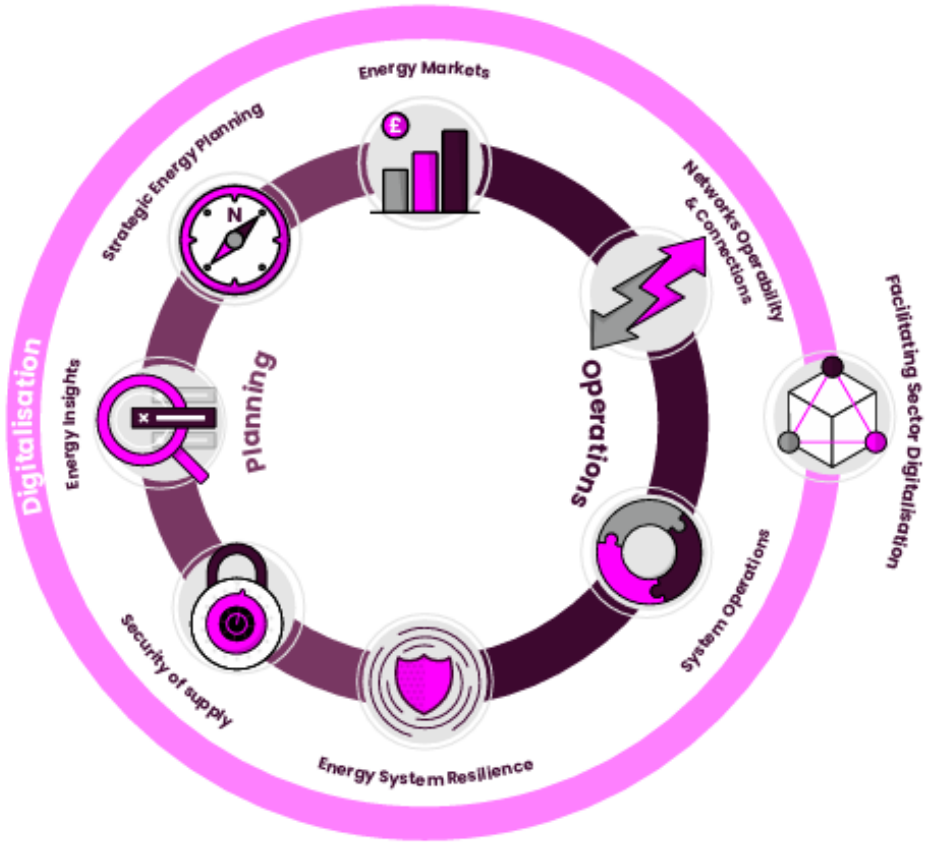
We bring together the eight roles* needed to deliver plans, manage, and run the energy system, both now and in the future. Bringing these roles together in one organisation encourages holistic thinking on the most cost-efficient and sustainable solutions.

In the context of our Digitalisation, the Digitalisation Strategy and Action Plan (DSAP) is the central enabler that brings NESO's eight roles together.

Digitalisation is as a cross-organisational, shared internal capability that enables NESO to activate and support digitalisation across the GB energy sector.

The Digitalisation strategy connects each role around clear digital priorities and a five-year strategic direction, set through Digital Charters. It also links digital delivery to the wider capabilities NESO needs to transform, including culture and upskilling, process re-engineering, and effective use of technology.

Together, this enables NESO to act in a consistent way to facilitate sector digitalisation, while building and scaling its own digital capability.



For more detail on our Strategy, the NESO1 Plan and our eight roles, visit the: [What we do | National Energy System Operator]

Last updated: June 2026

Bringing NESO's purpose to life through digitalisation

One Purpose & Vision → Four Goals → Eight Roles → One Digitalisation Strategy

Our purpose is to forge the path to a sustainable future for everyone.

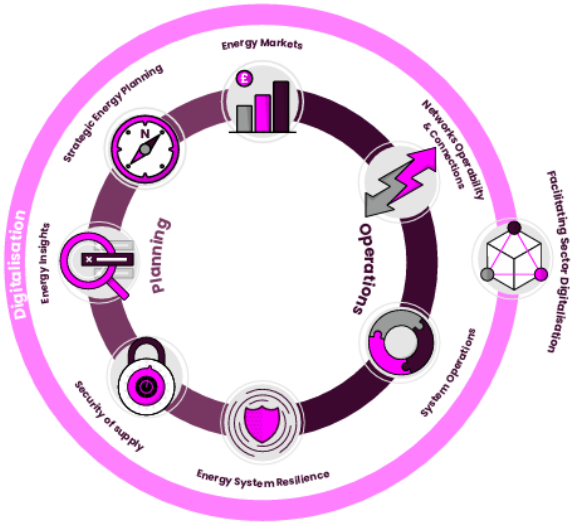
Our vision is a future where everyone has access to reliable, clean and affordable energy; our work will be a catalyst for change across the global community.

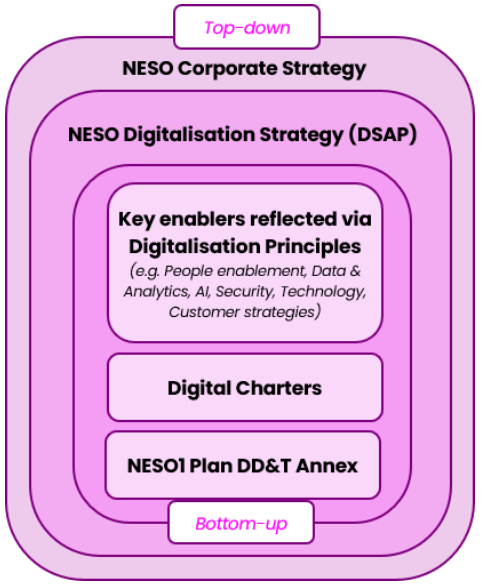
Drive consumer value

Pave the way to Sustainable Energy

Deliver a secure, resilient, and operable energy system

Lead as a trusted expert





The Digitalisation Strategy and Action Plan (DSAP) is a long-standing regulatory requirement. At NESO, it operates alongside and enables the Corporate Strategy and other organisational strategies, providing an aligned view of how digitalisation supports the organisation and how that capability is sustained.

DSAP provides a consistent way to consider how people, processes and enabling capabilities support NESO's priorities and roles. Through a shared digitalisation vision and guiding principles, it sets a clear direction that can be applied across the organisation in ways that reflect different responsibilities and operating contexts for our eight roles.

By taking account of the wider NESO and industry landscape, DSAP helps link strategic intent to delivery and supports a flexible, evolving approach that enables NESO to adapt over time while remaining focused on its core objectives.

Our Customers

As a publicly owned organisation, we have a unique role in working across the energy ecosystem.

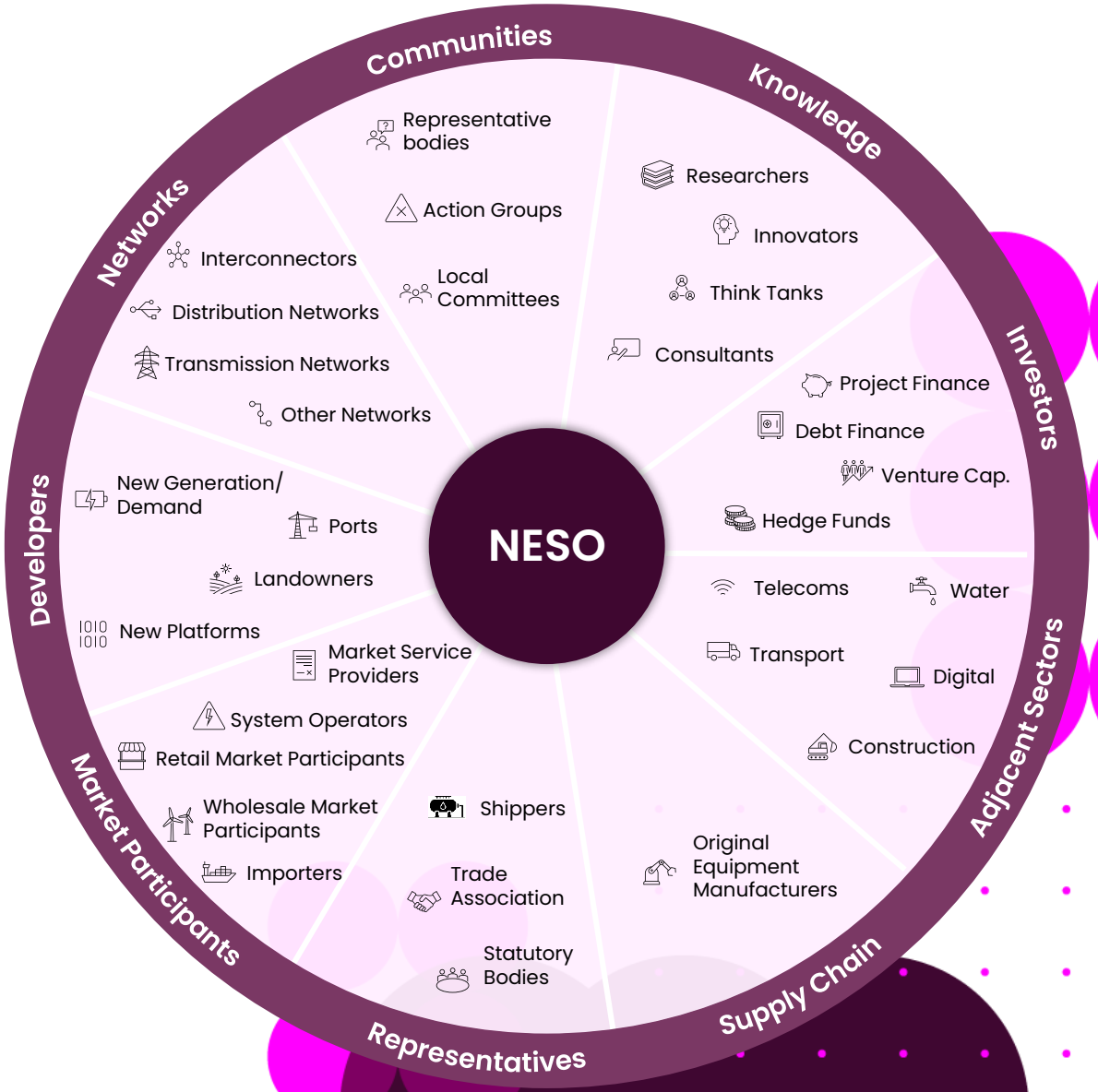
NESO works with a broad range of stakeholders who are essential to delivering our purpose.

Our consumers – the people and communities who rely on energy every day – are the ultimate beneficiaries of the energy system. To support our understanding & focus on external groups and organisations we work with across the energy ecosystem to enable the system to function, adapt and improve, we define them as customers.

Building strong relationships with our customers is essential to fulfilling our legislative and regulatory responsibilities. NESO plays a pivotal role in enabling markets to function effectively and promoting competitive outcomes, all of which hinge on robust, collaborative customer engagement.

Our commitment to transparency and accountability ensures that our customers are well-informed about our decisions and their impact on our work and the broader system. By working closely with our customers, we maximise the delivery of our purpose and reinforce our role as a trusted partner.

By using digital platforms to allow us to understand, track and inform delivery of seamless experiences to support proactive collaboration and service excellence across our end-to-end activity, we ensure that our strategy achieves value for money and enables our wider trust and broader corporate goals.



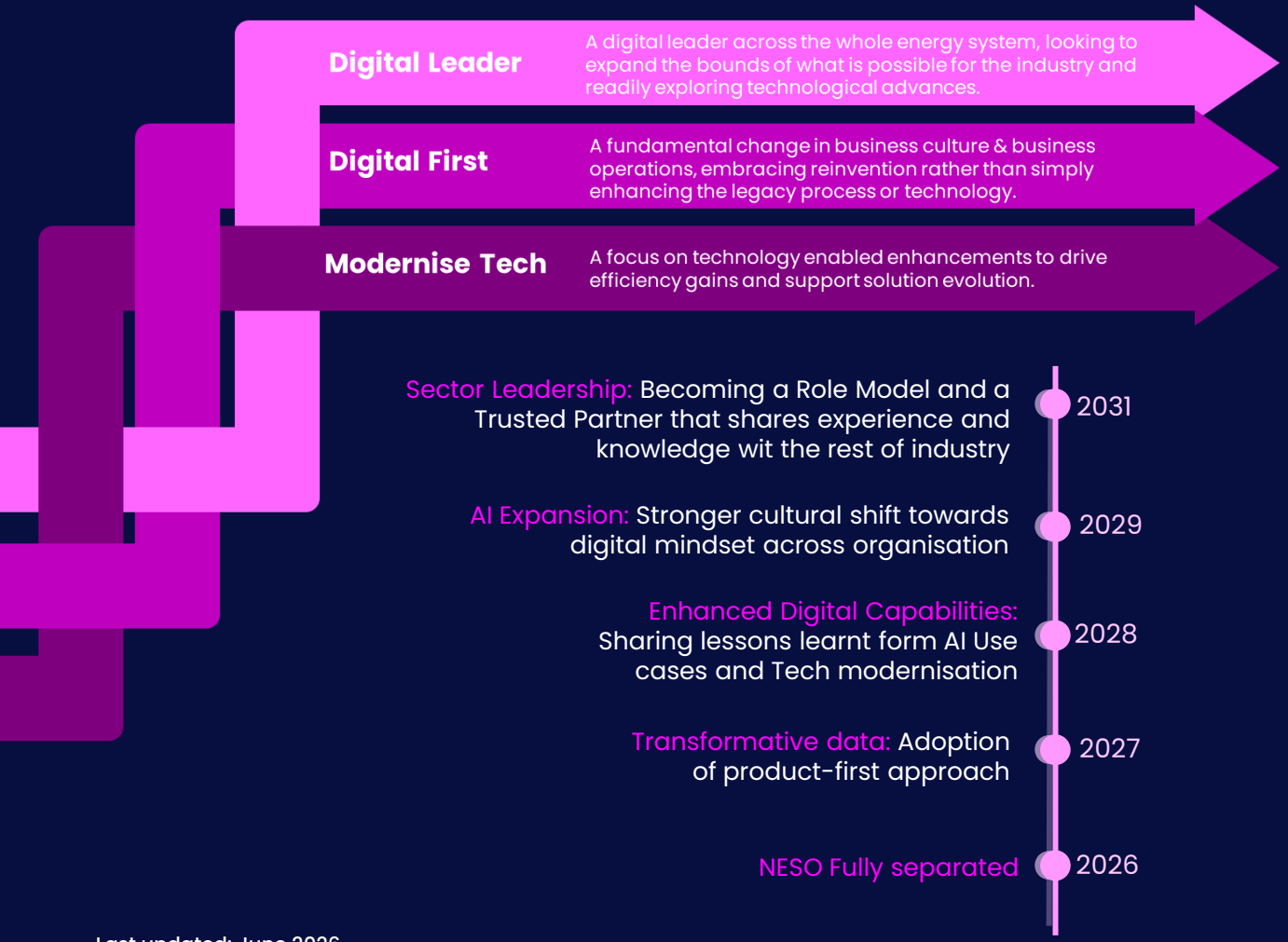
Last updated: June 2026

Digitalisation Strategy

Our Digitalisation Strategy reflects a flexible, principle-led approach that aligns with NESO's Strategy.

Our Digitalisation Vision

Utilising the power of data and innovation, we will become a digital leader and drive collaborative digitalisation of the whole energy system.



In December 2025, we entered the next stage of our digital journey. This phase, known as Digital First, reflects how we are strengthening the way we support our people and how we use data, processes and technology to operate today's electricity system and design tomorrow's energy system.

While Digital First is an important milestone, our digitalisation journey is not linear - our digitalisation journey involves activity progressing in parallel and evolving over time. This update to our strategy narrative and visuals is intended to better reflect how change happens in practice and to highlight the breadth of digitalisation activity taking place across NESO.

Many of the changes needed to become Digital First are already underway. For example, we are improving our core technology to achieve NESO's Full separation in 2026, while also changing how we work, building digital capability, and embedding consistent digital practices across NESO. By applying our Guiding Principles consistently, we are embedding digital thinking into everyday decisions and activities while also delivering benefits sooner and maintaining the momentum.

Over time, this will strengthen our role as a trusted Digital Leader, working in partnership across Great Britain and internationally. The timeline on the left shows how we expect this transformation to develop over time.

Our Digitalisation Vision

Energy Digitalisation framework states that "Digitalisation is essential for a more efficient and secure energy system and is a foundational driver for achieving clean power by 2030 and net zero by 2050". NESO is both a user and facilitator of digitalisation—we are operating the energy system using and improving our digital capability today, while planning, facilitating and stewarding the sector's shared digital and data infrastructure for the future.

