

2023 Sustainability Report



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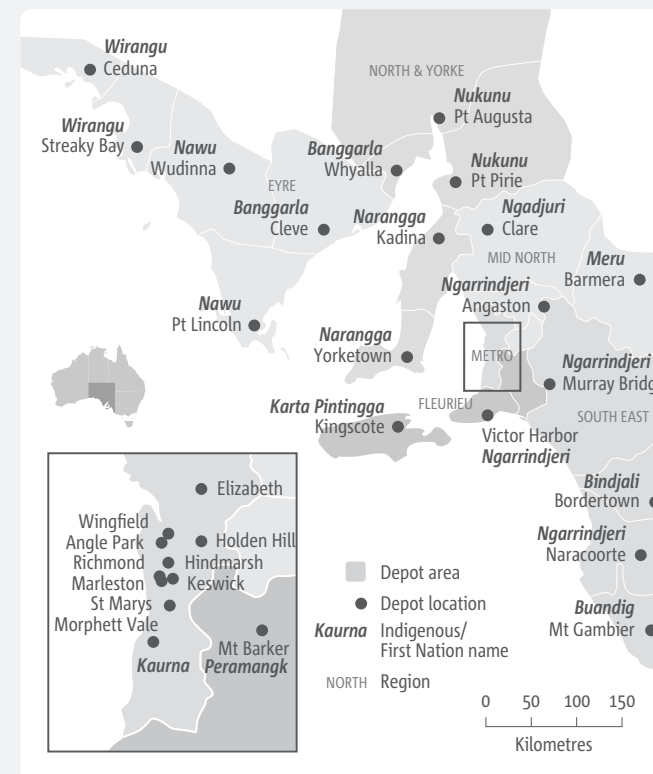
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Acknowledgement of Country

In the spirit of reconciliation, SA Power Networks and Enerven acknowledge the multiple Traditional Owners of the lands that host the South Australian electricity network and their connections to land, sea and community. We would also like to pay our respects to Elders past and present and acknowledge that these are living cultures.



The visual centrepiece of our first Reconciliation Action Plan is *Empowering South Australia*, by Presten Warren, an artist and proud Wirangu/Dieri/Kokatha/Mirning man.



Disclaimer

This report has been prepared as at 31 December 2023, covering the 2023 calendar year. This report and the information contained in this report is for general information only, is subject to change and correction and should not be taken, read or relied upon as anything other than general information. To the extent permitted by law SA Power Networks makes no representation and gives no warranties in relation to the accuracy, completeness or suitability of the information for a particular purpose.

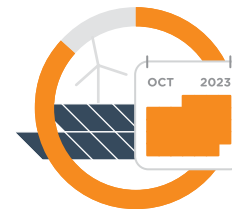
Contact us

sustainability@sapowernetworks.com.au

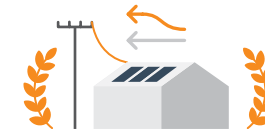
SA Power Networks Group Sustainability highlights 2023



72%
of electricity use
in SA
met by renewables



**Renewables powered
86.9%**
of State electricity use
over month of October (averaged),
setting a new global benchmark for
variable renewable energy in a major grid



Launched world's
1st
Flexible Exports
initiative



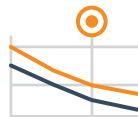
37%
customers in SA
with solar
– highest in NEM



#1
Benchmark ranking for
total factor productivity
by the AER



Reduced our
GHG emissions by
26%
compared to last year



Established
science-based
greenhouse gas emissions
reduction targets



Diverted
88%
of our waste
from landfill



Lodged our first
Reconciliation
Action Plan



0
fatal incidents
(employees and
contractors)



Reduction in average
annual distribution
bill per residential
customer



\$1.63m
invested
in community
partnerships and grants



Achieved
\$5m
in donations through
the Employee Foundation



Award-winning
safety and wellbeing
approach to River
Murray Flood response



0
Environmental fines,
prosecutions or EPA
Licence breaches



98%
of our spend is with
Australian-based
companies



0
Significant notifiable
cyber security
breaches



Award-winning
cyber security
team

Foreword

Empowering a prosperous and low carbon future for South Australia – a message from our Chief Executive Officer



On behalf of the Executive Leadership Team, I am pleased to present the 2023 Sustainability Report.

2023 was a busy, exciting and demanding year for the SA Power Networks Group, with our organisation's critical role in delivering an essential service and as a driving force in South Australia's decarbonisation journey again being brought into sharp focus. Since commencing in the role of CEO in May 2023 I have observed the unwavering focus of our businesses on the imperatives of supporting our community amid flooding, storms and a cost-of-living crisis.

I have also been impressed by the innovative and collaborative approach employed by the organisation to tackle the challenges and opportunities presented by the rapid energy transition. 2023 saw the strengthening of the State Government's commitment to capitalising on the global green transition, and the Federal Government's expansion of the Capacity Investment Scheme for clean energy projects to meet the pledged 82% renewable electricity target and firm the grid as ageing coal plants retire. The SA Power Networks Group continues to provide a compelling example of what can be achieved, and of the central role of electricity network operators, demonstrating how we can develop and maintain a more flexible, smarter, resilient and active network that enables more efficient and customer-centric whole-of-system outcomes.

During the year we reached the culmination of our Regulatory Proposal 'Reset' engagement process, providing the foundation for our Regulatory Proposal (which sets out our service levels, expenditure programs and prices for the five years

commencing 2025/26) being prepared for the Australian Energy Regulator (AER). Our Regulatory Proposal is always a major undertaking, but the engagement program for the 2025–30 proposal was the most comprehensive our business has ever delivered, and the planned work program required to meet the anticipated challenges is our largest yet. Throughout the two-year process our customers consistently asked us to prioritise four key themes when considering the balance of service and price for 2025–30:

- A reliable, resilient and safe network
- Customer experience, choice and empowerment
- Enabling clean energy and unlocking future value for our state
- Maintaining an affordable and equitable energy supply

It's an ambitious agenda, but one that we believe our final 2025–30 Regulatory Proposal can, and will, deliver.

Our ongoing commitment to customers was also reflected in our decision to join the Energy Charter as a full signatory in 2023. The Energy Charter engages energy companies, regulators, customers, and stakeholders to work together for positive change in the energy sector to improve outcomes for customers. I am looking forward to the SA Power Networks Group taking an even more proactive role with our Charter peers to ensure the energy transition provides equitable outcomes and opportunities for the entire community.

The transformation of the energy sector comes with challenges and opportunities. We have undertaken a review of our operating model to ensure we are well positioned to respond to the

challenges, while also taking advantage of the opportunities for business growth and positive impact. Further, our unregulated business Enerven continues to grow both in South Australia and interstate, building upon its expertise in successfully delivering a diverse portfolio of clean energy projects.

Our people are critical to our success, so alongside our review of our operating model, in 2023 we launched a new era of employee engagement. We began work to define the culture we desire and make meaningful steps towards the future. Whilst the operating model sets up the structure and environment for cultural change and business transformation, we are equally focusing on the required behaviours, values and ways of working for today and into the future.

This report captures the year's highlights, achievements and performance, and our response to current and emerging challenges as the energy transition gains momentum. It also reflects our continued focus on our customers and our people, and our aspiration to accelerate our contribution to a prosperous, equitable, and low carbon future for South Australia.

I would like to thank our owners, our people, our customers, stakeholders and the South Australian community for their warm welcome and exceptional enthusiasm for the future of our business.

Andrew Bills
Chief Executive Officer

About the SA Power Networks Group

Our role and services

The SA Power Networks Group has two key businesses – SA Power Networks, which manages the regulated electricity distribution network serving South Australia, and Enerven, a specialist service provider in the competitive energy and telecommunications sectors.



SA Power Networks – Regulated business
SA Power Networks' core business is electricity delivery, but our network also plays a vital role as South Australia transitions to a distributed and decarbonised energy system. A network that once served only to supply energy generated by large, centralised fossil-fuelled generators, now hosts more than half of the State's generation capacity, with much of it owned by customers. Managing the distribution network now involves not just managing supply for 900,000 customers with their diverse energy demand needs, but also managing their desire to contribute cheap and green energy into the grid from hundreds of thousands of consumer energy resources (CER) such as solar panels, batteries and electric vehicles. Over the longer term, our network will enable broader decarbonisation through electrification of transport and potentially other end-use applications currently powered by hydrocarbons.

Enerven – Unregulated business
Enerven specialises in the design, construction and maintenance of electrical, renewable, and telecommunications infrastructure. Enerven provides a range of services to utility, industrial and commercial enterprises, with experience in renewable energy technologies including solar farms, battery energy storage systems (BESS), smart lighting, Virtual Power Plants (VPP), embedded networks and microgrids.

Sole distributor in
South Australia
Supply South Australia's
1.7 million population

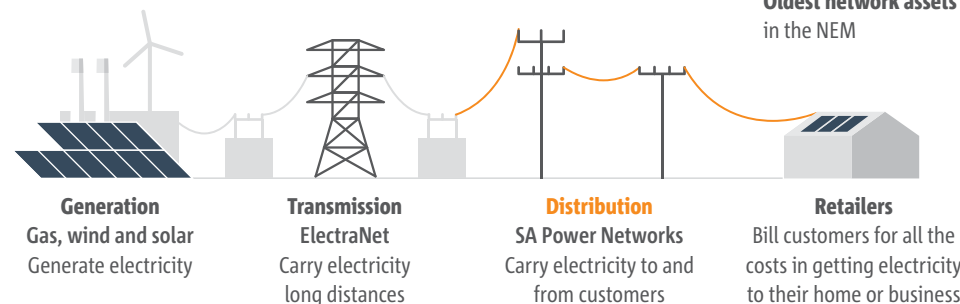
Supplying **900,000**
homes and businesses

2,600 employees in
more than 40 sites
700 apprenticeships
since 2000

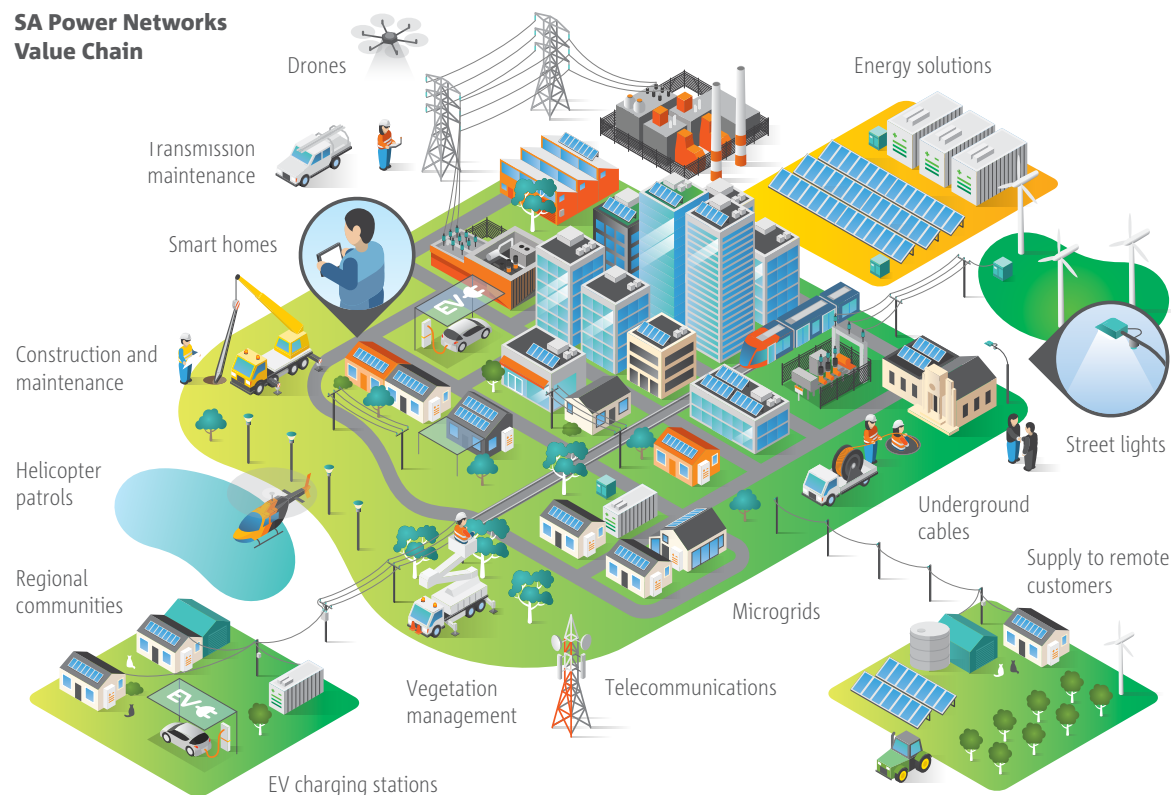
Electricity distributed
9,808GWh
406 zone substations
77,000 transformers

Network coverage
over **178,000km²**
Route length around
90,000km
Oldest network assets
in the NEM

South Australian electricity supply chain



SA Power Networks Value Chain



Our vision and approach to sustainability

The SA Power Networks Group’s Strategic Direction sets out our long-term ambitions through to 2035, with our vision “*Leading the transformation of energy services for a sustainable future*” reflecting our unique opportunity to support State decarbonisation and prosperity.

Our Sustainability Strategy outlines our vision, goal and initiatives to achieve a more sustainable business, community and environment. We know that our role extends beyond being an essential service and acknowledge our impact and influence on the continued prosperity of South Australia. Our sustainability approach reflects this, through the work we do to support and strengthen our customers and communities, collaborate on innovative opportunities with Government and the private sector, empower our workers, and protect the natural environment.

Focusing on what matters

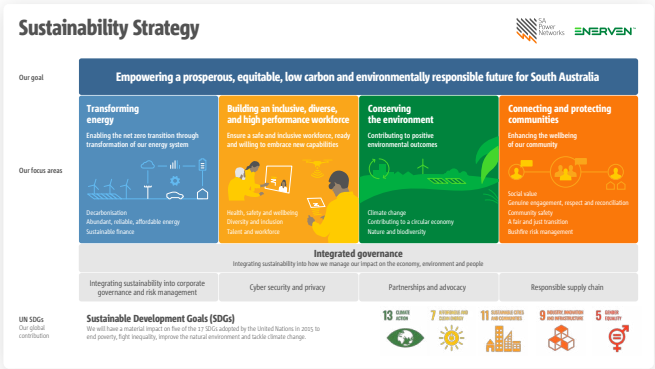
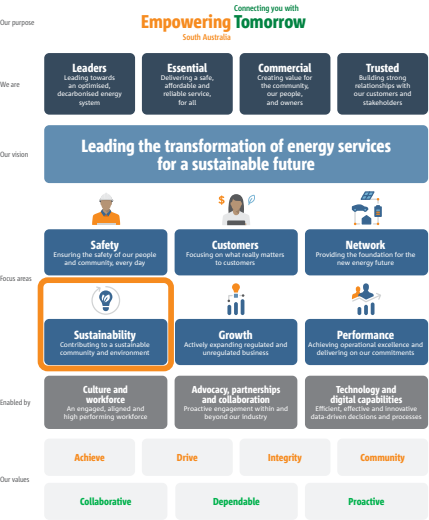
Our sustainability reporting describes how we are addressing the environmental, social and governance (ESG) risks and opportunities that matter most to our stakeholders, including our customers, employees, suppliers, partners and government. We established and validated what these key issues were in 2021 through a comprehensive and independent materiality assessment aligned to the requirements of the Global Reporting Initiative (GRI) Standards.

In 2023 we reviewed this materiality assessment to confirm that no new areas of importance had emerged, or significant changes to our approach were required. We undertook environmental scanning to capture megatrends, industry developments and research, reviewed corporate reports, and cross-checked and validated the findings from our extensive Regulatory Proposal engagement process. Our most material issues also align with the maturity self-assessment undertaken as part of our Energy Charter membership groundwork.

We plan to undertake a comprehensive materiality assessment in 2024 in consultation with our stakeholders to align with new Sustainability Standards and ensure our approach continues to be fit-for-purpose.

Our 15 most material issues are:

Theme	Material topic
Network	Energy affordability and equity
	Emerging technologies and integration
	Customer experience
	Grid resilience and reliability
People	Workplace inclusivity and diversity
	Safety, health and wellbeing of the workplace and public
	Talent attraction and development
Environment	Climate change and our role in decarbonisation
	Protecting biodiversity and the environment
	Responsible consumption, resource use and our contribution to the circular economy
Social	Community development and engagement
	Contributing to economic development
Governance	Integrating sustainability into corporate governance and risk management
	Cyber security, privacy and data
	Responsible supply chain



About this report

Our 2023 Sustainability Report provides a summary of progress against the goals, commitments and initiatives of our Sustainability Strategy, profiles key achievements, and outlines our vision and approach to sustainability. This report is structured around the key areas that encapsulate our ESG issues:

- 1 Transforming the energy sector
- 2 Our people
- 3 Our customers and communities
- 4 Environmental conservation

These areas – underpinned and enabled by integrated and robust governance – guide the SA Power Networks Group’s sustainability strategy and align with our values, purpose, vision and strategic priorities.

This document should be read in conjunction with our *2023 Sustainability Data and Disclosure Databook and Environmental, Social, Governance and Network Matters Management Approach Statements*, available on SA Power Networks’ website. Together, these documents comprise the core of our sustainability reporting suite and detail the ESG performance and achievements related to the SA Power Networks Group’s South Australian (SA) network, assets as well as projects (including work conducted interstate by Enerven) during the 2023 calendar year.

Sustainability Reporting Suite



Sustainability
(Performance)
Report

+



ESG Data and
Disclosure
'Databook'

+



ESG Matters
Management Approach
Statements

Reporting frameworks

The ESG reporting landscape is evolving rapidly. We continuously monitor these developments and annually review the frameworks and standards against which we report. Our proposed sustainability and ESG reporting framework is provided to the Executive Leadership Team (ELT) and Board Sustainability Committee for endorsement every year.

Our sustainability data and ESG disclosure indices are contained in our *2023 Sustainability Data and Disclosure Databook*. Our reporting for 2023 follows the guidance of the Financial Stability Board’s Taskforce for Climate-related Financial Disclosures (TCFD) Framework, the Global Reporting Initiative (GRI) Standards and general industry standards. Our carbon footprint is derived from our annual reporting under the *National Greenhouse and Energy Reporting Act (2007)* and the guidance of the Greenhouse Gas Protocol, Corporate Value Chain (Scope 3) Accounting and Reporting Standard, and the Technical Guidance for Calculating Scope 3 Emissions.

This year we began preparing for mandatory disclosures against the International Sustainability Standards Board’s Sustainability Standards (S1 and S2).

In 2023, at the launch of a Special Edition of the Sustainable Development Goals (SDGs) Progress Report, the UN Secretary-General Antonio Guterres lamented that just 12% of the SDG targets are on track, progress on 50% is weak and insufficient, and more than 30% are going in the wrong direction. We believe we can contribute positively to all 17 SDGs, and provide a significant contribution towards five in particular:

13 CLIMATE ACTION



7 AFFORDABLE AND CLEAN ENERGY



11 SUSTAINABLE CITIES AND COMMUNITIES



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



5 GENDER EQUALITY



A summary of our contribution against these SDGs, and our TCFD and GRI Indices can be found in our *2023 Sustainability Data and Disclosure Databook*.

Assurance

We engaged an independent assurance practitioner to undertake Limited Assurance over selected information included in the *2023 Sustainability Data and Disclosure Databook*. Further details of the scope of the assurance engagement and conclusion are included in the assurance report in Tab 9 of the *2023 Sustainability Data and Disclosure Databook*, available via our website.

Transforming energy

Enabling the net-zero transition through transformation of our energy system

Contributing to



Commitment

Decarbonisation

Accelerate South Australia's pathway to net zero emissions by enabling clean energy and unlocking future value for our State

Resilience and reliability

Providing a reliable, resilient and safe electricity network

2023 Progress



72%
of electricity use in SA
met by renewables



37%
customers with solar –
world's highest %
State's largest generator



2.85GW
of Distributed Energy
Resource capacity



36,900
home battery systems
enabled in South Australia
(cumulative)



1st
distribution network in Australia to introduce flexible connections for solar customers to enable more energy to be exported to the grid. Winner of the Australian Institute of Energy's SA Energy Project of the Year Award 2023 and the Premier's Awards for Energy and Mining – Innovation and Collaboration.



Innovative use of technology to enable safe and efficient response to River Murray Flood event

Transforming energy

Over recent years there has been significant discussion in the public domain regarding how Australia can meet its net zero targets and a particular focus on how Australia can achieve the target of 82%¹ national renewable electricity generation by 2030. Key themes have been the importance of consumers and community engagement, the need for urgent investment in transmission and modernised distribution infrastructure, low-cost renewables and firming generation/batteries.

South Australia – enabled by the SA Power Networks Group – is already demonstrating that these challenges can be met, with:

- over 72% of South Australia's electricity needs met by instantaneous variable renewable energy over the 12 months;
- several of the nation's largest battery and virtual power plant (VPP) systems;
- integration of hundreds of thousands of Consumer Energy Resource (CER – eg solar panels, battery systems, and electric vehicles);
- recognised customer engagement and a long history of collaboration with the private sector and government; and
- the successful piloting and implementation of innovative technology and approaches to ensure a safe and stable grid.

Decarbonisation

South Australia continued to break records for renewables production, minimum energy demand, and PV and battery uptake. Wind and solar accounted for more than 72% of state energy use – averaged over the year – and in month of October averaged 86.9% of state demand, setting a new global benchmark for variable renewable energy in a major grid.

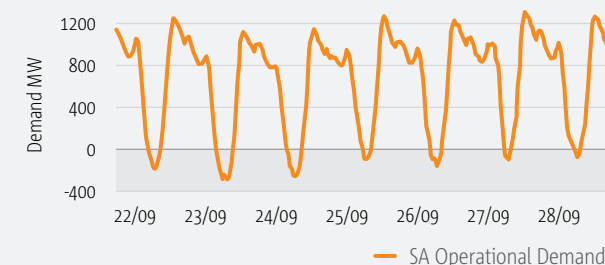
This record-breaking is predicted to continue, with the Australian Energy Market Operator (AEMO) releasing in mid-2023 the key scenario data and forecasts that will inform the 2024 Integrated System Plan, which is the National Electricity Market whole-of-system plan. AEMO forecast material increases in rooftop solar capacity and generation, and an increase in the speed of electric vehicle uptake. Based on these forecasts, and our own modelling, the state is expected to reach “net”² 100% renewables – averaged over 12 months – within a few years.

