Ausgrid

Delivering for the future

2021 SUSTAINABILITY REPORT

We're delivering the technologies to boost the resilience and efficiency of our network while enabling our customers and communities to thrive in the transition to a clean energy future

CONTENTS

COVER IMAGE:
Pritika Prasad
(Billing and Customer
Support Manager)

About this report

Our sustainability report describes how we are addressing the environmental, social and governance issues that matter most to our stakeholders.

This report is structured around three key areas which encapsulate our material environmental, social and governance (ESG) topics – Customers and communities, Our people, and Energy solutions. These areas guide Ausgrid's sustainability strategy and are closely aligned with our values, purpose and strategic priorities.

To improve transparency and trust with our stakeholders, we have been developing our sustainability reporting using internationally recognised frameworks. We will continue to expand the scope of our disclosures as data quality and availability improves.

This **2021** report is produced in accordance with the core requirements of the Global Reporting Initiative (GRI).

This report reflects our performance for the financial year from 1 July 2020 to 30 June 2021.

2021 Highlights

Customers and communities
PG 11

Claims and payment settlement times reduced by 25%

$4M Ausgrid capacity reset package delivered to reduce capacity charges for our worst affected medium and large business customers during COVID-19

805 schools in our network participated in Electricity Safety Week

Expanded our **'Voice of the Community'** customer engagement program to measure service performance across 25 different services, channels and market segments

Improved customer communications on network outages through an automated SMS service and updated website

Continuing to lead on demand tariff reform with 108,000 residential and small business customers now on demand tariffs

Our people
PG 15

17% reduction in Total Recordable Injury Frequency Rate from previous year

17% reduction in Lost Time Injury Frequency Rate from previous year

Conducted 1,300 health checks and 1,270 functional assessments on our people as part of the 'Fitness for Work' program

69% of employees participated in our first externally benchmarked employee engagement survey

Implemented further measures to ensure the **safety and wellbeing** of our people during the COVID-19 pandemic, including a dedicated nurse operated hotline and resources to assist with mental wellbeing

Strengthened the capability of our Health and Safety team and Site Leads through training and workshops covering risk management, incident management, contractor management and coaching

Energy solutions
PG 19

13% reduction in total CO_2-e emissions against our target of 8% by FY24

6,778 tonnes reduction in scope 3 greenhouse gas emissions via installation of LED streetlights from previous year

2,800 customers participated in our demand response trial

Installed two community batteries, enabling customers to export and virtually store solar power

Investing $42m over five years in our **Network Innovation Program** to test new technologies that will enable reliable, affordable and sustainable energy for customers

Strengthened cyber resilience by upgrading Electronic Access Control Management systems at 208 substation sites

CEO's message

This year continued to present many challenges to Ausgrid, our industry, and society more broadly. Changing customer expectations driven by the ongoing transition to a low-carbon economy and the disruption wrought by the COVID-19 pandemic, and extreme weather events, meant responsiveness and resilience were paramount.

Despite the challenges throughout the year, I am proud that we were able to deliver pleasing results in our sustainability focus areas. Ausgrid is committed to being a sustainable organisation. Our vision to be a leading energy solutions provider can only be achieved if as an organisation we are safe, smart and sustainable.

Ausgrid recognises the importance of addressing climate change and has responded to the greater community demand for action. We were the first electricity distribution network service provider to set CO_2-e targets. In FY21, we surpassed our emissions reduction target, achieving a 13% reduction in total emissions from our FY17 baseline. We are also aware that as the risks and opportunities associated with climate change increase, so must our actions. As such, over the coming year we will be refreshing our emissions reduction targets to further align with our net zero ambitions.

Our industry is experiencing a period of fundamental and unprecedented change. Customers' desire for affordable, resilient and sustainable energy is rapidly changing the landscape of the energy system. Our job is to make sure the network is ready for a future where renewables play a major role in the power mix, and where households and businesses can generate their own energy and sell it back to the grid. The introduction of new technologies to support our customers' energy choices will be enabled by the green energy revolution.

In FY21, for example, we installed two community batteries to give our customers better access to affordable clean energy. We were also pleased to announce our partnership with JOLT to bring free electric vehicle charging to our communities and support the uptake of electric vehicles. The project to date has delivered over 13MWh of green energy and saved 32t of carbon emissions.