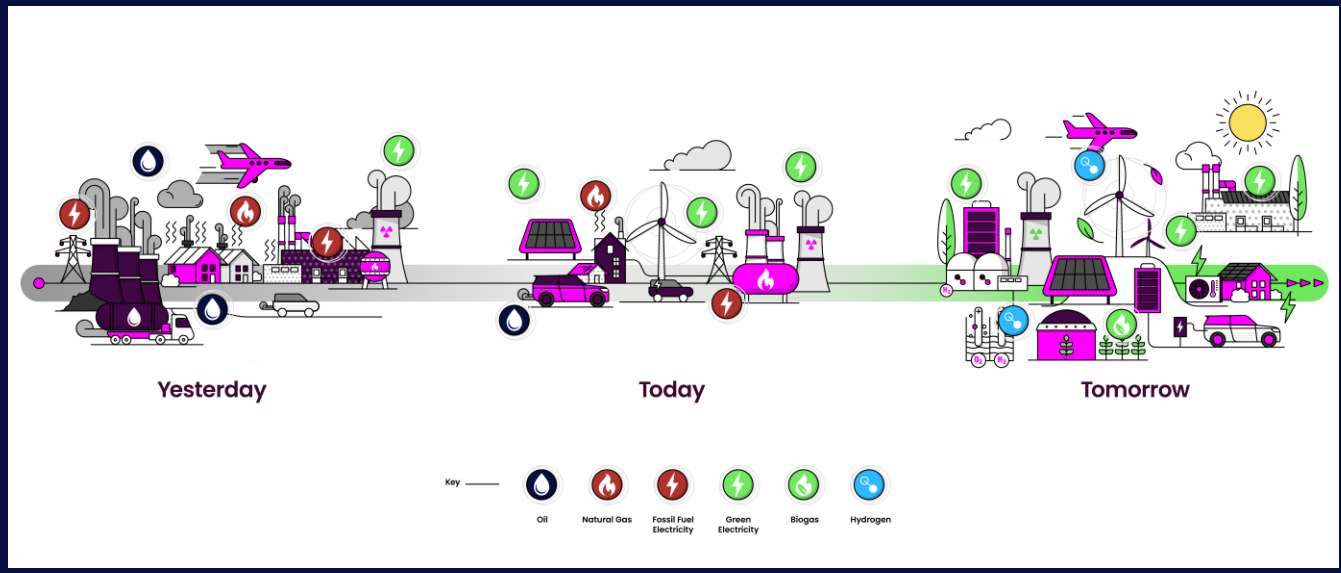
We are an active user of digitalisation, embedding digital capabilities across our organisation to transform how we operate, make decisions and deliver. Through our Digitalisation Strategy and Action Plan, we are strengthening our culture, processes, data and technology foundations—adopting digital-first ways of working, improving data sharing and insight, and building organisational capability in areas such as cloud, data and AI.

By strengthening our internal systems, data and ways of working, we can support better facilitation across the energy sector to 'enable a digitally connected energy system through open data, smart standards, AI and interoperable tools' as outlined in our NESO1 Plan.

By supporting the GB energy industry through a range of externally facing responsibilities—including Sector Digitalisation Planning, interim coordination of Data Sharing Infrastructure (DSI) , and appointment by DESNZ as Core Energy System service domain coordinator—NESO provides support by being a Trusted Partner. This digital leadership enables collaboration across the sector to deliver a more reliable, efficient and future-focused digital energy system for Great Britain.

Becoming a Digital Leader requires a series of parallel activities

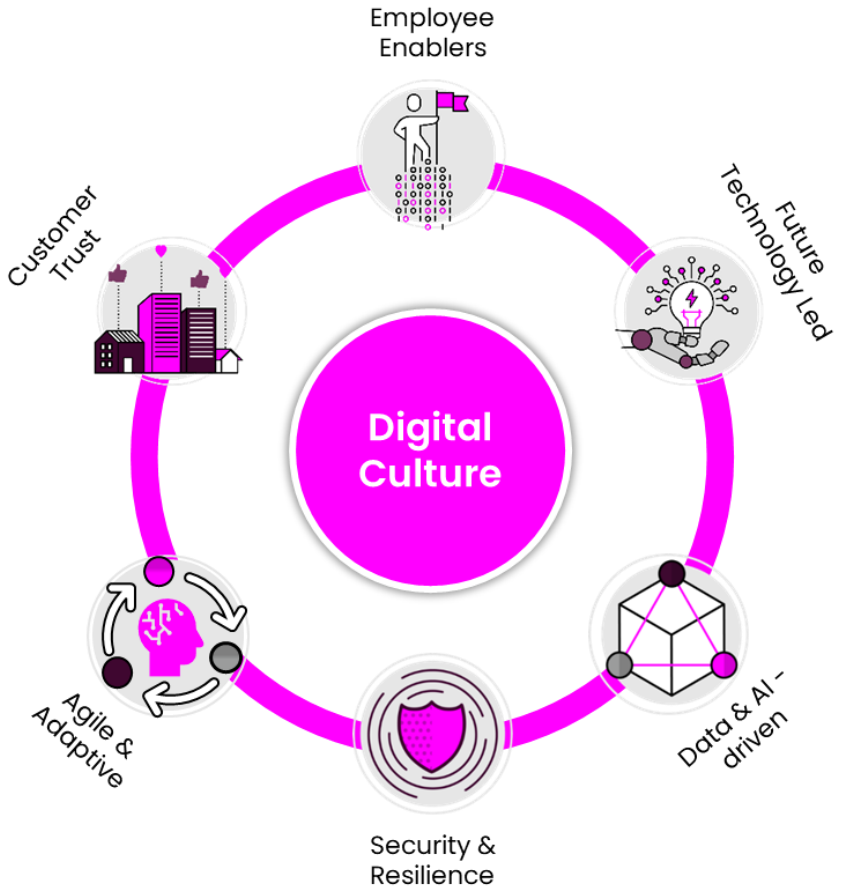
User of Digitalisation	Facilitator of Digitalisation	Trusted Partner in Digitalisation



Our Guiding Principles

We will achieve our digital vision by adhering to our Digitalisation Guiding Principles.

Our Guiding Principles guide technology and data decisions, and ultimately support our Digital Culture, which is at the heart of our ambition.



Digitalisation Guiding Principles

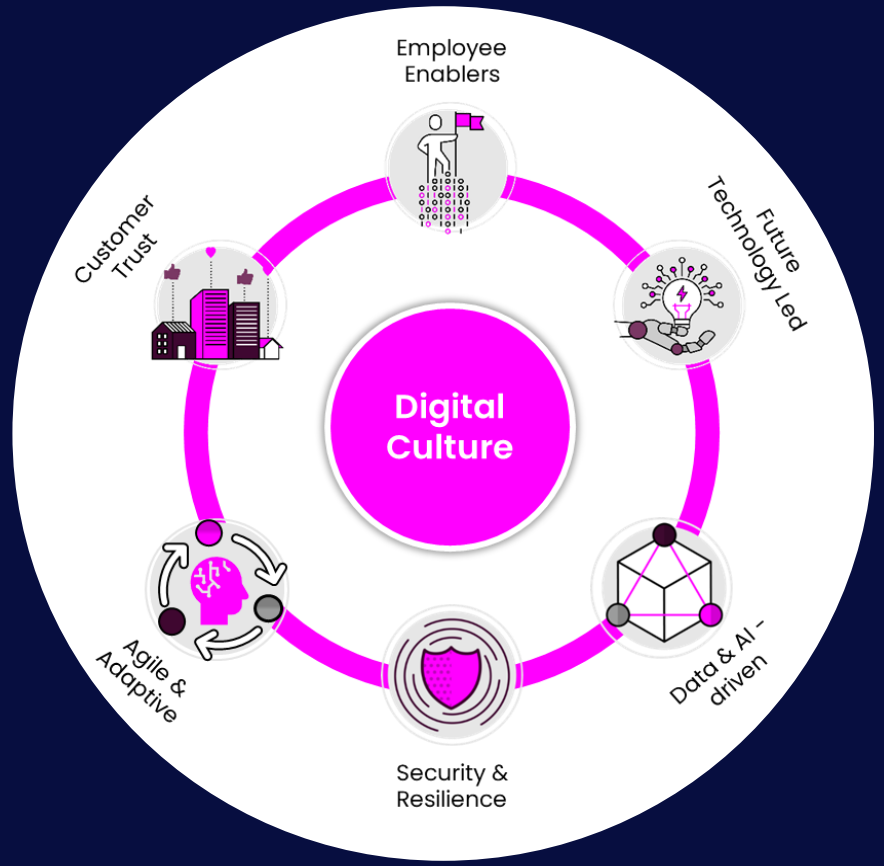
Employee Enablers	Setting the standard for digital excellence across the energy sector.
Future Technology Led	Embracing and harnessing emerging technologies to shape the energy future.
Data & AI-driven	Leveraging the power of data and artificial intelligence (AI) to make informed decisions and enhance operational efficiency.
Security & Resilience	Building and maintaining robust and secure digital infrastructure to support a reliable and sustainable energy system.
Agile & Adaptive	Responding to changing demands and evolving landscapes with flexibility and speed.
Customer Trust	Placing the customer at the heart of our digital transformation journey to deliver exceptional experience.

At our heart is Digital Culture

We are aligning our culture on reinvention through digitalisation & innovation. We achieve this through living our Guiding Principles.

We are Employee Enablers

We set the standard for digital excellence across the energy sector, facilitating collaboration, and drive digital adoption. We aim to lead by example, fostering a unified digital ecosystem.



We are Future Technology Led

We constantly scan for emerging technologies, evaluating their impact and adopting those with significant benefits. This proactive approach keeps us at the forefront of technological advancement, enabling us to address future challenges.

We are Data & AI-driven

We embed data analysis and AI into our core processes to inform decisions and enhance efficiency. This ensures we leverage data to optimise operations, manage risks, and identify opportunities.

We enable Customer Trust

We prioritise customer needs, working collaboratively to deliver value across the energy system. This ensures we provide a reliable, affordable, and sustainable energy system.

We are Agile & Adaptive

We embrace flexible methodologies, working iteratively and adjusting to new information. This growth mindset values continuous learning and improvement. Agile practices like DevSecOps enable faster, more responsive delivery.

We prioritise Security & Resilience

We embed security & resilience, with good architectural designs in our digital transformation, safeguarding infrastructure and ensuring system reliability.

Our Guiding Principles contribute towards NESO's Goals

Below are representative examples of how digitalisation principles enable our goals.

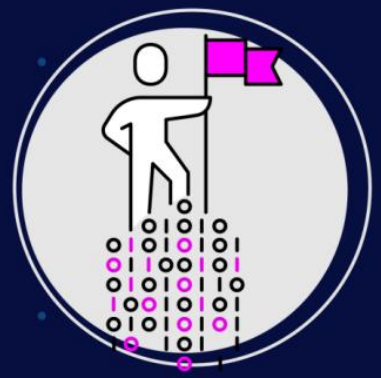
			Secure & Resilient	Future Tech Led	Data & AI-driven	Employee Enablers	Customer Trust	Agile & Adaptive
Pave the way to sustainable energy	We will design, develop and deliver a clean power system, by driving innovation, attracting investment and advising decision-makers to help achieve a successful and fair transition to a Net Zero Energy System.	'We are Future Technology Led', 'We are Agile and Adaptive' and 'We are Data & AI Driven' enable iterative development of integrated plans for decarbonisation by leveraging data and emerging technology.						
Deliver a secure, resilient and operable energy system	We will ensure the whole energy system remains resilient, secure and operable during the energy transition by managing risks, seizing opportunities and developing the necessary capabilities to enable and facilitate.	'We are Secure and Resilient' and 'We are Future Technology Led' support the transition to a zero-carbon electricity system by ensuring robust and innovative infrastructure.						
Drive consumer value	We will minimise supply and price risks, design competitive markets, and efficiently manage system costs through effective operational decisions, benefiting consumers positively.	Our people are at the forefront of the principle of "We enable Customer Trust" which demonstrates transformation efforts are focused on consumer priorities. This is supported by employee enablement and digital roadmaps which deliver clear value to consumers.						
Lead as a trusted expert	We will foster strong partnerships nationally and globally, leveraging digitalisation and data across the whole energy system and facilitating growth.	"We Employee Enablers" and "We are Agile and Adaptive" reflect a commitment to continuous learning and adaptability, enabling NESO to lead confidently as a trusted partner. Reinforced by "We enable Customer Trust," these principles focus on understanding and meeting customer needs while promoting digital excellence and a digitally skilled workforce.						

Last updated: June 2026

We are Employee Enablers

We are empowering People and Driving Excellence

We are aligning the needs of our people with digital enablers to transform NESO into an employee enabler. We are putting our people at the heart of our digital transformation to empower them driving innovation and operational excellence.



NESO aims to unlock the full potential of its people by fostering a culture of continuous learning, coaching, and innovation aligned with business strategy to build a future-ready workforce. Through evolving Learning & Development initiatives and investing in employee growth, the organisation seeks to empower colleagues to thrive and deliver sustainable success.

1 Knowledge

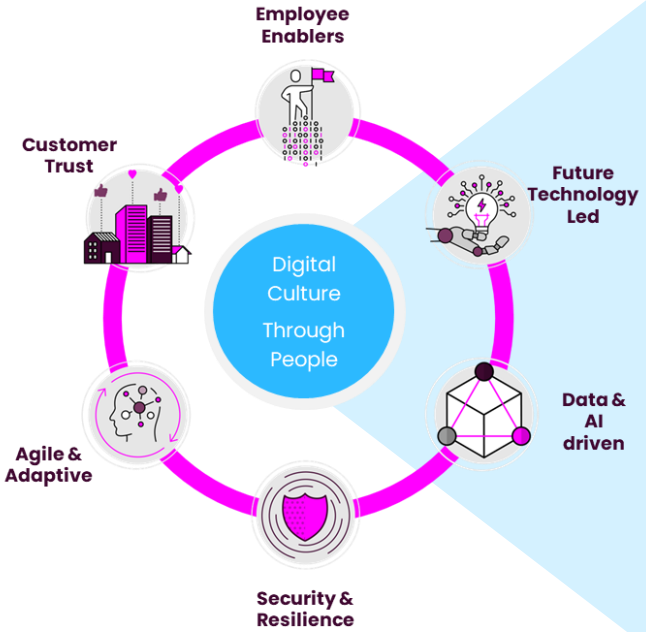
Foundation for understanding a subject: I can talk the talk

2 Practice

Refines skills and deepens comprehension: I can analyse and perform

3 Mastery

High proficiency and expertise achieved: I can create impactful outcomes



Right Foundations

Build a strong base with job-aligned learning, career development needs and leadership programmes informed by Digital Value Streams outlined in NESO1 Plan

Energising Delivery

Deliver consistent, collaborative learning experiences that integrate IT-driven training priorities alongside BAU leadership and capability programmes

Driving Innovation

Foster a continuous learning culture that connects IT transformation skills with cross-functional growth and career progression

Future Skills

Anticipate future roles and technologies (AI, Prompt Engineering, productivity skills to maximise technology investment impacts) through Horizon Scanning, and by ensuring that we are on the forefront of tech changes and how this impacts needs of NESO workforce

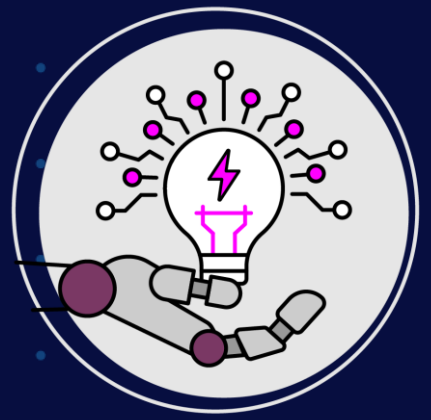
Our approach to People Strategy is being refined with the intention of aligning it more closely with upcoming iterations of the Digitalisation Strategy

Last updated: December 2025

We are Future Technology Led

Innovation is critical to helping us meet the challenges of transitioning to a zero-carbon future.

To meet the challenges of decarbonising our energy system, we are focusing on cutting-edge technologies and collaborative solutions that pave the way to a net-zero future.



We are committed to being the energy industry's innovation champion, leading by example as we address the challenges ahead. We are engaging our workforce in the innovation process, ensuring that insights are integrated into our daily ways of working.

Driving the Zero-Carbon Transition

By exploring better forecasting of supply and demand through transformational technologies, we enhance the integration of renewables and reduce balancing costs.

Collaboration is essential for accurately monitoring carbon across the energy system, informing decisions on optimal pathways to net zero.

Initiatives include:

- Enhancing supply and demand forecasting to better integrate renewable energy sources.
- Reducing balancing costs as we decarbonise the electricity system.
- Improving carbon monitoring across the energy landscape.
- Exploring microgrid management and decentralised dispatch.
- Supporting the pathway to 2030 and beyond for network requirements and Clean Power initiatives.

Whole Energy System

We adopt a holistic view, integrating electricity, gas, and hydrogen systems to support decarbonisation across sectors.

Understanding how multiple energy vectors can be co-optimised is key to enabling the decarbonisation of heat, power, transport, and industry while maintaining a secure and resilient energy system.

Initiatives include:

- Promoting collaboration and knowledge sharing throughout the energy system.
- Facilitating the integration of Distributed Energy Resources (DERs).
- Developing a strategic transport and energy demand model to assess Vehicle-to-Grid (V2G) impacts.
- Enhancing our network planning methodologies for long-term investment evaluation.

Future Markets

We are designing and testing market reforms aimed at facilitating the net-zero transition at the lowest cost. Our approach focuses on the removal of barriers to enable a diverse range of contributors to the market.

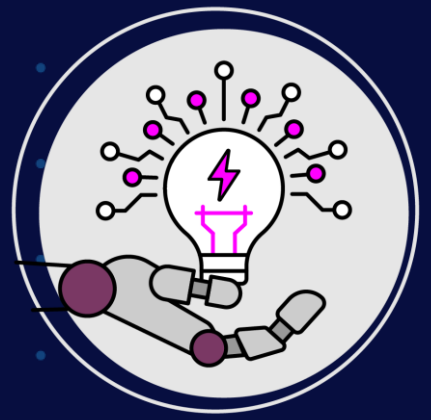
Initiatives include:

- Exploring long-term market design options for whole-system solutions.
- Developing mechanisms that incentivise flexibility from diverse resources.
- Investigating peer-to-peer energy trading in local markets

We are Future Technology Led

Find out more

- Innovation Strategy
- Operability Strategy Report
- Future Energy Scenarios
- ENA Innovation Portal
- Balancing Costs Strategy
- Go to our Action Plans



Last updated: December 2025

Digital, AI & Data

To become a Digital Leader, we are implementing AI to enable faster, more informed decision-making, automate processes, and enhance user experiences. These serve as enablers across our innovation priorities, exemplified by tools like the Dynamic Reserve Setting (DRS) model and the Volta programme, which will empower our control room with unprecedented insights.

