

# **Business Narrative: 2028–2033 Revenue Reset**

**February 2026**



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## Acknowledgement of Country

In the spirit of reconciliation, ElectraNet acknowledges the Traditional Owners throughout South Australia and their ongoing connections to land, sea and community.

ElectraNet's transmission network operates across many traditional lands, and we value the opportunity this provides to build positive relationships with the communities.

We pay our respect to Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples.

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## A Message from the CEO



South Australia is leading Australia and the world in the energy transition. Renewable generators in our State now often provide all the electricity, and more, that we use at any given time.

South Australia now averages 74% net variable renewable energy on an annual basis, driven by the uptake of large-scale wind and solar resources, and rooftop solar photovoltaic (PV).

More than 3,500 MW of large-scale wind and solar generation has connected to the network, and over the past six years rooftop solar PV capacity has increased threefold to over 2,400 MW.

These statistics put South Australia ahead globally in terms of renewable energy uptake. As such, the South Australian Government recently updated its target to achieve 100% net renewables by 2027, three years sooner than the original 2030 target.

With South Australia at the forefront of the global energy transition, as the state's principal electricity Transmission Network Service Provider we are a key enabler of the transition to net zero. We play a vital role in powering homes, businesses and communities, with both our transmission infrastructure and expert workforce being centrally important to maintenance and growth of South Australia's electricity supply chain.

ElectraNet's vision is to energise South Australia's clean energy future by delivering reliable transmission services and valued customer connections. In doing this we are guided by our four, deliberately prioritised, corporate objectives, of safety, reliability, affordability, reliability, and sustainability.

As a South Australian operated and majority Australian owned business, we are proud of the role we play in supporting both State and national prosperity. By aligning with global best practices and embracing advanced technologies, ElectraNet is future-proofing South Australia's energy infrastructure to meet the challenges ahead. Addressing these challenges will help businesses or expanding industries unlock job opportunities and economic growth and deliver lasting value to the communities we serve.

**Figure 1: ElectraNet’s Vision, Objectives and Key Drivers**



## Our commitment to delivering reliable, affordable energy solutions

ElectraNet puts South Australians at the heart of our decision-making and is committed to earning and retaining their trust to deliver affordable, reliable and sustainable energy solutions.

We know energy consumers are feeling the pinch.

Across Australia, households and businesses are grappling with the pressure of rising living costs, exacerbated by increasing retail electricity prices. Whether it's the price of groceries, housing, fuel, or energy, costs are increasingly under scrutiny as consumers look for relief and greater transparency.

While many people seek cost savings by adopting technologies like solar panels and electric vehicles, often supported by government policy, others are missing out. Barriers such as limited access to upfront capital, or split incentives between landlords and tenants, prevent some households and small businesses from participating in the energy transition.

For industrial customers, the challenge is different – while they may have greater access to capital, the scale and complexity of their operations can make it harder to integrate new technologies quickly or cost-effectively. These disparities highlight the need for inclusive solutions that allow everyone to benefit from a cleaner energy future.

In this environment, the role of network service providers in supporting affordability has never been more important.

Operating within the National Electricity Market (NEM), ElectraNet's activities are governed by the **National Electricity Objective**.

*to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity with respect to:*

- a. price, quality, safety, reliability and security of supply of electricity; and*
- b. the reliability, safety and security of the national electricity system; and*
- c. the achievement of targets set by a participating jurisdiction—*
  - for reducing Australia's greenhouse gas emissions; or*
  - that are likely to contribute to reducing Australia's greenhouse gas emissions."*

## We are engaging on our forthcoming revenue proposal

Consistent with our commitment to deliver affordable, reliable and sustainable energy solutions, we have commenced consultation on our Revenue Proposal for the 2028–2033 regulatory control period. This is part of a broader process to ensure that we focus on what matters most to our stakeholders.

This Business Narrative is an early step in that engagement process. It serves to inform consumers and stakeholders, represented in large part by our Consumer Advisory Panel, of ElectraNet’s ongoing commitment to our role in South Australia’s electricity sector, the clean energy transition and supporting innovation to facilitate growth opportunities in the State.

Looking ahead, two major forces will govern our activity in the 2028 to 2033 regulatory period.

The first is our commitment to preserving and prolonging the existing network to meet the needs of South Australian electricity consumers now and into the future.

Much of ElectraNet’s activity relates to managing the existing transmission network. Ensuring that it is maintained, renewed and extended to meet the evolving needs of electricity users as outlined above.

This is not new. Through the 2028 – 2033 regulatory period we will continue working to ensure that South Australians continue to enjoy the reliable and secure electricity network they deserve. We acknowledge that, now more than ever, South Australian consumers are experiencing rising living costs, and that project costs are also higher than before. Our approach to managing these competing needs is discussed below and will be discussed further in our revenue proposal.

The second force that will govern our activity in the next regulatory period is change.

The electricity sector is undergoing rapid change as Australia makes the transition to Net Zero and as new technologies are adopted.

For ElectraNet, the 2028 – 2033 period will be influenced heavily by change, which can be categorised by six themes:

### **Six themes to ElectraNet’s revenue proposal for 2028 to 2033**

1. Preserving and prolonging existing transmission services
2. Demand growth driven by policy and changing preferences
3. Network modernisation
4. Transforming our ways of working: Technology and Cyber uplift
5. Building the future workforce and co-creating a workplace of choice
6. Enriching our communities: The key to community acceptance

## How we engage

While ElectraNet's focus is on delivering benefits to all South Australians, most electricity consumers are not our direct customers. Instead, ElectraNet works directly with distribution networks, large industrial loads and generators.

While distribution connected electricity consumers may be affected by our services, this occurs indirectly. Therefore, to gain their perspective, ElectraNet engages with consumer and stakeholder representatives to understand community perspectives.