Whilst what is happening in South Australia is a positive example of what can be achieved across the whole Australian energy system, there are significant challenges to be met (and opportunities to explore) as we undergo a distribution revolution. The SA Power Networks Group is tackling this proactively, increasing the focus on our collaboration, engagement and innovation to ensure the energy transition is as smooth as possible and no one is left behind, particularly more vulnerable customers.

Snapshot: South Australia hits a new minimum demand record

On 31 December 2023, South Australia recorded a new minimum demand record. This was the third time we broke this record in 2023 (previously in mid-September and again in early October 2023). Importantly however on this occasion, this was the first time we reached negative demand across the State (for the 30-minute period to 13:30), with a total state demand of -26MW. Solar generation across South Australia was sufficient to entirely meet the full 1500MW of underlying demand, with excess energy exported across to Victoria via the interconnector.

This trend is occurring nationally too, with the National Electricity Market (NEM) seeing record low demand of 11,009 MW on 29 October, with rooftop and grid-scale solar contributing 67% of total electricity supply in the NEM.



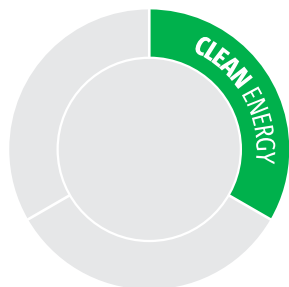
The above chart shows 22–28 September where the grid in South Australia had 7 consecutive negative days in a row. South Australia experienced a total of 16 negative days in September, and regularly experiences a situation where every sunny, mild day our customers are being entirely powered by rooftop solar during the daytime.

¹ Although not legislated, the Federal Government has publicly committed to this target in its Annual Climate Change Statement (December 2022).

² “Net” 100% renewables simply means that wind and solar produce electricity equivalent to the state's annual demand, but that we will export and import power when appropriate through the transmission links to neighbouring states (Victoria and NSW, which have both renewable and fossil based generation sources).

More information on how we are facilitating the decarbonisation of South Australia, integrating new technologies such as solar, batteries and electric vehicles, and maintaining a resilient, safe and stable grid can be found in our *Network Matters Management Approach Statement*. How we are playing our part in making energy more affordable can be found in the *Connecting and protecting communities* section of this report and our *Social Matters Management Approach Statement*.

The extensive engagement undertaken as part of our Regulatory Reset Proposal development also reflects these themes and validates that we are on the right track:



Enabling clean energy and unlocking future value for our State

South Australia is leading the world in the transition to renewable energy and our distribution network plays a central role in enabling this transition. Better supporting clean energy is fundamental to mitigating climate change, and over the long-term, will result in significant reductions to customers' energy bills.

Our progress: Accelerate South Australia's pathway to net zero emissions by enabling clean energy and unlocking future value for our State.

We conducted modelling in 2022 to better understand the implications of various pathways to net-zero on the South Australian energy sector broadly, and our customers and network specifically. Analysis suggests that by 2050, electricity consumption will account for approximately 70% of South Australia's total final energy demand. The distribution network is anticipated to deliver most of this (50%) with the transmission network delivering the remaining 20%. This means that we are expecting our network's distribution volumes to increase by approximately 150% (more than double the current GWh) through to 2050, and peak demand is expected to shift to winter and increase by 50%. Learnings from this modelling are informing how we design and manage our network.

SA Power Networks has developed and is implementing a comprehensive, innovative and well supported set of activities and functions to enable the energy transition. Our ultimate aim is to develop and maintain a more flexible, smarter, resilient and active network that enables more efficient and customer-centric whole-of-system outcomes.

When aggregated together, residential and commercial rooftop solar is the State's largest generator, but most systems are not responsive to wholesale energy market pricing signals. This has led innovative energy retailers to develop new solar management offers that reward customers in return for reducing their solar during periods where the wholesale energy price is negative (which occurred for more than 1,700 hours in 2022!).

To enable the integration of our Flexible Export connection with these new retail offers, SA Power Networks has partnered with energy retailers AGL and Simply Energy in the \$2.1M Australian Renewable Energy Agency (ARENA) funded Market Active Solar Trial. The trial seeks to demonstrate how Flexible Exports can work in conjunction with retailer solar management offers to deliver the greatest benefit to electricity consumers. Additionally, the customer journey for these types of offers will be explored, and several technical integration models will be tested, with findings informing broader market design, as well as addressing cyber security concerns.

This innovation will enable solar customers to get even more value from their systems, while supporting the increased uptake of renewables and network efficiencies that benefit all customers. If successful, the solutions developed could be adopted in other states in the National Electricity Market and potentially unlock wholesale market and network benefits.



Highlight: Record share of renewable generation rapidly decarbonising the State

We are actively supporting the South Australian Government's goal to achieve a net 100% renewables grid by 2030. Our State has a significant and growing amount of large-scale wind and solar farms, and over 37% of our residential and business customers have rooftop solar PV. In total, around 72% of South Australia's electricity needs were met by (wind and solar) renewable energy in 2023 – more than any other mainland state, and also unique as we have no hydro, geothermal, or biomass power to speak of.

In 2022 South Australia set a renewables production record with an extended run of nearly 10 consecutive days over which the average production of wind and solar accounted for 100% of local electricity demand. In 2023 we also experienced extended periods of high renewables, with a week-long period in late October reaching 99.8%, this time backed up by synchronous condensers providing system strength, allowing gas fired power stations to revert to minimum levels of production. We expect this trend to intensify with the connection of more renewables and the commissioning of larger amounts of battery storage and the construction of the State Government's 200MW hydrogen gas generator and 250MW electrolyser in Whyalla in coming years.



International visitors experiencing a glimpse of the future of electricity grids

The PV Power Systems Programme (PVPSP) is a research and development agreement established by the International Energy Agency to pursue collaborative projects with global partners related to the application of Solar PV.

In October, senior members of the PVPSP from Europe, Asia and Australia visited Adelaide to undertake a range of workshops and site visits, including a tour of the Network Innovation Centre (NIC).

Our NIC provides SA Power Networks with a facility to trial and test new technologies that could impact on our business and customers in the immediate and mid-term future. It has both network side and customer side technologies on display including a section of distribution network that can be viewed close-up as well as a 'smart house' which integrates solar PV, battery storage, an electric vehicle and a home energy management system with a range of traditional appliances.

The PVPSP group were extremely impressed by the progress SA Power Networks has made with integrating Customer Energy Resources (CER) into the network and were inspired by our organisation's strategy, culture and proactive leadership to enable the transition. The visitors emphasised the pace of change and CER integration in South Australia was unlike anything they were experiencing in Europe.

Highlight: Launch of world first – Flexible Exports

South Australia continues to lead the world in the take up of rooftop solar and home batteries, and predictions show this trend will continue. This means our power system is increasingly dominated by consumer energy resources (CER) and this is placing pressure on us to maintain system security and quality of supply.

Our distribution network was built many years before solar, and reverse power flows from solar are now starting to exceed the ‘hosting capacity’ of parts of the network, especially on mild Spring days. This lowers the performance of customers’ solar systems, and causes voltage issues, (including for non-solar customers) in some areas with a lot of rooftop solar. It is also starting to exceed the reverse power ratings of some of our major plant at some substations.

Launched in July 2023, Flexible Exports is one of many initiatives designed to support the continued growth of solar, and it is an option that we have been developing with customers, the solar industry, government and technical bodies for some time now. It allows smart solar systems to respond to times when the network is congested, while enabling greater export limits the rest of the time.

Our new Flexible Export connection offer provides new and upgrading small embedded generation solar customers in certain locations a choice of either a fixed 1.5kW per phase year-round, or a flexible limit that varies between

1.5 and 10kW per phase, allowing customers to feed in the maximum amount of unused energy from their rooftop solar system that the grid can safely accommodate. Modelling shows that customers will be better off on a flexible connection offer, as the 10kW limit will be available for majority of the time, with export limitations only occurring during rare instances of network constraint.

In parallel to the release of Flexible Exports, the State Government mandated that all small solar installations and upgrades from 1 July must be flexible exports capable, meaning installers can only install Flexible Export compatible systems that can be connected to the internet to send and receive export limits remotely (unless a system is set to zero export limit).

Our business, along with the national Application Programming Interface (API) Technical working group, led the development of the national technical standard for inverter communication that has now been adopted as an official Standards Australia handbook, as well as a suite of very smart technical capabilities and customer friendly applications.

Winner of both the Australian Institute of Energy’s SA Energy Project of the Year Award, the 2023 Premier’s Awards for Energy and Mining – Innovation and Collaboration Award, and a Finalist in the Industry Innovation category of the Energy Networks Australia 2023 Awards, Flexible Exports is world leading and an essential foundation for the suite of future looking connections options we are developing for customers – more information is available on our website.



437
Trial customers



2.25x
energy exported
vs static 1.5kW limit



7.3/10
average customer
satisfaction



CSIP-AUS
set the national standards
for solar integration



20+
inverter brands
certified representing
95%+ market share



2
States adopting
the same approach



15
technical system
components



20
system integrations
developed



4
new customer apps
developed



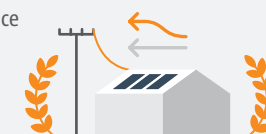
6,000
stakeholders
15 industry reference
groups



11
industry webinars



47
communications
artefacts developed





Enabling the Electric Vehicle (EV) transition

We believe the future of transport is electric, and that electric vehicles have enormous potential to help drive down household energy costs, improve health outcomes and maximise utilisation of our network. Modelling has shown that total household energy bills can be halved by switching to electric vehicles.

Electric vehicles are the next big thing influencing energy outcomes. They have batteries three to ten times the storage capacity of home batteries and are a great opportunity to utilise the State's abundance of renewable energy. Emerging technologies like smart two-way chargers for EVs also have real potential to slash energy costs for consumers.

As part of our future network planning, we have forecast over 800 GWh of additional energy flowing through our network annually by 2030 – an increase of almost 10% – due to EVs. By 2050, EVs will have increased energy throughput on our network by 50% and our network will be the primary distribution system for transport energy for the State.

If EV charging occurs frequently during peak times, the transition to EVs has the potential to drive significant new growth in peak electricity demand, requiring significant upgrades to the distribution network. If EV charging is

managed to occur mostly outside of the peak periods, our modelling suggests that South Australia has the potential to decarbonise the transport sector largely within our existing network capacity.

In 2023 the Federal Government released their National EV Strategy, Australia saw the beginning of an exponential curve in new EV purchases (fueled in part by financial incentives), and there was a rapid increase in the installation of public EV chargers. In addition, RACE for 2030 launched their Australian Strategic Electric Vehicle Integration Project, which will investigate ways to integrate electric vehicles with renewable energy generation and storage, via on-the-ground demonstrations led by CRC partners (including SA Power Networks) in NSW, SA and WA.

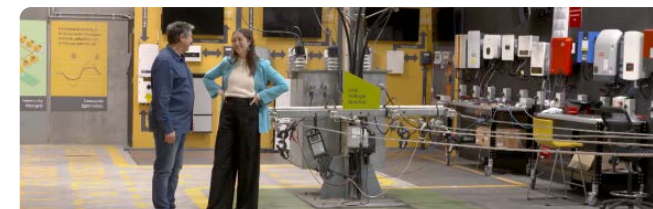
In South Australia, the State Government and the RAA began rolling out an additional 530 charging stations across 140 sites in addition to those existing. Additionally, the NRMA began developing their National Highway EV Network, with SA Power Networks assisting in their installation in South Australia. We also assisted in the installation of two electric truck charging stations, providing 315kVA pole top transformers at both sites for the battery charger.

In 2023 SA Power Networks began looking to partner with local councils to pursue a trial investigating the viability of Stobie (power) pole charging stations for electric vehicles. With around 670,000 Stobie poles around the state, and uptake of electric vehicles growing rapidly, we're keen to understand how best to harness the potential versatility of this solution. By the end of 2023 the City of Mitcham Council was onboarded, stakeholder engagement commenced, with charging station installation to begin in early 2024. Issues at front of mind for the New and Emerging Business team heading up the trial include the safety implications of roadside charging, network impact, pricing models, maintenance, and the minimisation of metering to deploy a low-cost solution. Whilst the progress for EV adoption is promising, it is still far behind global trends. We believe that by addressing a few key policy barriers, Australia may see heavy and light commercial

EV availability increase in time to meet our 43% emissions reduction targets by 2030.

For our part, we will continue to:

- advocate for strong public policy to support the growth of the EV market;
- promote and share learnings from our nation-leading bi-directional (Vehicle-to-Grid) EV charging offering;
- electrify our fleet, including exploring options for heavy vehicles; and
- continue to work with the Electric Vehicle Council through our regular Networks and Charging Working Groups to share, learn, and ensure our positive work on EVs is recognised and adopted across other electricity network distribution businesses.



Snapshot: Spruiking the benefits (and challenges) of the EV Revolution

We are passionate about our role as an essential service to South Australians and playing our part in decarbonising the state, so will regularly take (and make) the opportunity to raise awareness about the energy transition. Along with a range of social media, community engagement activities and events, we also produce educational segments for television.

In 2023, we produced a story on Electric Vehicles (EVs) for 'Outdoors Indoors' a lifestyle show on free-to-air TV. In addition to a simple overview of issues and opportunities arising from the take-up of EVs, it included interviews with staff involved in our EV initiatives.

Helping deliver the energy transition

In addition to the work we've done to adapt our network to facilitate and accelerate the energy transition and provide customers the energy services they want, Enerven (our commercial energy service provider) has been helping clients to realise their sustainability ambitions, including the installation of large-scale solar, battery, EV charging and virtual power plant (VPP) solutions.

Case study: Helping deliver big battery projects

South Australia was home to the nation's first 'big battery' at Hornsdale in 2017, and our expertise has continued to be utilised to deliver more battery projects in SA and interstate.

Significant milestone for the Enerven and Tesla VPP

In early 2023, Enerven completed the 1000th install for phase 3 of Tesla's Virtual Power Plant (VPP) project. As part of the project, Housing SA residents across South Australia have had a Tesla Powerwall and a solar system installed, creating a system that works together to create a single power plant. As a result, the SA VPP provides Housing SA tenants the lowest electricity rate in the State, while also creating higher energy security and grid reliability for the entire community.



Powering up Wärtsilä Energy's grid-scale batteries

In 2023 Enerven shared a significant milestone with near-completion of the construction of Finnish company Wärtsilä Energy's 250MW / 250 MWh grid-scale battery at AGL's Torrens Island Power Station. At about the size of Adelaide Oval, the batteries will provide essential capacity when renewable generation is impacted during periods of high demand, supporting the growth of intermittent renewable energy in South Australia.

The flexible capacity provided by the Torrens Island battery delivers an efficient means for balancing the supply of energy from renewable sources, thereby supporting the stability and reliability of the grid. Enerven was responsible for the design, construction and commissioning of the Battery Energy Storage System (BESS) substation.

Following on from this successful project, Enerven was contracted again to construct a new grid-connected BESS, in partnership with Wärtsilä, and also announced its partnership with Transgrid for the design and construction of the Eraring BESS 330kV/33kV substation, substation switch bay and 330kV transmission line for Origin Energy at their Eraring Power Station. These projects are the first step in reshaping the NSW energy market, and will provide a range of reliability, community and economic benefits for the local Lake Macquarie region, NSW and the National Energy Market.



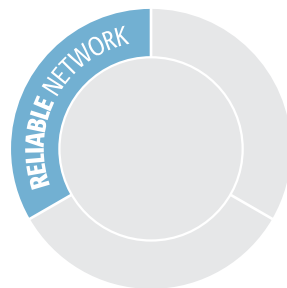
Resilience and reliability

Our progress: Providing a reliable, resilient and safe electricity network, keeping the community and the environment safe from bushfire risks.

SA Power Networks' *Reliability & Resilience Management Strategy* describes our strategy for managing the network to comply with our distribution licence conditions, details how we will identify areas of poor performance, and manage negative reliability trends (eg declining performance due to an increase in severe weather events).

Maintaining reliability and improving resilience requires an ongoing program of works, particularly in the context of the current and predicted future challenges we are facing in South Australia. Throughout our Regulatory Proposal engagement process there were clear recurring themes in the feedback we received in relation to maintaining a safe and reliable network and addressing challenges.

We took these views into consideration in developing and refining our Regulatory Proposal.



A reliable resilient and safe network

Keeping the lights on for customers, and doing it safely, is non-negotiable for our business. To keep doing this, there are several challenges we need to address in the next regulatory period. They include addressing ageing assets, increasing demand, and declining reliability in some rural areas, but also protecting ourselves and customers from risks like cyber threats and the physical impacts of climate change such as bushfires and severe weather.

National Benchmark Performance

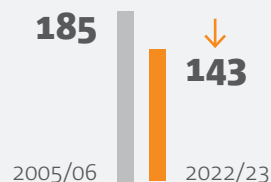
1. South Australia

2. Queensland
3. Victoria
4. New South Wales
5. Tasmania
6. Australian Capital Territory



System Reliability

Average minutes off supply per annum



Key resilience and reliability issues and recommendations included:



Our network is ageing

– SA Power Networks has one of the oldest electricity distribution networks in Australia and the construction profile has been uneven – with a large proportion of our network constructed in the 1950s, 1960s and 1970s. Much of this network will reach the end of its life in the coming decades, which if not addressed will impact network reliability and safety. Additionally, we have historically had one of the lowest asset replacement rates of Australian electricity distribution companies.

Our plan – We have proposed an increase in replacement expenditure to maintain reliability service levels and current network safety risk levels.



The reliability our customers experience varies across South Australia

– Whilst we have generally been meeting regulated reliability targets in most areas, the reliability of our network in the Adelaide CBD is declining as our CBD underground cable network reaches the end of its serviceable life. In remote areas our rural long network reliability is declining due to equipment failures, GPS-guided farming equipment hitting our poles, and the impact of severe weather events.

Our customers have told us that it is important to consider equity between regions and customers when investing in network reliability improvements to better align customer experience across the network.

Our plan – We will continue to maintain our overall network reliability and also propose to improve reliability to our worst served customers and regions. We have also proposed investment to meet reliability targets for the Adelaide CBD and rural long networks.

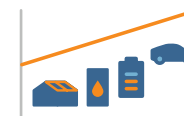
We also plan to invest in additional mobile emergency generators for improved response to minimise long duration outages and impact to our regional/remote customers.



The risk of bushfires is increasing

– Even with our robust bushfire risk management practices, climate change and an ageing network will likely contribute to more frequent and severe high bushfire risk conditions, increasing the risk to the community.

Our plan – We will enhance our bushfire risk management via targeted programs where economic and reduce the impact of emergency power shutoffs. Customers support investment in replacing our deteriorating assets to avoid increasing risk of bushfires and outages, particularly in the face of climate change.



The demand on our network is increasing

– In the coming decade the demand on our network will gradually increase as our customers move more of their energy needs to electricity, including electric cooking, heating and vehicles. Customers told us that they did not want security of supply in the network to be reduced with increasing demand for electricity.

Our plan – We will continue our innovative work to support electrification, whilst maintaining system security, including powerline and substation upgrades.



Increasing cyber security threats

– An increase in cyber events impacting large corporations, and the fact that we are an operator of critical infrastructure means we have an obligation to ensure the security and resilience of our network. Customers strongly support the need to invest in cyber security given the critical role of electricity.

Our plan – We will continue our program of cyber security to increase resilience. Customers supported the implementation of new measures to exceed Australian Energy Sector Cyber Security Framework obligations.



Snapshot: Improving reliability and safety, all the way to the end of the line

In 2023 we continued our program of works to improve reliability to our worst served customers, specifically those who consistently experienced more than twice the number of outages than the regional average.

Customers in rural and remote areas are supplied by very long powerlines that are vulnerable to lightning damage. Once improvement works are completed, such as upgrading existing porcelain insulators with lightning resilient resin insulators, we estimate we will deliver a 40% improvement on average in reliability to these customers.

Ceduna is the most westerly point of the National Electricity Market grid, as well as the farthest extent of SA Power Networks' distribution network. The South Australian west coast is known for its picturesque, rugged coastlines, but it's a harsh environment for electrical equipment, with blasting hot salty air creating the 'perfect' environment for corrosion.

Failure of corroded electrical infrastructure impacts network reliability and safety, so in 2023 we replaced over 34 kilometres of the 66kV transmission line between Tarlton (near Streaky Bay) and Ceduna Substations.

To maintain supply to customers during this work, the new transmission lines were strung 20 metres to the side of the existing line, with 52 new poles, footings, insulators, and fittings. Our Network Management team coordinated design and land access to private property to minimise impacts on landholders as part of the project, with six properties hosting our transmission line assets.

Snapshot: Maturing our approach to asset management to meet reliability and resilience challenges

Asset Management Transformation to aid the energy transition

In 2023 we embarked on an exciting program of work to meet the asset management challenges of the energy transition. The Asset Management Transformation Program (AMTP) is about improving the way we undertake the whole lifecycle of asset management from planning and execution, to ongoing monitoring and review.

Delivery of our stakeholder's priorities and expectations whilst tackling the problems associated with a changing climate, and an aging asset base, integrating customer energy resources, and maintaining affordability can be challenging.

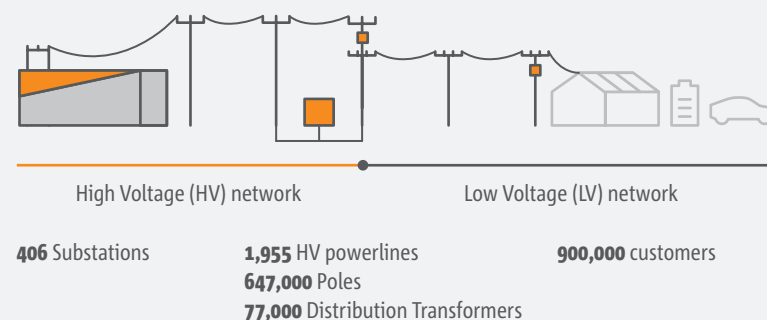
Our ambition is to meet these challenges and improve outcomes through the adoption of a more coordinated, end-to-end, systematic and systemic asset management approach that balances risk, cost and performance over the short and longer term to meet customer, community and other stakeholder needs.