Initiatives include:

- Improving data interoperability and automation.
- Utilising AI to enhance data quality and standards.
- Establishing a secure data-sharing infrastructure.
- Innovating the Control Room of the future through technology.
- Exploring Generative AI use cases for operational efficiency.
- Investigating Quantum Computing applications for energy simulation.

Constraint Management

We are implementing innovative solutions to effectively manage system constraints and minimise impact on consumers. By testing a variety of market-led solutions and technologies, we aim to identify the most economic methods to mitigate constraints and reduce costs..

Initiatives include:

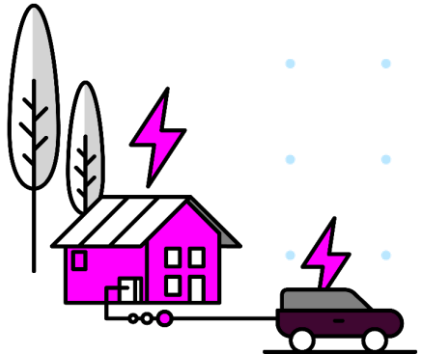
- Developing methods for early oscillation detection and mitigation.
- Creating tools to enhance operational awareness of inertia.
- Optimising metrics for system strength and stability.
- Testing various approaches to economically mitigate power transmission limits.

System Stability and Resilience

Our focus is on ensuring the stability and resilience of the system as we integrate more renewable energy sources. We aim to improve our understanding of how various factors impact the system and how to mitigate these effects while operating with increasing non-synchronous generation.

Initiatives include:

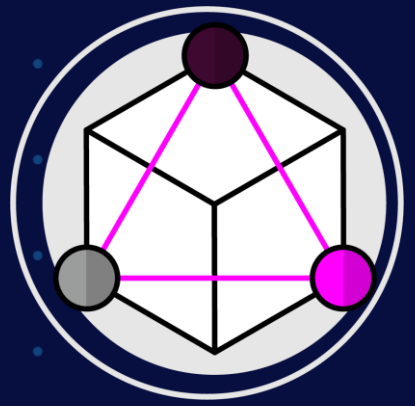
- Developing tools for real-time monitoring and management of inertia.
- Enhancing cybersecurity and grid monitoring capabilities.
- Improving our capacity for Electro-Magnetic Transient (EMT) studies.
- Innovating outage planning and system restoration strategies.
- Managing frequency and stability in asynchronous systems.



We are Data & AI-driven

We use data and AI to make better decisions. Our Data and Analytics Strategy ensures data is trusted, impartial and supports customers and stakeholders.

Our Data & Analytics Strategy addresses today's challenges while building strong foundations for the future. By improving data quality, access and collaboration, we enable more reliable operations, support a cleaner system and help deliver an efficient, affordable energy market.



Last updated: June 2026

Our Data and Analytics strategy is guided by 10 clear principles. Each principle aligns with our wider digitalisation principles (see page 17). By applying these principles, we ensure our data and analytics are trustworthy, deliver better outcomes, improve efficiency, and support digitalisation across the energy sector.

Data is a Strategic Asset
Data must be treated by all NESO teams as a strategic asset for NESO.

Robust, Independent, and Evidence-based Analytics
We must be vigilant in ensuring the outcomes of our analytics are transparent, of high quality, and meet intended outcomes.

Clear data ownership
We must establish clear ownership and accountability for data assets.

Responsible sharing and collaboration
We must facilitate responsible sharing and collaboration externally.

Ensure Data Quality
Our data must be accurate, reliable, and of the expected quality for its intended purpose.

Responsible intake of external data
We must facilitate responsible intake of data from external sources.

Ensure data privacy and ethical use of data
We must uphold privacy rights and embed ethics into all data activities.

Data-savvy workforce
We must build a data & analytics-savvy workforce and culture.

Ensure data is ready for consumption
Our data must be accessible, understandable and actionable for stakeholders.

Data should be protected
We must guard data against unauthorised access, breaches and loss.

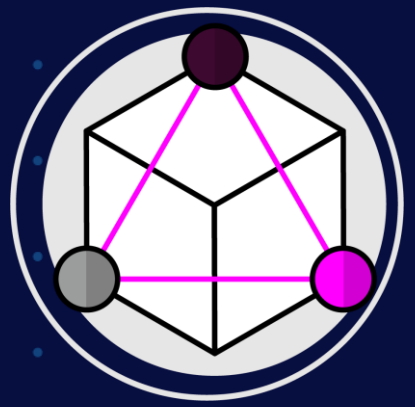
In our previous publication of DSAP, we also outlined strategic shifts which we intend to activate across 4Ms: Model (operating model), Machinery (technology), Method (processes), and Mindset (talent & skills). Each of our Principles also guides which guardrails and components we put in place to activate each of the 4M's. Please refer to our December 2025 DSAP to understand key components of each shift.

Model	Evolve the operating construct of how people interact with data, and how designated people / groups govern actions of people	**Method**	Re-design / introduce principles, policies, and processes to materialise the new ways of interacting with data analytics
Machinery	Re-imagine new age technology eco-system to cater to the evolving data analytics needs of stakeholder groups	**Mindset**	Upskill / enable talent to be able to operate with new technologies, and within new ways of working models

We are Data & AI-driven

We recognise that a robust data and information ecosystem is foundational to our vision for a modern energy landscape.

We aim to enhance decision-making, improve operational efficiency, and foster collaboration both within our organisation, and across the industry.



Data is the cornerstone of our Digitalisation Strategy. As we shift towards a digital-first approach, we are dedicated to ensuring transparency, trust, and access to critical data to fuel decision making and valuable insights, as well as enable AI.

Data Quality Programme

We continue to develop a Data Quality Programme to enhance the accuracy and reliability of our data. In partnering with data owners, we are working to identify critical data for monitoring and remediation, and for issues management. Tooling is being selected to enable at scale discovery of potential data quality issues and improve process efficiency.

Data and Analytics Platform (DAP)

We have built a Data and Analytics Platform, which will be a central repository for all relevant energy system data. It can facilitate discoverability, access advanced analytics, and has already created data products to facilitate important use cases – improving decision making and insight.

As more data is made available along with greater capability to analyse in a user-friendly manner, it will continue improving data insights and support the development of data products.

Data as the foundation for AI

High-quality, standardised, and interoperable data is essential for training, validating, and deploying effective AI models. Successful AI-driven operations rely on a robust and accessible data ecosystem. DAP is the unifying platform for both data management and AI development, housing the Advanced Analytics Environment (AAE) and facilitating seamless integration of AI models into NESO's operational workflows.

Our data governance initiatives, including the Data Quality Programme and the adoption of industry common, best practice will support AI development by ensuring data consistency, accuracy, and reliability. Additionally, AI-driven insights will enhance our data management processes, creating a continuous feedback loop that improves both data and AI capabilities.

Data Sharing Infrastructure (DSI)

As publicly-owned digital infrastructure, it plays a crucial role in the sector's digitalisation and enabling clean power by 2030

NESO is a future user of DSI, which sits at the heart of our digitalisation vision to enable a more collaborative, whole-system approach to the energy system.

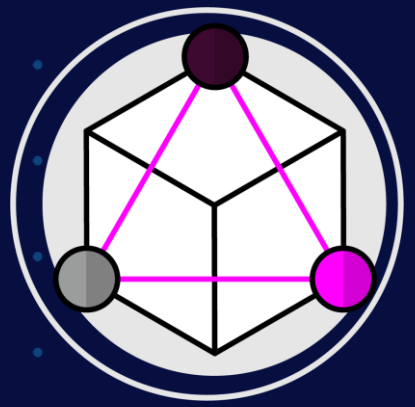
The DSI will enable secure and trusted data sharing at scale between any organisation in the system.

Its socio-technical approach creates a more connected and resilient energy ecosystem - enhancing decision-making, improve operational efficiency, and accelerate innovation across the energy sector.

We are Data & AI-driven

Find out more

Go to our Action Plans



AI and Machine Learning (ML) are transforming how we manage and operate energy systems. We're taking a phased approach to becoming AI-driven, initially focusing on foundational AI capabilities before expanding innovations to the wider market. Our AI ambition is structured around three key workstreams:

Technology & Data

- Delivering AI-based use cases built on robust data and cutting-edge technology platforms.
- Introducing enterprise-wide AI capabilities, such as an OpenAI service for generative AI solutions and a demand forecasting tool using time-series AI capabilities.
- Volta programme integrating AI into the Control Room to aid real-time decision-making. This will enhance scheduling strategies and introduce an AI-based decision awareness tool.

Talent & Culture

- Ensuring a long-term talent pipeline to support our AI ambitions by upskilling internal resources and collaborating with top universities to influence curriculum.
- Establishing a core AI hub to address internal AI ideas, launching initiatives like NESO.GPT, demand forecasting, and the Grid Code GenAI tool.
- Conducting workshops and webinars to raise awareness of AI opportunities across the organisation, with plans to identify skill gaps and create a long-term resource plan.

Policy & Governance

- Influencing AI policy and identifying barriers to the safe and ethical use of AI.
- Embedding internal AI policy to guide employees on safe practices and enable self-service AI.
- Engaging closely with Ofgem on AI initiatives, including building an AI cost-benefit analysis for the industry, and collaborating with the Royal Academy of Engineering and Department for Science, Innovation & Technology (DSIT) on the opportunities and threats of AI.

By introducing AI internally first, we will refine our applications and processes before extending innovations to the wider market. This approach ensures that we build a solid foundation and demonstrate the value of AI within our operations, paving the way for adoption across the energy sector.

We prioritise Security & Resilience

Resilient operations are vital for safeguarding information and ensuring our customers can trust our markets and platforms.

By enhancing our security posture and resilience, we are well-equipped to adapt to the evolving needs of our customers and the energy sector.

In today's digital landscape, our investments in security, and resilient architectural approaches align with our enhanced security objectives and obligations, reinforcing our role as a leader in the energy sector.

Strengthening Cybersecurity

We are continuously improving our cybersecurity capabilities. By implementing robust security controls and enhancing threat detection, we aim to protect our systems and sensitive data from evolving threats.

Our security principles include:

- Building NESO's secure future
- Enhancing NESO's cyber resilience
- Developing & attracting security talent
- Assisting the government to enable the UK energy industry
- Protecting data & innovation

We have started to operate our own cyber security services while in parallel continue to establish new capabilities. These key services include:

- Designing and implementing both a Cyber (partially implemented) and Physical Security Operations Centre (SOC) and a Security Information and Event Management (SIEM) solution to detect and respond to suspicious or actual cyber events.
- Designing and enhancing physical security controls, such as CCTV.

Resilient Architectural Designs

Enterprise architecture serves as the foundation for our operations as a digital and data-centric business, enabling us to focus on customer needs through iterative, agile development cycles.

Our commitment to a secure and resilient architecture involves adopting a defence-in-depth strategy and leveraging cloud technologies for scalability and redundancy.

We are taking a cloud-native approach to simplify our build, deployment, and monitoring processes, utilising containerised services and infrastructure as code to enhance efficiency. This architecture will include robust data backup and recovery mechanisms, essential for maintaining operational continuity in the face of disruptions

Regulatory requirements

Transitioning services from the National Grid Shared Service Model to our ownership will help us meet regulatory requirements and maintain high service standards. Establishing our Vendor Management Office will ensure effective third-party service delivery and value for money through strategic vendor selection and performance management. This transition will also avoid unnecessary costs from parallel systems, generating long-term operational benefits.

As an Operator of Essential Service (OES), we continue to work closely with Ofgem to enhance our maturity in line with their expectations.

We prioritise Security & Resilience

Find out more

Go to our Action Plans

See our NESO1 Business Plan

Proactive Threat Mitigation

By implementing Site Reliability Engineering (SRE) principles, we enhance our ability to monitor and respond to disruptions. This shift from monitoring to observability allows us to understand the root causes of failures, enabling quicker and more effective responses.

Platforms and Ecosystems

We are embracing Software as a Service (SaaS) and standard design patterns, prioritising features, business value, and user experience over traditional infrastructure. This includes the use of reusable patterns and published design models to foster innovation.

Application Programme Interface (API) and Integration

We are building new capabilities using microservices and event-driven designs. Our platform will feature self-service APIs that can be extended to external customers and partners, incorporating event-driven patterns and both public and private gateways.

Telemetry and Networks

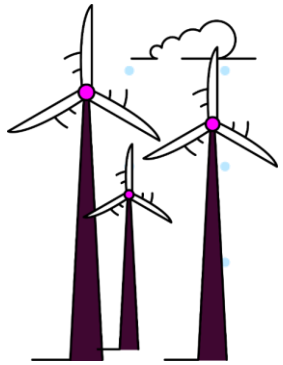
Our focus is on removing barriers to connectivity, enabling seamless integration with energy grids and control systems at an accelerated pace.

Collaborative Architectural Approaches

Our approaches will foster collaboration across the energy sector. Our initiatives include:

- Industry Engagement: We will maintain continuous dialogue with customers to cultivate a culture of shared responsibility and collaboration.
- Common Frameworks: By contributing to the development of common data-sharing frameworks, we will ensure interoperability and unified approach to security.
- Data Sharing Infrastructure: Leading the development, in collaboration with the National Digital Twin Programme, will enhance security and resilience across the sector.
- Digital Skills Development: Recognising the importance of skilled personnel, we are investing in digital skills development programmes for our workforce and external partners.

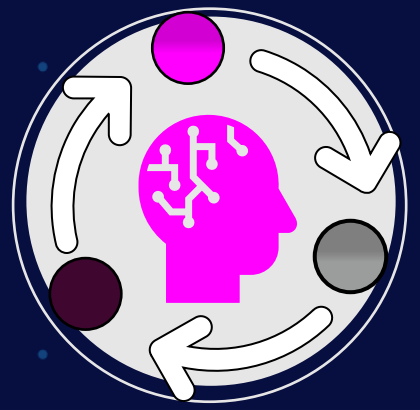
As we implement our strategy and transition our services, we anticipate that these efforts will yield significant benefits, enhancing our overall security posture and operational efficiency.



We are Agile & Adaptive

NESO will embrace agility in response to evolving industry demands and rapid technological advancements

An agile and adaptive approach allows us to stay ahead of industry changes, ensuring we can integrate solutions seamlessly and respond to emerging trends effectively.



By embracing agile and adaptive practices, we will create an energy system capable of meeting future challenges, benefiting both NESO and the wider energy industry.

Digital Strategy & Mindset

We are prioritising modern architectures and agile delivery methods, such as DevSecOps, to ensure our systems are robust and adaptable. By fostering a digital-first mindset, we are empowering our employees to embrace change and drive innovation.

Agile Resource Deployment

We are forming flexible teams capable of adapting to new challenges. Our "Growth Mindset" culture encourages continuous learning and experimentation, preparing our workforce for the future.

Software-as-a-Service (SaaS) Platforms

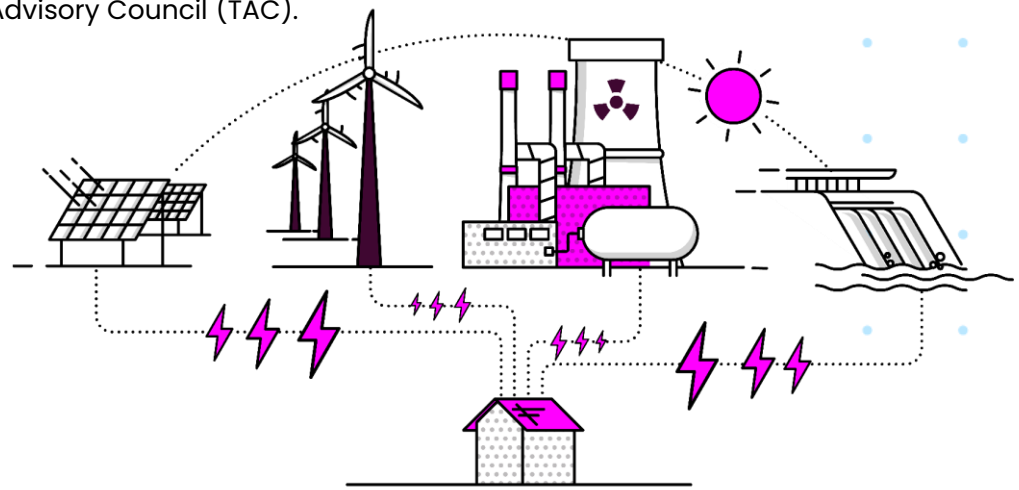
We are adopting modern, scalable platforms that enable rapid feature development and deployment. The Open Balancing Platform (OBP) demonstrates this by enhancing transparency, operational flexibility, and security.

Iterative Development

Continuous improvement is at the core of our working. We are regularly updating our DSAP and roadmaps based on stakeholder feedback and evolving needs, ensuring our initiatives remain relevant and effective.

Cross-Functional Collaboration:

We are promoting collaboration across teams and with customers to identify needs and develop tailored solutions. We are leveraging technology to facilitate data exchange and consistency, supported by initiatives like the Data and Information Ecosystem accelerator and the Technology Advisory Council (TAC).