For us, effective stakeholder engagement involves identifying relevant groups and understanding their interests and concerns. Key stakeholder groups for this engagement process include:

- Consumer representatives
- Industry participants
- Regulators and policy makers
- Consumer advocacy groups
- Community groups and environmental organisations.

While we engage primarily with representative bodies, we welcome input and feedback from any stakeholder on this narrative and, later in 2026 on our Preliminary Revenue Proposal.



## Our engagement objective

ElectraNet's objective for engagement in relation to the 2028 to 2033 Revenue Proposal is to ensure our expenditure recommendations and all the decisions that feed into the Proposal, reflect and respond to the preferences and the concerns of energy consumers, as expressed to us.

This will be demonstrated in the Revenue Proposal and also by the Consumer Advisory Panel being able to produce a comprehensive report accompanying it. Our Revenue Proposal must be submitted to the Australian Energy Regulator on **31 January 2027**.

To support this objective, we are committed to the following engagement goals.

#### **ElectraNet's engagement goals**

- **Transparent and inclusive engagement:** Ensure stakeholders are well informed, understand the process, and have meaningful opportunities to provide feedback.
- **Ensure stakeholder perspectives are heard:** Create a comprehensive, transparent engagement process that allows stakeholders to provide meaningful input into the revenue determination process.

**Build trust and strengthen relationships:** Establish a two-way communication process to foster a sense of partnership with stakeholders, enabling transparency, open dialogue and trust-building.



## 1 Introduction

The energy system is undergoing a rapid transformation. Technologies like solar, batteries, electric vehicles, and the impacts of climate change are reshaping how energy is generated, moved, and used.

Networks play a critical role—not just by building infrastructure, but by enabling smarter energy flows, supporting innovation, and making better use of existing assets. This shift demands new partnerships, smarter regulation, and a willingness to try new approaches. At the same time we must protect consumers and ensure that the transition is timely, but also efficient, inclusive, and grounded in sound competition that delivers better outcomes.

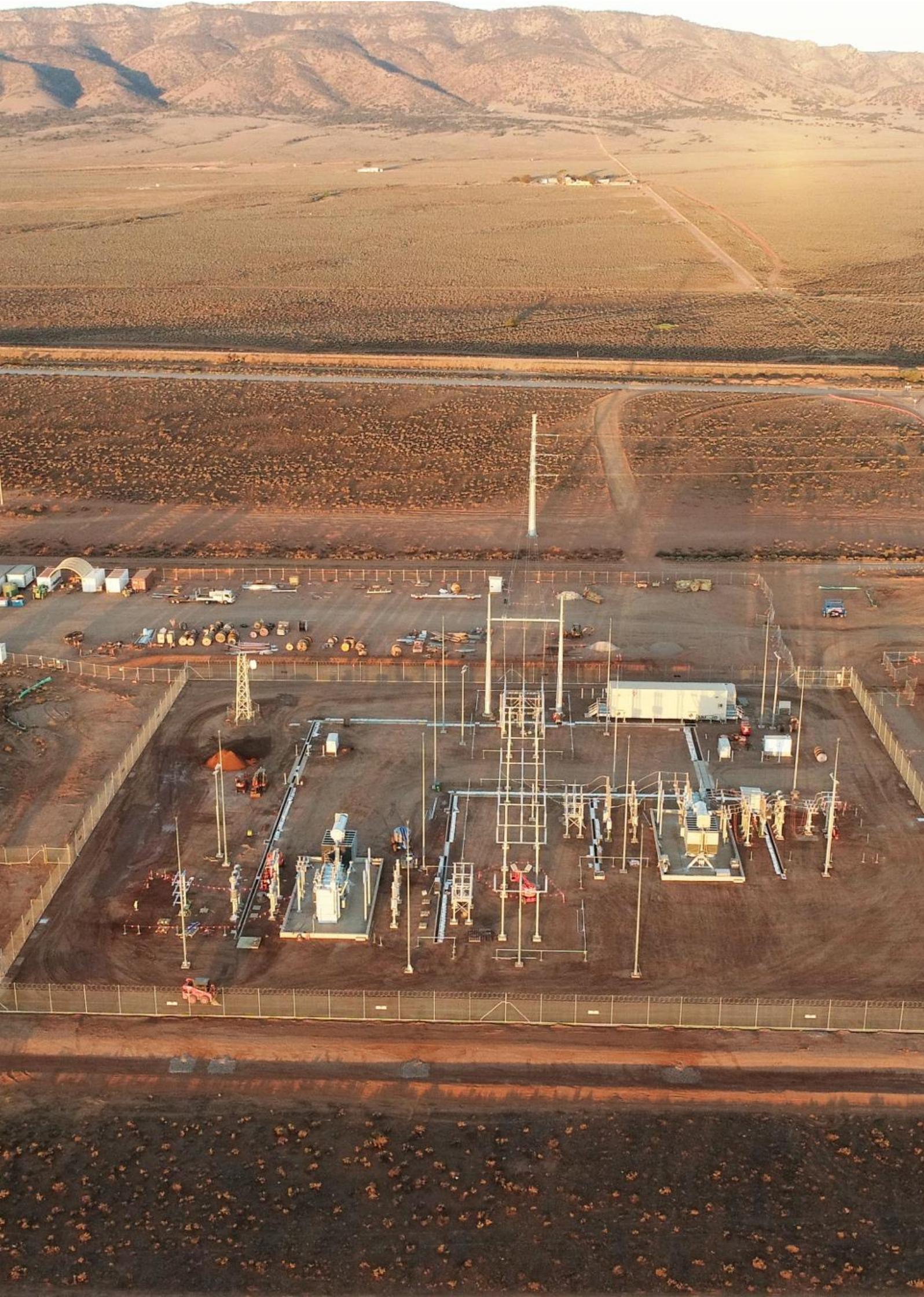
ElectraNet is at the frontier of the global energy transition, managing world-first complexity as South Australia becomes the most decentralised and renewable-powered grid in Australia's Electricity Market. With more than 50% of homes equipped with rooftop solar and demand patterns shifting dramatically. We, we are navigating unprecedented variability, including negative midday demand and steep evening peaks that is reshaping how, when, and where electricity is consumed and generated. This requires a complete rethink of traditional transmission planning.