The first phase involved an assessment of the maturity of our approach to the management of SA Power Network assets and identify opportunities for improvement. Whilst the assessment found we are a

mature organization performing well and undertaking a range of innovative initiatives to meet challenges, to further mature our approach, we will need to develop and implement improvement roadmap – this phase commenced in late 2023.

Asset replacement value \$37b

Asset	Quantity	Replacement value (\$m)
Poles	647,000	5,667
Underground cables (km)	18,000	16,864
Overhead conductors (km)	174,000	8,212
Transformers	77,000	1,684
SCADA network control and protection systems	13,300	2,269
Switchgear	15,500	1,412
Service lines	796,000	429
Other DNSP defined		456
Total		36,996



AI Powered Advancements in Distribution Network Asset Management

As part of continued improvements in Asset Management, SA Power Networks partnered with a specialist consultancy to develop a new tool to reliably predict when and how in-service distribution network assets will fail. This information is very important as SA Power Networks has one of the oldest electricity distribution networks in Australia and the construction profile has been uneven – with a large proportion of our network constructed in the 1950s, 1960s and 1970s. Much of this network will reach the end of its life in the coming decades.

The deterioration of assets depends on many factors, including physical characteristics and environmental conditions. Through the integration of engineering, artificial intelligence, and data analytics, the condition-based algorithm built by the team forecasts the lifespan of assets and identifies the factors contributing to their degradation. Utilising machine learning, this tool computes the likelihood of failure for various assets.

Developed over a year from concept to capability integration, the tool is being applied to 173,000km of overhead conductors, 450km of CBD underground cables, 75,000 distribution transformers and 600,000 Stobie poles. The project was nominated for Engineers Australia SA Project of the Year award.



Another significant milestone was the integration of our Network Assets dataset into our new data platform called Ada. Ada – which also stands for access data anytime – is named after the world's first computer programmer, Countess Ada Lovelace.

Ada is a significant step on the journey to establish a trusted data repository and end-to-end data management capability we can incrementally build out to manage, maintain and secure all the data required to support our business. Through Ada, the barriers to using and analysing data have been significantly lowered, making it much easier to use, visualise and model Network Assets data in programs such as PowerBI.



Damage from October storms, during which nearly 50,000 customers were impacted.

Along with all the other agencies that responded to the River Murray Flood Event, SA Power Networks was recognised for our efforts. The Premier Peter Malinauskas presented SA Power Networks with a plaque to recognise our “outstanding collegiality and cross-government support for the River Murray floods”. Our approach to the safety and wellbeing of the impacted communities, our personnel and other workers won the Premier’s Award: Energy and Mining, in the Safety and wellbeing category.

Climate change and the grid resilience challenge

Our network assets and infrastructure, as well as the communities we serve, are impacted by a range of reliability, safety and resilience challenges, including severe weather events. The physical impacts of climate change – including more frequent and severe storms, flash flooding, and bushfires – are already challenging electricity networks’ ability to maintain reliability and resilience. It is our responsibility to ensure the network remains resilient and to assist our customers to become more resilient, particularly those most vulnerable to climate change impacts. Without investing in resilience, these weather factors lead to more frequent and prolonged power outages and safety risks.

Impact of flooding in SA

- 4,000 properties inundated
- 120 roads closed
- 9/13 ferries closed
- 68 catastrophic levee failures

Impact on our electrical infrastructure

- 3,300 homes, businesses, sheds, pumps and sheds
- 1,600 transformer areas impacted
- 400km of powerlines operating over floodwater
- 1 at-risk zone substation

Our organisation’s ability to withstand, manage, recover and learn from major incidents is tested during our annual bushfire season, winter storms and during 2022/23, the devastating River Murray floods. Work to reconnect those customers impacted by the floods in late 2022 continued through the first half of 2023. The response to the River Murray emergency flood event presented many challenges, both to our business and the thousands of South Australians directly impacted.

While limiting the disruption of service to river communities was our focus, our paramount responsibility was keeping these communities, emergency service providers and our workforce safe during and after the event (whilst conforming to the requirements set out by the Office of the Technical Regulator). Our teams worked closely with SA government agencies to develop an efficient process for reconnection of customers with flood damage and utilised a range of operational approaches (including boats and helicopters) and innovative technology to accurately determine clearance levels to enable safe access and reconnection.

In late August, the Australian Energy Market Operator (AEMO) released its 2023 Electricity Statement of Opportunities Report, a 10-year reliability outlook that signals the reliability risks and development needs of each state in the National Energy Market (NEM). The report flagged heightened reliability risks in SA over the 2023/24 summer, due in part to the impact of El Nino conditions which usually result in low wind, and high demand conditions.

The three-year reign of the La Nina climatic event which brought the wetter than average conditions that drove the floods across Australia, began to wane in 2023. The wetter weather also resulted in significant vegetation growth, increasing the potential bushfire fuel load. With meteorology experts warning of a shift to El Nino conditions, and the Country Fire Service (CFS) declaring an early start to the fire danger season in six districts in South Australia, our Seasonal Preparation Plan for Spring-Summer 2023/24 began early, and in earnest. For South Australia El Nino means:

- More frequent and severe bushfire weather
- More likelihood of pre-emptive bushfire risk disconnections
- More heatwaves and electricity system peak loads
- Fire danger and hot weather days occurring earlier in the season.

More information on how we are facilitating the decarbonisation of South Australia, integrating new technologies such as solar, batteries and electric vehicles, and maintaining a resilient, safe and stable grid can be found in our *Network Matters Management Approach Statement*. How we are playing our part in making energy more affordable can be found in the *Connecting and protecting communities* section of this report and our *Social Matters Management Approach Statement*.

Case Study: new technologies a silver lining in flood response

In response to the devastating 2022–23 River Murray flooding crisis, SA Power Networks dramatically transformed its flood response with AI and LiDAR technology to assess network damage and risk through digital flood impact modelling.

Initially, SA Power Networks managed most of its response to the flooding event manually. Asset inspectors and field crews were sent to various locations to monitor the impact of water levels on safe powerline clearances and their encroachment on electricity assets.

With flood waters rising quickly and the scale of the event increased, the need for an innovative approach underpinned by technology became apparent. As a result, we engaged with our current delivery partners Helistar (LiDAR) and Neara (digital twin), to develop a 3D model which could, at scale, determine conductor to water clearance for every span within the predicted 340GL/day River Murray flood area, for both actual and modelled water levels.

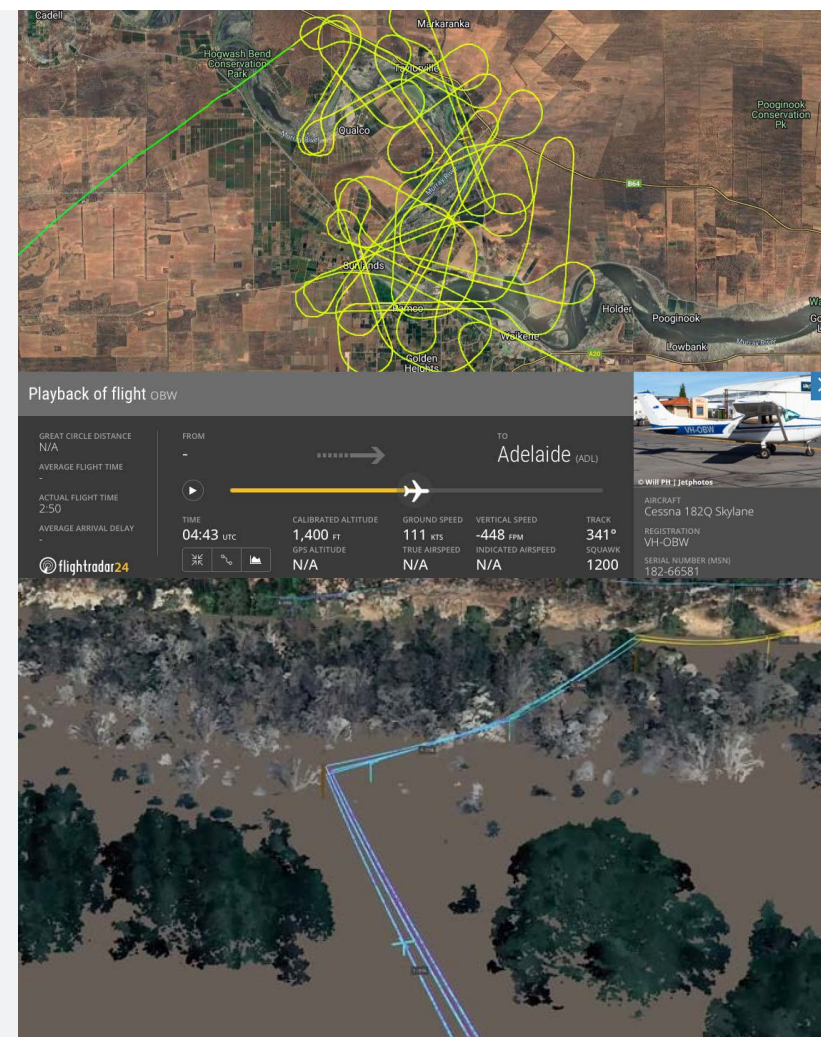
Over the course of five weeks beginning in early December 2022, a light aircraft flying at an altitude of 1,200 to 1,400 feet was employed to capture LiDAR data associated with SA Power Networks assets located within the flood area, with the main priorities to capture powerlines and attachment points.

Trillions of LiDAR data points over the 650km River Murray region at a resolution of 20 points per square metre were collected. Neara's technology then classified the LiDAR data including poles, conductors, buildings and terrain, and merged this information with additional data sources to create a sophisticated 3D model of the network.

This process would have taken weeks if not months, to complete through manual business systems and resources without advanced AI and LiDAR capabilities, and greater areas of the network and a large number of South Australians would have remained disconnected for extended periods.

Utilising this level of visualisation and analysis, we were able to start proactively planning when we could get vehicles and crews back into these communities to perform restoration works in a safe and timely manner.

As the Riverland continues to open up and we focus on re-energising our assets, this technology has been key in enabling us to get people reconnected as quickly and possible but ensuring they still remain safe. The River Murray flooding event provided incredible insight into the capabilities of technological innovation and how leveraging digital insights during these extreme weather scenarios can support efforts to keep residents connected and safe during high-risk circumstances.



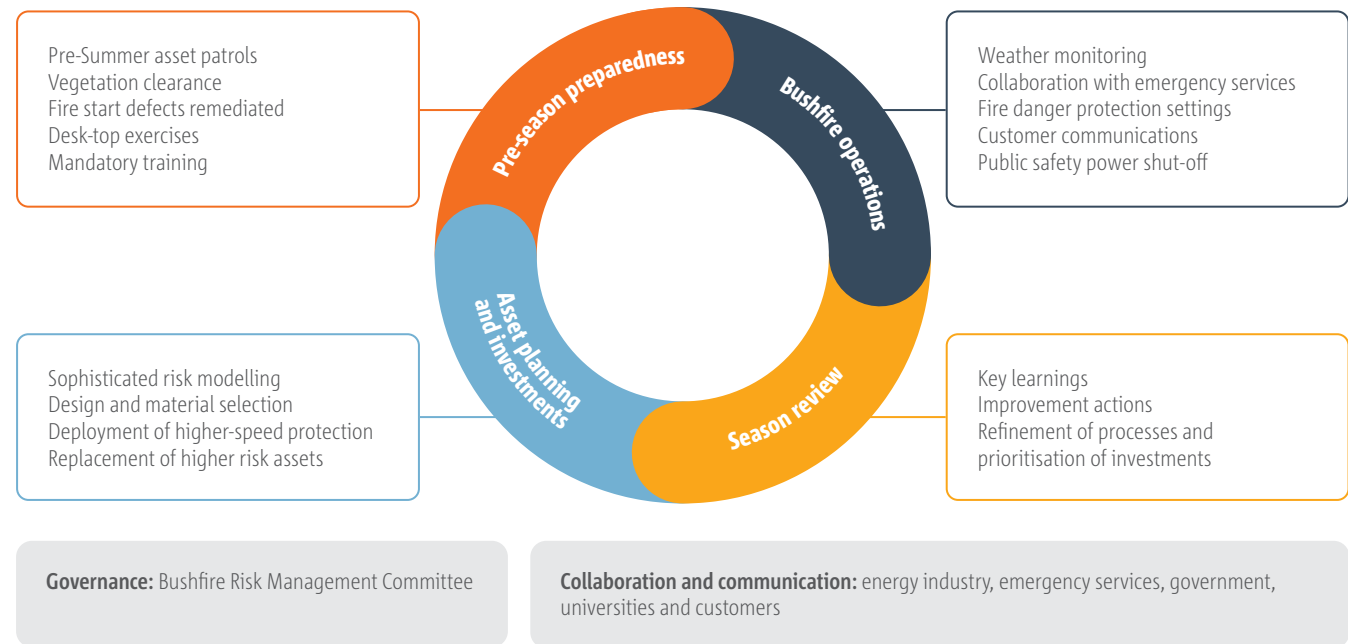
Managing the increasing risk of bushfires

Like many jurisdictions in Australia and globally, South Australia is experiencing longer and more severe elevated fire risk conditions during the year – well before the official start, and long after the official end of the bushfire season.

Bushfires pose a very real threat to lives and property in South Australia. They also interfere with everyday infrastructure such as our water and power supply. Electrical infrastructure can also start fires if damaged or if trees or animals impact our network. This has implications for the way we design our network and monitor assets. Fire starts from either vegetation or asset failure is our highest corporate risk, and vegetation management is our largest operating expenditure. Consequently, vegetation and asset management requires proactive and rigorous management in particular in extreme weather conditions or responding to events.

Because bushfire represents such a significant safety and reliability risk to our workers, communities and infrastructure, the SA Power Networks Group undertakes an extremely comprehensive range of bushfire risk preparation, mitigation, response and adaptation activities.

Bushfire risk management cycle



More information on how we are facilitating the decarbonisation of South Australia, integrating new technologies such as solar, batteries and electric vehicles, and maintaining a resilient, safe and stable grid can be found in our *Network Matters Management Approach Statement*. How we are playing our part in making energy more affordable can be found in the *Connecting and protecting communities* section of this report and our *Social Matters Management Approach Statement*.

Snapshot: Managing bushfire risk through collaboration

International Wildfire Conference

SA Power Networks is a member of the International Wildfire Risk Mitigation Consortium, which is an industry-sponsored association for sharing bushfire risk management insights and innovations. It is predominantly made up of transmission and distribution companies from the US and Australia.

An important part of our continuous improvement approach with respect to managing bushfire risk is learning from and sharing with others. Early in 2023 SA Power Networks joined representatives from the electricity transmission and distribution sector at the International Wildfire Conference in San Diego, USA.

The focus of the conference was regarding the “Vision for 2030” for bushfire risk mitigation in 2030. Common themes presented included:

- The work being done to reduce the prohibitive cost associated with undergrounding powerlines to reduce bushfire risk.
- The benefits of better integrating bushfire risk reduction activities with ongoing asset management/replacement and grid electrification strategies.
- The increasing uptake of Customer Energy Resources (CER), eg solar, batteries, EVs

will lend itself to forming self-sustaining micro-grids and stand-alone power systems that will improve community resilience to both pre-emptive power shut-offs and asset damage caused by a bushfire.

Vegetation management

Trimming trees and branches near powerlines reduces the risk of bushfire, and also helps us to provide a safe and reliable electricity supply for our customers and communities. The last three years of La Nina weather conditions resulted in significant vegetation growth, and our vegetation management program was required to trim vegetation on 70,911 spans of powerline across South Australia before the commencement of the bushfire danger season. Because we take bushfire risk so seriously, SA Power Networks is the only utility in Australia that chooses to be annually audited for vegetation compliance against the Electricity (Principles of Vegetation Clearance) Regulations 2021.

To raise awareness of some of our vegetation management approaches, our Vegetation Services and Customer and Community teams organised a field trip to engage with key stakeholders on appropriate tree planting around powerlines. Stakeholders who attended

the bus trip included representatives from our Arborist Reference Group, the Local Government Association, Native Vegetation Council, Botanic Gardens, Advisory Committee, and the Office of the Technical Regulator.

The bus trip visited a Native Vegetation removal site at One Tree Hill, met with a customer at Millbrook, observed Active Tree Services’ mechanical cutting equipment at Charleston, and reviewed tree planting



Above: Native vegetation removal site at One Tree Hill
Below: Mechanical Cutting equipment – The Jabiru

trial sites in Mt Barker. The trip was a great success and provided an opportunity to further engage with key stakeholders on the challenges around providing a safe, reliable, and compliant network, whilst improving outcomes for our customers and communities.

State Bushfire Coordination Committee

The State Bushfire Coordination Committee – managed by the Country Fire Service on behalf of the South Australian Government – is made up of representatives of fire and land management, as well as allied agencies. The primary role of the committee is to coordinate bushfire risk management activities, provide oversight of the operation of Bushfire Management Plans, and promote bushfire awareness.

SA Power Networks is a member of the committee, and we work closely with other members to plan and implement activities in preparation for the bushfire season.

In the lead up to the 2023/24 season, we shared our operational experience with the new Australian Fire Danger Rating System and the bushfire risk disconnections at Ceduna and Streaky Bay, that occurred in September 2023.

Building an inclusive, diverse, and high performance workforce

Ensure a safe and diverse workforce, ready and willing to embrace new capabilities

Contributing to



Commitment

Inclusion and diversity

To build an inclusive workplace that better reflects the diversity of our community and creates opportunities for all our people.

Talent and workforce planning

To build a future-ready workforce that embraces new capabilities.

Health, safety and wellbeing

No serious safety incidents or harm to ourselves or others.

2023 Progress



Launched a new training pathway 'Powerline for Electricians – Accelerated Training Program'



Launched our **1st** Reconciliation Action Plan



Nationally recognised Graduate Program



\$5m milestone reached of Employee Foundation donations to SA charities



68,768 student hours delivered by Training Services



771 Employee volunteering hours



Launched a new Culture and Engagement Survey regime



Implementation of the Fatal Risk Critical Control Project

Building an inclusive, diverse, and high performance workforce

Culture and engagement

A positive and effective company culture is an integral part of a business's success. The SA Power Networks Group has long prided itself on a great culture, with our people – who are critical to our success – living our purpose and values. We want to ensure that our people are safe, connected, engaged, supported and contributing in ways that are meaningful to them and aligned to our goals.

Over recent years, our people have been through quite challenging times – apart from continuing to provide an essential service throughout the disruption of the COVID-19 pandemic, we have responded to unprecedented severe storms and the River Murray flooding event, and taken on an increasing workload resulting from the rapid energy transition. Concerns about burn-out and disaffection also featured in our first (in several years) Culture and Engagement Survey. The flipside of this was the very strong feedback that SA Power Networks and Enerven are great businesses to work for, and our people want to build on the positives.

In recognition of this, in 2023, we launched a new era of employee engagement, with an invigorated program of initiatives, including a new Employee Value Proposition, an enhanced employee induction process, a new Culture and Engagement Survey regime, improved and more frequent communications – including Town Hall forums – to and from

the Executive Leadership Team, and the re-commencement of our Making a Difference Awards after a COVID-19-induced hiatus. This program of work will be ongoing and will grow, as we know that creating better engagement and improving organisational culture is something that takes time.

Another important employee engagement process occurred during 2023 as the SA Power Networks Group undertook negotiations for a new Enterprise Agreement (EA). Feedback (via a post implementation review and the Culture and Engagement Survey) on key elements of the previous EA process were predominantly negative, so a new approach – in consultation with employees and Unions – was developed. The 2023 EA negotiation undertaken was a consolidated and conciliated process, involving a dedicated Negotiation Team, enhanced communications, daily meetings with the Single Bargaining Unit, and supported by an Independent Conciliator.

As a result, an in-principle agreement was reached within 2 weeks of consolidated bargaining, and was accepted via a vote in December. One of the aims of the refreshed process was to change the way we engage with Unions, and a commitment to ongoing, open and transparent engagement. This more positive and constructive relationship with the Unions is set to continue in the form of a newly established Union Engagement Group.

Snapshot: Culture and Engagement Survey

The energy transition in South Australia is already in full flight, so our organisation needs 'all hands and heads on deck' with a positive and collaborative culture to ensure we achieve our strategic objectives. One of the first initiatives our incoming CEO Andrew Bills was keen to kick off was the establishment of an annual Culture and Engagement Survey.

The Survey enables our leaders to get an understanding of how our employees are feeling, what is working well, and what isn't. By fostering an open, transparent and engaged culture across the SA Power Networks Group, roadblocks can be addressed, and improvements made.

The 2023 Survey attracted a very strong participation rate, with 82% of the workforce responding, and an overall Engagement Score of 70% favourable. A range of questions were asked regarding our workplace and culture, and factor scores (the average score of all questions within that factor) were determined for a number of key areas. Pleasingly, high factor scores featured for some important areas including:

- Health & Safety – 83
- Alignment & Involvement – 80
- Management – 77
- Wellbeing – 76
- Work & Life Blend – 76

Following on from the release of the Survey results, a series of Culture Survey Focus Groups were held to identify opportunities and actions from the themes and feedback that came through in the Culture and Engagement Survey, followed by leader-specific online training and information sessions.

As experienced by all large organisations, we will inevitably unearth some things that are not working well or resulting in negative feelings, however our leaders are keen to hear what employees are saying so that these issues can be worked through.

The key themes with opportunities to improve were:

- Collaboration and Communication – 55
- Feedback and Recognition – 47
- Action – 44

A range of activities were immediately instigated to improve these areas such as broader and tailored Field Services business updates, skip level feedback, leadership and Respect@Work training, and in late 2023 a dedicated Culture and Engagement Program was launched.