We enable Customer Trust

We are working closely with customers across the energy sector, to ensure they have trusted tools and platforms to succeed.

Our principle-led approach ensures our digital solutions are developed with customers, supporting trust, transparency and progress across the energy system.

To become a trusted partner and digital leader we will work with our customers across the energy system, understanding their digital needs & ensuring we can accelerate progress against shared goals

Digital Mindset

Our digital approach is about creating simple, joined-up experiences. Better data access, user-centred platforms and integrated tools help remove friction, making it easier for customers to take part in the energy system. We want a digital landscape that's inclusive and benefits everyone. This approach supports our ambition to be a reliable and impartial system operator.

Principles into Practice

We design our digital services around the principles that build trust: being easy to work with, reliable, impartial and credible. By working directly with customers, we create solutions that respond to real needs. From real-time operational data to long-term planning and market tools, our aim is to deliver value and give customers confidence in how they navigate the system.

Collaboration

We're investing in deeper, more meaningful collaboration. Through continuous dialogue, industry forums and direct feedback, we're shaping services that reflect the changing needs of the energy system, support with targeted digital solutions and are easier for customers to use.

We enable Customer Trust

Find out more

Go to our Action Plans

By listening to our customers needs, we have already developed & deployed tools designed to support customer success and our digital leader goal

Data Transparency and Access

Our commitment to data transparency is demonstrated through a comprehensive data catalogue within our data portal. This initiative provides customers with easy access to real-time insights and historical trends, empowering them to make informed decisions about their energy consumption and participation in flexibility markets.

Facilitating Customer Participation

Investments in digital platforms, such as the Open Balancing Platform (OBP), have allowed us to create more accessible and user-friendly markets for flexibility services, providing clear information on benefits and risks to inform their decisions. This tooling allows a wider range of customers, including households and businesses, to participate and benefit in market activity.

Self-Service Platforms

We have created easier access for customers to self-help information and support via the NESO website.

Our online knowledge centre tool provides resources, allowing customers to independently access help and advice in a way that suits them. Our online query management tool also facilitates seamless communication with our customer service teams, ensuring these are routed and responded to promptly. With our advanced CRM platform tools allowing us to track and continuously improve our web help portal ongoing., we can ensure customer questions are not only answered but used to help us improve our ongoing service for all customers.

Enhanced Communication Channels

We have improved our communication channels to provide timely updates on system status, market developments, and planned outages. This enhancement builds trust and by providing reliable and accurate information customers can use to keep updated and support their own planning from.

Customer Feedback Mechanisms

By adopting digital surveying and feedback tools we are able to capture and integrate customer feedback, alongside key data into our systems, creating easy access for our teams to support understanding and key insight creation that ensure our customers voice is used to inform and shape our wider NESO strategy, delivery activity and internal improvement.

3a.

Digital Charters

NESO Digital Strategy and Role-Based Charters

NESO's Digitalisation Strategy is underpinned by a series of **role-based digital charters**. These charters provide a clear framework for how digital capabilities are embedded across roles within the organisation. They are designed to:

- Align technology investments and digital initiatives with NESO's strategic objectives.
- Support broader strategies, including **Data** and **Artificial Intelligence**, ensuring consistency and integration.
- Enable effective planning and delivery of digital solutions that enhance operational performance and stakeholder value.

By defining expectations and responsibilities for digital adoption at a role level, these charters help ensure that NESO's approach to digitalisation is structured, transparent, and aligned with long-term strategic goals. This approach strengthens confidence in our ability to deliver innovation and value across the energy system.

Energy Markets Digital Charter Overview

Our 2031 Ambition

We develop and operate the markets needed for balancing GB's electricity system. We also contribute to strategy for wholesale markets, act as a code manager and are a market delivery body, across all energy vectors.

Performance Objective

NESO will seek to reduce supply and price risks and deliver consumer value by evolving frameworks to support decarbonisation, flexibility, and innovation. We will enable a smarter, cleaner, and more efficient energy system, with clear market signals, improved market access, and open access to systems and high-quality data.

Challenges

- Regulatory Volatility & Complex Governance
- Data Quality & Real-Time Visibility Gaps
- Legacy Tooling
- Market Access & Design Limitations
- Budget & Resource Constraints
- Defining Value & Managing Stakeholder Expectations

Target Outcomes for 2031

- Regulatory Change & External Governance
- Standardised Market Participation
- Multi-Horizon, Location Procurement
- Trusted Data, Modelling & Transparency

Digital Capabilities Required

- Authoritative Data & Catalogue
- System Connectivity & Integration
- Automated Assurance & Monitoring
- Flexible Procurement & Auction Platform
- Secure Modelling & Analytics Platform

NESO 1: Role Based Investments (Action Plans Section page "38-42" for details)

Last updated: December 2025

Energy System Resilience & Security of Supply Digital Charter Overview

Our 2031 Ambition

We assess and enhance the resilience and security of energy networks. This includes identifying improvements, addressing threats and vulnerabilities, and evaluating the security of gas supply.

Performance Objective

ESR: NESO will evolve from a system operator that monitors electricity risks into an organisation with a greater understanding of whole energy system risk and resilience. We will have the capability to be a catalyst for mitigations and solutions with our stakeholders across the energy system.
SoS: NESO will ensure a balanced, resilient, and low-carbon energy supply through advanced forecasting, coordinated system operations, and long-term planning aligned with the pace of the energy transition.

Last updated: December 2025

Challenges

- Secure Data & External Sharing Gaps
- Whole – Energy & Extreme – Event Modelling Limitations
- Operational Data Exchange & Reporting Inefficiencies
- System – Wide Risk Intelligence & Register Caps
- Prioritisation & Cross – Programme Dependencies

Target Outcomes for 2031

- Security of Supply & Market Assurance
- Restoration, Readiness & Control – Room Support
- Whole Energy Modelling & Extreme Event Analysis
- Sensitive Data & System-wide Risk Intelligence
- Stakeholder Insight & Operational Exchanges

Digital Capabilities Required

- Authoritative Data & Catalogue
- Modelling & Analytical Platform
- Single System Restoration Tool with Visualisation
- Secure Data Access & Sharing Platform
- Engagement Intelligence & CRM

NESO 1: Role Based Investments (Action Plans Section page “43-44” for details)

Facilitating Sector Digitalisation Digital Charter Overview

Our 2031 Ambition

We promote and protect our reputation externally as a new public body, whilst supporting the business with strategic stakeholder engagement, messaging, branding and more.

Performance Objective

NESO will enable a digitally connected energy system through open data, smart standards, AI and interoperable tools—accelerating innovation, broadening participation, and driving system-wide efficiency. This will accelerate digitalisation across the energy sector, champion open data and foster a digital ecosystem that unlocks value and drives collaboration.

Challenges

- Managing Technical Debt and Risk While Delivering at Pace
- Moving from Project to Product Working
- Transition of CNI Corporate Estate
- Platform Modernisation
- One NESO Maturity

Target Outcomes for 2031

- Golden Thread Between Business Planning, DSAP, and Digital Charters
- A Tolerable Level of Technical Debt Accepted with a Plan to Reduce
- Dynamic Security & Resilience Across Estates
- Disciplined Modernisation & Value Governance
- Foundational Services that are Stable, Secure & Enable Vale Creation

Digital Capabilities Required

- Portfolio & Value Management
- Data & Catalogue Foundation
- Identity, Security & Trust
- System Connectivity & Integration
- Modernised Platforms

NESO 1: Role Based Investments (Action Plans Section page “45” for details)

Last updated: December 2025

Network Operability & Connections Digital Charter Overview

Our 2031 Ambition

We ensure that GB's electricity system will be operable through identifying operability needs, procuring solutions and delivering engineering services and commercial contracts. We serve customers connecting to and operating on transmission and distribution networks.

Performance Objective

NESO will deliver a resilient, operable, and decarbonised energy system through efficient connections and coordinated system standards

Challenges

- Fragmented Data
- Manual, time-consuming Submissions & Reviews
- Patchy Customer Experience
- Compute, Modelling & Tooling Constraints

Target Outcomes for 2031

- Trusted Data & Traceability
- Integrated Intake & Exchanges
- Customer Experience & Insights
- Governed Digital Delivery
- Modern Modelling & Compute

Digital Capabilities Required

- Data Backbone & Traceability
- Intake & Exchange Fabric
- Customer Experience & CRM Platform
- Modelling & Compute Platform
- Digital Delivery & Observability

NESO 1: Role Based Investments (Action Plans Section page "46-47" for details)

Last updated: December 2025

Strategic Energy Planning Digital Charter Overview

Our 2031 Ambition

We create integrated, resilient national network plans for GB's electricity, gas and hydrogen networks. We also align regional energy planning through regionalised engagement teams and strategies.

Performance Objective

NESO will shape the future of energy by defining the energy infrastructure requirements across Great Britain. Our whole-energy plan will take into account what society and communities value, safeguarding the environment, maintaining system resilience, and ensuring consumer benefits are realised.

Challenges

- Data Lifecycle Constraints
- Modelling Limitations & Fragmentation
- Stakeholder Insights Gaps
- External Transparency & Self-Service Publication
- Skills, Capacity & Onboarding Gaps
- Regulatory Uncertainty

Target Outcomes for 2031

- Trusted End to End SEP Data for Timely Confident Decisions
- Risk Based Whole Energy Modelling that factors in Uncertainty
- Stakeholder Insights and Transparent External Publication
- Optimised Ways of Working and Stable Core Tools
- Stronger SEP Skills, Faster Onboarding, and Better Alignment

Digital Capabilities Required

- Authoritative Data & Lineage
- Advanced Modelling Workflow
- Stakeholder Insight Standards
- Publication & Access
- Operating Model & Skills

NESO 1: Role Based Investments (Action Plans Section page “48” for details)

Last updated: December 2025

System Operations Digital Charter Overview

Our 2031 Ambition

We drive NESO's holistic and integrated transformation in collaboration with our customers, through a robust and focused approach to change & programme delivery, enabling our purpose of forging a path to a sustainable future for everyone.

Performance Objective

NESO will operate a flexible, and increasingly intelligent electricity system, optimising transparent real-time decision-making to manage a complex, zero carbon grid and ensure a resilient energy system enabled through data, automation, and future – ready digital tools.

Challenges

- Cross-Industry Coordination & Governance Complexity
- Data Access, Transparency & Reliability
- Fragmented Data
- Refinement and optimisation of Modelling
- Physical Connectivity Efficiency
- Requirements Outpace Implementation & Upskilling
- Limited System Status & Dashboarding

Target Outcomes for 2031

- Authoritative Data & Models re-usability
- Whole – System Connectivity & Standard Data Exchange
- Operator – Centric Control Centre & Service Resilience
- Modern Balancing Operations & Assurance
- People, Process & "In-Between" Governance (Safe Path to Automation)

Digital Capabilities Required

- Data & Model Foundations
- System Connectivity & Integration
- System Access Digital Enablement
- CNI Service Platform
- Operational Experience Modernisation

NESO 1: Role Based Investments (Action Plans Section page "49-55" for details)

Last updated: December 2025

Energy Insights Digital Charter Overview

Our 2031 Ambition

We create robust, evidence – based insights into emerging energy transition trends. Resulting in the development of scenarios, insight and advice for the use of policy makers, industry and NESO itself.

Performance Objective

NESO will be a thought leader and trusted partner. We will enable informed, effective decision-making across our own processes, industry and policy makers, by delivering transparent, evidence-based insights and advice requested by Ministers and Ofgem.

Challenges

- Fragmented Data
- Tooling optimisation
- Policy Monitoring & Horizon Scanning
- AI & Knowledge Tools Review
- Digital Literacy & Upskilling

Target Outcomes for 2031

- Trusted Data for Evidence Based Insight
- Faster Policy Monitoring & Horizon Scanning
- Efficient Stakeholder Engagement
- Refined assurance mechanisms for Publishable Outputs
- AI & Knowledge Enabled Insight Creation

Digital Capabilities Required

- Authoritative Data & Lineage
- System Connectivity & Integration
- Policy & Signal Intake & Scanning
- Digital Clearance & Publication
- Knowledge & AI Enablement

NESO 1: Role Based Investments (Action Plans Section page "62" for details)

Last updated: December 2025

Action Plan

Our Action Plan sets the stage for NESO's digital transformation, driven by a principle-led approach to enhance collaboration and sustainability across the energy system.

Our NESO DD&T Annex sets out the Data, Digital and Technology investments we will deliver during NESO1 (FY27–FY28). It provides a clear link between our corporate strategy and the digital capabilities that support how we operate and plan the energy system.

For full details of these investments, see the NESO1 DD&T Annex .

As this DSAP is published in the first quarter of a new financial year, we will provide a further update on progress against these investments in our December 2026 publication.

See our NESO1 Business Plan

See our NESO1 DD&T Annex

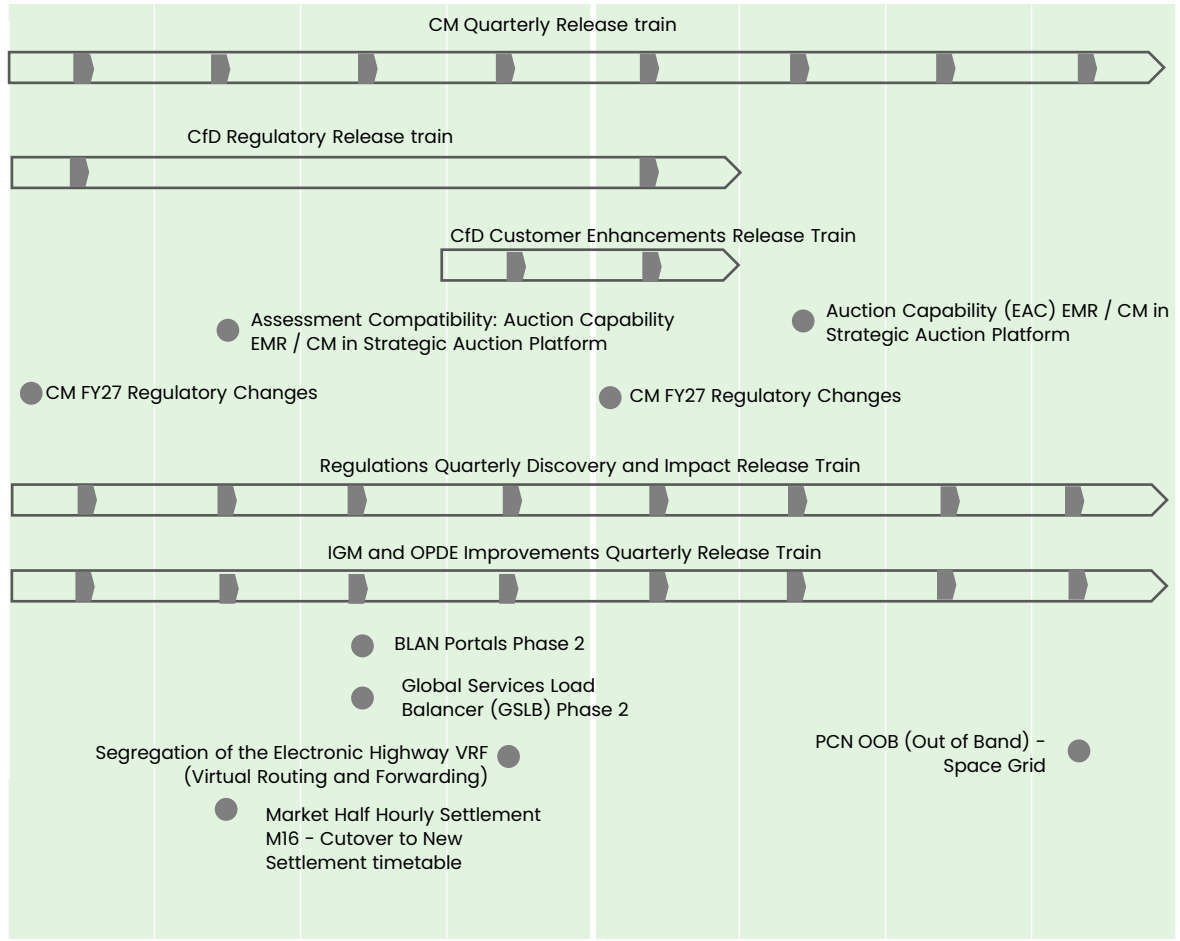
See our Digital Charter Overview

See our NESO1 Business Plan

See our Digital Charter Overview

Action Plans | Energy Markets

ID	Title & Description
NESO1-320	**Capacity Market and Contracts for Difference Regimes** Delivery method: Agile The Capacity Market (CM) and Contracts for Difference (CfD) regimes were introduced under the Energy Act 2013 to help deliver a secure, reliable, and affordable electricity supply while supporting the transition to a low-carbon future. Appointed as the Electricity Market Reform Delivery Body (EMR DB), we are responsible for administering both these two core mechanisms designed to tackle the challenges of decarbonisation and energy security. The CM & CfD investment aims to maximise operational efficiencies across technology function enabling the delivery body to meet its regulatory obligations to achieve the policy intent.
NESO1-330	**Regulations** Delivery method: Agile This investment enables us to deliver regulatory change arising from our GB regulatory and Trade and Cooperation Agreement (TCA) obligations. It exists to keep NESO compliant, enable market reform, support the UK's decarbonisation pathway, and seeks to balance our forecast with the risk of locking into premature scope or spend. It spans discovery, impact assessment and, where required, time-bound delivery, coordinated closely with adjacent DD&T investments to avoid duplication and manage portfolio dependencies