In this environment, ElectraNet is balancing its objectives, **safety, reliability, affordability, and sustainability**—while responding to surging electrification, industrial growth, and evolving Government policy to facilitate the rapid uptake of batteries and electric vehicles to achieve ambitious clean energy targets. While these technologies offer significant benefits to consumers, their uneven adoption and unpredictable impacts demand agile, data-driven solutions. Through strategic investment, flexible infrastructure, and scenario-based planning, ElectraNet ensures the grid remains secure, resilient, and ready for what's next.

In doing this we must also deal with the reality that the existing network is ageing and that the climate is placing increasing demands on parts of it. This calls into focus ElectraNet's disciplined approach to asset management and our ongoing commitment to navigating our four objectives.

As a responsible innovator, ElectraNet is addressing these challenges head-on—investing in smarter technologies, refining asset management practices, and making targeted decisions that deliver long-term value for consumers. Whether it's deferring unnecessary expenditure, enhancing restoration preparedness, or supporting system security in a renewables-rich grid, our actions are guided by a clear commitment to keeping the lights on, at the lowest possible cost, with minimal environmental impact.

We are committed to working collaboratively with our stakeholders to ensure our decisions reflect community values, deliver enduring benefits, and support a secure, sustainable energy system for all South Australians.



## 2 Preserving and prolonging existing transmission services

A lot of ElectraNet's day-to-day activity involves managing South Australia's existing transmission network. We ensure the network is maintained and renewed to meet the evolving needs of electricity users, and to overcome challenges not imagined when it was first established more than 60 years ago. As a result, asset management to ensure the ongoing supply of transmission services accounts for a large portion of our costs. This activity will continue through the 2028 – 2033 regulatory period to ensure that South Australians continue to enjoy the reliable and secure electricity network they deserve. Delivering this at a time when South Australians are experiencing acute cost of living pressures and project costs are higher than ever will be an important challenge.

Our activities to preserve and prolong the transmission network are not new. However, ElectraNet will continue to evolve in its approach to them and to identify the most efficient and least disruptive approach, and timing, to undertaking the necessary projects.

ElectraNet takes a disciplined, forward-looking approach to asset management, ensuring every dollar spent delivers long-term value, safety, and reliability for South Australians. Through integrated maintenance planning, we align asset replacement with condition, risk, and future demand. We embed environmental improvements, such as phasing out greenhouse gasses, into routine works wherever possible rather than funding standalone programs.

We are refining our maintenance strategies by leveraging data and condition monitoring to eliminate unnecessary tasks and reduce outages. This will improve efficiency without compromising reliability.

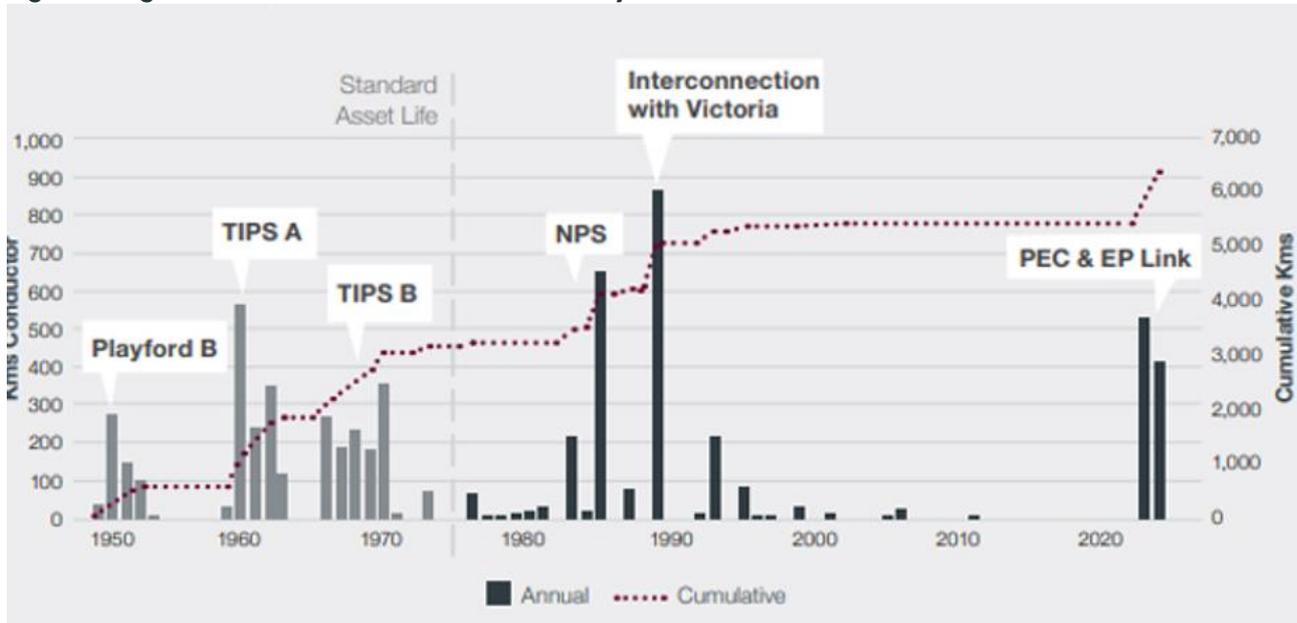
ElectraNet only proposes replacing assets when ongoing maintenance is no longer viable and upgrades will deliver more sustainable, long-term outcomes. Hummocks Substation, for example, meets this criteria.