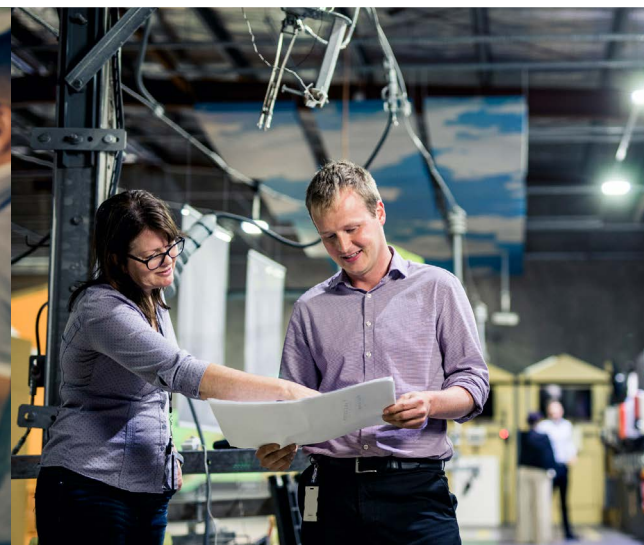
The results of the Survey and Focus Groups will serve as a benchmark for us to improve and assess our progress over the coming years.

Some key initiatives delivered or progressed in our People and Culture space over 2023 include:

- A dedicated **Culture and Engagement Program**;
- Our **Attraction and Retention Program**, with a focus on increasing female representation and promotion of science, technology, engineering, and mathematics skills;
- A range of promotion, education, development and embedding activities under our **Inclusion and Diversity Action Plan** including a **Respect @ Work** Directive and mandatory training, Field Services **gender equity workshops** and an internal **pay gap analysis**;

- Further building of leadership competencies aligned to the Capability Framework and talent pipeline development plans under our **Leadership Development Plan**;
- **Workforce Planning Capability Uplift** – Enhance our workforce planning capabilities to enable data driven decision making to build our future workforce;
- Launch of a new **Powerline for Electricians – Accelerated Training Program** and expansion of the **Cadet Network Project Officer Program**, focused on building capacity in our Customer Solutions and Powerline Design Teams;

- Increased intake of **Graduates** and an expansion of our **Mentoring Program**; and
- Development of new **leadership development programs** for Senior Leaders and piloted inclusive **leadership masterclasses**.



More information about how we are building an inclusive, diverse, engaged, high performance workforce, see our *Social Matters Management Approach Statement*. For more information about Community Safety, refer to the *Connecting and protecting communities* section of this report.

Highlight: Recognising outstanding employees



The SA Power Networks Group Making a Difference Awards

Every two years, the SA Power Networks Group holds the Making a Difference Awards, recognising the outstanding individuals across SA Power Networks and Enerven who are making a significant contribution to our workplace.

Twenty-five award winners – which included the 2023 4th Year Apprentice of the Year – had the opportunity to travel to Hong Kong in November to participate in the Cheung Kong Family Day event, hosted by one of the SA Power Networks Group owner companies CK Hutchison Holdings. As well as Family Day events, winners had the opportunity to enjoy the sights and activities of this bustling city.

After the global COVID-19 pandemic resulted in the cancellation of the last Making a Difference Awards, its re-introduction 2023 generated a significant response. Award criteria were based on four areas of performance:

- Safety
- Customer Service
- Innovation
- Leadership

More than 340 nominations were received, with several individuals collecting multiple nominations. Of the 25 Award recipients, 15 were male and 10 were female employees. Considering that females are only 20% of our workforce, this result reflects very positively on the achievements of our female employees.

Customer Service Week Awards

Our customers are central to our business, and every year we celebrate Customer Service Week as a great opportunity to reflect on all the important ways our people contribute to delivering outstanding customer service, as well as think about how we can do better in the future. The theme for 2023 was 'Team Services', highlighting the importance of teamwork in providing the best possible experience to our customers, and amongst the multiple events organised was the Customer Service Awards.

Seventy two people from across the business were nominated by their peers for going above and beyond in improving the service we provide to customers and the SA community - reflecting the great work that's being done by our people, and the spirit of encouragement, pride and recognition that exists among those who took the time to make a nomination.

Scaling new fundraising heights and winning awards

The SA Power Networks Group is well-known for its fundraising and charitable endeavours, including our Community Partnerships Program, Community Grants and Employee Foundation. In 2023, our Employee Foundation – which enables our employees, their families and friends to make a positive contribution to the lives of people in our community through payroll donations, fundraising and volunteering – reached a cumulative donation milestone of \$5 million.

One of the organisations we have proudly supported for many years is Operation Flinders, a South Australian based provider of adventure therapy programs for young people facing challenges. Every year Operation Flinders runs the City to Summit charity trek, and in 2023 SA Power Networks fielded three teams, raising over \$33,000 – the largest donation from a single organisation, with our Chief Risk Officer winning the award for highest individual fundraiser. These funds help provide demanding experiences, personal development and pathways to wellbeing and life success for young people.

Our philanthropic and community efforts were recognised when we won the Premier's Award for Corporate Social Responsibility at the 2023 SA Volunteer Awards. The Awards honour South Australian businesses that lead change in our community through Philanthropy, Partnership, and Corporate/employee volunteering.

The 2023 award recognised our various community partnerships across the State, and the incredible volunteering work and generous donations from our people through our Employee Foundation.



Inclusion and diversity

Responses to key questions in our 2023 Culture and Engagement Survey indicated very strong support for inclusion and diversity activities. Inclusion in a workplace is achieved when a diversity of people (eg ages, cultural backgrounds, genders, perspectives) feel that they are respected, connected, contributing and progressing. We know that by improving the diversity, equity and inclusive practices of our organisation, our people will feel more valued, and engaged – key factors in growing a culture in which our people work together to improve performance and wellbeing.

Pleasingly, in the 2023 Culture and Engagement survey 88% of team members feel they are provided with equal opportunities to speak during team discussions. Ensuring our people have the opportunity be heard is essential to building a sense of connection and belonging.

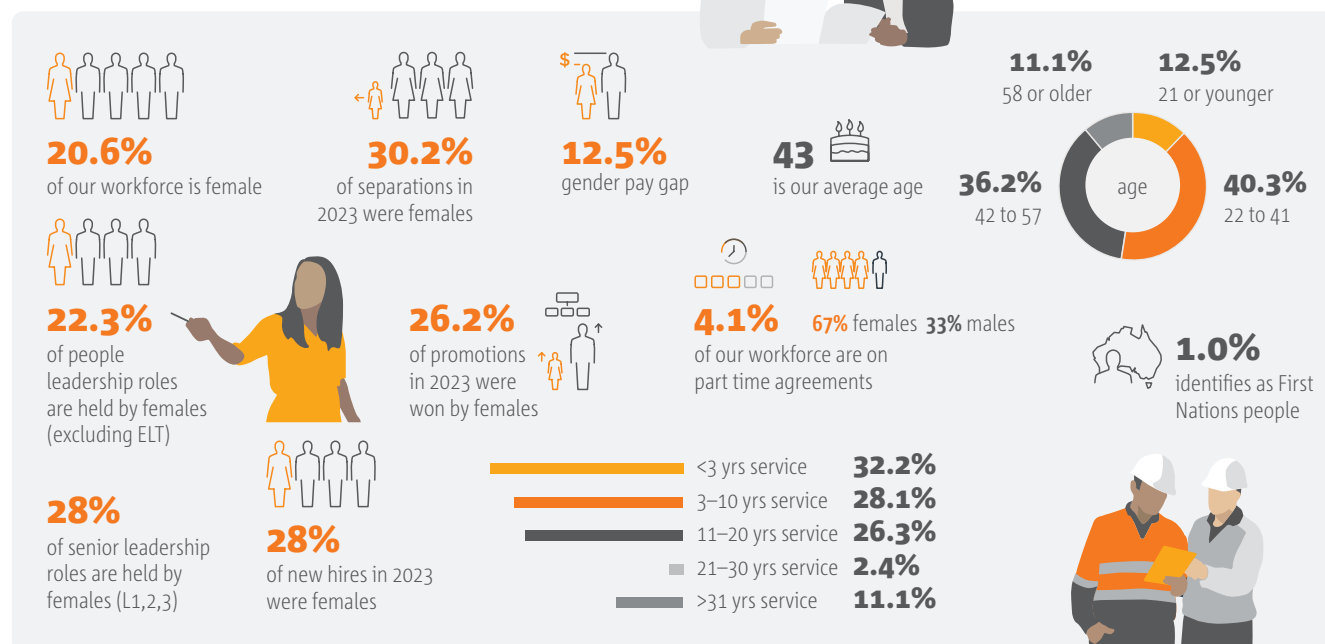
Our progress: To build an inclusive workplace that better reflects the diversity of our community and creates opportunities for all our people.

After launching our 2022–2025 Inclusion and Diversity (I&D) Strategy and Action Plan last year, the focus in 2023 was to continue the acceleration of our I&D activities. The purpose of our I&D Strategy is to ensure we have clear, aligned and transparent initiatives that are required to deliver our I&D ambition. To have impact I&D demands a robust roadmap of interdependent initiatives across our three pillars of, ‘gender equity’, ‘reflect our community’ and ‘respect’ to embed I&D into ‘business as usual’.

Our initial priority is to accelerate our gender equity progress. The strategy contains ambitious targets pertaining to female representation in the workplace. Notably, we are striving to achieve female participation of 25% by 2025 and 40% by 2035. Both targets represent a stretch for the organisation. Current progress shows we are tracking at just over 20.5% female representation, enterprise wide. Talent injection, particularly in our early career pipelines, represents the most significant opportunity to deliver our targets.

We are now tracking and regularly reporting our gender equity progress. This is to provide insights into our activities around attracting female talent, progressing females in leadership, our compensation and promotion practices, providing equitable career opportunities and developing a robust pipeline of future female leaders. Our Executives meet quarterly in their collective leadership role to review and discuss the enterprises I&D progress.

2023 Snapshot of our workforce



We have a number of activities and initiatives underway or completed in our business that all contribute to inclusion at work, including:

- Implementing gender-diverse interview panels
- Incorporating inclusion as a specific topic in our leadership development programs
- Conducting Field Service Gender Equity workshops
- Designating parent-friendly rooms
- Analysing our internal gender pay gap to ensure inequities are eliminated
- Lodging our inaugural Reconciliation Action Plan with Reconciliation Australia
- Creating a Respect at Work Directive and launching training for all employees.

Throughout the year we celebrated, recognised and contributed sponsorship to a large number of significant dates and events as part of our inclusion and diversity calendar, covering the breadth of I&D issues including mental health, disability, discrimination, identity/gender, LGBTQIA+, culture, and social issues. Significant events were International Women's Day, White Ribbon Day, Harmony Day, International Day of Women and Girls in STEM, Inclusion at Work Week, National Pride Month and Reconciliation Week.

In 2023 we formally lodged our first Reconciliation Action Plan (RAP) – a very exciting and important milestone in our reconciliation journey. Our RAP Steering Committee and Working Group includes representation from right across the business to govern the development and implementation of our Reflect RAP. To ensure their voices are central, the extensive consultation and engagement included an opportunity for Aboriginal and Torres Strait Islander staff to self-identify and get involved. More information about our RAP and reconciliation can be found in the *Connecting and protecting communities* section of this report.

Snapshot: Building a workforce that reflects our communities

The Adelaide Feast Festival, celebrating all things LGBTQIA+, is a staple of the Adelaide festival scene, and the SA Power Networks Group has been a proud major partner and supporter for five years. In 2023, we debuted an interactive stall at Picnic in the Park, a family and community event which attracted over 3,000 people.

Our stall was a colourful collaboration between HR Early Careers, the Inclusion and Diversity Committee, and the Customer and Strategy department.

We had a mission: to reach out to the incredible people we serve and, at the same time, introduce our fantastic career opportunities to the up-and-coming apprentices, cadets, and graduates of tomorrow.

Our “bedazzle your own hard hat” station had kids and adults alike decorating headgear with glitter and glam, turning safety into a fashion statement, and the Elevated Work Platform (EWP) bucket became a popular photo spot.



Talent and workforce

A key topic at the 2023 Australian Energy Week conference, and the focus of a research report by Jobs and Skills Australia, was around the current and predicted clean energy workforce capacity needed to drive the energy transition. As the Australian clean energy sector embarks on a period of extraordinary growth and development and positions our country as a global clean energy superpower, the SA Power Networks Group has been ramping up our efforts to grow and develop our workforce.

Our progress: To build a future-ready workforce that embraces new capabilities.

Like many in the energy sector, we are experiencing shortages across several aspects of the existing workforce, particularly in fields such as engineering, technical professions and powerline workers. To attract, maintain, and develop a workforce for the future, with diverse people who are ready and willing to embrace new capabilities and technology, we are employing a range of initiatives and strategies.

The SA Power Networks Group aspires to be known as an employer of choice, with a motivated workforce who are strong brand ambassadors. We think we can offer a diverse and exciting range of career opportunities, from more traditional roles to innovative roles of the future – many of which are already here. We have people working in artificial intelligence, electric vehicles, virtual reality, robotics, drones, and cyber security, helping us navigate the challenges and opportunities posed by the rapid energy transition.

Highlight: Encouraging emerging Science, Technology, Engineering and Mathematics (STEM) talent for the skilled workforce of the future

STEM skills and knowledge are vital to growing our organisational capability, both for current and future employees. The SA Power Networks Group actively engages with schools and universities to promote a career in the energy sector and STEM fields, from internships and scholarships for existing students and graduate positions for those who have recently completed their studies to forging closer relationships with the universities themselves.

In 2023 we formed an internal STEM Education Committee to guide a cohesive, business-wide approach to our STEM engagement activities.

Examples include:

- hosting information booths and speaking at **University Open Days** and **Career Expos**.
- supporting the **Playford Memorial Trust** via the **SA Power Networks Scholarship** for a final-year Electrical Engineering student.
- participating in the **SA Schools Science and Engineering Challenge**, held at the Flinders University. Two of our Engineers hosted the ElectraCity challenge for the day, where groups of students from different schools competed against each other to plan an electricity network. We also host a stand, 'discovery sessions' and competitions at South Australia's **Science Alive!** and **STEM Day Out** events.
- hosting an annual **School Robotics Challenge** – in 2023, over 100 talented

students from 14 schools across South Australia displayed their exceptional skills and ingenuity in robotics, captivating the audience with their innovative creations. To kick off the challenge, representatives from our metropolitan and regional depots visited local schools to present the dangers of faulty fuse switches on our network, outlining the challenge for students to engineer solutions to – using robotics, remove a High Voltage Fuse (simulated by an orange plastic pipe) from a HV fuse base.

There were four categories of Award, Innovation, Automation, Engineering and WD-40, with a fierce competition and high standard of entries across all areas:

- Running a paid **Summer Vacation Program** for Engineering students – this 12-week program is designed to provide invaluable hands-on experience, allowing students to put their theoretical knowledge into practice alongside industry experts.
- Our Cyber Security team leading a **Girls in STEM** session with students from the Wilderness School. It was an extremely informative session for the girls not only on cyber risks and what can happen, but the career pathways and opportunities in that space.
- Participating in the inaugural **SA Aboriginal Secondary Training Academy (SAASTA)** / Port Adelaide Power Football Club SAASTA Connect Carnival Expo to engage with hundreds of First Nations high school students to encourage them to consider a career in the energy sector.



Attracting and developing a skilled workforce

In 2023 SA Power Networks launched its Employee Value Proposition, a summary of some of the things that set us apart as an organisation, but especially as an employer. Our Employee Value Proposition helps us recruit the best talent in our industry and reminds our people of the positive workplace culture we aspire to build upon into the future.

Over the year, the Employee Value Proposition was used to positive effect in a range of social and other media, including LinkedIn, Twitter, Facebook and TikTok, with the aim of attracting a new generation of SA Power Networks and Enerven employees. A key benefit promoted via these campaigns is our learning and development program – as one of South Australia's largest employers of apprentices and graduates, SA Power Networks runs a range of accredited training, undergraduate and graduate level development programs.

Employee Value Proposition

At SA Power Networks, you will play an exciting role in serving South Australia and leading the world in the shift to clean energy.

It's about more than simply keeping the power on – you'll be joining one of South Australia's key innovators, helping to build a sustainable and renewable future that our people, our customers, and our community can all be proud of.

As one of SA's largest employers, we offer a varied and opportunity-rich workplace where you can forge an interesting and financially rewarding career, now and into the future. You'll benefit from award-winning training, internal development programs and diverse career pathways.

Our business sees truly diverse people coming together to drive our innovation, and you'll work alongside some of the most talented and motivated people in the state.

Let us empower your career, as you help empower South Australia.



In 2023 we were named one of Australia's Top Graduate Employers. SA Power Networks is a member of the Australian Association of Graduate Employers and currently sits at 27th in their top graduate employer list from a possible 150 graduate employers – the highest of any regulated energy distributor in Australia. The aim of the list is to recognise those organisations that provide the most positive experience for their new graduates as determined by the graduates themselves. We also placed well (28th out of 98 organisations) in the AAGE's ranking for Top Intern Program for our Engineering Vacation Program.

Our Graduate Development Program provides the opportunity to put theory in to practice and supports the transition from university to full-time employment. It includes employment opportunities within the organisation's engineering, asset management, information technology, strategy, innovation and telecommunications departments, with approximately 157 Engineering and 34 IT graduates completing the program since 2006. In 2023 we had our first intake of Economics graduates start at the organisation, one of the many ways we are trying to bring diverse skills into the business.



Snapshot: Collaboration one of the keys to growing our green energy workforce

The success of the energy transition depends on a skilled and knowledgeable workforce, highlighting the urgent need for a co-ordinated and comprehensive skills training and development strategy. We work closely with governments, education bodies and the private sector to develop the skilled workforce we need now and into the future.

In late 2023 we had the privilege of hosting the National Skills Commission at our Network Innovation Centre to discuss the critical role of skills development in achieving our nation's decarbonisation goals. We discussed equipping our current and future workforce with the expertise needed to operate, maintain, and innovate in this evolving energy landscape.

The Apprenticeship Program includes both on and off-the-job training at a dedicated Training Centre, and since 2000, 699 apprentices have been trained or are completing training. Every year we host an Apprentice Graduation Dinner, where powerline and electrical apprentices are awarded their Graduation Certificates, outstanding 1st, 2nd and 3rd year apprentices are acknowledged, and the the best performing Fourth Year Apprentice is awarded the Playford Medal.



In 2023 we introduced a new pathway for electricians with existing qualifications to transfer their skills to the powerline industry. The 'Powerline for Electricians – Accelerated Training Program' allows experienced electricians to undertake an accelerated two-year course to qualify as a distribution Powerline Worker, without having to start from scratch.

To meet the increasing demand for trade technical workers, our Training Services Department has undergone unprecedented growth over the past couple of years, for example in 2023, Training Services delivered 68,768 student hours. Backed by data, the Training Services team developed a four-year apprentice plan to help them predict what the training commitment would be, recruit more trainers, and ensure our systems and processes continue to be of a high standard, as SA Power Networks is an Enterprise Registered Training Organisation in a high-risk industry.

In 2023 we grew the recently launched Cadet Network Project Officer Program, recruiting six new Cadets to be placed in metropolitan and regional depots. Network Project Officers are responsible for leading new connections, asset relocations and extensions of the distribution network. They also liaise with customers and stakeholders and carry out scoping and estimating functions to ensure reliability of the distribution network. Cadets receive a nationally recognised qualification and on-the-job experience through structured rotations in different business areas, to develop a broad range of skills and experience.



Snapshot: New employee Induction Day

Although we've typically undertaken thorough and engaging inductions for new apprentices and graduates, the induction process for other employees was conventional and very 'desk-based'.

In 2023, began holding monthly 'formal' induction days for new starters, at which new employees were provided an overview of our business by a handful of our Executive Leadership Team, as well as undertaking tours of the Network Innovation Centre and Angle Park Pole Construction Yard and Training Centre.

Health, safety and wellbeing

The 2023 Culture and Engagement Survey revealed 87% of our people agreed they are ‘comfortable voicing concerns or making suggestions about workplace health and safety’, a strong response that clearly demonstrates our organisation’s focus on safety is on the right track. Although this result is a positive reflection of the inroads that have been made in building a strong organisational safety culture, we will continue our focus on strengthening it.

Whilst safety is our top priority, we recognise that it cannot be addressed in isolation from other human factors such as health and wellbeing. The SA Power Networks Group strives to manage potential risks and hazards to the ‘whole person’, that is, our approach encompasses physical and mental health and overall wellbeing.

Our progress: No serious safety incidents or harm to ourselves or others

The goal of our Safety Strategy (2021–2025) is “No serious safety incidents or harm to ourselves or others”. To achieve this we continuously:

- Focus on health and wellbeing
- Pursue operational excellence
- Strive to eliminate fatal risks
- Hold ourselves and each other accountable
- Assure community safety

Our comprehensive Safety Plan sets out the implementation of a range of annual and ongoing projects, initiatives and programs to ensure we meet our commitments and objectives under the Safety Strategy. More information about our approach to safety can be found in our *Social Matters Management Approach Statement*.

Highlights from 2023 include the:

- Refresh and expansion of the **Health and Wellbeing Framework**, with additional initiatives and offerings being added, such as guidance on managing psychosocial safety at work. High-level, anonymous feedback provided by the Employee Assistance Program on some of the most prevalent issues arising over the past three years – such as depression, anxiety, and relationships with family members – have helped influence these new offerings.
- Development of a **Back-to-Basics Campaign**. An increase in the number of recordable injuries towards the end of 2022 was the catalyst behind the safety-focused ‘Back to Basics’ campaign, highlighting a specific area of focus in a monthly Safety Bulletin. Whilst most of these injuries were ‘minor’ they still warranted addressing. To stop these types of events reoccurring, analysis was undertaken to reveal probable causes, and where required, resulted in additional measures being put in place. By getting back to the safety basics, we are refocusing our attention on simple yet important things – the fundamental principles of staying safe and well at work.
- Conclusion of the **Safety Leadership Academy** after 46 sessions and more than 2,300 participants. The program was designed to empower leaders and improve our safety culture and systems, educating our people on the standards, values and supporting behaviours. A version of this program will be developed for new leaders in the business.
- Implementation of the **Fatal Risk Critical Control Project**. Fatal risks are hazardous activities with credible potential to cause death. We have undertaken extensive consultation

with those people in our organisation closest to fatal risks – the people who do the work. From this, 12 fatal risk categories were identified, and a review of our safety controls was conducted to identify those which are effective and those that need some improvement. Our ultimate aim is to eliminate fatal risk events by focusing on the most important controls for each task, and then monitoring them in real time to keep our people, contractors and the community safe. The project is a partnership between our Field Services, Enerven, Network, Safety and Risk teams. While the methodology we’re using is not unique to us, the design and delivery is. Operational input is key to the success of this project and a fundamental aspect of this work right through to implementation. This project represents the most significant step change in safety since the Safety Leadership Academy.