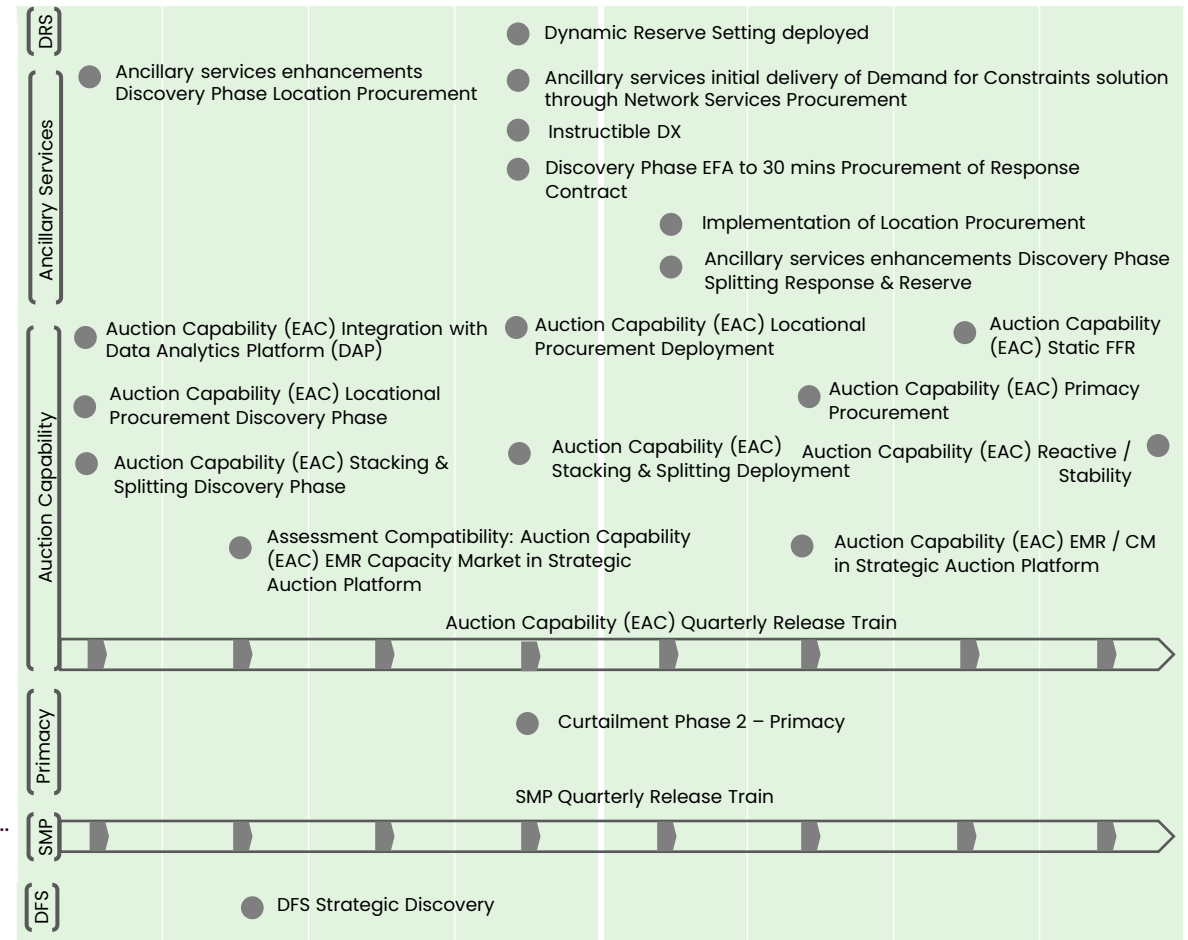


See our NESO1 Business Plan

See our Digital Charter Overview

Action Plans | Energy Markets

ID	Title & Description
NESO1-340	**Market Access and Procurement** Delivery method: Hybrid This strategic initiative supports NESO's statutory duties to deliver consumer value, enable decarbonisation, and ensure system operability and resilience. Our key objectives include creating competitive and accessible markets that minimise supply and price risks and embedding transparency and auditability in market design and procurement decisions. We will continue to improve investments which include the development of the Single Market Platform (SMP), Ancillary Services Reform (ASR), and Demand Flexibility Service (DFS).



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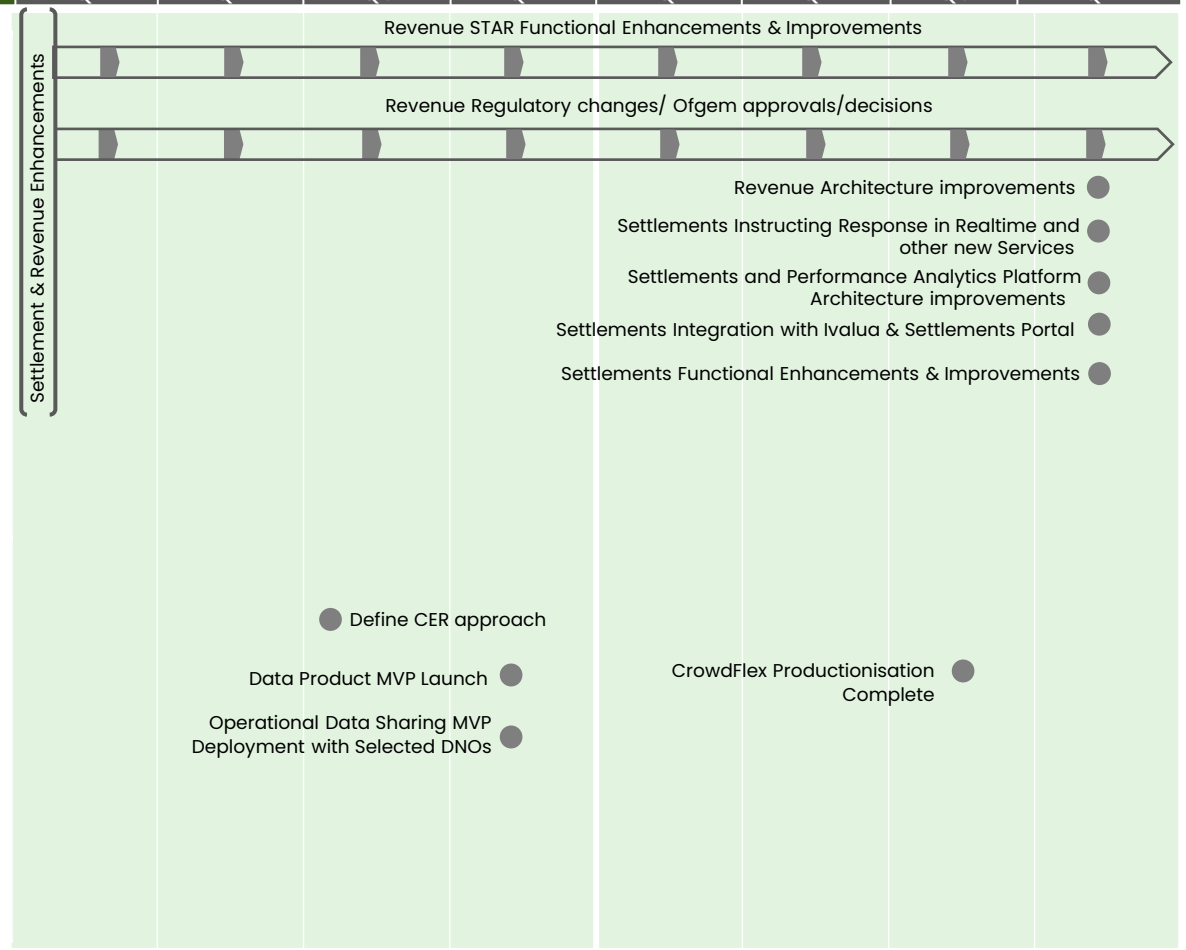
See our NESO1 Business Plan

See our Digital Charter Overview

Action Plans | Energy Markets

ID	Title & Description
NESO1-340 (Cont.)	**Market Access and Procurement** Delivery method: Hybrid This strategic initiative supports NESO's statutory duties to deliver consumer value, enable decarbonisation, and ensure system operability and resilience. Our key objectives include creating competitive and accessible markets that minimise supply and price risks and embedding transparency and auditability in market design and procurement decisions. We will continue to improve investments which include the development of the Single Market Platform (SMP), Ancillary Services Reform (ASR), and Demand Flexibility Service (DFS).
NESO1-350	**Flexibility Enablement** Delivery method: Agile Flexibility Enablement directly advances Clean Power 2030 by scaling access to distributed flexibility; enhances Consumer Value through better auction sizing, bid evaluation and delivery certainty; accelerates Digitalisation and Data Sharing via standardised ingestion, APIs and production analytics; and underpins Secure and Resilient Systems by improving visibility for constraint management and supporting restoration outcomes. It positions NESO as a digital leader in flexibility operations, with the capabilities to expand participation, coordinate effectively across the system, and deliver reliable, low-carbon operation at the lowest reasonable cost.

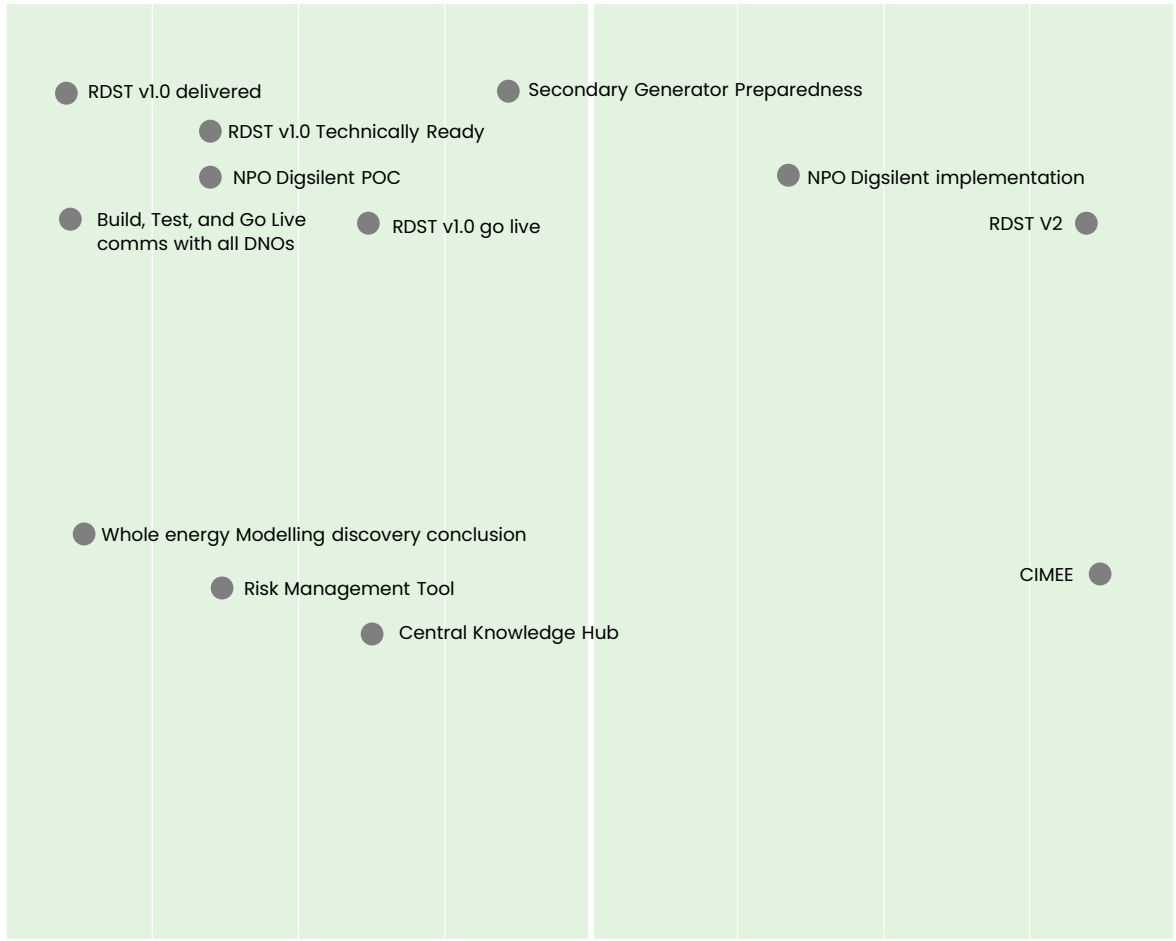


See our NESO1 Business Plan

See our Digital Charter Overview

Action Plans | Energy System Resilience

ID	Title & Description
NESO1-360	**Restoration** Delivery method: Waterfall Restoration is a strategic investment designed to meet the Electricity System Restoration Standard (ESRS), which mandates restoring 60% of regional demand within 24 hours and 100% of national demand within 5 days by 31 December 2026. This investment will build upon the core principles of the BP3 investment 510 Restoration and Restoration Decision Support Tool but with a specific focus on delivering against the new standard.
NESO1-370	**Resilience & Risk** Delivery method: TBC To support the delivery of these licence requirements, the Resilience and Risk investment will continue the work being developed with the Whole Energy Modelling (840) which will later inform the scope of works for our Cascading Impact Model for Extreme Events (CIMEE). We will also integrate two wider areas of scope into one comprehensive model. One of these components will be the integration of the virtual energy system and understanding how a CIMEE model can interact with a virtual energy system when modelling high risk low likelihood events. The CIMEE project will also if applicable integrate the findings of the innovation project Space Weather Impact for Future Electricity System Resilience (SWIFTER) with an assessment to be made on the innovation projects conclusion.



Legend: Completed, On Track, Planned, At Risk, Removed, Delayed, Brought Forward, Release Increment, Release Train

See our NESO1 Business Plan

See our Digital Charter Overview

Action Plans | Energy System Resilience

Legend: Completed, On Track, Planned, At Risk, Removed, Delayed, Brought Forward, Release Increment, Release Train

ID	Title & Description	FY 2027				FY 2028			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NESO1-380	**Electricity Market Reform Discovery** Delivery method: TBC The team are responsible for a variety of duties including production of the Electricity Capacity Report, mapping and maintaining EMR modelling, and their supporting processes and Strategic Planning. To enable this work, we currently use an energy market simulation tool. This discovery investment will review the capabilities of the tool vs what the team need as currently several manual coding processes must be developed to deliver this analysis.				Discovery Conclusion				

See our NESO1 Business Plan

See our Digital Charter Overview

Action Plans | Facilitating Sector Digitalisation

Legend: Completed, On Track, Planned, At Risk, Removed, Delayed, Brought Forward, Release Increment, Release Train

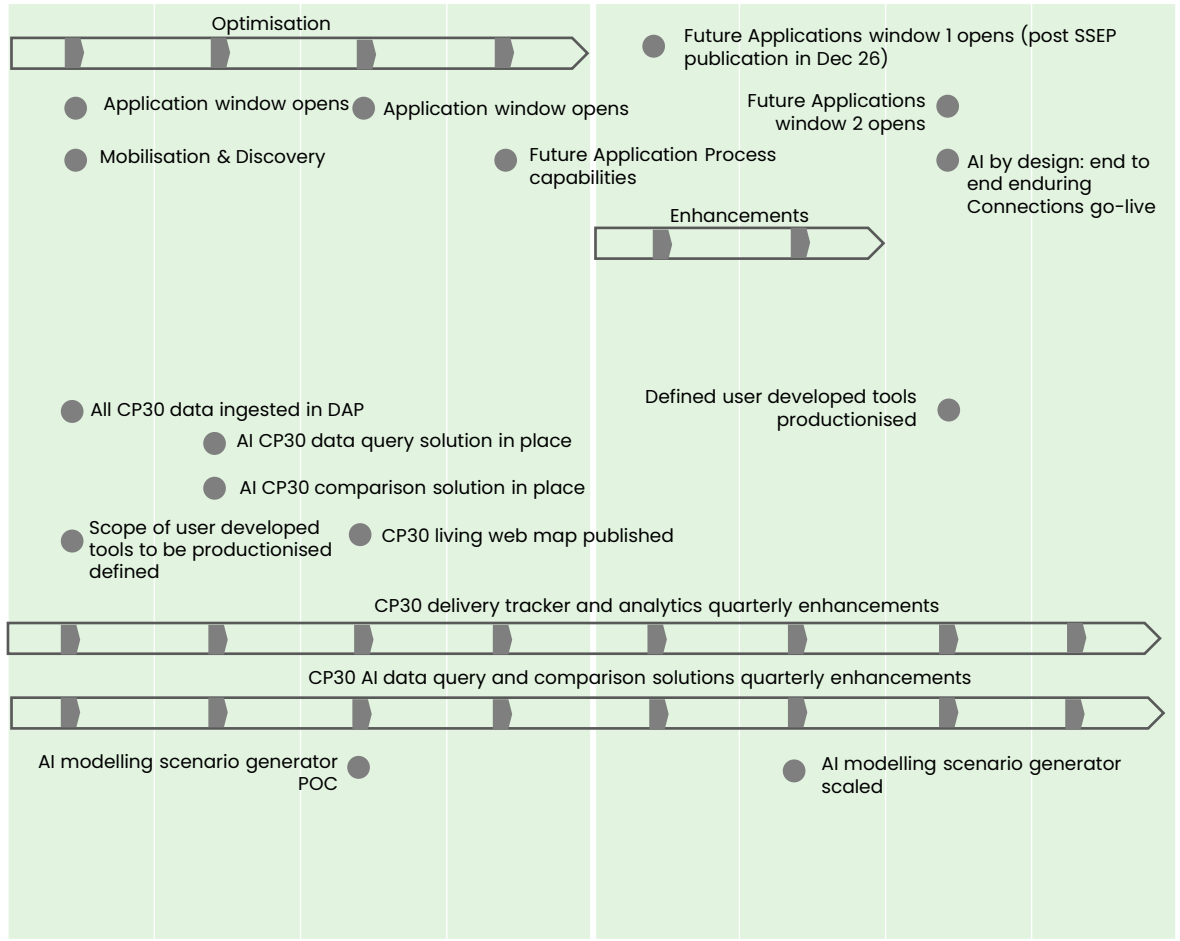
ID	Title & Description	FY 2027 Q1	FY 2027 Q2	FY 2027 Q3	FY 2027 Q4	FY 2028 Q1	FY 2028 Q2	FY 2028 Q3	FY 2028 Q4
NESO1-120	**Data Sharing Infrastructure** Delivery method: Agile This investment, delivered by NESO on behalf of and for the sector, responds to a long series of publications and policies asking for improved data sharing: from the 2017 National Infrastructure Commission (NIC) Report "Data for the Public Good", through to the more recent "Government response to the energy system Digital Spine Feasibility Study" (August 2024) and Ofgem "Governance of the Data Sharing Infrastructure (Decision)" (April 2025) which assigned NESO the mandate to implement a pilot and Minimum Viable Product (MVP) of the DSI and act as the role of Interim DSI Coordinator for the period until 2028.			MVP release candidate (WP1)		MVP release for trials (WP1)		Public beta launch (WP1) Governance Transition Complete (WP2)	