We also plan to invest strategically in land acquisition ahead of time to avoid future constraints and rising costs, ensuring the network can expand efficiently as demand grows.

## 2.1 Aging assets: An ongoing challenge

South Australia’s electricity transmission network was first built in the 1960s, making it the oldest network on mainland Australia. Its full age profile is outlined in Figure 2.

**Figure 2 : Age Profile of South Australia’s Electricity Transmission Network**



In recent years, ElectraNet has focused on maximising the efficiency of its existing network and maintaining downward pressure on electricity prices by deferring asset replacement where possible.

The critical challenge for ElectraNet is to carefully determine which assets must be replaced ‘now’ and which can be left in place until later. If this judgement is made correctly, South Australians benefit from lower prices. If not, network reliability could be compromised, or costs could be higher than necessary.

ElectraNet has evolved from age-based asset replacement approach, to a more considered risk-and-condition-based approach. Capital replacements are only triggered when asset risk exceeds acceptable thresholds having regard to both the cost of a given project as well as the consequence costs of deferring it. The details of this approach will be reviewed in detail with the Consumer Advisory Panel’s Reset Reference Group and set out in our risk model configuration procedures.

## 2.2 Climate resilience – A key ingredient for reliability

Climate resilience is a consideration for the 2028 – 2033 regulatory period that relates to both ‘preserve and prolong’ and ‘change’ drivers.

We are proud of our track record providing a reliable transmission service with our existing assets. However, as time passes investment is becoming necessary to ensure ongoing reliability and to manage risks that have not previously been experienced.

For example, the extended outage on the Yorke Peninsula in March 2025 was caused by insulator pollution at the Hummocks substation brought on by a record dry season.

Considering the age of this substation and the rising risk of insulator pollution causing disruption, ElectraNet proposes to rebuild the Hummocks substation with a modern configuration to allow insulator washing without de-energisation.

However, not all climate responses will require transmission solutions. In some cases ElectraNet is actively trying to avoid substantial investment.

For example, in October 2024 South Australia experienced an extreme weather event, with wind speeds exceeding 130KM/H, and 250,000 lightning strikes in a 24-hour period. This storm caused significant damage to South Australia’s transmission network.

While three powerlines were in the storm’s path, only two experienced failures. The surviving line was built to a more recent design standard, which reflects a more comprehensive understanding of downdraft winds and their impact on transmission line infrastructure.

Rather than attributing the failure of the lines that went down to maintenance or age, which would make the case to strengthen or upgrade these assets, we determined they were not designed for weather events that are more common now than they once were. This allowed us to explore more cost-effective solutions to ensure greater resilience to the extreme weather events that are growing in frequency. In this case, it may also be appropriate to transition the area surrounding Leigh Creek and Hawker to off grid solutions. ElectraNet will work closely with SA Power Networks and the affected communities to develop this solution.

The high cost of replacing assets that are still functional, but that may not withstand future extreme weather is an important issue. ElectraNet increasingly considers restoration preparedness as a more sustainable and cost-effective long-term strategy. Past reviews of severe weather events have shown that, in many cases, enhancing the ability to restore supply quickly delivers better value than investing in significantly more resilient infrastructure.



**Figure 3 – Aerial washing of line insulators on Yorke Peninsula**

While ElectraNet maintains a fleet of emergency replacement structures in the event of multi structure failures, even with best endeavours outages may exceed those contemplated in the Electricity Transmission Code. This vulnerability may not meet community expectations as even a single-day outage can significantly disrupt economic activities and daily life.

ElectraNet will continue to conduct a range of analysis and risk assessments to determine appropriate responses to climate resilience. We will propose solutions in the Revenue Proposal or, if appropriate, defer those solutions for future regulatory period.

## 2.3 Intensifying Cost & Delivery Pressures

ElectraNet faces intensifying cost and delivery pressures that are reshaping the way it conducts asset management across South Australia's transmission network. Material costs have surged by up to 200% in some cases.<sup>1</sup> At the same time, equipment lead times continue to lengthen, requiring earlier procurement of some assets. Competition for skilled contractors is also increasing.

These factors create a challenging operating environment where balancing network reliability with affordability demands strategic investment planning, efficient delivery models, and rigorous regulatory alignment to ensure continued value for energy consumers.

ElectraNet is committed to delivering greater value through smarter investment decisions, rather than increased expenditure, as we continue to play a leading role in Australia's energy transition. ElectraNet has a proven track record of prioritising investments that serve the long-term interests of South Australian energy consumers. The following two examples further demonstrate this.

ElectraNet balances affordability with safety, reliability, and sustainability in all of its project and operational decisions. We pride ourselves on the fact that South Australia's transmission network is operating reliably despite being the oldest on the Australian mainland. Our ability to defer investment has served South Australians well to date by preventing premature increases in transmission costs. While it is now necessary to make some investments, our commitment to affordability will come through as we strive to find efficient and innovative ways to make the necessary investments in prudent and efficient ways and to avoid making unnecessary investments at all. Two examples are discussed in Table 1 below.

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<sup>1</sup> FINAL – 2025 Transmission Cost Database Update Report.docx page 45/46

**Table 1: examples of ElectraNet's consumer focused approach to investment in infrastructure**

### System Strength

In AEMO's 2022 System Strength Report, ElectraNet was assigned an obligation to deliver a significant increase in system strength by December 2025. This was necessary to meet the anticipated growth in renewable generation connecting to the South Australian transmission network. To meet this obligation in the available time, ElectraNet would have needed to invest in additional synchronous condensers, estimated at approximately \$250 million per pair.