- Implementation of a revised **Personal Protective Clothing (PPC)** policy for some clothing items worn in operational settings. PPC is an important safety control to protect people from harm. After concerns were raised about the level of protection offered by short pants and short sleeve shirts worn in some situations in the field – including sun exposure, cuts, grazes, burns and bites – a proposal to mandate long sleeves and pants was developed, trialed, and rolled out. Obsolete workwear was recycled by our textile recycler into other textiles such as Geofabric.
- **Upgrade of Enablon**, our corporate incident and risk management system. The upgrade allows for the implementation of the Audit, Compliance and Risk modules in support of the integration of data across all aspects of the system. 2023 was the first operational year of the Inspection Module including the scheduling of all assurance activities associated with Safety Leadership, Field Observations, and Workplace Inspections (previously paper-based), providing an organisational overview of compliance, recognition of positive performance/actions and record of opportunities for improvement.

Snapshot: Keeping the focus on worker safety through education, awareness and training

SA Power Networks, Enerven and our contractors never miss an opportunity to communicate lessons learnt when it comes to safety, with regular events and multi-channel communication.

Social and other media a great tool for safety communication

As the huge clean up after the floods progressed along the River Murray, SA Power Networks issued a strong warning about the potentially fatal risk associated with contacting or getting too close to electrical infrastructure. We used a range of media to remind community members and industry – including the waste management, demolition and construction sectors – of the risk of working around energised powerlines.

During the clean-up, people will often operate large vehicles and machinery to undertake demolition or construction work – in these situations, electrical risks are not always top of mind. We urged property owners to engage a qualified electrician to undertake a safety check of all electrical wiring and carry out any repair works that are needed.

Despite the hundreds of electrical assets in floodwater, the large community impacted, and hundreds of emergency services, essential service and other personnel working across many months of flooding and reconnection of supply, there was not one report of an electric shock during the event. Our approach to the safety and wellbeing of the impacted communities, our personnel and other workers won the Premier's Award: Energy and Mining, in the Safety and wellbeing category.

Industry Safety Forum brings everyone together for safety focus

Timed to align with National Safe Work Month in October, we held our SA Power Networks and Enerven Industry Safety Forum. The forum was an opportunity to promote safety, share strategic initiatives and hear from Dr Sean Brady. Brady is a national expert in safety who has undertaken forensic examinations of major national safety incidents. The event saw over 400 people attend, including SA Power Networks Group personnel, representatives from our industry and contracting partners, stakeholders, regulators and safety professionals

Training services – key to safety culture

As an Enterprise Registered Training Organisation, (ERTO) with two dedicated training facilities, one in the metro area and one in the rural area, SA Power Networks' Training Services is well positioned to service the current and future training needs of our employees. Working in the electricity sector is considered a high-risk activity, so safety is paramount. The in-house training provided by our Training Services is specifically tailored to ensure a high level of competence upon completing their qualification, with safety incorporated into every aspect.

Training Services is an enabler for the organisation as there is a really strong correlation between training and safety performance.

Top: No electric shocks reported in 2023 River Murray flood clean-up
Middle: Industry Safety Forum in October
Below: A section of the yard at the Davenport Training Centre



Contractor safety

Our focus on and approach to safety goes beyond our employees, encompassing our contractors and the broader community. We utilise a dedicated Contractor Management System – Sitepass – which enables us to mandate and monitor appropriate safety and environmental compliance standards across our large contractor base. Every year, SA Power Networks and Enerven hold a Contractor Safety Forum to bring together all of our key contractors to hear about the latest developments in the safety space and share experiences about working in the electricity maintenance and construction industry.

The 2023 Forum was a great opportunity for attendees to share experiences on the theme of safety in higher risk workplaces, learn about the latest initiatives on mental health and wellbeing, and network with others.



Case study: Vegetation Management Services Partner utilises cutting edge safety technology

Safety is paramount when trimming vegetation or dealing with fallen tree limbs on or adjacent live powerlines, so we work closely with our vegetation management service provider Active Tree Services (ATS) to trial new technology or innovation techniques.

Key objectives are to promote safety and efficiency, by reducing the time that employees and contractors are required to work at heights, reduce the manual effort involved in cutting and minimise time working near live overhead conductors. A number of innovations have been introduced by ATS including hedgers and the Jabiru (a mechanical rig, that has a cutting arm with two circular blades on the end of an insulated Elevated Work Platform (EWP) boom). Two recent examples are the Magni cutter and the Afron cutter.

Designed for the forestry industry, the new telescopic cutting machine called the Magni can tackle the trickiest of operations, and in 2023 a large storm event provided the perfect opportunity to test it out.

With gale-force winds following extensive rains, a Field Services crew identified an unstable Eucalypt tree in the Adelaide Hills that had the potential of falling onto low-voltage and high-voltage powerlines. When an ATS climbing crew arrived on site to complete the job, they assessed that there was no access for an EWP and the tree was not safe to climb, instead installing a temporary rigging line to make the tree safe overnight.

The following day, ATS returned with their Magni forestry cutting attachment. The Magni can grab, lift, and cut large trees from all sorts of angles and distances, and successfully removed the at risk tree without requiring any operators in the air during the complicated tree removal exercise.



Another new cutting machine trialled by ATS is the Afron, which features a three-star rotating head with 800mm blades at the end of each tip, and is used extensively in the Orchard industry.

Initial trials suggest the technology is promising, with ATS recently using the machine to cut two long spans of Poplar trees. Traditionally this would have required multiple EWPs with many hours of set-up time, but the Afron completed the cutting in under an hour, with no workers required to work at height or in proximity to powerlines.



Conserving the environment

Contributing to positive environmental outcomes

Contributing to



Commitment

Climate change

Achieve credible and ambitious greenhouse gas emissions reduction across our operations, activities and value chain

Circular economy

Embed circular principles across our activities and our value chain with the goal of becoming a net zero waste organisation by 2050

Nature and biodiversity

Contribute to a net-positive impact on nature and biodiversity across South Australia

2023 Progress



Established science-based near-term and long-term reduction targets for Scope 1, 2 and 3 GHG emissions



Reduced our Scope 1 and 2 GHG emissions by **26%** compared to last year



Completed our first Scope 3 GHG emissions inventory



19% of our passenger fleet is electric



88% of our waste is diverted from landfill



65% of the public lights we manage are now energy saving LED



~7,560 public lights converted to LED lamps in 2023



45 charging stations installed across our sites

Conserving the environment

Responsible environmental risk management is core business for the SA Power Networks Group. We recognise that our activities have the potential to impact the environment, whether in the field or office, or our value chain, and we strive to minimise this where possible. To do this, we provide our workforce with the skills, knowledge and resources to protect and improve the environment in which we operate and have influence over. We aim to promote a culture of innovation and be a leader in environmental responsibility.

Climate change

Concerningly, 2023 saw more climate change-driven floods, catastrophic bushfires, record-breaking temperatures, and signs that the current warming trajectory is triggering critical and irreversible Earth System tipping points. Many organisations – including the SA Power Networks Group – have responded by ramping up and focussing their action on emissions reduction, and climate-related innovation, engagement, resilience and adaptation.

Our progress: Achieve credible and ambitious greenhouse gas (GHG) emissions reductions across our operations, activities and value chain.

In 2023 we made significant progress developing our *Climate Change Transition Roadmap*³, which describes our path to net zero. Our goal is to achieve credible and ambitious GHG emissions reductions across our operations, activities and value chain, hence our *Climate Change Transition Roadmap* (due for completion in 2024) will describe our emissions

sources, our near-term and long-term targets, and how we will get there.

The SA Power Networks Group has been collating and reporting our Scope 1 and 2 GHG emissions for around 15 years and have a sound understanding of the material emission sources. We have also developed foundational climate-related metrics and monitor our carbon footprint and intensity.

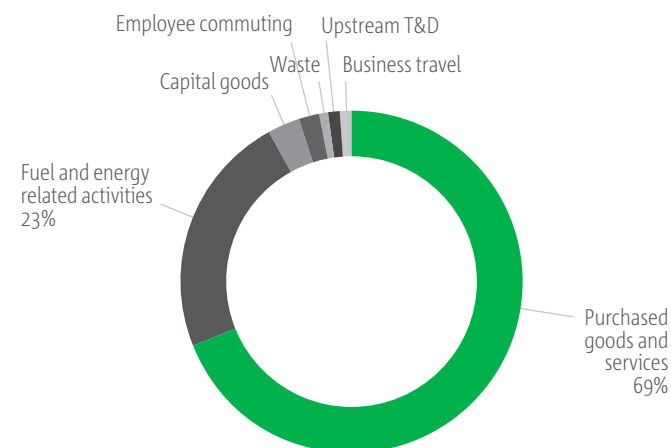
To gain a complete picture of our total carbon footprint, and enable the development of near-term targets, in 2023 we engaged consultancy support to prepare our first Scope 3 (value chain) GHG emissions inventory. A GHG inventory is a list of emission sources and the associated emissions quantified using standardised methods, and enables organisations to accurately account for, manage and report on their full GHG emissions profile and reduction efforts.

Scope 3 GHG emissions are indirect greenhouse gas emissions other than Scope 2 emissions that are generated in the wider economy. They occur as a consequence of the activities of an organisation, but from sources not owned or controlled by that business, hence are often referred to as ‘value chain emissions’. Accounting for the embodied carbon (for example, the raw material extraction, transportation, manufacturing, maintenance and disposal of a product, system or service) is complex, but it is anticipated that the availability and quality of the required data and information will improve as more companies work on their Scope 3 GHG emissions.

The bulk of the SA Power Networks Group’s Scope 3 GHG emissions result from our ‘Purchased goods and services’, and ‘Fuel/energy related activities’. Key materials under ‘Purchased goods and services’ include corporate services/

goods, electrical equipment/hardware, power cables, and contractor services such as asset inspection, maintenance and construction. ‘Fuel/energy related activities’ relates to the production process of the of the electricity and fuels we consume.

Figure 1: 2022 (baseline year) Scope 3 Emissions by Category (tCO₂-e)



When added to our Scope 1 and 2 emissions, Scope 3 represents approximately one third of our profile. This portion will grow in proportion as our Scope 1 and 2 decreases through the electrification of our fleet and the increase in renewable energy generation in South Australia.

³ The title was updated from ‘Climate Change Roadmap’ as reported in the 2022 Sustainability Report to better align with incoming the ISSB Sustainability Standards.

More detail on how we identify, assess, manage and monitor environmental risks and opportunities, including those of climate change, nature and biodiversity, responsible consumption and the circular economy can be found in our *Environmental Matters Management Approach Statement*.

Figure 2: 2022 (baseline year) Total Emissions by Scope (tCO₂-e)

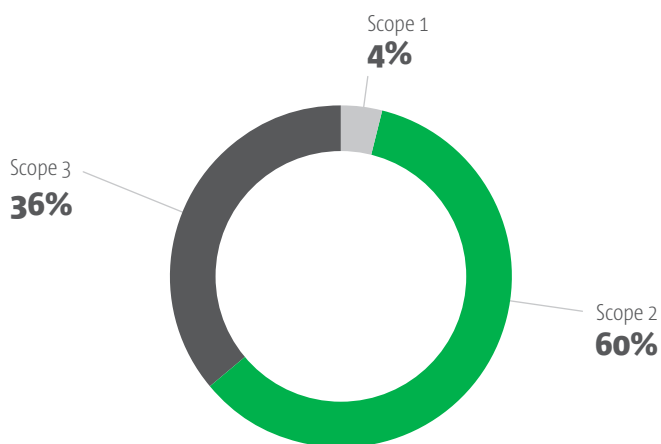
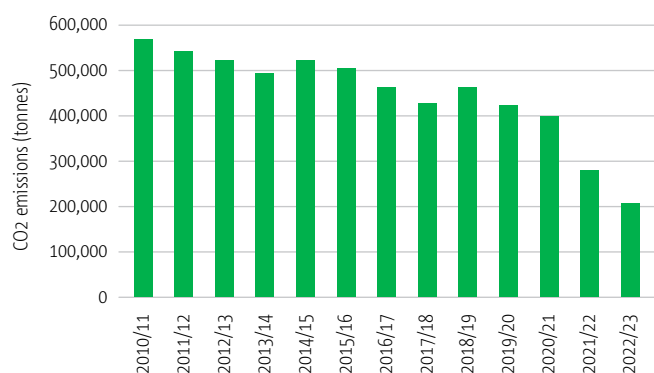


Figure 3: SA Power Networks Group Total Scope 1 and 2 GHG Emissions



Over the second half of 2023 we undertook analysis of our future growth and operations to forecast our emissions over the coming decades and establish Scope 1, 2 and 3 GHG emissions reduction targets. To ensure these targets are aligned to what the latest science tells us is necessary to meet the goals of the Paris Agreement⁴ we sought expert support to ensure they are aligned to the guidance of the Science Based Targets Initiative.

Our goal

Achieve credible and ambitious greenhouse gas emissions reduction across our operations, activities and value chain

How we will get to net zero

Type of emissions and key sources		Near-term targets	Long-term targets	How we will get there
Scope 1	Direct emissions <ul style="list-style-type: none">• Diesel, petrol and natural gas from vehicles, equipment and small scale generation• SF6 from network equipment	Reduce Scope 1 and 2 emissions by 50% by 2030 from a base year of 2022	Net zero Scope 1 and 2 emissions by 2035	Enabling the rapid transition to renewables in South Australia Transition our passenger and light commercial vehicles to EV Phase out SF6 Replacement of public lighting with LEDs
Scope 2	Indirect emissions <ul style="list-style-type: none">• Electricity consumed at offices, depots and facilities• Distribution line losses and electricity consumed by public lighting			
Scope 3	Indirect (value chain) emissions <ul style="list-style-type: none">• Emissions associated with purchased goods and services, fuel and energy related activities, and business/employee travel	Reduce absolute Scope 3 emissions from fuel and energy related activities by 25% by 2030 from a 2022 base year + 70% of our suppliers emissions covering purchased goods and services will have science-based targets by 2028	Net zero Scope 3 emissions by 2050	Working closely with our supply chain partners to optimise product offerings and encourage them to set their own science-based net zero targets
Governance		Innovation	Partnerships, engagement and advocacy	Customer focus

⁴ The Paris Agreement is a legally binding international treaty on climate change which aims to limit global warming to well below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C.

More detail on how we identify, assess, manage and monitor environmental risks and opportunities, including those of climate change, nature and biodiversity, responsible consumption and the circular economy can be found in our *Environmental Matters Management Approach Statement*.

Nature and biodiversity

Global concerns about the ongoing, systemic destruction and pollution of wilderness, wildlife and natural systems, and the over-consumption of natural resources continue to increase. Efforts to tackle this will gain momentum in coming months and years with the adoption of the Taskforce on Nature-related Financial Disclosure (TNFD) guidance, the final recommendations of which were released in 2023. Adherence to, and reporting against TNFD will enable businesses to integrate nature into decision making, and ultimately support a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes.

Our progress: Contribute to a net-positive impact on nature and biodiversity across South Australia.

Although the scale and scope of our day-to-day operations and activities does not have a significant (acute) negative impact on natural habitats and ecosystems, we recognise the inherent impacts that all large businesses can have and strive to minimise any potential damage through a range of biodiversity and natural resources related planning and operational procedures and systems.

In 2023 we sought consultancy support to begin the development of an *Action Plan for Nature and Biodiversity*⁵ and *TNFD Roadmap* to enable the SA Power Networks Group to move toward future adherence to the TNFD guidance and net positive biodiversity outcomes. Calculating nature loss is complex and measuring the impacts of activities and solutions is still maturing, so our journey will be a gradual and staged one.

⁵ The title was updated from 'Biodiversity Action Plan' as reported in the 2022 Sustainability Report to better reflect the intent of this piece of work.

More detail on how we identify, assess, manage and monitor environmental risks and opportunities, including those of climate change, nature and biodiversity, responsible consumption and the circular economy can be found in our *Environmental Matters Management Approach Statement*.

A key step in the development process was gaining an understanding of our business footprint, impacts, dependencies, risks and opportunities with respect to nature. From this assessment, six high-level focus areas for action were suggested, with current and potential activities summarised, and categorised into workstreams. Foundational steps to develop an Action Plan for Nature and Biodiversity that integrates progress on TNFD were identified for the next 12-month period and beyond. The three proposed pillars of our Action Plan on Nature and Biodiversity are:

Progress on developing and implementing the *Action Plan on Nature and Biodiversity* will be reported via the annual Sustainability Reporting Suite.

Three Pillars of the Action Plan on Nature and Biodiversity

1 Integrate & enhance progress on nature	Identify, accelerate and connect current actions to improve nature and biodiversity and connect with community
2 Manage nature risk and resilience	Understand highest threats and opportunities arising from material nature-related impacts and dependencies and develop management plans
3 Build readiness to disclose nature	Monitor nature reporting trends, build internal capability to address the four pillars of the TNFD: <i>Governance, Strategy, Risk & Impact Management, Metrics & Targets</i>



Snapshot: Protecting biodiversity in substation design

Our contestable business Enerven helps companies build and connect renewables projects and strives to ensure any work they undertake considers environmental impacts. In 2023 Enerven undertook the design, procurement, and construction associated with the Goyder Wind Farm Connection Robertstown Substation. The project connected the largest wind farm in South Australia to ElectraNet's transmission network, contributing to the decarbonisation of the State.

Building a substation involves a range of civil and other works, and the design was adapted to include the building of 200m of reinforced concrete culverts below the length of the substation to minimise environmental impact and ensure wildlife, water flows and vegetation in the area were not impacted.

A separate evaporation pond was expanded to capture runoff water, with the soil removed utilised to create a bund to direct the flow path of stormwater away from the pond towards the natural swales. To combat erosion, the pond was hydroseeded.

The project was nominated in the Environment category of the 2023 Premier's Awards for Energy and Mining.

Circular economy

South Australia has a long history of recycling and resource recovery. We were the first state to introduce container deposit legislation in 1975, regulations around product-stewardship for items such as e-waste, tyres, and the first state to ban checkout-style plastic shopping bags in 2009. We are also leading the nation in landfill diversion – over 83% of the waste generated in South Australia is recovered for recycling, re-use or energy recovery, with current focus on improving the circularity of the state's industrial economy.

A more 'circular' economy will result in a drastic reduction in waste and pollution, keeping products and materials in use for as long as possible, allowing for the regeneration of natural systems. By keeping waste out of landfill, we reduce methane (a potent greenhouse gas) and enable the maximum use of materials.

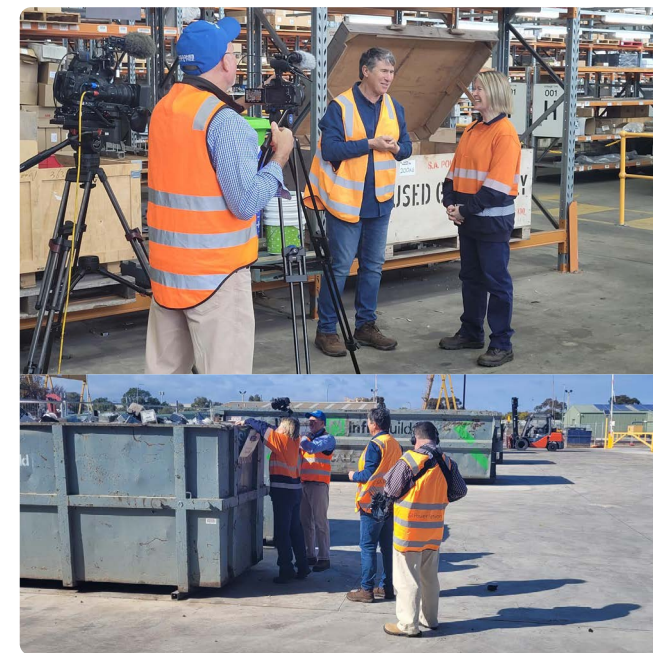
Our progress: Embed circular principles across our activities and our value chain with the goal of becoming a net zero waste organisation by 2050.

The SA Power Networks Group plays its part in the circular economy in a range of ways, both in terms of our high recycling and resource recovery efforts, and our role as a decarbonisation accelerator (refer to the *Transforming energy* section of this report). We hope that by adopting a more circular approach, we will continue to improve business efficiencies and performance, contributing to our goal of achieving net-zero waste by 2050⁶.

Beyond reducing the amount of waste we send to landfill, we strive to procure more environmentally beneficial goods, improve our planning and design decisions to minimise waste generation at the source, and responsibly manage our assets through the whole life-cycle, including repair and reuse. Key highlights in 2023 include:

- An increase in our overall **landfill diversion rate**, to **89%**;
- After the success of our 2022 trial, expanding the replacement of plastic-wrapped pallets with **re-useable tubs**;
- **Engaging with our suppliers** about their products and services to work towards lower GHG emissions and better environmental outcomes;
- Enhancing the management of **waste and recycling data** to enable better access, visibility and accuracy for the organisation;
- Working with our **cable drum and pallet** suppliers to enable a take-back system, whereby their products are **continuously re-used**;
- **Recycling and extraction of precious metals** from disused fibre optic cable and **recycling into other fibres** the workwear made obsolete with the change to long-sleeves and long trousers for Field Personnel. Recycling of workwear will be ongoing after this occurs; and
- **Educating and showcasing our recycling and circular economy efforts**. We produced a story on our waste management journey for 'Outdoors Indoors' a lifestyle show on free-to-air TV. The segment outlined our operations and the types of waste we generate, what happens to different waste streams, and showcased some of the initiatives we've put in place over recent years and their benefits.

We know that to drive and maintain the energy transition, circular economy activities need to accelerate. For example, the demand for the critical minerals and metals that clean energy technologies require is outpacing supply, so recovering them via electronic ('e')-waste is vital. While a circular economy for metals would not eliminate the need for new mineral extraction, it would reduce reliance on extractive processes. Key electronic waste streams that we collect for recycling and resource recovery include computers and mobile phones, batteries, lamps/lightbulbs, toner cartridges, and cable.