See our NESO1 Business Plan

See our Digital Charter Overview

Action Plans | Network Operability & Connections

ID	Title & Description
NESO1-230	**Connections Enduring Capabilities Ecosystem** Delivery method: Agile DevSecOps The Connections Enduring Capabilities Ecosystem is a strategic digital initiative designed to transform how networks, NESO, and customers manage end-to-end connections to the transmission system. This investment will continue to leverage and enhance the existing Connections digital ecosystem, which offers a self-service portal with an intuitive user experience – enabling users to register, apply for connections, and manage their project portfolios, all supported by embedded query management functionality.
NESO1-240	**Clean Power 2030 Enablement** Delivery method: Agile The Clean Power 2030 (CP30) Enablement investment enables NESO to digitally support the UK Government's commitment to a decarbonised electricity system by 2030, encompassing strategic planning, market reform, infrastructure development, and stakeholder engagement. Key objectives focus on: (1)Supporting the tracking of the Clean Power Action Plan (CPAP) through strategic technology solutions, anticipating risks to the CPAP by leveraging data insights. (2)Ensuring that NESO is acting as a trusted advisor to DESNZ and Ofgem, offering modelling, scenario analysis, and implementation guidance. (3)Ability to flex and respond tactically to changing business and regulatory requirements to achieve the CP30 objective.

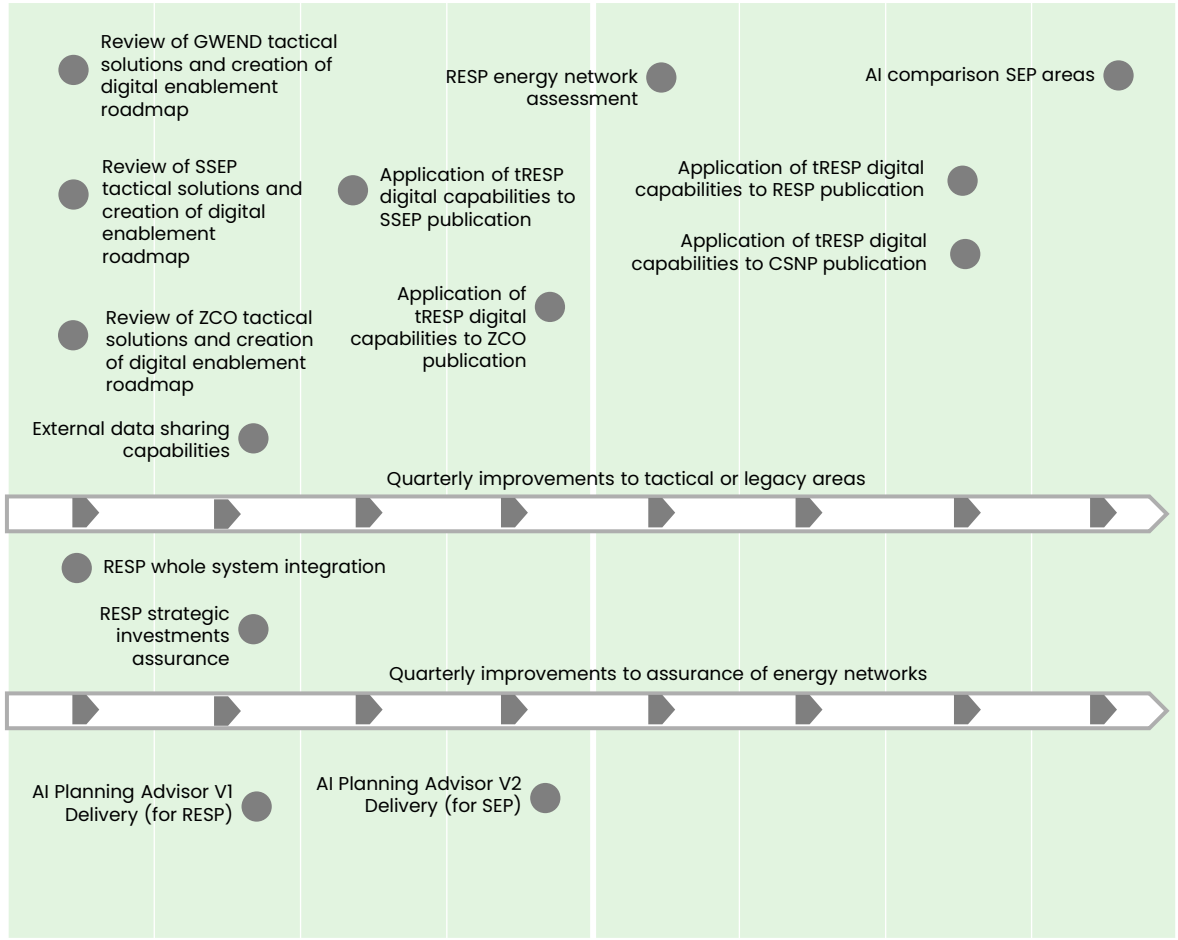


See our NESO1 Business Plan

See our Digital Charter Overview

Action Plans | Strategic Energy Planning

ID	Title & Description
NESO1 - 250	**Strategic Energy Planning** Delivery method: Agile This investment will enable the Strategic Energy Planning (SEP) directorate by providing modelling, data, and stakeholder engagement capabilities. We are adopting a delivery model to cater for all SEP outcomes in one investment to achieve their digital vision. This is due to the overlapping nature of processes, data, and technology requirements across the directorate. Creating discrete investments for each of the planning roles may lead to more complex dependency management, cost and resource inefficiencies and a disjointed customer experience. Where SEP capabilities can be delivered through existing or planned initiatives these will be utilised as appropriate. Several NESO-wide capabilities have already been identified which will support the delivery of SEP outcomes and are outlined further in the Solution Options section

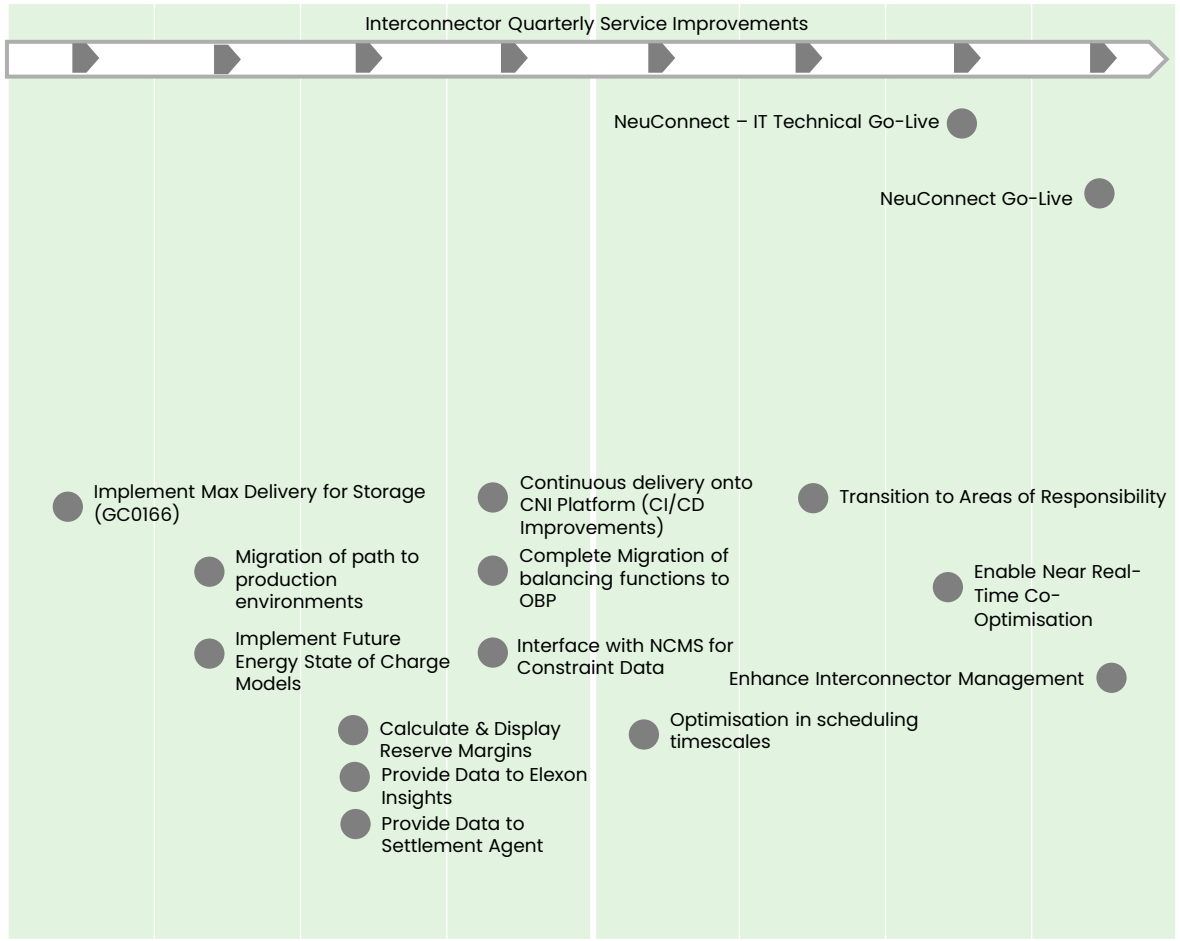


See our NESO1 Business Plan

See our Digital Charter Overview

Action Plans | System Operations

ID	Title & Description
NESO1 - 390	**Interconnectors** Delivery method: Agile Interconnectors play a vital role in the UK's transition to cleaner energy by linking our electricity system with those of neighbouring countries. This investment strengthens our ability to support both existing and new interconnectors, ensuring flexibility, reliability, and alignment with future energy needs such as non-standard assets like Offshore Hybrid Assets. By modernising our platform for greater automation and integration, we can improve real-time control, reduce renewable energy waste, and expand access to energy markets. Ultimately, this investment supports smarter decision-making, enhances energy security, and helps the UK progress towards net zero emissions in line with European energy market developments
NESO1 - 400	**Open Balancing Programme** Delivery method: Hybrid ; Agile & Waterfall This investment delivers both the platform and the product for Open Balancing—combining the underlying digital capability with the market-facing functionality participants will use. The Open Balancing Platform (OBP) is central to this transformation, moving NESO to a unified system that co-optimises key balancing activities to drive operational efficiency, improve transparency and reduce cost. Through this investment, legacy system functionality is being progressively integrated into OBP enabling the phased retirement of these legacy platforms.



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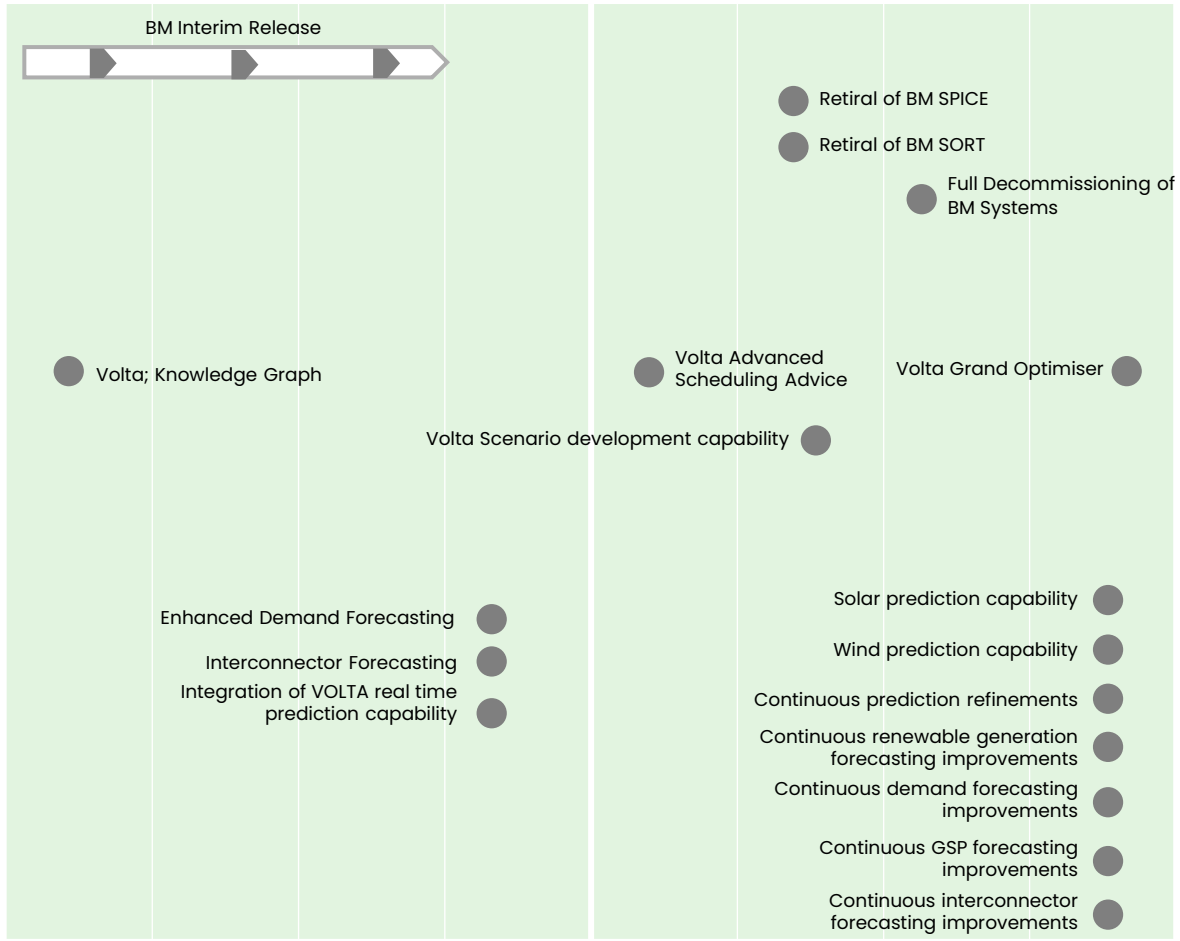
Action Plans | System Operations

ID	Title & Description
410	**Balancing Asset Health** Delivery method: Waterfall Balancing Asset Health is a critical investment that ensures the continued reliability and performance of NESO's existing Balancing Mechanism (BM) systems. While NESO transitions to the Open Balancing Platform (OBP), this investment maintains a secure and stable balancing capability to support safe system operation and short-term market value.
420	**Balancing Innovation Delivery** Delivery method: Design – Led & Agile This initiative builds on the Volta Innovation Programme, delivering AI-driven models that adapt to changing grid conditions for better forecasting and operational decisions. It turns innovation into tangible value for system operations. As the energy system grows more complex, rapid testing and integration of digital tools are vital for reliability, efficiency, and market responsiveness. This investment reinforces NESO's ambition to lead in digital operations and create a smarter, adaptive, and efficient balancing function.
430	**Forecasting & Predictions** Delivery method: Hybrid ; Agile & Collaborative The Forecasting and Predictions investment brings together two complementary workstreams -Forecasting Enhancements (260) and Real-Time Prediction (670) - into a single, unified investment. This consolidation creates a more integrated and responsive capability for NESO operations, improving coordination between forecasting outputs and real-time prediction signals, reducing duplication, and supporting more timely changes for control room and stakeholder needs.