However, AEMO's 2023 update significantly revised the required system strength levels downward, reflecting slower growth in generation than forecast the year before.

By that time, alternative technologies for system strength were emerging and ElectraNet's assessment was that no additional synchronous condensers were required in the immediate term.

Notwithstanding this assessment, our obligation to be able to provide the, now unneeded, system strength remained based on the 2022 report.

Rather than pursue investments that were legally required, but not technically needed, ElectraNet raised the matter with the AER and proposed that we be excused from an obligation to make an investment that would benefit nobody but ElectraNet. The AER accepted this revised approach, taking the additional step of working with all TNSPs to develop a 'guidance note' to address similar circumstances.

### Inertia Supply

In December 2021 AEMO identified that, if South Australia became islanded from the wider electricity grid it would be necessary to have a certain quantity of inertia to ensure the power system remained stable. It gave ElectraNet the task of providing that inertia, which we did by obtaining contracts from various other businesses.

The AER approved our assessment of the cost of providing this essential system service and we began recovering it through transmission prices.

At the same time, the one second fast frequency response market was being established and, by December 2023, that market had developed to the extent that AEMO would no longer need ElectraNet to provide inertia following an islanding event.

In January 2024 ElectraNet identified an opportunity to work with the AER to amend transmission prices for 2024/25 so that we would not recover the cost of providing a service which was no longer required.

Under the Rules, any over-recovery we made would be 'given back' to customers in future years through the pass-through mechanism, but we were not satisfied with this. We considered it important to make the adjustment quickly so that customers would not be required to pay and be paid back for a service that, as things progressed, was no longer needed.

Therefore, in January 2024 we submitted a *negative pass-through* application to the AER and asked it to make an urgent decision in time for transmission prices to reflect the outcome.

We were very pleased that the AER accommodate this request and that, in the end, our revenue for 2024-25 was \$6.15 million less than it would have otherwise been.



## 3 Change: demand growth driven by policy and changing preferences

### 3.1 Government policy settings are driving new economic activity

Electricity transmission is a vital nation-building activity and key supporter of economic activity in our State.

Facilitating and solving the challenges of the green energy transition will create a platform for businesses to thrive well into the future. It can also encourage high growth and emerging sectors to the State, creating jobs and growth opportunities for generations.

With these future opportunities in mind, Government policy settings have become strong drivers of new economic activity in recent years. This will have ramifications into the 2028–2033 regulatory period.

The South Australian and Australian Governments have funded major policy measures aimed at driving net zero, economic transformation and green reindustrialisation. These represent a significant shift toward industry policy settings designed to catalyse new economic activity among both generators and industry.

In September 2025, the Australian Government announced an updated national climate target to reduce emissions by 62–70% (below 2005 levels) by 2035, reinforcing its commitment to net zero by 2050.

Central to this plan is the Electricity and Energy pathway, which aims to accelerate the transition to clean energy through expanded renewable generation, improved grid infrastructure, and electrification of homes, businesses, and industries. Key initiatives include investments in battery storage, interconnectors, and support for household solar and battery uptake.

The strategy is backed by over \$8 billion in funding and informed by expert advice and modelling from the Climate Change Authority and CSIRO to ensure the targets are both ambitious and achievable.

There are also several major Australian Government policy initiatives that will continue to drive the development of renewable energy generation, energy storage, and green industrial activity in South Australia that should also be considered:

- Future Made in Australia
- Capacity Investment Scheme
- Renewable Energy Transformation Agreements
- Development of the National perspective on high tech opportunities for Australia

The significant levels of financial investment and regulatory support that now attach to State and Federal policies are translating to new industrial activity in South Australia. As a result, ElectraNet is experiencing unprecedented levels of enquiry for network connection from prospective generators, prospective electricity users, and from existing businesses seeking to shift their processes to electricity.

In South Australia, this seems likely to cause a substantial change in the rate at which electricity demand will grow in future. While demand has been flat, if not declining, for the last several years, it is now showing signs of rapid growth.

For example, the various projects supported by the State Prosperity Project, which include increased mining, various green iron and steel projects must be reflected in future demand forecasts. These projects, which enjoy the support of both industry and the Government of South Australia, represent an important part of the region's prosperity for generations to come. They include:

- State Prosperity Project
- Northern Water Project
- Hydrogen and Renewable Energy Act 2023
- State Development Coordination & Facilitation Bill 2025
- Whyalla Steelworks Support
- Olympic Dam Copper Operations
- Aukus Manufacturing
- Data Centre Construction

As Australia decarbonises its economy, sectors like transport, industry, and heating are likely to shift to electricity. Under the government's target of 62–70% reduction emissions by 2035, substantial electrification of private and public transport fleets will need to take place within the next 10 years. Electrification of public transport, particularly buses and trains, is emerging as a significant driver of future electricity demand in Australia. Charging infrastructure must be strategically located and timed to avoid exacerbating peak demand periods.

The reversal of the demand trend introduces planning complexity. While decentralised generation and storage offer flexibility, the timing, location, and scale of future demand are **increasingly uncertain**, and ElectraNet must prepare for a more dynamic grid.

These projects, along with electrification at the urban and domestic level, are likely to see a reversal of recent trends in demand growth in South Australia. While the rate at which that growth will proceed is still uncertain, it is imperative that the necessary investments in the network have at least commenced, to ensure reliability in the medium term and to realise the State's future job and economic opportunities

## 3.2 Industrial demand growth

South Australia is forecast to enter a period of significant growth in industrial electricity load as government and industry adopt cleaner energy and new technologies.

This growth reflects major shifts driven by the convergence of decarbonisation, digitalisation, and re-industrialisation.