⁶ Excluding hazardous wastes and contaminated waste soil.

More detail on how we identify, assess, manage and monitor environmental risks and opportunities, including those of climate change, nature and biodiversity, responsible consumption and the circular economy can be found in our *Environmental Matters Management Approach Statement*.

Snapshot: Use of vanadium flow batteries a first in the Southern hemisphere



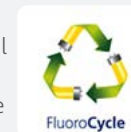
In late 2023, SA Power Networks completed partial commissioning of Yadlamalka Energy's ARENA-backed Spencer Energy project, which is a 4.6MVA / 9MWh battery and 6MW solar farm, located in the mid-North region of South Australia. The significance of this project is the use of vanadium flow batteries instead of the mainstream lithium ion batteries.

Vanadium flow batteries are known to have a number of advantages over lithium ion batteries such as lower cost of storage, having more than twice the duration, no degradation and lower maintenance. Most importantly, these batteries are said to be almost 100% recyclable, have more than twice the life expectancy of lithium batteries (25+ years) and minimum to no fire risk (the electrolyte is 80% water). Due to the higher utilisation and 100% depth of discharge, these batteries can help in storage of more variable renewable energy such as solar.

This is the first commercial use of a vanadium flow battery in not only Australia, but in the whole of the Southern Hemisphere. Once fully commissioned, the project is said to be able to produce up to 10GWh of dispatchable solar power a year and provide grid stability in terms of Frequency Controlled Ancillary Services.

Shining a light for the Fluorocycle program

FluoroCycle, a scheme initiated by the Federal Government and now administered by the Lighting Council of Australia, aims to increase the recycling of lamps that contain mercury and reduce the amount of mercury – a toxic pollutant – entering the environment.



Although we had already been recycling dis-used lamps and lighting gear for many years, in March 2012, SA Power Networks became the first electricity distribution business to become a Signatory (in the Commercial User category) to the scheme. Since joining, approximately 78 tonnes of mercury bearing waste has been processed by our contractor Ecocycle. We also recycle all other types of lamps including LEDs.

Our participation in Fluorocycle is significant, as we are the owner and/or maintainer of over 90% of South Australia's public lighting infrastructure. As LED lighting is much more efficient than traditional lighting and requires less maintenance, our rollout of LED streetlights reduces running costs for state and local governments and associated greenhouse gas emissions.

Connecting and protecting communities

Enhancing the wellbeing of our community

Contributing to



Commitment

Empowering customers and communities through the energy transition

Contribute to a fair and just energy transition through education, awareness and accessibility whilst maintaining affordable energy services.

Genuine engagement, respect and reconciliation

Enhance the breadth and quality of our stakeholder engagement to better reflect the diversity of our communities and the complexity of energy sector issues.

Social value

Investing in strategic programs that enhance positive social outcomes in areas that matter most to our community.

Community safety

Continue to manage risks to improve safety across our community through everything we do.

2023 Progress



Became a Full Signatory to the Energy Charter



\$1.63m
invested in community partnerships and grants



Lodged our **1st** Reconciliation Action Plan (RAP)



Implemented a range of initiatives and actively advocated for energy affordability and equity



Shortlisted for ENA 2023 Consumer Engagement Award for our People's Panel



30 Community Grants awarded across South Australia



Won Premier's Awards for Mining and Energy – Safety and Wellbeing



First electricity distribution business to join Healthy Homes for Renters

Connecting and protecting communities

Empowering customers and communities through the energy transition



Affordable and equitable energy supply

Customer and community-focused content of the 2023 Australian Energy Week conference signalled that there is growing momentum behind the idea of the consumer being the ‘hero’ of the transition, at the centre of a reliable, sustainable and affordable energy system. It is also critical to ensure as the world transitions towards net-zero that it is done so in a just and fair manner and to think ahead to identify and address new forms of exclusion and inequality.

Our progress: Contribute to a fair and just energy transition through education, awareness and accessibility whilst maintaining affordable energy services.

Although SA Power Networks has collaborated on key Energy Charter *#Better Together* initiatives over recent years, 2023 saw our commitment to providing more customer-centric energy services intensify with our move to take up full signatory status with the Energy Charter. We are committed to fostering the industry culture and solutions that are required to deliver on that purpose and recognise that better customer outcomes require a whole of industry approach.

The Energy Charter engages energy companies, regulators, customers, and stakeholders to work together for positive change in the energy sector to improve outcomes for customers across five foundational principles: putting customers at the centre of the business; improving energy affordability; supporting a reliable and resilient energy system, and working towards a lower-emissions future; improving the customer experience; and supporting customers facing vulnerable circumstances. These principles align perfectly with our mission to “provide affordable, safe, reliable, and sustainable energy services for South Australian communities”.

One of the four key themes of our 2025–30 Regulatory Proposal focusses on ensuring an “Affordable and Equitable Energy Supply” for our customers. We strive to put the community voice at the forefront of our core decision-making with regard to the overall pricing outcomes and tariff designs, but there are also other ways we are improving equity, empowerment and affordability – described in the following sections. Our Regulatory Proposal development process focused on talking to customers and the community to understand how we can balance the performance of our

network services and the costs associated with providing them. Overall service/price balance was deliberated on and agreed by the representative People’s Panel and underpins our planned work programs for the 2025–30 period.

We know that for many customers, a sizeable part of their income is spent on energy, especially for people experiencing vulnerable circumstances. Our challenge and opportunity is to ensure an equitable energy supply for all our customers, while also ensuring adequate investment is made to support customers’ desired service levels.

We also acknowledge that while customers can significantly reduce their costs through new technologies such as solar, batteries and electric vehicles, or more efficient appliances, many of our customers do not have the means or opportunity to invest in this cost-saving technology.

Balancing affordability and service levels, managing inter-generational equity, tariff design, and how we support more vulnerable customers were some of the key areas we were keen to learn more about from our customers and stakeholders as we engaged with them throughout 2022 and 2023.



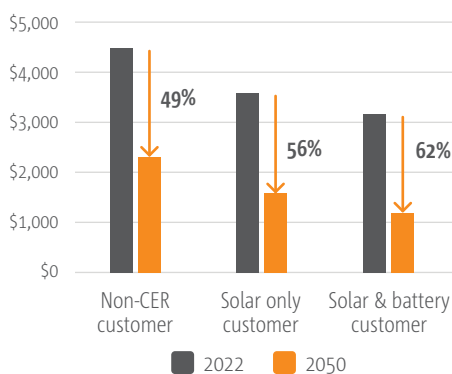
Affordability – customer electricity bills

Cost-of-living pressures are front of mind for much of our community right now, but affordable and equitable access to energy is always a priority for our business. This issue is industry-wide, and requires a lot of collaboration with government, non-government organisations (NGOs), customers and our peers right through the energy supply chain.

As in other states, South Australian customers saw a material increase in energy and other household bills in 2023. Despite increases in wholesale, transmission and retail costs, SA Power Networks lodged our annual pricing proposal for 2023/24 with the AER with a reduction in our network charges for residential customers.

How do we expect household energy bills to change through to 2050?

Average household energy bill reduction (average across scenarios)



The key driver of declining household energy bills is the switch to EVs.

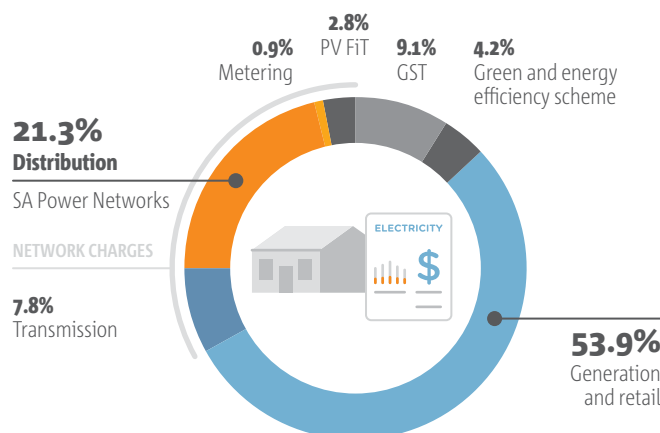
Significant reductions are expected regardless of whether a household has invested in CER.

Total energy bill includes costs relating to electricity usage, gas usage and petrol/fuel

Modelling we undertook in 2022/23 indicates that total household energy bills (including electricity, gas and transport fuel) are forecast to decline by approximately 50% by 2050. The decline arises from the transitioning to a renewable electricity fuelled economy and all consumers, irrespective of if they have invested in Consumer Energy Resources (eg solar, batteries, EV) will receive some benefit compared to current energy bills. To unlock the full bill saving of approximately 50%, the key driver is the large-scale switch to EVs, which is due to take place between 2030–2040 and will fuel substitution in the commercial and industrial sectors.

This is a promising prediction, made all the more remarkable by the forecast growth in electricity volumes set to flow through our network by 2050 – more than double the GWh than current day.

Breakdown of typical residential electricity bill in SA (2022/23)



Playing our part – energy equity and affordability

In response to the ongoing cost of living crisis faced by much of Australia, the May 2023 Federal Budget included several new initiatives to give residents and businesses electricity bill relief. Energy Charter Signatories – including SA Power Networks – collaborated to commit to support customers and communities experiencing vulnerability due to the impact of increasing cost-of-living pressures through an Industry Statement of Support (SoS). The commitment was to work together to address cost-of-living pressures for customers.

The Energy Charter 2023 cost-of-living initiatives include the National Concessions Awareness and Engagement Campaign ‘Keep the Money. It’s yours’ which supports the large number of eligible consumers that are missing out on available energy concessions⁷.

Other commitments enacted by SA Power Networks to help ease the cost of living, address vulnerability, and contribute to a fair and just energy transition included:

- Partnering with retailers to pioneer a **Pre-Disconnection Field Visit** initiative to customers who are on the disconnection pathway due to non-payment, in an effort to increase engagement with the retailer. At the time of the visit, customers are also provided with information about support services such as the SA Financial Wellbeing and Resilience Program and the National Debt Helpline. The trial showed a significant increase in customers engaging with their retailers and a reduction in disconnections for non-payment by customers, which is usually driven by circumstances and not by choice.

Building on this trial, we also actively contributed to the Energy Charter **Knock to Stay Connected Program** and

⁷ Research by the Melbourne Institute: ‘Taking the Pulse of the Nation Research’ indicates that close to 60% of people eligible for energy concessions could be missing out.

More information on how we are investing in programs that enhance positive social outcomes, how we approach customer and stakeholder engagement and reconciliation, what we are doing to provide affordable and accessible energy services, and how we contribute to a fair and just energy transition can be found in our *Social Matters Management Approach Statement*.

the development of a nationally consistent, customer-led **Knock to Stay Connected Customer Code**. Launched in June 2023, the Customer Code aims to keep customers connected to their electricity supply, build better practice across energy networks and retailers, and result in better customer outcomes. We are currently working with retailers to explore how we can continue the Knock to Stay Connected Program, including incorporation into ongoing business. We are also planning to develop a new **Vulnerable Customer Assistance Program**;

- Actively **developing and enabling new energy products, services, tariffs and markets**, including supporting community benefit initiatives (eg energy efficiency, solar PV and batteries) which can make energy more affordable.
- Proactively **addressing risk-factors and structural and systematic issues** by connecting cheaper renewable generation in an efficient and coordinated way that maintains reliability and minimises costs, and using new technology to maximise the utilisation of the distribution network, reducing the need for additional network investment.
- Customer energy resources and networks are central to the delivery of a **least cost energy transition**, with the AER State of the Energy Market report 2023 highlighting the importance of effectively integrating these resources to avoid the need for more costly grid and generation investment, and the acknowledgement that regulatory barriers needed to be removed. SA Power Networks has effectively advocated for this kind of change in regulatory rules;
- Participating in the **PowerUp Advisory Group** assisting in the design and delivery of the Energy Consumers Australia (ECA) PowerUp: Consumer Voices in the Energy Transition research program. PowerUp seeks to explore consumer values, needs and preferences in relation to Customer Energy Resources (CER – solar PV, batteries and EVs), including the trade-offs households are increasingly being asked to make between cost, control and behaviour change. Understanding these elements, what they mean, and the impact they have on different consumers is critical to building an energy system that meets consumer expectations.

Snapshot: Our contribution to keeping electricity affordable

Our distribution charges make up around 22% of the typical average residential electricity bill in 2023/24. Our charges have not changed in real terms since 1999 and are about \$11 per week for the average customer. The distribution component of the bill for a typical residential customer has reduced in real terms from \$765 to \$570 over the period since 1999.

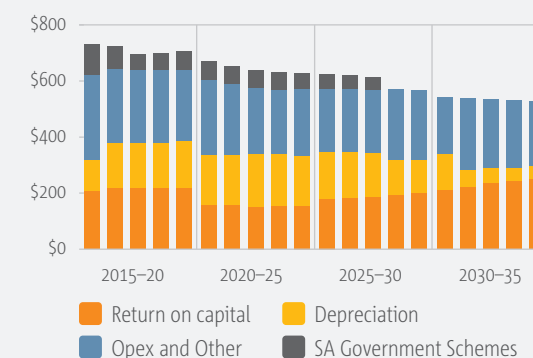
Encouragingly, modelling we undertook in 2022 indicates that our average network price, currently around 9c per unit of energy carried, is forecast to hold roughly steady to the end of this decade before gradually reducing to around 5.5c by 2050. This is despite network capital investment being forecast to increase over that period, and results to a large extent from the additional energy our network will be required to carry as electric vehicle take-up accelerates.

In our upcoming regulatory control period of 2025 to 2030 we acknowledge the current cost of living pressures on the community with affordability being a key customer and stakeholder concern. In an attempt to provide some bill relief in the first three years of the new regulatory period we are proposing a revenue smoothing profile which minimises distribution bill increases in the first

three years of the 2025–30 period. There will be a step up in distribution bills in Year 4. However, the impact of this step increase on customer bills will be offset by the conclusion of the SA Government PV Feed in Tariff scheme (44c/kWh) in June 2028 lowering residential bills on average by \$46.

We believe the long-term energy outlook is bright, but it will be a challenging journey for many in the short term. Nonetheless, we are playing our part to keep prices under control and continue to work with organisations and the State Government, to make sure that members of the community experiencing vulnerability are supported as best as possible.

Breakdown of Distribution costs for average residential electricity bill in SA



- Undertaking **detailed research into what customers value**, and what they are willing to pay for in the way of new or enhanced energy products and services. We use the results of this research, along with the **customer voice and lived experience to inform the design and delivery of our energy services**. Our 2025–30 Regulatory Proposal was developed in close consultation with our customers (including those experiencing vulnerability and their advocates) and stakeholders, including our **Community Advisory Board** and **People’s Panel**. We also have a range of ongoing work we engage our **Community Reference Group** on, focused on issues facing particular groups within the community, particularly vulnerable customers.
- Engaging with targeted groups, including our **Culturally and Linguistically Diverse (CALD)** and the **Deaf and Hearing Impaired** communities to help bring new voices to the ‘future energy’ conversation and to involve members of our community who may otherwise not get involved or who experience barriers to participation. We worked closely with key leaders in each target group over our Regulatory Proposal engagement process to host conversations appropriately and inclusively.
- **Providing** clear communications with customers and communities about the **availability of energy support and concessions**, and where to get help. In 2023 we collaborated on the development of the Energy Charter’s **#BetterTogether Energy Literacy ‘Train-the-Trainer’** initiative. Inspired by the Voices for Power project, the initiative brings cultural, religious and community leaders together to build collective energy knowledge and capability in diverse communities, with the aim of improving accessibility to clean and affordable energy solutions. The program model trains and mentors a cohort of ‘Community Energy Trainers’ who deliver culturally appropriate energy literacy workshops to diverse communities. It also aims

to address other barriers, such as individual financial management to support the growing demand for in-community financial counsellors with specific cultural or language knowledge, and partner with different communities facing vulnerability, including First Nations, older Australians, renters, young people and unemployed. SA Power Networks will be a contributor to the newly announced Federal Government Industry Funding Model for Financial Counselling.

- **Transforming the customer experience** to make energy services and options through us simple and accessible (refer to the *Improving customer experience and empowerment* section below).

Advocating for positive change

Our Strategic Direction to 2035 emphasises the opportunity to influence change through deep stakeholder engagement, strong partnerships, and clear, evidence-based advocacy. In doing so, we aim to benefit our customers, the business, and South Australia in general.

In 2023 the South Australian Government released a *Green Paper on the Energy Transition*, the first step in developing a whole-of-government energy plan that will be the foundation for economic development in South Australia to 2050.

Key recommendations in our response submission included:

- Development of an *SA Energy Transition Roadmap* that considers the future role of a range of fuel sources and demand and supply side policies, to achieve efficient ‘whole of energy system’ outcomes.
- Policy and budget support to improve the efficiency of South Australia’s existing housing stock, with a key focus on rental properties and social housing.

- A mechanism to remove ‘split incentives’ on rental properties and better access for rental tenants to technologies that can dramatically impact their energy use and bills.
- The establishment of technology standards that will allow South Australian homes to optimise their energy use much more easily, to achieve benefits for consumers and the entire energy system.
- Reform of the current Energy Advisory Service, with a focus on providing trusted, unbiased and more personalised advice to consumers on meeting the entirety of their energy needs.
- A strong public policy commitment to a South Australian Electric Vehicle sales target, as a key mechanism to decarbonise.

In addition to our submission to the *Green Paper on the Energy Transition*, we submitted feedback to the:

- Essential Services Commission of South Australia (ESCOSA) Inquiry into Retail Energy Prices expressing our strong support of the review to ensure that customers are paying no more than is absolutely necessary for energy and any actions that might be taken to improve energy affordability; and
- review of the South Australian Residential Tenancies Act, highlighting the need for strong action to improve the energy efficiency of homes, particularly for renters.

Although more clean and affordable energy generation and distribution is needed, we believe that it is vital that we use energy ‘smartly’ and that our homes are as energy efficient as possible. The efficiency of existing housing stock is a critical issue impacting energy costs and health outcomes.

That is why in 2023 we became the first Australian electricity distributor to sign on to the Healthy Homes for Renters initiative, a national collaboration of about 100 organisations

calling for minimum energy efficiency standards for rental homes. By improving homes' energy efficiency, we can significantly reduce energy bills for those least able to do so and contribute to decarbonisation. It will also mean less investment will be required in the supply side – generation, networks, storage and firming capacity – to meet household demand.



Snapshot: Looking after those experiencing vulnerability

Vulnerable Customer Strategy

Access to an essential service, such as electricity, is necessary to sustain the health and wellbeing of our community. Many customers will need more support as we transition towards the new energy future, particularly those experiencing financial or medical difficulties, people with a disability, from culturally and linguistically diverse backgrounds, and the elderly.

We care about our customers who find themselves in vulnerable circumstances, and work closely with our Community Reference Group to implement our *Vulnerable Customer Strategy*. The strategy outlines the key ways in which we can and do help address vulnerability, and our top priorities with respect to implementing the strategy. Over 2023 we continued to make progress in delivering the initiatives under the strategy (detailed throughout this section of the report).

System-wide collaboration to drive change

One of the aims of the Australian Energy Regulator's (AER) *Toward energy equity – a strategy for an inclusive energy market* is to advocate for sector-wide 'game changer' reforms. Although governments and industry have invested significantly in concession and rebate programs, it is clear that there are systemic challenges in supporting consumers experiencing vulnerability.

The AER's 'Game Changer' project has been developed to drive systemic change and advocate for an energy system and market that is inclusive of a broader range of consumers, and which provides better outcomes for

consumers experiencing vulnerability. Our CEO Andrew Bills is a member of the Game Changer Leadership Group, a group of senior stakeholders from industry, government, market bodies, ombudsman schemes and consumer advocates established to provide direction and input at key stages of the project. One of the outcomes in 2023 was the provision of recommendations to the Energy Ministers Meeting on nationally led policy change to better support energy customers in vulnerable circumstances.

#BetterTogether Life Support initiative

In 2021, an Australian Energy Foundation Report identified that up to 68% of Life Support Customers incorrectly expected priority power restoration within 2 hours and 54% did not have a plan in place for back-up power.

Commenced in 2022 and continuing in 2023, the #BetterTogether Life Support initiative formed the Life Support Medical Advisory Group (LMAG) which is working with customer representatives, medical professionals, retailers and distributors on a draft Rule Change focused on improving experiences for Life Support Customers. Led by SA Power Networks and Essential Energy, key benefits include:

- Re-defining Life Support Equipment
- Creating a National Standard Medical Registration Process that enables specialist registered medical professionals with greater guidance regarding their patients who have life support equipment in their homes
- Introducing a National Household Life Support Equipment Back-up Plan Template that includes medical professionals in back-up planning
- Committing to an inclusive National Awareness + Engagement Campaign targeting all Life Support Customers and their supports.

Improving customer experience and empowerment



Customer experience choice and empowerment

It is no accident that the customer is at the heart of our Regulatory Proposal themes diagram – customers' needs are only going to become more important to our business as the energy transition adds both complexity and flexibility in their energy use. To make energy easier for our customers, we need to provide them with the most accurate and relevant information, in the ways they want to receive it. And whilst things like artificial intelligence (AI) and Machine Learning will support customers to make the right decisions regarding their interaction with energy, we recognise that there is too much complexity and consumers need to be empowered to participate to make good choices.

Our business provides electricity to the entire state of South Australia, with over 900,000 residential and business connections supplying 1.7 million South Australians.

Through extensive customer research we have heard a variety of opinions from customers about what they need from their electricity supply. They also told us that they find the electricity sector very difficult to understand, so are looking to us for guidance and support. By 2030 a majority of our customers expect that how they interact with electricity will have changed. Some of them were optimistic for the future, others not so. They mostly agreed that there would be a greater reliance on green energy, and this would create opportunities about how they would meet their energy needs. We know that we must transform our customer service capabilities to

meet the challenges and opportunities of our rapidly evolving industry and increasing customer interactions.