Legend: Completed, On Track, Planned, At Risk, Removed, Delayed, Brought Forward, Release Increment, Release Train

See our NESO1 Business Plan

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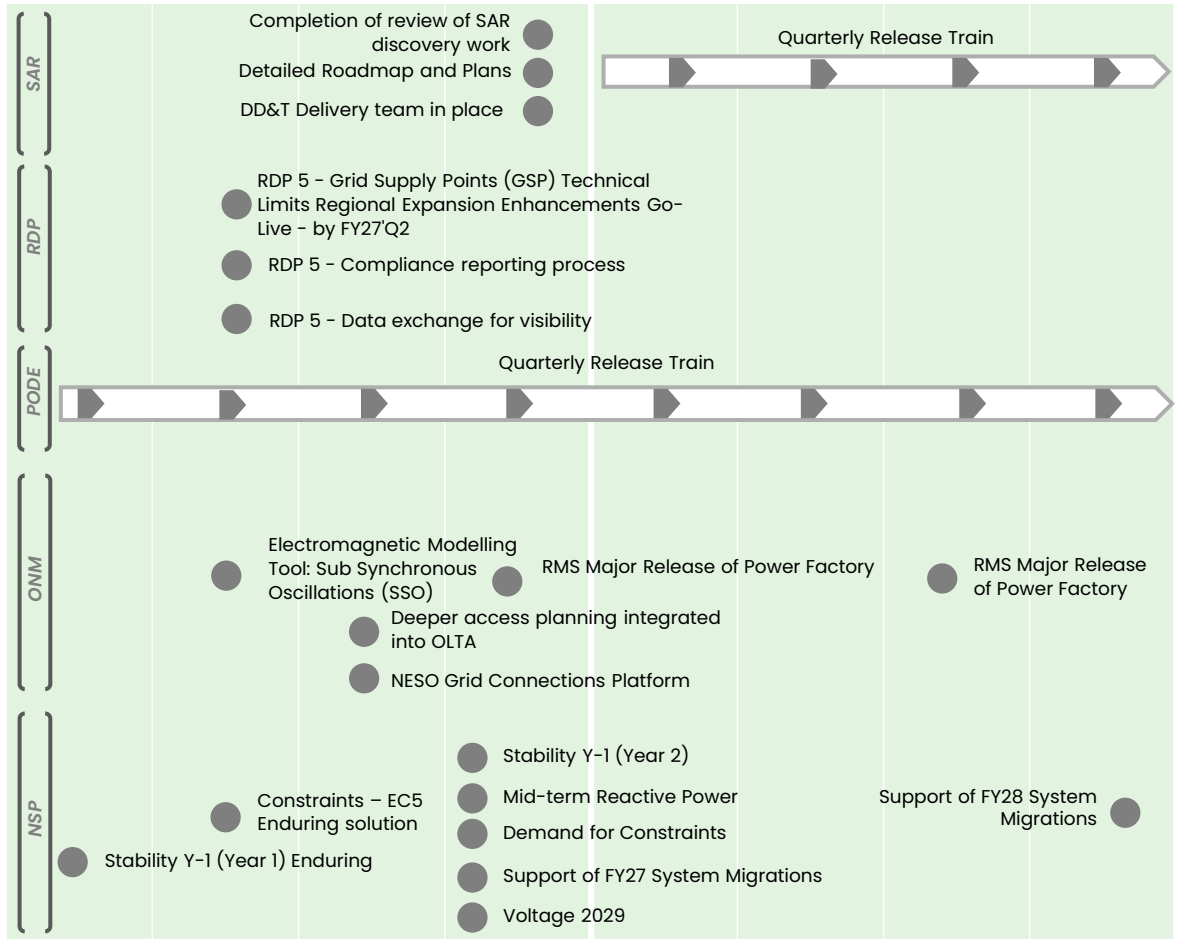
Action Plans | System Operations

ID	Title & Description
NESO1 - 440	**System Access** Delivery method: Agile This investment responds to the scale and pace of transmission build-out required for Clean Power 2030, which is driving a step change in planned outages, regional constraints, and system operability. Current processes and data exchanges are fragmented, limiting NESO's ability to optimise access windows, reduce constraint costs, and provide transparent, system-wide visibility to industry stakeholders Together, these initiatives (SAR, RDP, PODE, ONM & NSP) will enable NESO to manage the growing volume of works safely and efficiently, reduce consumer costs, and deliver a secure, transparent, and digitally enabled electricity system. The investment directly supports NESO's strategic objectives by improving system resilience, accelerating digitalisation, enabling decarbonisation, and strengthening NESO's role as a trusted system planner and operator



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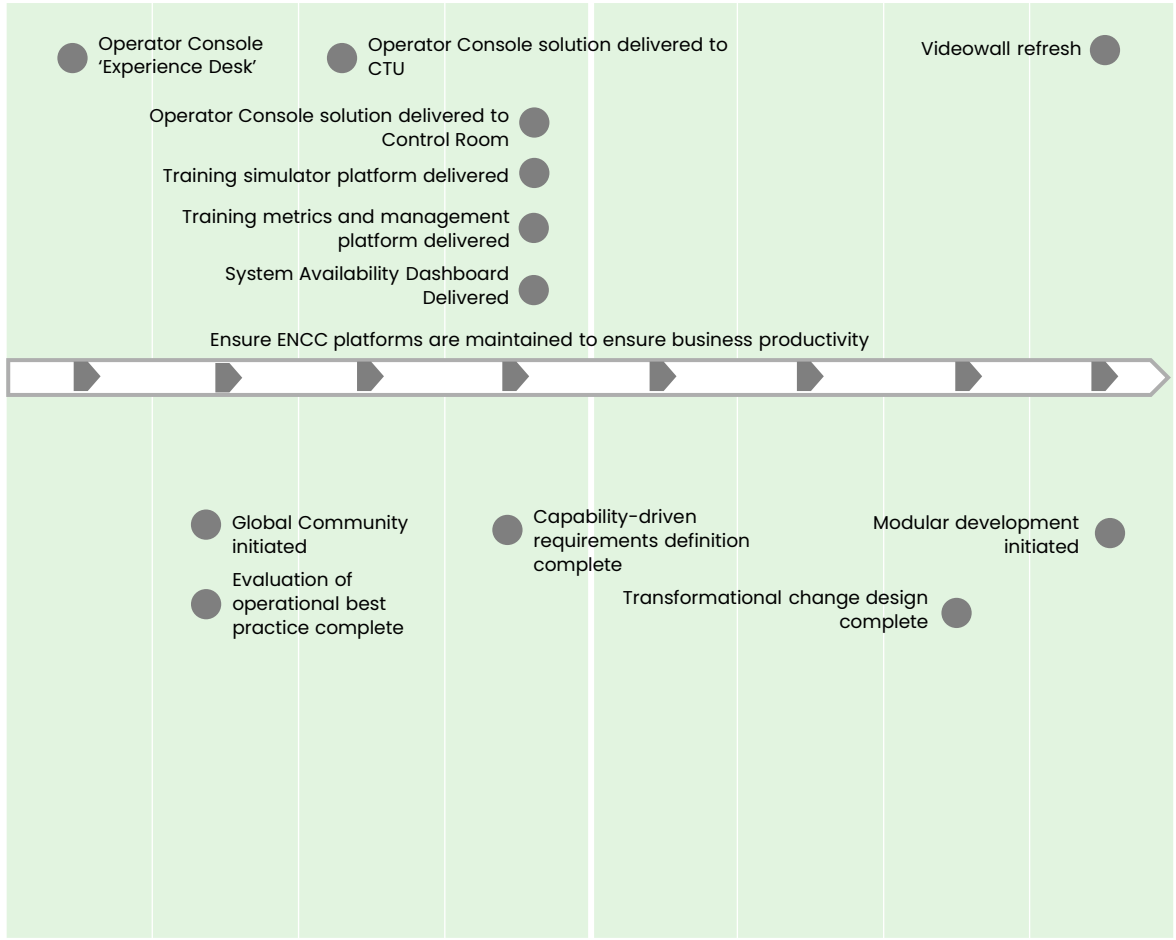
Action Plans | System Operations

ID	Title & Description
NESO1 - 450	**ENCC Operations Enablement** Delivery method: Agile This investment targets delivery of improved capabilities and efficiencies to support the ENCC workforce in their operational work. Through delivering streamlined and future-looking technology, underpinned by robust tools and platforms, we can ensure that the ENCC can continue to operate a secure and resilient energy system in line with our strategic goals.
NESO1 - 460	**Network Topology Optimisation** Delivery method: TBC This investment is looking to move towards a more automated and integrated NTO process. NTO will drive a focus on efficiency and sound economic decisions powered by digitally advanced, AI enabled technologies. This investment contributes directly to the NESO strategic objectives of driving consumer value, delivering a resilient and secure energy system through the transition to net-zero, and leading as a trusted expert through fostering strong global partnerships.



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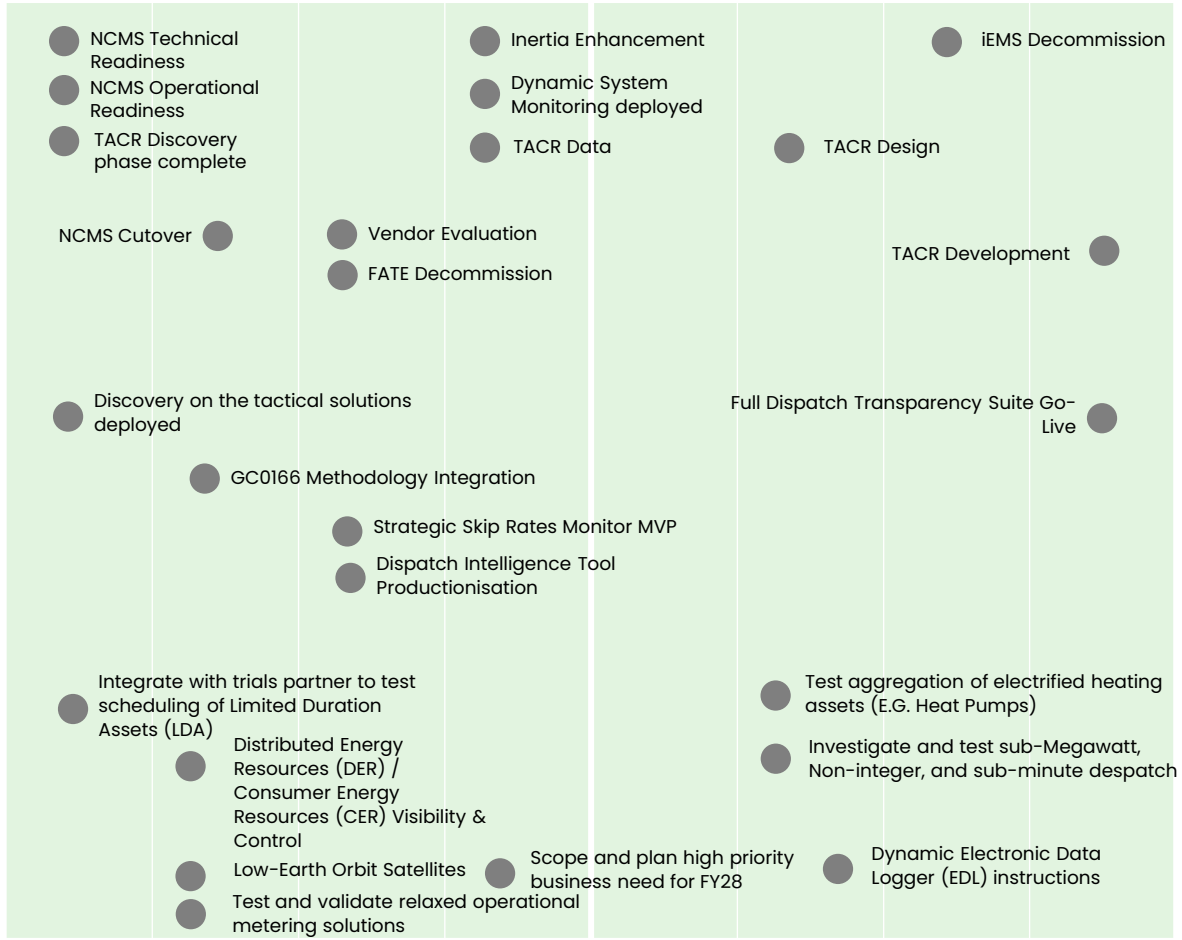
Action Plans | System Operations

ID	Title & Description
NESO1 - 470	**Situational Awareness Tool** Delivery method: Agile This investment focuses on delivery of advanced monitoring tools and data infrastructure to support increased visibility of system conditions, frequency, and inertia. These capabilities will ensure that we continue to provide a secure, efficient and cost-effective system operation – our core priority and continuing strategic goal. Additionally, by implementing a new Network Control Management System, we further contribute to meeting our target of full separation from National Grid Electricity Transmission (NGET)
NESO1 - 480	**Dispatch Transparency** Delivery method: Agile This programme delivers tools to enhance transparency, automate processes, and improve decision accountability, while enabling real-time mitigation of skips and better post-event analysis. The investment's success depends on coordination with the Balancing Programme, which supports skip rate reduction through improved constraint and dispatch optimisation. Ultimately, these changes will strengthen stakeholder engagement and system performance.
NESO1 - 490	**Digital Trials Platform** Delivery method: Agile The platform will provide a secure, cloud-hosted environment outside of Critical National Infrastructure (CNI), allowing NESO and industry participants to trial new services, technologies, and regulatory changes without operational risk. This capability is essential as the energy system becomes increasingly decentralised and complex, requiring agile, scalable solutions to maintain reliability and affordability.



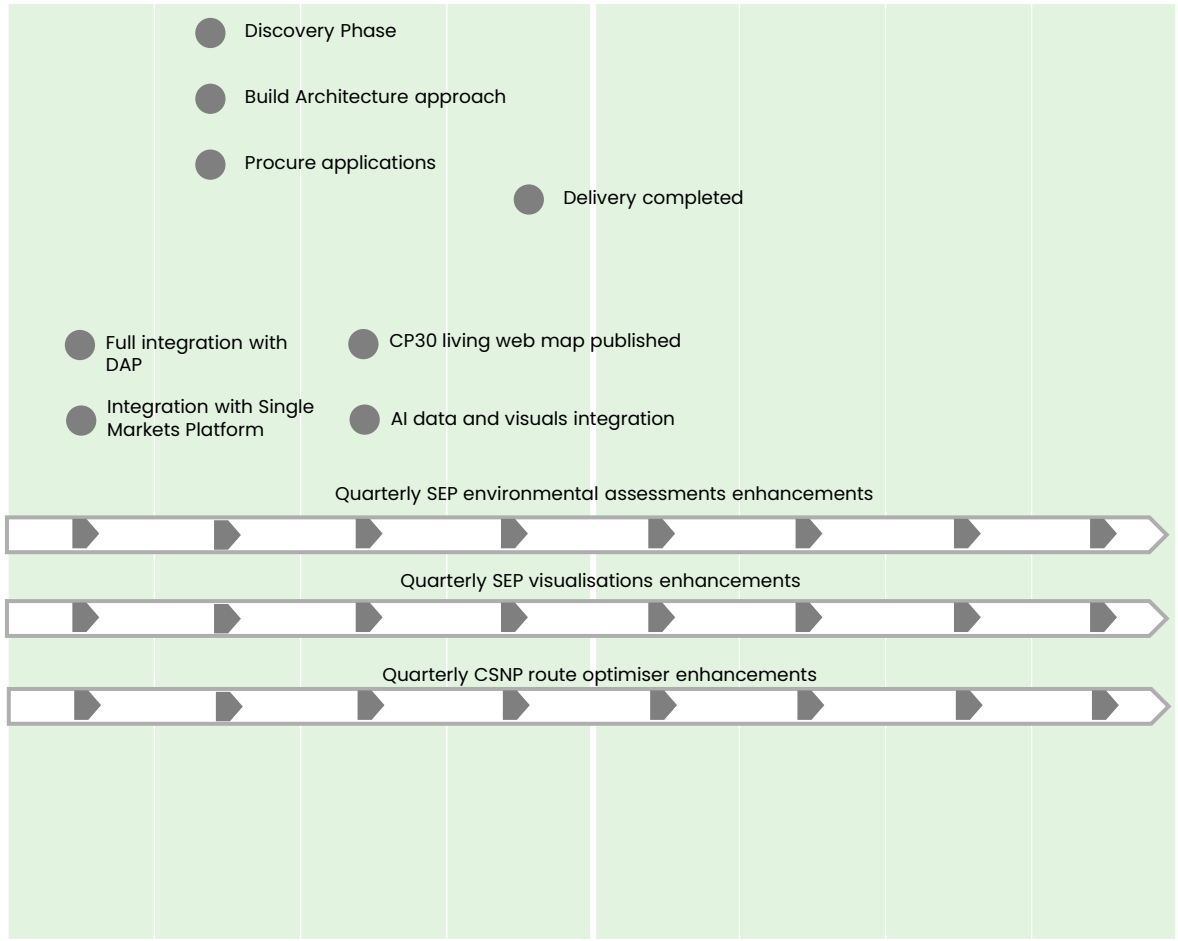
Last reviewed: June 2026

Action Plans | Business Health

See our NESO1 Business Plan

Legend: Completed, On Track, Planned, At Risk, Removed, Delayed, Brought Forward, Release Increment, Release Train

ID	Title & Description
NESO1 - 210	**Digital Change for Legal, Risk, and Regulation** Delivery method: TBC The NESO Digital Change for Legal, Risk, and Regulation project is a strategic investment initiative under NESO's broader digital transformation programme. It aims to modernise and digitise the Legal, Risk, and Regulation function by equipping teams with advanced digital tooling, enhancing operational capabilities, and aligning with NESO's independence and regulatory obligations.
NESO1 - 220	**Network and System Modelling Capability Modernisation** Delivery method: Agile This investment will deliver an enduring platform for NESO's geospatial and location intelligence capabilities. This includes full integration with data platforms to deliver centralised geospatial technologies and intelligence across NESO. The enterprise-wide platform will enable insight-driven decision making, through managed, accessible, and accurate location data. The solution will deliver benefits to multiple directorates, users, and external parties, delivering greater insights and providing quality trusted geospatial data.