Projects like minerals processing for clean-tech supply chains, electrified steelmaking, defence precinct expansion, renewable powered desalination, data centres, and the emergence of hydrogen and other electricity-derived energy carriers will require more reliable and secure electricity. These trends are already influencing national market forecasts, with data centres and industrial electrification among the biggest drivers of future energy needs. Australia's Energy Ministers have also raised questions about the appropriateness of cost recovery in light of these large and rapid changes. While the highly structured approach to transmission pricing set out in the National Electricity rules means that this is not a central issue for the forthcoming revenue proposal, it is nonetheless an issue that ElectraNet will consider in the near term.

ElectraNet's views and expectations concerning demand growth will be provided in our 2026 Transmission Annual Planning Report, which we intend to publish in April 2026.

While forecasts are still being developed, it seems clear that, across these drivers, South Australia's demand growth will be broad-based, persistent, and increasingly responsive to renewable supply and system flexibility. Coordinated transmission upgrades, system strength, and connections reforms, alongside reliable, low-cost renewable firming, will be critical to de-risking investment and realising the state's net-zero strategy.

For decision-makers, the near-term priority is ensuring timely delivery of transmission infrastructure, high-quality industrial connections, and market frameworks that support flexible, high-load assets for grid-supportive operation. This will enable South Australia to translate abundant wind and solar into competitive large-scale energy for industry.

## 3.3 The growth of consumer energy resources

South Australia is seeing a strong consumer-level shift to electrification, driven by government policy and incentives, rising gas prices, improved energy efficiency, and the financial and environmental appeal of all-electric homes. Households are increasingly adopting energy-efficient electric appliances, and electric vehicles are being enabled by Consumer Energy Resources (CER).

CER has and will continue to play a major role in the state's energy landscape. South Australia has long enjoyed the highest uptake of rooftop solar anywhere in the world and uptake is continuing at pace. As South Australia moves toward 100% net renewable electricity by 2027, CER is not only empowering consumers but also enabling a decarbonised energy system.

The electrification shift at the consumer level is creating new complexities for the electricity network at both distribution and transmission levels. As households increasingly adopt CER, the distribution grid must accommodate two-way power flows, variable generation, and rising peak demand. This decentralised energy model challenges traditional network design at the transmission level as well. It may justify upgrades to infrastructure, smarter coordination

systems, and more flexible demand-side management. However, the investments needed to do these things are costly and should not be made without careful consideration.

Consumers will also play a vital role in meeting future grid demand for industry. Integrating rooftop systems, home batteries and other consumer energy resources into the system will allow households to export rooftop solar and stored energy into the system when it is needed.

**AER: 2025 State of the Energy Market Report.**

To manage these increases, network operators are planning to invest in digitalisation, grid reinforcement, and planning reforms such as voltage support and ancillary services to ensure reliability, equity, and efficiency in a more complex energy landscape. For ElectraNet, surging demand will require upgrades to various parts of the transmission network depending on when, where and how quickly it occurs. Major investment will be required for transmission infrastructure, system strength services, and grid resilience, with over 1,300 MW of new load forecast by 2035 and potential future demand exceeding 15,000 MWh.

The next phase of the story is behind the meter (BTM) battery storage. Households and business installations are rising rapidly supported by falling feed-in tariffs and the Commonwealth Cheaper Home Battery scheme. Since July 2025, more than 21,000 batteries have been installed, an increase of 42% on the preceding 10 years. Totalling 238MWh, these assets provide more storage than the original Hornsdale battery, which was installed after the state black in 2016. Collectively, these assets now represent the fourth largest battery in South Australia by capacity.

This development brings complexity to grid operators like SAPN and ElectraNet. The addition of thousands of small batteries make the system harder to manage. However, it also presents a major opportunity. These batteries could be used to help keep the grid stable and even reduce costs for everyone. The challenge is that network operators can't always "see" or control these batteries but will probably need to be able to do so to access these broader benefits..

That's why there is work underway to make small scale batteries part of the bigger picture, to help manage power flows, provide services such as voltage support, and respond to peaks in demand..

Virtual Power Plant operators, energy retailers, and network operators are working together on solutions like:

- dynamic operating envelopes (rules for when batteries can charge or discharge)
- co-ordination between distribution and transmission networks
- enabling aggregated flexibility to provide power to help during peak times or emergencies.

ElectraNet will continue to engage directly with these providers to understand how these services can potentially provide non-network solutions to existing and emerging constraints and support requirements. Non-network solutions are ways to avoid expensive upgrades and keep costs down for the benefit of all consumers.

## 4 Change: network modernisation

### 4.1 Adapting to a renewable future

ElectraNet's role as South Australia's Transmission Network Service Provider is evolving rapidly in response to the energy transition. The increasing penetration of renewable generation and CER such as solar, wind and batteries in homes and businesses is displacing traditional thermal generation, such as gas and coal. Sun and wind are now by far the dominant 'fuel' for electricity generation in South Australia, with rooftop solar assuming the role of the state's single largest generator and an ever growing number of large wind and solar farms.

***ElectraNet first operated the SA power system at 100% instantaneous variable renewable energy in November 2021 and has done so increasingly since then.***

As South Australia leads the nation in renewable uptake, we continue to experience ever greater variability in both the quantity and location of generation. A power system operating with regular periods of 100% or more instantaneous variable renewable energy (VRE) presents new and significantly greater planning and operational complexity than one underpinned by conventional generation. Original design and operational assumptions of the transmission system are being challenged and high VRE penetration introduces a wider range of operating scenarios and greater uncertainty, as the performance of inverter-based technologies and transmission assets under these conditions is not yet fully understood.

***ElectraNet is the first TNSP in the world to experience power system security challenges from VRE.***

The network, once primarily used to transport electricity from large, centralised generators to consumers, is now required to support bi-directional flows, regional balancing, and the delivery of essential system services previously provided by thermal generators. Unlike traditional generators, inverter-based technologies interact with the grid differently, often creating new fault characteristics and dynamic system responses that legacy protection systems were not designed to manage.