Initiated in 2023, our Energy Services Program of work will assist us deliver a transformation of our energy services in our next Regulatory 'Reset' period 2025–30, and is designed to deliver the modern systems, initiatives and skills to better enable us to provide an experience that aligns and evolves with our customers' expectations and delivers value from their perspective, be it sustainability, cost or efficiency. The initiatives aim to transform the customer experience to provide a fast, seamless, positive, helpful and consistent customer experience regardless of the channel a customer chooses to use, with a focus on growing digital channels as a customer-centric platform.

We must transform our customer service capabilities to meet the challenges and opportunities of our rapidly evolving industry and increasing customer interactions

This year, digital native customers will overtake traditional customers in volume, requiring greater customer service experience and customer centricity in service delivery – both via online and traditional channels.

There has been a significant demonstrated growth trend in our customer service interactions, presenting an opportunity to leverage digital channels to offer more scalable and on demand services.

The energy transition is driving the need for deeper customer centricity as more customers bring distributed assets onto the network and expect a higher level of transparency related to the performance of their assets.

SA Power Networks' ageing customer service technology capabilities need to be modernised to keep up with industry and customer changes and regulatory compliance obligations.



We expect to deliver a step change in capital works on our network in the next period, this will drive further increases in our customer interactions.

Net zero targets and electrification of the state will drive increased and evolving connections, alterations and demand on our network.

Metering contestability and the acceleration of the advanced meter roll-out will bring increased challenges and opportunities for our customers and our business.

In the context of the energy transition, NEM reform will continue. We need to build the agility and flexibility to maintain our market compliance and be positioned to advocate for and leverage opportunities.

Snapshot: Personal focus on customer satisfaction

Like most service-based companies, the customer is central to what we do, and we pride ourselves on delivering great customer service. One of the ways we measure customer satisfaction is through a survey which looks at gathering insights from customers who have had an interaction with us across four key service areas – planned interruptions, general enquiries, unplanned interruptions and new connections.

The insights collected are benchmarked against two other distributors nationally and at SA Power Networks we have an established company-wide target of 7.8 out of 10, which is generally over and above the benchmark score. While we have been collecting these insights since 2018, and have performed well, we are yet to meet the corporate-wide 7.8 target.

To get us there, in 2023 we kicked off embedding customer satisfaction measures into the performance monitoring of key roles across the business. Each quarter, involved groups come together to talk about service delivery end-to-end and identify areas of opportunity where improvements can be made, with a greater focus on customer experience. This new process yielded positive results, including process improvement identification, and see us edging closer to our corporate-wide target.

As we look ahead to a more efficient and streamlined customer experience, the relevance of understanding our customers and their end-to-end experience is becoming increasingly important.



Highlight: Field Days and Festivals – a great way to connect with and protect our regional communities

SA Power Networks has had a presence at country Field Days for many years. They are a positive and practical way for our technical experts and local depot personnel to answer questions about customers' energy options and promote farm safety.

Spring is a busy time for events and shows across South Australia, and we took our newly-configured stand to several country Field Days. In addition to the ever-popular Elevated Work Platform photo bucket and free paper hard hats, it now includes a seated area for customers to come and have a chat about their energy, and a virtual reality 'Tractor Hit Pole' simulation.

Also attending several of our Field Days and other events were members of our Community Advisory Board (CAB).

Our CAB consists of a broad range of stakeholders with an interest in shaping the decision-making of SA Power Networks and includes customer advocacy representatives. By attending events such as these, they were able to hear directly from our customers.

Tunarama – a uniquely South Australian event

Celebrating Port Lincoln's famous seafood and regional arts and culture, Tunarama, was held early in 2023 for the last time after 60 years. SA Power Networks has hosted a stall at the event for several years, enabling our local and Adelaide staff to talk with customers about fault finding, solar, batteries, energy efficiency, and the transition to a more sustainable future through renewables. Some farmers were especially excited to chat with our team about the future use of drones for patrolling purposes, to reduce impacts on farming properties. Two of the more famous events are the tuna-tossing competition and the tug-of-war – our SA Power Networks tug-of-war team came runners up to the SA Police team.

Genuine engagement, respect and reconciliation

We know that to achieve our strategic goals and be a leading force in the successful transition of the energy sector in our State, we will need to collaborate with our stakeholders, partner with our customers and advocate for positive and constructive change. We have already made significant strides in the way we involve customers and other stakeholders in decision making on key issues and have been recognised by the industry and the Australian Energy Regulator for our customer engagement processes. We also continue to improve our Stakeholder Engagement Framework, and Customer feedback formed the foundation of our 2025–30 Regulatory Proposal. The proposal is our future plan for the network –driven by what our customers want and their preferences for the future.

Our progress: Enhance the breadth and quality of our stakeholder engagement to better reflect the diversity of our communities and the complexity of energy sector issues.

We engage with a broad and diverse range of stakeholders across the State, and we’re committed to improving the way we engage with these groups, understand, and consider their needs in our decision-making. Our key stakeholder groups and how we engage with them is summarised in our *Social Matters Management Approach Statement*.

Our most significant and deepest engagement with customers and stakeholders centres on our Regulatory (Reset) Proposal, determining our service targets and business and network plans to achieve them for each regulatory period (five years).

Engagement on our 2025–30 Regulatory Proposal included a series of regional and metro workshops, deep dives, collaboration with our business-as-usual Community Advisory Board and other Working/Reference Groups, and culminated in 2023 with our ‘People’s Panel’ process.

Our comprehensive Regulatory Proposal engagement reinforces our commitment to working with our customers and stakeholders to understand their needs and deliver services they value. We believe that our relationships with our stakeholders and our willingness to engage with our customers and to listen and respond to their needs, is fundamental to achieving balanced outcomes for our customers and community.

Our People’s Panel comprised an independently selected group of 51 representative South Australians, reflecting the diverse mix of customers that we have – representing the regions, homeowners, renters, solar and non-solar customers, and a wide range of age groups. The People’s Panel considered the recommendations (developed by SA Power Networks after intensive engagement with customers) for the 2025–30 Regulatory Period, working together to find the right balance of cost and services that benefit everyone.

Where consensus was reached by the People’s Panel, SA Power Networks accepted all recommendations and reverted to the recommendations from the Focussed Conversations engagement phase on non-consensus items. Following on from this, the Draft Regulatory Proposal was put out for broader consultation. Responses were largely positive, with stakeholders generally supporting our proposed service levels and investments, strong support for our vulnerable customer work, and strong support for proposed investments to support the energy transition and resilience. Pleasingly, representatives from the People’s Panel re-affirmed that the subsequent Draft Proposal reflected their recommendations.

2025–30 Regulatory Proposal – People’s Panel



51
Panel members



1,500
hours face-to-face
deliberation



350+
hours of self-directed
research



15,000km
travelled to
participate



44
workshops hours



11
topics



25
recommendations
made



30+
decision makers and
observers from Board,
Senior Executives, CAB,
CCP and AER staff



50+
resources



15
discussion threads
with 108 comments

Snapshot: Engaging with our vital energy services industry partners

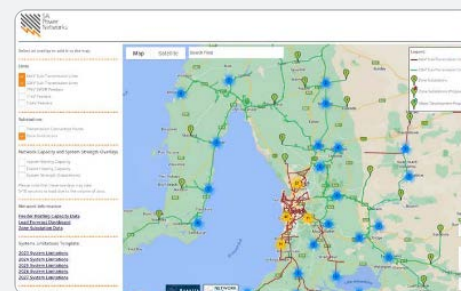
The electricians, solar PV, battery and EV charger installers, system designers, engineers and broader energy services industry are all an integral part of the energy transition, and we strive to make our processes around these as easy as possible. We also provide information and training and participate at industry events.



In 2023 SA Power Networks participated in the National Electrical and Communications Association (NECA) Roadshow and the Master Builders Home Show. Both events enabled valuable conversations with electricians, service providers and customers.

We also hosted a Distributed Energy Resource (DER) Compliance webinar targeted at solar retailers and installers in South Australia. We discussed the challenges faced in managing a once one-way network with now the dual flow of load and generation. Congestion in local networks, high voltages, transformer overloads, and system-wide security risks were highlighted to show the impacts to both customer and the grid.

Demonstrating practical approaches to managing DER Compliance, including SmartInstall, Flexible Exports, Export Limits, and Volt-VAR, as well as an automated compliance management process that notifies users via email when solar installation compliance is under 90%, our purpose was to build the knowledge and skills of solar retailers and installers to manage their DER installations and help shape the future of consumer energy resources in South Australia.



Network Visualisation Portal and Facilities Access Portal making it easier for service providers to plan connections and lease infrastructure

In response to customer needs, in 2023 SA Power Networks published a Network Visualisation Portal that provides customers with a visual indication of network capacity, for both importing and exporting to the grid.

We expect this tool will offer a significant benefit, particularly to our larger customers, by providing them with an immediate indication of network capacity for a given location – they can readily see where the network can more easily accommodate large load or generator connections. At this stage, the data provided via the tool (accessible from our corporate website) is a high-level estimate, but we expect to

continue to refine and increase the accuracy in the tool to better inform customers.

Third-party customer equipment is attached to our infrastructure in more than 150,000 locations across the state. This includes things like having telecommunications equipment attached to Stobie poles for improved mobile and internet services for our communities.

To make the process easier for customers and third parties to lease our infrastructure across South Australia – reducing their deployment costs and benefitting the community – in 2023 we also launched a new public-facing Facilities Access Portal. The portal shows our business' available assets on a map, so third parties can easily choose the ones they're interested in renting and provides a quick way for them to submit an expression of interest for use.

Reconciliation

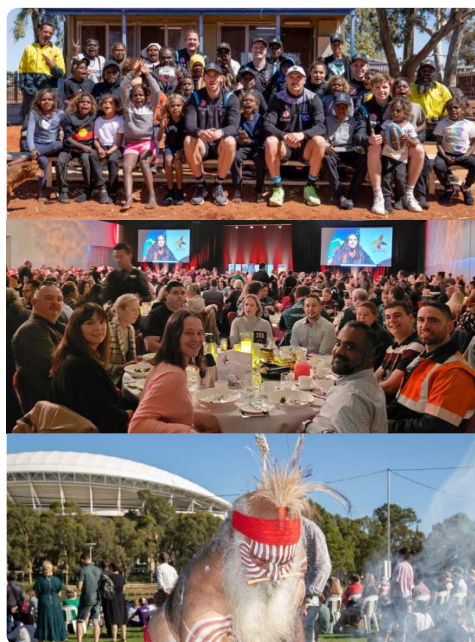
Our approach to reconciliation until recent years has been well-intended, but inconsistent and fragmented. However with our first Reconciliation Action Plan, we are endeavouring to mature our approach to integrate all aspects of reconciliation into our organisation, as well as improving how we work externally with community.

The first stage will focus on awareness raising and education, and capitalising on our unique position and role to build on existing reconciliation opportunities:

- As our network and operations are hosted on the lands of multiple Traditional Owner Groups, and we are part of dozens of regional towns across the entire State, we have a large sphere of influence to naturally build our relationships with local communities and employ Indigenous owned and operated suppliers.
- We acknowledge connection to country and know that Aboriginal heritage sites provide an important link with traditional cultural heritage so have always striven to respect this when planning projects and will work with Traditional Owners to ensure sites of significance are not disturbed.
- We recognise and support significant cultural events such as NAIDOC week, Harmony Day, and Reconciliation Week. In 2023 our people recognised the week with a morning tea, attendance of the National Sorry Day breakfast, and sponsorship of the Lowitja O'Donoghue Oration for the second time, with our funds going towards bringing 93 secondary school students from across South Australia to attend the

event. The Don Dunstan Foundation runs the Lowitja O'Donoghue Oration, in honour of influential Aboriginal leader, Dr Lowitja O'Donoghue AC CBE DSG.

- A range of communications and educational opportunities on the 2023 Voice to Parliament Referendum were made available to our staff, including a dedicated "Insight" session presented in collaboration with the Reconciliation Action Plan Working Group. The online forum sought to support our people in making their own informed decision, covering fundamental information about what a referendum is, what the constitution is, what question was being asked, and where to find reputable information.



Highlight: Lodgment of our first Reconciliation Action Plan (RAP)

In October 2023 we formally lodged our first RAP – a very exciting and important milestone in our reconciliation journey. Our Reflect RAP was co-developed with our RAP Working Group and guided by Reconciliation South Australia. The four key pillars that comprise our activities are:

- Relationships
- Respect
- Opportunities
- Governance and reporting

The priority actions under each of these pillars reflect what is required to build a strong foundation for our first RAP. Key actions under the plan include recruiting a First Nations RAP Coordinator to lead implementation, dedicated awareness raising and education of the importance of reconciliation and Aboriginal cultural heritage, mentoring and employment opportunities and investigating further opportunities to source from First Nations businesses.

Another exciting milestone as part of our RAP journey was the commissioning of a First Nations artist to produce an artwork to form the visual centrepiece for our RAP. We partnered with Country Arts SA to engage a South Australian First Nations artist to create a visual artwork representing our reconciliation journey. There was a diverse and highly skilled group of applicants for this opportunity,

with the selection committee (comprising members of our RAP Working Group) selecting Presten Warren a young and emerging South Australian artist - which aligns with our business being at the very beginning of our RAP journey.

Born in Port Augusta and raised in Ceduna, he is a proud Wirangu/Dieri/Kokatha/Mirning man, currently living in Port Lincoln. Walking in the footsteps of his grandmother who taught him about Aboriginal art, Presten honours his culture by keeping this important tradition alive.

Presten's artwork – entitled 'Empowering South Australia' – depicts the role SA Power Networks and Enerven have in the community and the reconciliation journey on which we are embarking. Presten hopes *"that this piece and what it stands for, combined with [our] first ever Reconciliation Action Plan, will be embraced by the people of SA Power Networks and can be integrated seamlessly into the workplace culture to create better outcomes and a better future for everyone."*



Social value

More than just an essential service, the SA Power Networks Group is proudly South Australian and a strong supporter of the South Australian community and economy, and believe that clean, reliable, affordable electricity will become the key foundation of the State’s economic growth. We strive to increase the positive, meaningful impact – the social value – experienced by our customers, communities and workers over the long-term through our initiatives and actions, particularly in the context of the cost of living crisis, the energy transition, and climate change.

Our progress: Investing in strategic programs that enhance positive social outcomes in areas that matter most to our community.

In a similar vein to the Australian Government’s first national wellbeing framework (Measuring What Matters Framework), and in an effort to better understand, articulate and measure the social value we believe we provide, in 2023 we began developing a Social Value Scorecard. The Social Value Scorecard is the first tool we’ve developed to measure the impact of our operations and programs that improve the economic, social and environmental wellbeing of our people and the customers and communities serviced by our network.

Developed to utilise current measures and reporting, five key areas of social impact and a range of measures were identified as relevant for the SA Power Networks Group.

We have begun to measure our progress against the social value measure domains, which enables us to chart where we are improving, and what areas need more focus. In 2023 we saw significant improvement in key areas such as measuring workforce engagement, an increase on waste diverted from landfill and the ongoing growth in the use of renewable energy sources to service the community. Areas that trended negatively include a reduction in employee volunteering hours, a significant increase in customer power bills (mainly due to record high wholesale energy prices) and impacts on reliability as a consequence of extreme weather events. We plan to mature our approach to measuring and monitoring social value and impact over coming years.

Social Impact Areas	Impact on our customers, safety and affordability	Impact on workforce safety, engagement and development	Impact on economic development and employment creation	Impact on environment and sustainability	Impact on community development and corporate responsibility
Social Value Measure Domains	<ul style="list-style-type: none">• Customer satisfaction• System reliability• Affordability• Community safety	<ul style="list-style-type: none">• Employee safety• Workforce engagement• Gender equality• Learning and Development	<ul style="list-style-type: none">• Local expenditure• Number of jobs• Number of regional jobs	<ul style="list-style-type: none">• Carbon emissions• Environmental incidents• Waste diverted from landfill• Renewable energy	<ul style="list-style-type: none">• Sponsorships and partnerships• Community grants• Volunteering
Key Linkages	<ul style="list-style-type: none">• Energy Charter• Customer Strategy• ESG reporting	<ul style="list-style-type: none">• People Strategy• ESG reporting	<ul style="list-style-type: none">• Growth Strategy• ESG reporting	<ul style="list-style-type: none">• Sustainability Strategy• ESG reporting	<ul style="list-style-type: none">• Energy Charter• Customer Strategy• ESG reporting

Contributing to economic development and investing in our communities

Our activities positively contribute to the economy through employment, infrastructure projects, innovation, investment, education, philanthropy and procurement.

As the sole electricity distributor in South Australia, servicing around 1.7 million customers, SA Power Networks understands how important our service and operations are to the wellbeing and prosperity to all South Australians. The electricity and energy services we deliver powers South Australian businesses, enables the economy to grow and our residents to thrive. Further, we believe that enabling the decarbonisation of our grid will encourage energy-intensive industries to set up or expand in South Australia, as more and more businesses will be searching for low-cost, zero-emissions energy sources.

Infrastructure projects – such as the connection of new and upgraded embedded generation and asset relocation for industry and government that we design, construct and maintain – facilitate economic development and provide employment for a range of contracting industries and specialists. We are also a big procurer, and the goods and services we purchase pumps money into the local and Australian economy, particularly benefitting small businesses and South Australian-based companies.

Our pioneering innovation work has resulted in numerous collaborations and partnering with governments and the private sector to trial technologies and approaches – this significant research and development investment not only helps us tackle some of our current challenges, but lays the foundations of longer term business and sector sustainability.

Snapshot: Supporting connectivity on Kangaroo Island

In late 2023 we announced the building of a 150-kilometre long fibre optic connection to Kangaroo Island, a renowned eco-tourism destination off the South Australian coast. The connection will help manage our electricity network, but also opens the opportunity for the Island to have the fibre connection it has been seeking for some time.

The new fibre optic cable has the potential to provide the Island and western Fleurieu Peninsula with greater mobile phone coverage, faster and more reliable internet, and access to cloud services – all of which will be a boon for residents and tourists, health and education providers, government, industry, and businesses according to Regional Development Australia.

The \$7 million project involves connecting our Keswick operations centre with the Kingscote substation and utilising fibre cores included in our undersea power cable linking the Island to Cape Jervis. Works began in 2023 and are due for completion in mid-2024.

Snapshot: Partnering in innovation – backing Australian technology and talent

As the Distribution System Operator at the heart of the energy transition in South Australia, technology and innovation play a fundamental role in how we do things. We approach innovation as ‘change that adds value’ and have incorporated innovation into a wide range of systems, functions, and processes, with a focus on improving safety and efficiency.

We have a growing range of careers that are innovation and technology-focussed, a dedicated Innovation Team and a Network Innovation Centre, and utilise artificial intelligence, machine learning, electric vehicles, drones, robotics and virtual reality technology to deliver our services and operate our network. We actively encourage and support students to consider a career in science, technology, engineering and mathematics (STEM) and technical trade fields, with vacation, work experience, scholarships, Graduate Development and Apprenticeship Programs.

We undertake a range of trials and pilots in partnership with industry leading solutions providers in the private sector, often supported by funding and/or research through the Australian Renewable Energy Agency (ARENA), the Electric Vehicle Council, and the RACE for 2030. We also work very closely with our key stakeholder groups such as the South Australian Government, Energy Networks Australia (ENA), AEMO, and ElectraNet.

Over the last decade we have demonstrated our industry leadership in integrating distributed energy resources like rooftop solar PV, household batteries, electric vehicles and Virtual Power Plants (VPP) into the distribution network. This work not only contributes to the progress of innovation, it helps grow the Australian talent behind it, and fosters the economic prosperity of South Australia.

Community Partnerships

Contributing to the communities where we live and work – including supporting community organisations and events – has led to many valuable long-term partnerships. Our Community Partnerships program has operated since 1995 and supports a wide range of community organisations and aspirations.



In 2023 we were proud to announce a partnership with the Zahra Foundation, providing hope and support for those affected by family and domestic violence. Through our partnership, we proudly support the Pathways to Empowerment program, a transformative nine-week journey for women and non-binary individuals who have endured the devastating impact of domestic and family violence.

The success of our Community Grants program continued in 2023, with over 300 applications for grants which responded to our four focus areas: keeping the community safe; supporting SA Power Networks customers and community; supporting a sustainable SA; and supporting innovation for future growth. Following a competitive process, grants of \$5,000 were awarded to 30 groups across South Australia, with over half of the funding supporting activities in regional and remote areas.

Successful projects include upgrades to parks, gardens, playgrounds and other community facilities, as well as support for mental health, inclusion programs, and equipment and training for emergency response agencies. Some examples include:



- **Port Adelaide Diversity and Inclusion Film Festival (PADIFF).** This festival stands as a beacon of social change and inclusivity in our community. This annual, one-night-only event not only spotlights culturally diverse, under-represented, and minority groups but also supports the vibrant Australian filmmaking scene.



- **Little Athletics SA.** We support Little Athletics SA through the SA Power Networks' Membership Support Fund. This initiative is designed to assist families facing unexpected hardships that leave them financially strained, making it challenging to cover their child's sports and recreational activities. Parents/caregivers can apply for a free membership for their child to participate in Little Athletics SA through this fund. Additionally, we contribute to the Regional Support Fund, enabling regional clubs to seek financial aid for areas such as promotion and marketing, development and program services, volunteer management, and IT infrastructure.



- **Hardwicke Bay Progress Association.** The Progress Association was able to upgrade their community hall's solar system, with the aim to be more sustainable and save money that can be reinvested into the community. With a modest population of only 200 permanent residents, Hardwicke Bay's Progress Association provides community services that contribute to bringing people together and improving town facilities. They have undertaken various initiatives including providing amenities like BBQs, a playground, a beach look-out, and a community hall.



- **Small town of Tulka** (near Port Lincoln). The town bolstered its firefighting and protection capabilities, and also established a sustainable water source for the playground area and water catchment by acquiring a new 30,000-litre rainwater tank. This initiative is vital, as Tulka serves as an evacuation point for both locals and tourists from Lincoln National Park during bushfires. In February 2023, numerous tourists and campers sought refuge at the Tulka playground area when they couldn't proceed into Port Lincoln due to the bushfires.