See our NESO1 Business Plan

Action Plans | Business Health

Legend: Completed, On Track, Planned, At Risk, Removed, Delayed, Brought Forward, Release Increment, Release Train

ID	Title & Description	FY 2027				FY 2028			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NESO1 - 300	**Transformation Enablement Project** Delivery method: Agile The Transformation Enablement Project is a strategic investment designed to support NESO's evolution into a fully independent, digitally advanced, and operationally resilient organisation. This initiative aims to transform how NESO plans, delivers, and tracks change across the business, providing a unified, intelligent view of transformation and major projects. At its core, the project will develop a centralised, AI-powered cockpit, offering leaders and teams real-time, actionable insights. This will enable early risk identification, progress tracking against strategic goals, and confident, data-driven decision-making. This tool will drive efficiency, agility, and focus, supporting planning, delivery, and performance tracking across all directorates.			Discovery phase complete		Cockpit MVP delivered		Full integration	

See our NESO1 Business Plan

Legend: Completed, On Track, Planned, At Risk, Removed, Delayed, Brought Forward, Release Increment, Release Train

Action Plans | Customer

ID	Title & Description	FY 2027				FY 2028			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NESO1 - 600	**Digital Change for Customer** Delivery method: Agile The Digital Change for Customer investment aligns with NESO's commitment to achieve a high degree of trust by providing excellent service delivery, differentiated customer relationships, and purposeful and collaborative engagement. We will achieve this by advancing digital solutions, leveraging technologies such as AI and unlocking power of data. We will adopt an AI-powered, digital first approach to develop and enhance the capabilities required for consistent, high quality, transparent, and reliable service delivery. In customer operations, we will lead with an AI-first, automation-first, and mobile-first approach. Our aim is to enable a fully aligned, end to-end omnichannel customer journey that is consistent across all engagement channels and systems, providing our customers with the right information through guided insights.						Feedback and Survey Platform Customer collaboration capability Stakeholder Engagement Capability Smart workflow/ Case management Customer insights and analytics Knowledge Hub capability		

See our NESO1 Business Plan

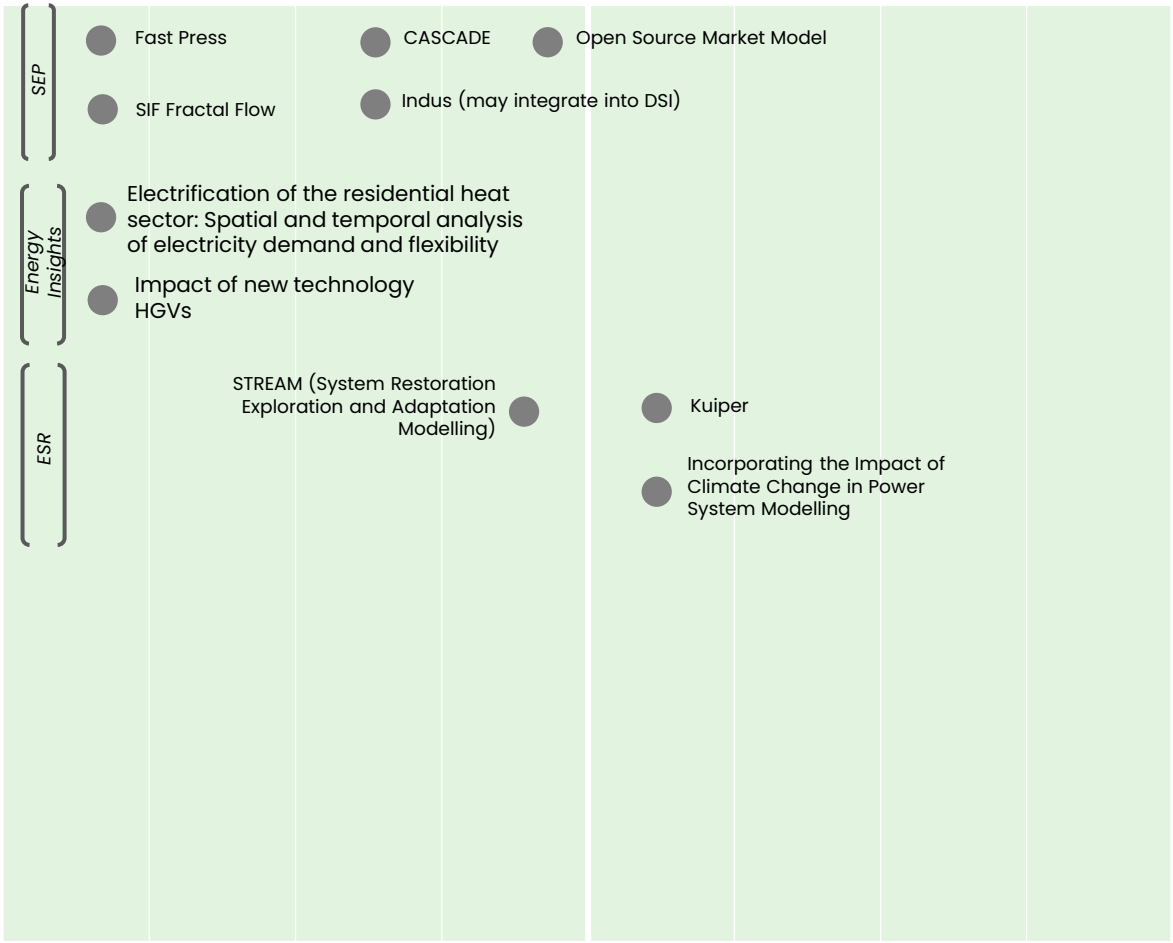
Action Plans | Digitalisation, Data & AI

ID	Title & Description	FY 2027				FY 2028			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NESO1 – 100	**Innovation Productionisation** Delivery method: Scaled Agile The purpose of the Innovation Productionisation investment line is to advance and implement into our systems and processes proven innovation projects which have previously been funded through the Network Innovation Allowance (NIA), Network Innovation Competition (NIC) and the Strategic Innovation Fund (SIF). We acknowledge and appreciate the significant contributions of Ofgem in driving industry innovation, as this has enabled NESO to deliver projects which have completed the initial Research, Development or Demonstration phases. This investment supports the successful innovation projects which are now ready for fast and effective implementation.	Energy Markets: Regional Reserve; Consumer Building Blocks (Phase 1 & 2)				Stackpath		Energy Transaction Model Bill Modelling (ETMM)	
		Sys Ops: Dispatch Transparency Methodology; Causational Analysis of Balancing Costs				AI metering quality		Mass mobility data for demand forecasts	
		NOC: Battery Storage Modelling for Enhanced Connection Assessment (BaTSeC); Construction Planning Assumptions Methodology; Enhanced RMS (e-RMS) models for stability assurance; Practical Transition into wider EMT GB Modelling; Power System Oscillation Characterisation using Wavelets and Trilateration; STARTZ		GridConnect X; TOTEM3; Reactive Power Projections; GPU Accelerated Grid Optimisation		Hydrogen Plant Dynamic Models		Incorporating the Impact of Climate Change in Power System Modelling; Assurance of Stability; Early Signs of Oscillation Events	
		Bus. Health: Regulation Navigator							

Action Plans | Digitalisation, Data & AI

See our NESO1 Business Plan

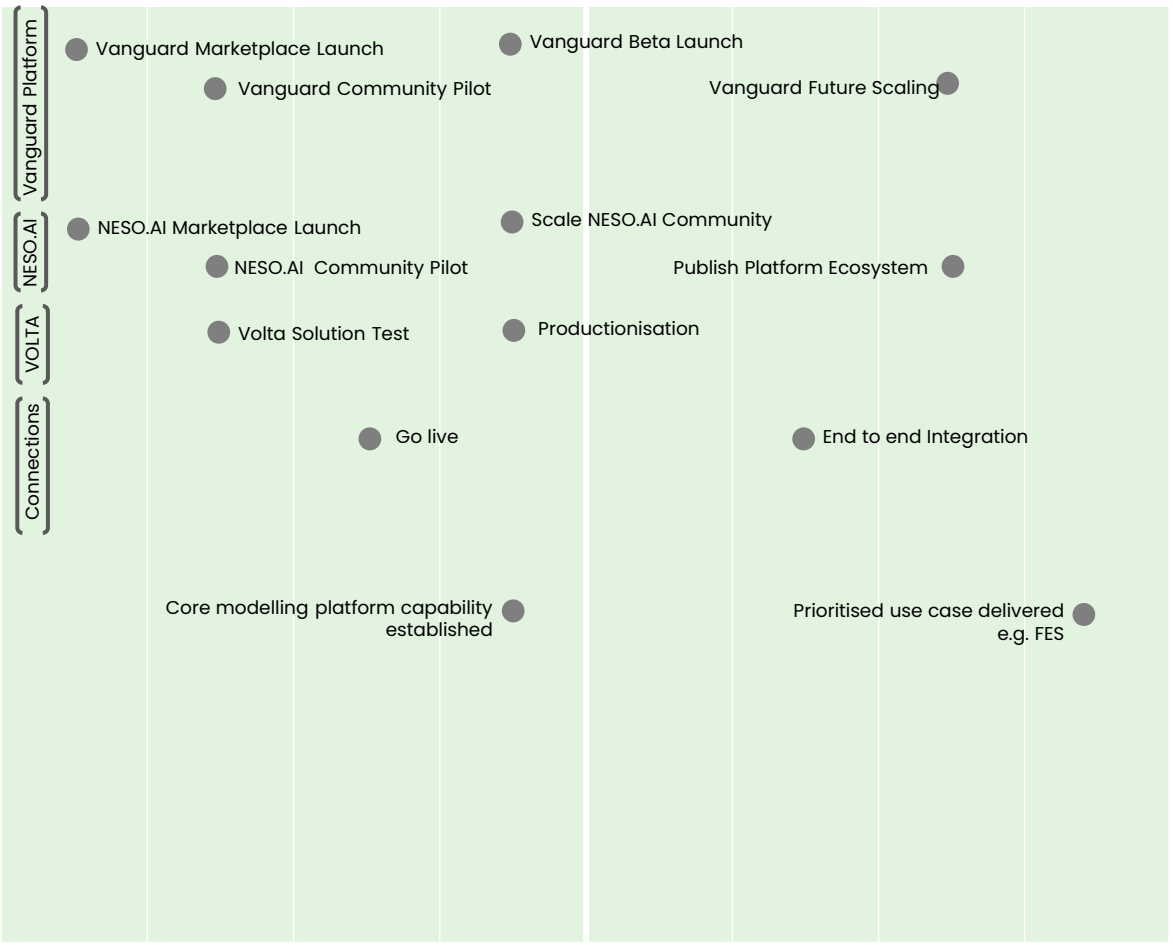
ID	Title & Description	FY 2027				FY 2028			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NESO1 – 100 (Cont.)	**Innovation Productionisation** Delivery method: Scaled Agile The purpose of the Innovation Productionisation investment line is to advance and implement into our systems and processes proven innovation projects which have previously been funded through the Network Innovation Allowance (NIA), Network Innovation Competition (NIC) and the Strategic Innovation Fund (SIF). We acknowledge and appreciate the significant contributions of Ofgem in driving industry innovation, as this has enabled NESO to deliver projects which have completed the initial Research, Development or Demonstration phases. This investment supports the successful innovation projects which are now ready for fast and effective implementation.								



See our NESO1 Business Plan

Action Plans | Digital, Data & Technology

ID	Title & Description
NESO1-110	**NESO AI Energy Core Delivery** Delivery method: Phased Artificial Intelligence (AI) can help to interpret and derive insights from a high volume of structured and unstructured data, whilst also accelerating the execution of repeatable tasks. For example, AI-driven simulation and modelling that accurately reflects the real-world power system could play a critical role in managing this growing complexity. Without investment in new AI-led capabilities, we risk falling short of evolving customer demands and expectations. By embracing AI, NESO can reduce operational risks, enhance system resilience, and maintain relevance in this digital age.
NESO1-610	**Modelling Platforms and Tooling** Delivery method: TBC The platform integrates datasets seamlessly and delivers intuitive visualisations and actionable intelligence, enabling stakeholders to make well-informed decisions. Our ongoing development of platform capabilities continues to strengthen decision-making, support our clean energy ambitions, and advance our broader organisational goals.



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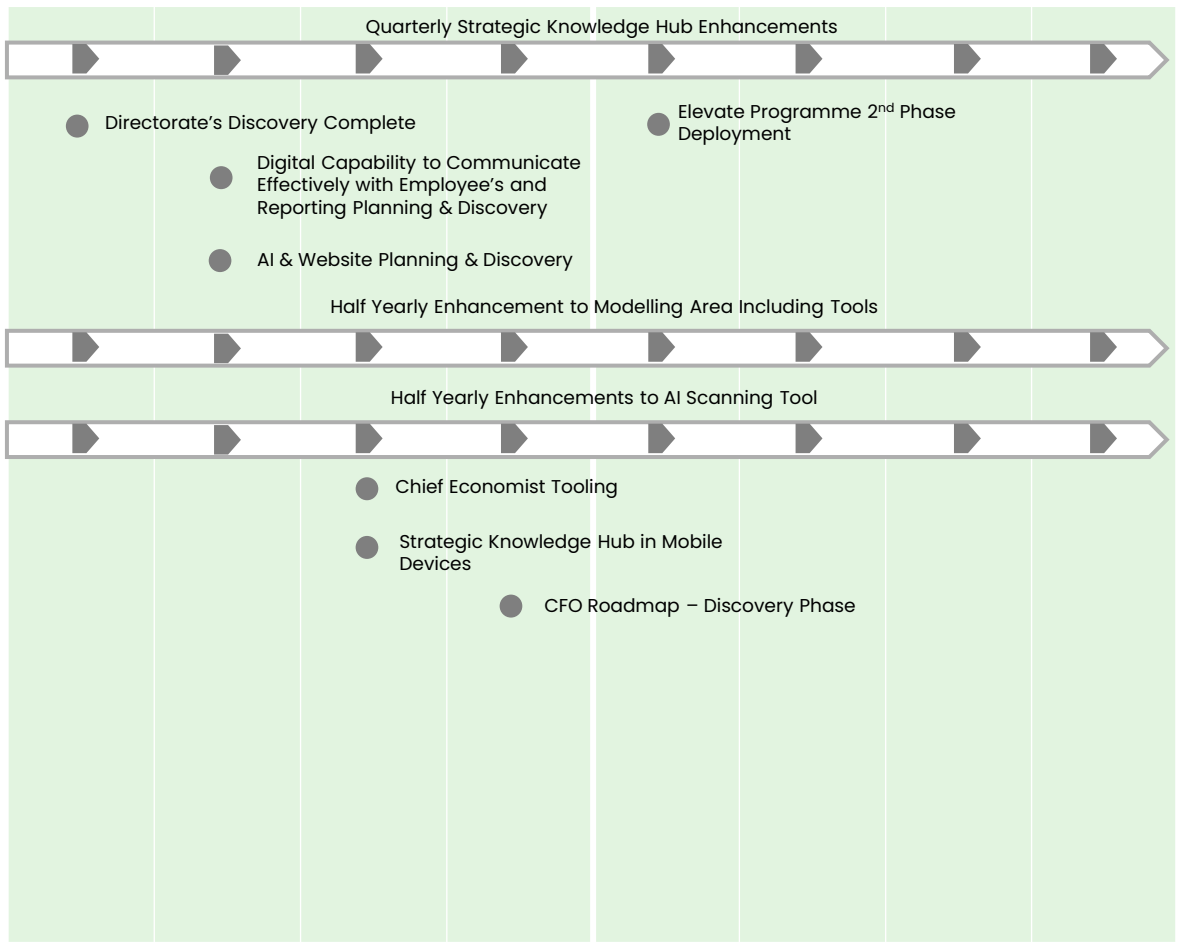
See our NESO1 Business Plan

See our Digital Charter Overview

Action Plans | Energy Insights

ID	Title & Description
NESO1-200	**Digitalisation of Enabling Functions** Delivery method: Waterfall The NESO Digitalisation of Enabling Functions is a strategic transformation initiative designed to modernise our Strategy and Policy, Finance, Procurement, and People services. Through continuing to digitalise our enabling functions and transitioning to NESO-owned systems and processes, it allows us to evolve our internal capabilities and continue to support the wider organisation. The Enabling Functions that fall under this this investment are: • Digital Change for Strategy & Policy • Digital Change for Finance • Digital Change for People



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Legend: Completed, On Track, Planned, At Risk, Removed, Delayed, Brought Forward, Release Increment, Release Train

Action Plans | Public Voice & Brand

ID	Title & Description	FY 2027 Q1	FY 2027 Q2	FY 2027 Q3	FY 2027 Q4	FY 2028 Q1	FY 2028 Q2	FY 2028 Q3	FY 2028 Q4
NESO1-620	**Digital Engagement Platform** Delivery method: Agile DevSecOps This investment has two key areas of delivery: 1. Digital Experience Platform (DXP) – DXP provides integration with several other platforms allowing customers access to a wealth of data and functionality via a single point of access i.e., Data Analytics platform (DAP), Single Markets Platform (SMP), Digitalised Code Management (DCM), Connections, Electricity Network Access Management System (ENAMS), Electricity Generator Availability and Margin Analysis (EGAMA), Planning and Outage Data Exchange (PODE) and Enduring Auction Capability (EAC). 2. Customer Identity Access Management (CIAM) – DEP delivers functionality that enables single sign on security through CIAM, giving our end users a secure and intuitive journey.	Implementation of ESG reporting solution	Delivery of Polling and Insights using Data platform tools	Implementation of approved website designs complete Accessibility					

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