To maintain system security and resilience, ElectraNet installed synchronous condensers in 2020 and has since implemented advanced protection and emergency control systems to manage challenging scenarios. In more recent years the focus is turning to Remedial Action Schemes.

As inverter-based technologies continue to grow, the need for innovation in these areas will increase and new solutions will need to be considered, including evolving capabilities such as grid forming inverters and storage technologies. This growing challenge has also been highlighted in AEMO's 2025 General Power System Risk Review.

ElectraNet will continue to re-evaluate and evolve its protection philosophies and implementations to ensure the network remains secure in the face of high renewable penetration and changing system dynamics.

## 4.2 Investment in advanced information technologies

As South Australia's transmission network approaches its technical limits and faces increasing complexity, ElectraNet is sharpening its focus on performance, security, and asset condition.

To support this, we are investing in advanced information technologies that enhance asset management and resilience. Initiatives such as digital twins, sensor-driven analytics, and Network Model Management enable real-time monitoring, predictive maintenance, and streamlined operational decision-making. These innovations improve data accuracy, reduce maintenance costs, and support targeted asset replacement—ensuring safety, reliability, and sustainability remain central to our operations.

As the energy transition continues, we are building the capabilities needed to manage increasing complexity and risk. This includes strengthening our people in terms of capability and planning and operational systems in terms of capacity of the power system. We are working with AEMO and other transmission providers to develop a future capability framework that guides technology investments and the capability uplift required.

## 5 Change: transforming our ways of working: Technology and cyber security uplift

ElectraNet's commitment to prudent investment in corporate systems and operational technology is central to safeguarding South Australia's transmission network as it becomes more complex and interconnected. Our strategy is to uplift core IT systems, integrating AI-driven analytics, digital twins, and unified network model management to proactively identify and address risks before they impact reliability. These advancements enable us to anticipate emerging threats, optimise asset management, and streamline planning and operational decision-making, ensuring our network remains resilient and efficient.

Cyber risks are increasingly sophisticated and can have direct, disruptive impacts on network reliability, operational continuity, the safety of our people and all South Australians. Threats such as ransomware, targeted attacks on operational technology, and data breaches have the potential to interrupt electricity supply, compromise sensitive information, and undermine stakeholder trust.

Recognising this, ElectraNet's cyber security program is aligned with the Security of Critical Infrastructure Act and national energy sector standards. It embeds robust governance, risk management, and incident response protocols across all business functions.

Our Organisational Resilience program integrates cyber security with business continuity, disaster recovery, and scenario-based testing. This ensures that in the event of a cyber incident, we can maintain essential services, protect critical infrastructure, and recover quickly with minimal impact to consumers. The program also supports secure access controls, workforce safety, and privacy protection, reinforcing our ability to engage with communities, facilitating new interconnections, and delivering transmission projects that are both economically sound and environmentally responsible.

As we advance our technology investments, we are also enhancing our engagement with the environment and stakeholders. Digitalisation and improved data management allow us to better understand and mitigate environmental impacts, support transparent reporting, and strengthen our social license to operate. These capabilities are vital as we deliver new transmission projects, respond to regulatory requirements, engage appropriately our traditional landowners, and adapt to the evolving needs of South Australia's energy system.

By embedding advanced information technology, cyber security, and resilience into every aspect of our operations, ElectraNet is protecting the transmission network, balancing innovation and efficiency with the need for prudent, necessary investment. This approach ensures we continue to deliver reliable, affordable energy while maintaining the trust of our stakeholders and supporting the state's clean energy transition.

## 6 Change: building the future workforce and co-creating a workplace of choice



ElectraNet, like many organisations across Australia, is actively working to recruit and retain skilled employees as a critical enabler to deliver reliable, secure, and affordable energy to South Australians.

However, we face increasing competition from the eastern states, where large-scale infrastructure projects attract top talent. This trend is particularly evident among contractors, many of whom are expanding their operations eastward in pursuit of more lucrative opportunities. The challenge of maintaining a stable and capable team in this environment underscores the need for strategic workforce planning, competitive employment offerings, and a strong organisational culture that supports long-term retention.

In response to these challenges, ElectraNet's corporate strategy places strong emphasis on *co-creating a workplace of choice*—a key driver that shapes the organisation's priorities and goals. This includes targeted efforts to attract and retain talent, invest in the development of its people, and foster a culture of engagement and wellbeing.

By focusing on these areas, ElectraNet aims to build a resilient, high-performing workforce capable of meeting the demands of a rapidly evolving energy landscape. These initiatives are not only essential for maintaining operational excellence but also for ensuring the organisation continues to deliver long-term value to energy consumers across South Australia.

## 6.1 One home for ElectraNet

As part of our commitment to co-create a workplace of choice, ElectraNet is re-evaluating its approach to workforce accommodation with a view to centralising staff into a single location.

This approach is designed to enhance operational efficiency, strengthen employee engagement, and support talent retention by fostering a more connected and collaborative working environment.

Centralisation also offers improved physical and cyber security, a clearer organisational identity, and an uplifted external profile. Most importantly, this strategy is underpinned by a focus on delivering value for energy consumers by enabling more streamlined decision-making, encouraging retention and lowering recruitment costs, and supporting a high-performing workforce that can respond effectively to the demands of South Australia's energy system.

## 6.2 Future resource considerations for a dynamic energy sector

ElectraNet recognises that building a resilient and future-ready workforce requires more than just recruitment and retention, it demands a strategic response to the evolving challenges facing the energy sector nationally. This includes preparing for the skills required in a decarbonised and digitalised grid, supporting regional workforce development, fostering diversity and inclusion, and adapting to changing expectations around flexibility and hybrid work.