Highlight: SA Power Networks and Enerven Employee Foundation reaches \$5 million milestone

Since its establishment in 2006, the Employee Foundation has now donated a total of \$5 million to worthy local charities. The Foundation is a not-for-profit, charitable trust, that donates every dollar it receives (via staff payroll donations and fundraising efforts) to those in need.

Our Key Charity partner currently is Cancer Council SA

Our Major Charity partners currently are Backpacks 4 SA Kids, Breakthrough Mental Health Foundation, Childhood Cancer Association, Hutt St Centre, MND SA, and the Women's and Children's Hospital Foundation

Our Project Partners currently are Australian Lions Hearing Dogs, Can:Do 4Kids, Mary Potter Foundation, Nature Foundation, Royal Society for the Blind, Novita

It was only in August 2021 that the Foundation celebrated hitting \$4 million of cumulative donations. To donate another \$1 million so soon afterwards is an exceptional demonstration of the compassion, dedication and community spirit of our people, in the face of COVID and cost-of-living pressures.

Community safety

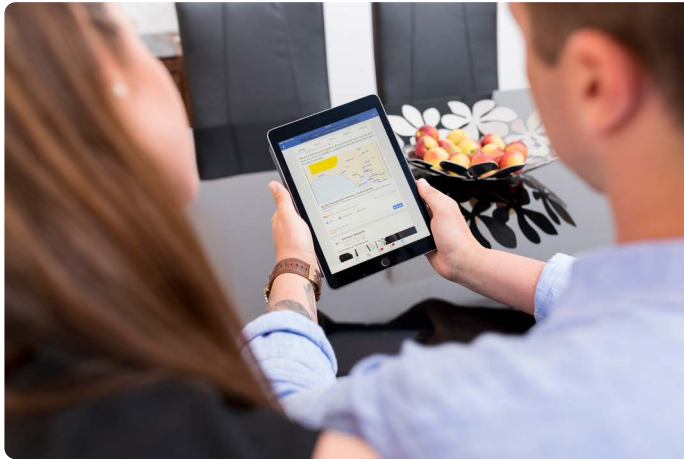
We are committed to providing a safe and reliable electricity supply for South Australians and an important part of this is ensuring the wellbeing of the community. Electricity can be dangerous and touching powerlines or even getting close to them, can be fatal or lead to serious injury. We do everything we can to minimise risk through careful design, operation and maintenance of our assets and infrastructure, and providing relevant public safety information. Each year we undertake a planned program across the state to prepare for summer and the bushfire season, and in extreme bushfire risk situations, we may turn off power to protect lives and property.

Our progress: Continue to manage risks to improve safety across our community through everything we do.

The safety of our people, contractors and the community is our top priority. We employ a range of safety programs, activities, training and education, including:

- Proactively addressing bushfire, floods, electric shock, severe weather, wires down and life support risks;
- Undertaking a continuous and comprehensive cycle of bushfire risk preparation, mitigation and adaptation activities. More detailed information about how we to reduce the risk of bushfire and loss of power supply in communities can be found under *Resilience and reliability* in the *Transforming energy* section of this report, on the SA Power Networks website and our *Environmental, Social and Governance Matters Management Approach Statements*;
- Maintaining our assets and infrastructure to minimise risk of asset failure especially in the face of intense and prolonged summer heatwaves and severe storms brought on by climate change;
- Implementing an electric shock mitigation program, including proactive messaging to identify shock risks, smart meter data identifying failed neutrals, and targeted neutral screen replacements;
- Undertaking public safety awareness and behaviour research to better understand and tailor public safety planning and education;

- Providing safety information that is relevant, timely and easily accessible via targeted public safety campaigns, social media, website updates and two-way communication with customers;
- Maintaining a timely response to community concerns and incidents via SA Power Networks' 24/7 faults and emergencies line, 'Power at my place' app, corporate website and social media accounts;
- Managing a register of customers with a medical condition or who rely on life support equipment to better enable us to provide notification of planned interruptions. For customers using life support equipment, a reliable power supply is vital, and we've working with relevant agencies and stakeholder groups to refine the definition and identification of life support customers in order to provide enhanced services to this vulnerable customer group;
- Ensuring that our contractors and other workers are required to meet stringent work, health and safety requirements and be trained or inducted prior to working around our infrastructure; and
- Working closely with other government and first responder agencies such as the State Emergency Service (SES), Metropolitan and Country Fire Services (MFS/CFS), and the Bureau of Meteorology (BoM) to plan, prepare and respond to major public safety incidents and the bushfire season.



Highlight: Award-winning approach to community safety and wellbeing during floods

In addition to the emotional and economic impacts of the prolonged 2022/23 River Murray flood, electric shock due to flood inundation of electricity infrastructure was a key risk to the community, emergency services personnel and SA Power Networks Group employees. Our approach to the safety and wellbeing of the impacted communities, our personnel and other workers won the Premier's Award: Energy and Mining, in the Safety and wellbeing category.

Described by government as the most significant natural disaster in the state's history, floodwaters reached 186GL per day, with more than 3,300 properties having power disconnected for safety reasons. Despite the hundreds of electrical assets in floodwater, the large (approximately 40,000 people) community impacted, and hundreds of emergency services, essential service and other personnel working across many months of flooding and reconnection of supply, there was not one report of an electric shock during the event.

SA Power Networks created a raft of new safety procedures for employees, adopted modern Artificial intelligence (AI) and LiDAR processing capabilities to help manage our response to the flood in real time, and undertook extensive community and stakeholder engagement to manage risk, inform the community and support wellbeing.

SA Power Networks not only recognised physical safety as an issue, but also community wellbeing. We:

- communicated directly with customers along the river, sending 34,000 SMS messages to keep them informed;
- attended about 40 community meetings organised by government;
- organised 38 SA Power Networks-initiated community hubs;
- hosted 11 stakeholder engagement meetings attended by regional MPs, local councils and heads of peak bodies/industry associations;
- engaged with retailers to ensure customers would not be charged for supply for the period they were disconnected;
- waived network charges for reconnection for affected customers; and
- participated in a range of government-led daily and weekly emergency management and communications meetings.

Managing safety risk for employees was also a significant issue. Given the last flood was in the mid-1990s, prior to the privatisation of the company, there was minimal corporate memory or readily available documentation of such a major flood event. Also, safety management has significantly advanced since then, so comprehensive procedures and processes were developed by cross-functional teams and supported by daily safety meetings and other briefings to protect a range of employees operating in the field.



Governance

Integrating sustainability into how we manage our impact on the economy, environment and people

Our material governance matters are:

- 1 Corporate governance and risk management
- 2 Responsible supply chain
- 3 Cyber security and data protection

This section should be read in conjunction with the *Governance Matters Management Approach Statement*, which provides further detail about how the SA Power Networks Group manages material corporate governance, risk management, responsible supply chain, and cyber security and data protection matters.

Governance

The SA Power Networks Group regards good corporate governance as a fundamental component of our duty and commitment to our customers, our people, our owners and the communities which we serve. We believe that our long-term sustainability as a business, delivering value to our owners and customers, is underpinned by responsible corporate behaviour. We want to be known as a trusted and respected essential service, which can only happen if we operate with the highest standards of integrity and professionalism and conduct our business in compliance with all legal and regulatory requirements. Our approach to corporate governance and risk management matters is underpinned by comprehensive principles, policies, rules, practices and processes.

Our progress: Proactively implement consideration of our impact on the economy, environment and people into SA Power Networks strategy, governance and operations.

Governance of sustainability and ESG matters

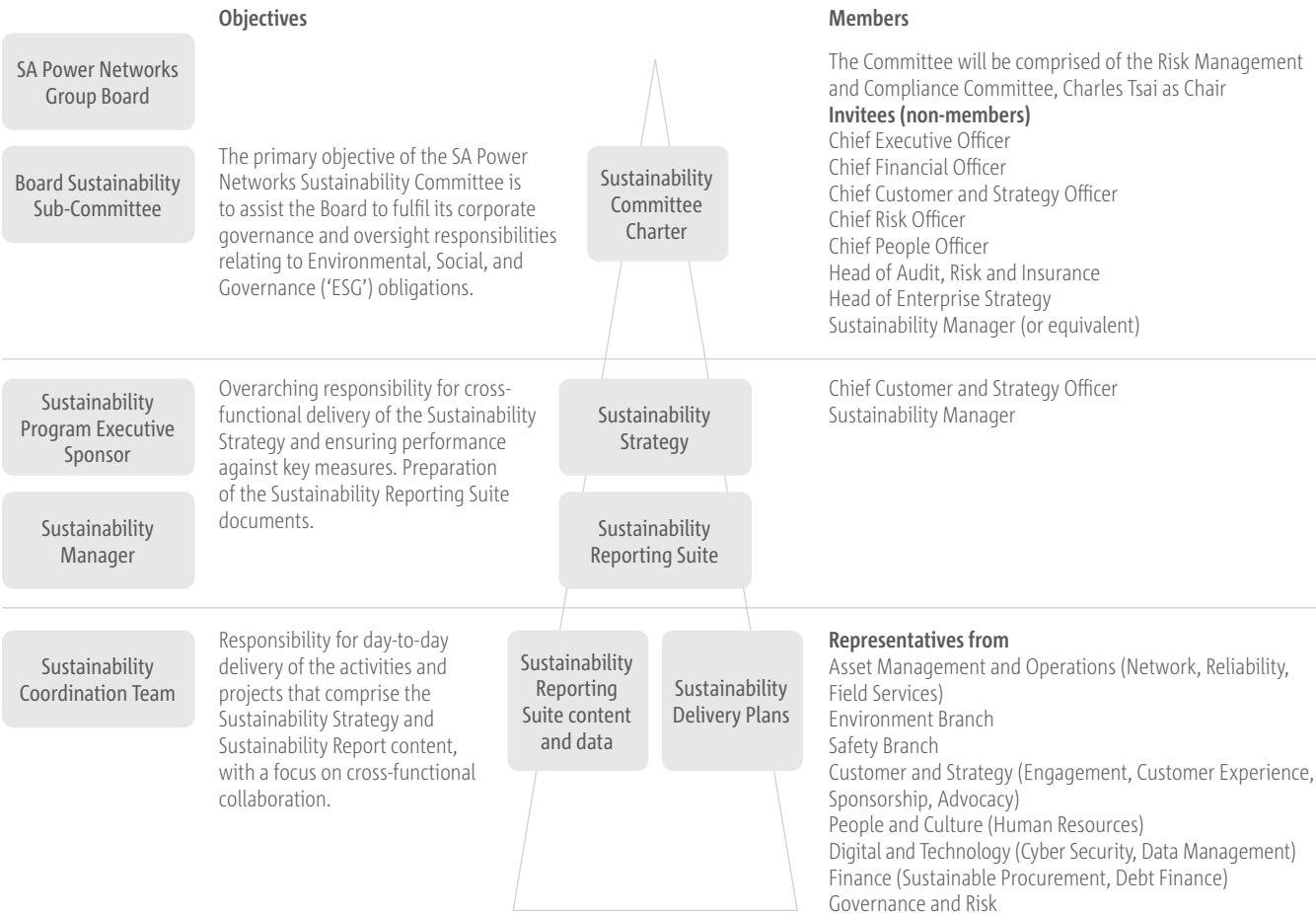
Our Sustainability Strategy and the goals, activities and decisions driving it are underpinned by robust governance arrangements which are designed to consider the risks and opportunities that material ESG matters present. The SA Power Networks Group recognises that when ESG risks and impacts are not well managed, they can cause significant negative impacts to our business and pose threats to the natural environment and long-term sustainable development of society.

A tiered governance system has been developed to oversee and manage our approach to ESG issues and actions.

This involves our Board, executive, senior management and operational personnel and utilises existing risk management, corporate, financial, legal and procurement governance systems to ensure a high standard of compliance.

In 2023 our Sustainability Governance Model was revised and streamlined to enable more efficient prioritisation and decision making, in alignment with recommendations of an internal audit of our corporate governance framework.

Sustainability Governance



This section should be read in conjunction with the *Governance Matters Management Approach Statement*, which provides further detail about how the SA Power Networks Group manages material corporate governance, risk management, responsible supply chain, and cyber security and data protection matters.

The Board Sustainability Committee met four times during the year, to receive progress updates on the SA Power Networks Group's Sustainability Strategy and reporting, and monitor performance against a range of ESG metrics and targets. Papers endorsed by the Committee included items addressing our Inclusion and Diversity Strategy, development of our Climate Change Roadmap, completion of our Scope 3 GHG Emissions Inventory, Sustainability in Procurement, and lodgement of our first Reconciliation Action Plan.

Risk management

ESG Risks are identified, managed, mitigated, and monitored using our comprehensive enterprise Risk Management Framework, which is aligned to the Risk Management Principles of AS/NZS ISO 31000:2009. To continually improve our ability to identify and address sustainability and ESG risks and opportunities, we have a program of initiatives that seek to integrate ESG related knowledge, policies, processes, and accountabilities into our corporate governance structure and operations.

Responsible supply chain

Responsible Supply Chain is one of the commitments and goals set out in the Integrated Governance pillar of the SA Power Networks Group's Sustainability Strategy, which aims to integrate sustainability into how we manage our impact on the economy, environment and people.

A Responsible Supply Chain requires a fundamental shift in procurement decision making from a cost-driven approach to one which integrates sustainability as a supplier success factor. This shift requires investment in strategic programmes and initiatives that address human rights and environmental issues across our value chain.

Sustainability initiatives can have unintended consequences if not balanced and managed carefully, therefore we continue to implement processes and ways of working to embed environmental and social considerations into our decision-making frameworks. We aim to maintain an appropriate balance and awareness of potential adverse outcomes while pursuing each of our initiatives. Collaboration both within the organisation and across industry is important to maintain awareness of good practice and to inform and progress practical supply chain sustainability initiatives.

Our progress: Investing in strategic programs and initiatives that address salient human rights and environmental issues across our value chain.

SA Power Network's infrastructure for the distribution network is based in South Australia, requiring all materials and direct services to be delivered to and in the State.

With the continued growth of our unregulated business, Enerven, supply chain capability continues to be extended with delivery now required in other states.

We undertake a range of activities and services to procure goods and services from a diverse array of suppliers. With over 1,300 suppliers engaged annually, we are aware of our purchasing power and invest in strategic programs and initiatives that address salient human rights, community and environmental issues across our value chain.

During 2023 we:

- Quantified our value chain (scope 3) GHG emissions, compiling a Scope 3 GHG Emissions Inventory which found that 70% of our scope 3 emissions result from purchased goods and services.
- Established a target for Scope 3 GHG emissions which sets a challenging, yet achievable target that requires specific initiatives across our supplier base.
- Ran briefing sessions with our procurement teams to embed sustainability within supplier engagements. This has resulted in targeted conversations with a few of our existing and potential suppliers to improve mutual understanding of sustainability impacts in our supply chain.
- Introduced a second weekly payment run and amended our standard payment terms to improve payment times to our suppliers. This was driven from the desire to better support our suppliers, particularly with small business, who form a significant percentage of our supplier base.
- Continued to review opportunities to increase engagement with First Nations organisations, both directly and indirectly, and established specific actions in our Reconciliation Action Plan.
- Developed a supplier and contract search tool to support identification of our existing suppliers located in regional areas who can provide services within those locations.

- Continued collaboration with peers to improve understanding of sustainability in the energy sector.
- As a member of the Energy Procurement & Supply Association, SA Power Networks is represented on the management committee and contributes to discussion on items of interest across the industry. The theme of the annual conference held in May 2023 was ESG and provided the opportunity for collaboration on what initiatives members have underway to improve sustainable procurement outcomes.
- SA Power Networks is part of the EPSA Consortium that use the Informed 365 Modern Slavery tool. This consortium has access to subject experts that provide timely updates on global and national trends.
- SA Power Networks maintains membership of the Chartered Institute of Procurement and Supply (CIPS), including successful completion of its annual ethics training by all Procurement personnel.
- Increased the footprint of responses to the Modern Slavery Questionnaire to improve our understanding of the risks across our supply chain.
- Provided additional education to all staff across the organisation about social procurement and responsible supply chain activities via an all of business Insight session.
- Provided input to reviews of both the *Modern Slavery Act 2018 (Cth)* and *Payment Times Reporting Act 2020 (Cth)* with the objective of making recommendations which better support the objectives and outcomes and the legislation.

SA Power Networks Group Supply Chain



98%

Expenditure with
Australian-based
entities



49%

Expenditure with
South Australian-based
entities



0.02%

Expenditure with
First nations
suppliers



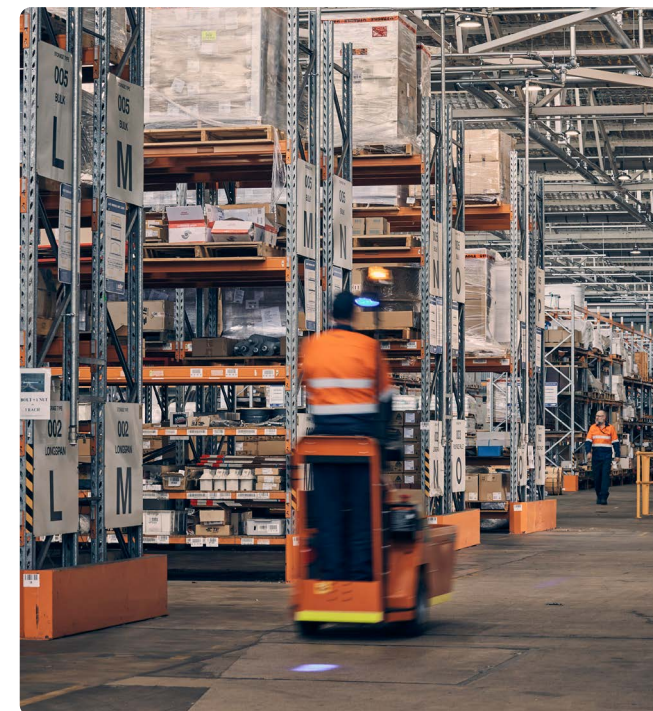
1415

Total number of
suppliers
engaged in 2023



883

Number of Australian
small businesses
engaged in 2023



Cyber security and data protection

Cyber threats are constantly evolving, with critical infrastructure networks targeted globally by both state and criminal cyber actors⁸. Over the past few years, the critical infrastructure threat landscape has evolved rapidly, with a proliferation of new tactics, techniques and procedures being implemented and undertaken by cyber threat actors and criminals. This has escalated the number and seriousness of threats faced by the SA Power Networks Group. Utilities, including those within the energy sector, having fallen under increasing attention. This is evidenced by sophisticated cyberattacks against critical infrastructure in several global jurisdictions.

Moving forward, threats will continue to evolve and increase in prevalence and sophistication. Gartner⁹ predicts that by 2025, 30% of critical infrastructure organisations will experience a security breach that will result in the halting of an operational or mission-critical cyber-physical system. The SA Power Networks Group has in place a comprehensive cyber security regime to manage cyber security related risk and undertakes a range of programs to protect critical assets, systems and data from cyber attacks.

Our progress: Keep our customers and organisation safe and secure by maintaining the confidentiality, integrity and availability of information and technology systems supporting the delivery of reliable energy services.

The SA Power Networks Group Cyber Security and IT Resilience team is the cornerstone of our defence against cyber threats. We take a proactive stance, providing governance, keen oversight, and expert consultation to protect the organisation from potential risks. In recent years, we've heavily invested in refining our cyber security program by aligning ourselves with the Australian Energy Sector Cyber Security Framework (AESCSF) and continuing to fine tune our threat led and risk managed approach.

This program consists of multiple streams of work, focusing on both technical and management cyber security outcomes to safeguard our network from both cyber and physical threats, we're continually enhancing our capabilities and bolstering resilience. Further, we aim to promote a culture where cyber security is part of the conversation all year round and is talked about in a positive way to encourage all of our people to take those extra steps to secure themselves online, both at home and in the office.

Given its significance, the SA Power Group's corporate Risk Register incorporates multiple cyber-related risks that can be categorised into two main groups: initial access and exploitation. Initial access encompasses risks associated with stolen credentials, insufficient cyber skills, and publicly available data. On the other hand, exploitation pertains to the compromise of the environment, loss of sensitive data, and failures in our supply chain. Incorporating these risks into the corporate Risk Register ensures that all levels of management have visibility into the cybersecurity landscape.

Snapshot: Real-world test shows disaster recovery readiness



In an era where cyber security threats are ever-present, it is imperative that our critical systems undergo disaster recovery testing to ensure that our disaster recovery plans are effective and our people have the capability and agility to respond. Although we regularly undertake paper-based walk-through exercises, in mid-2023 one of our IT teams was successfully challenged to show how robust our disaster recovery preparedness and processes are when it carried out a real-world recovery exercise on one of our tier-one apps.

The Recovery Team was challenged to recover our Fire Danger Level application in two distinct disaster recovery scenarios: a failure of a data centre, and a malware infection. The app provides information to the business relating to wind speed, wind gust and fire danger index levels and was chosen for the exercise as its information vital during the bushfire season.

⁸ Risk Assessment Advisory - Energy Sector (cisc.gov.au)

⁹ Gartner Predicts 30% of Critical Infrastructure Organizations Will Experience a Security Breach by 2025

This section should be read in conjunction with the *Governance Matters Management Approach Statement*, which provides further detail about how the SA Power Networks Group manages material corporate governance, risk management, responsible supply chain, and cyber security and data protection matters.



~41,000

of ~33 million emails
blocked for malware,
phishing or business
email compromise
criteria



239

cyber security
incidents requiring
a response

Largest expenditure
on an incident
\$103,000



13,232

suspicious emails
reported



166

average attendance of
Lunch and Learn
sessions

417
hours spent reviewing
suspicious emails



532

malicious emails

Snapshot: Our cyber security people winning awards



In 2023 our Cyber Security and IT Resilience team won the coveted Security Operations Superheroes Award at the Spotlight23 Cybersecurity Warrior Awards, and our Cyber Security Operations Manager won the Thought Leadership: Cybersecurity Trailblazer award at the global AttackIQ Purple Hats Customer Awards, recognising our threat-led approach to cyber security.

To complete the trifecta, one of Cyber Security Analysts, won Rising Star of the Year at the national Australian Information Security Association Cyber Security Awards. The award is given to an individual with less than three years' industry experience who has made a significant contribution to the field of cyber security and who has shown potential and dedication to a career in cyber security.