With an ageing workforce and increasing competition for talent, succession planning and knowledge transfer are also critical. These considerations are deeply aligned with ElectraNet's strategic priority of co-creating a workplace of choice, ensuring the organisation is equipped to deliver reliable, secure, and affordable energy services to South Australians—now and into the future.

## 7 Enriching our communities: The key to community acceptance



ElectraNet's vision to energise South Australia's clean energy future is guided by its core objectives: Safety, Affordability, Reliability, and Sustainability. As the State's primary Transmission Network Service Provider, ElectraNet is committed to:

- delivering infrastructure that is essential to meet the technical, economic, environmental, and cultural needs of the State.
- building trust with the communities in which it operates and serves – maintaining transparent, respectful, and consistent engagement, protecting the environment and cultural heritage, and ensuring the long-term sustainability of operations.

In meeting these commitments, ElectraNet complies with all applicable legislative and regulatory requirements, and also draws on recognised best-practice frameworks to support consistent and transparent decision-making in how environmental, social and governance issues identified and managed.

A key part of this commitment involves rethinking how network impacts are managed and conducting operations in ways that enable both people and nature to thrive. Ongoing community engagement, particularly with landowners, Traditional Owners and stakeholders around asset management, biosecurity, and cultural and environmental outcomes, remains central to this approach, alongside efforts to improve network utilisation and maximise

efficiencies in capital and maintenance delivery. We recognise the need to balance affordability and reliability, working to reduce electricity costs while maintaining the safety, security, and resilience of the transmission network.

## 7.1 Environmental, Social and Governance leadership

ElectraNet is committed to meaningfully embedding Environmental Social and Governance (ESG) principles throughout our business, recognising their importance in delivering long-term value for the community in which we operate. Guided by global ESG frameworks, ElectraNet sets targets, monitors performance, and builds resilience to climate and ESG-related risks.

### 7.1.1 ESG Governance and Accountability

ESG oversight at ElectraNet is embedded at the highest levels, with the Board receiving regular updates via its Risk, Audit and Compliance Committee, and the Executive Management Team (EMT) receiving monthly reporting.

ESG responsibilities are integrated across the EMT, with accountability assigned to the Executive Assurance. This is supported by ElectraNet's ISO 31000:2018-aligned Risk Management Framework, which includes capturing key ESG risks such as bushfire resilience, cultural heritage protection, and environmental performance.

### 7.1.2 ESG Reporting and Performance

ElectraNet reports annually under the National Greenhouse and Energy Reporting (NGER) scheme, providing a consistent and transparent account of our greenhouse gas emissions and energy use in accordance with legislative requirements.

We also participate in the Global Real Estate Sustainability Benchmark (GRESB), an independent framework commonly used by infrastructure and asset-intensive organisations to benchmark ESG governance, risk management and disclosure practices.

ElectraNet's GRESB results provide a point-in-time benchmark for internal governance and oversight, with scores of 97/100 in 2024 (#2 globally for our peer group) and 99/100 in 2025 (#1 globally). These results are used to inform continuous improvement and track performance over time,

ElectraNet is preparing for mandatory climate-related disclosures under the Australian Sustainability Reporting Standards (ASRS), including publication of a Climate Statement aligned with emerging national requirements and international reporting practices. These disclosures are intended to improve transparency and consistency in how climate-related risks, opportunities, governance and strategy are managed and complement existing regulatory and statutory reporting obligations.

A public-facing Sustainability Report is in development to consolidate ESG-related information and support clearer engagement with consumers and stakeholders, alongside other regulatory disclosures.

### 7.1.3 Environmental Stewardship, Cultural Heritage & Community Engagement

ElectraNet's commitment to environmental stewardship, cultural heritage protection, and community engagement is embedded across its operations. Our ISO14001-certified environmental management system drives continuous improvement and impact minimisation, while our approach to cultural heritage includes legislative compliance, ongoing engagement with Traditional Owners, and formal heritage frameworks. The successful delivery of our Reflect Reconciliation Action Plan (RAP) in 2024 and the launch of our Innovate RAP in April 2024 further strengthen these relationships.

Guided by our strategic driver of *enriching our communities*, we work closely with stakeholders to understand local priorities and deliver tangible benefits such as economic growth, job creation, and enhanced community outcomes. Community input informs the planning and delivery of these benefits to ensure cultural relevance and values alignment. Our route development and construction processes prioritise land and place protection through robust environmental and cultural assessments. Respectful engagement and transparent decision-making remain central to every project we undertake, reinforcing ElectraNet's socially and environmentally responsible status, and reinforcing our role as a partner of choice in South Australia's energy transition.

#### 7.1.4 Integrated Strategic Planning

Sustainability, climate resilience, and cultural heritage are embedded across ElectraNet's planning and investment frameworks:

- **Strategic Asset Management Plan (SAMP)** integrates climate risk, environmental impact, and cultural heritage into asset lifecycle decisions
- **Integrated Planning Framework** includes the Network Transition Strategy, TAPR, NDP, and Regulated Investment Planning Policy to guide risk-based, ESG-aligned investment decisions.

#### 7.1.5 Positioning for Climate Resilience

ElectraNet's integrated approach to climate resilience ensures its infrastructure and operations are responsive to both immediate and long-term environmental challenges. By embedding sustainability, cultural heritage protection, and climate risk management into strategic planning and investment frameworks, ElectraNet is well-positioned to provide South Australia's transmission needs.

This includes delivering essential resilient infrastructure, maintaining strong community and Traditional Owner relationships, and aligning with emerging climate disclosure requirements—reinforcing its role as a trusted enabler of the state's energy future and supporting prudent, risk-informed decision-making over the long term.