Being a responsible business means continually finding ways to keep our people safe. The health and safety of our people throughout the pandemic has been a foremost priority. From the development of a Critical Incident Response Tool to locate and track the COVID-19 status of our people, to the availability of a dedicated COVID-19 medical hotline, we have sought to provide comprehensive support and care. Pleasingly, safety continues to improve, and we achieved a 17% reduction in our total recordable injury frequency rate from the previous year. We were similarly focused on keeping the community members we serve safe from the dangers of electricity. Our Electricity Safety Week program was rolled out to over 800 schools in Ausgrid's network, raising awareness of potential dangers in the distribution and usage of electricity.

Engaging with our customers and communities to measure their satisfaction, strengthen their connection to the organisation, and seek ways to continuously improve our services, remains a priority. FY21 saw the expansion of our Voices of the Community program, which captured more feedback across a wider variety of channels, services and customer segments. We used these insights to make material changes for our customers, including improvements to the customer complaints process and our customer communications.

While delivering on these important sustainability initiatives, we understand affordability is also critical to our customers. Throughout the year we implemented a range of business transformation initiatives focused on increasing our capability and efficiency and providing a safe, reliable and affordable network for our customers. These initiatives also further our ambition to be a customer-centric, performance-driven and technology-enabled business.

Finally, I would like to acknowledge the Ausgrid teams who have delivered these achievements. Our resilience and ability to remain focused on serving our customers and communities during a difficult period gives me confidence that our business is well positioned for success in the months and years ahead.

Richard Gross
Chief Executive Officer

Our organisation / Our value chain / Sustainability at Ausgrid

Our organisation

Ausgrid is the largest distributor of electricity on Australia's east coast, providing electricity to 1.8 million customers – that's over four million Australians. Our network is made up of substations, powerlines, underground cables and power poles, spanning 22,275 square kilometres throughout Sydney, the Central Coast and the Hunter Valley.

For over a century, Ausgrid has overseen a network of assets that connects communities and empowers the lives of customers.

Our network is made up of large and small substations connected through high and low voltage power lines, underground cables, tunnels and power poles. Our operations include infrastructure construction and maintenance, customer connections, street lighting and telecommunications.

Our customers and users

There are over four million customers and users of Ausgrid's services spread across Sydney, the Central Coast and the Hunter Valley. They range from urban residents in Australia's largest city to rural customers in the Central Coast and Hunter Valley, and businesses from corner shops to mines.

In addition to homes and businesses, our customers and users include councils, telecommunications providers and developers. We also service critical infrastructure within our network footprint, including schools and hospitals.

OUR ORGANISATION

2,750 employees	**511,526** power poles	**261,505** streetlights	**22,275**km² of area supplied
51,090km power lines and underground cables	**33,064** small distribution substations	**231** large electricity substations	**1** customer consultative committee with 3 sub-committees

OUR IMPACT

|			
>4m customers and users	**1.8**m almost 1.8m homes and businesses	**20**% of Australia's Gross Domestic Product	**24,457**GWh power sold
1,325 schools	**65** hospitals	**184**k businesses	**2** community batteries installed

Our vision

To become a leading energy solutions provider, recognised both locally and globally.

Our purpose

To connect communities and empower lives with a focus on affordability, reliability and sustainability.

Our values

- Work safe, live safe
- Customer-focused
- Commercially minded
- Collaborative
- Honest and accountable
- Respect

Ausgrid ownership

Ausgrid is a partnership 50.4% owned by AustralianSuper and IFM Investors, and 49.6% owned by the State of New South Wales.

Governance

Ausgrid's governance framework is focused on ensuring that risk is effectively managed, our statutory obligations are met, and that our people and culture are nurtured.

Underpinning our approach to governance are strong risk management principles and our Code of Conduct, which helps ensure we live our values and work towards a sustainable future. We have adopted a 'three lines of defence' model across the business, which defines the roles and responsibilities of the business and the oversight function, including the internal audit function.

Our Board assumes overall responsibility for Ausgrid's corporate governance, overseeing the performance of the organisation, our management, employees, and the interests of our shareholders and other stakeholders. The Board consists of 10 members comprising three women and seven men. It maintains five committees: health, safety and environment; finance; risk; audit; and remuneration.

As a private organisation, we do not publish an Annual Report.

Strong corporate governance enables us to enhance our sustainability performance and financial success.

LINE OF DEFENCE	RESPONSIBILITIES
First Line All business groups/ operational management	Own the risks that impact the objectives of their business areas. They perform the day-to-day risk management activities and are responsible to identify, analyse, evaluate, treat, monitor, review and report risks that could prevent the business from achieving its objectives.
Second Line Governance Risk and Compliance team and other risk oversight functions	The oversight functions provide advice, training and monitoring to the first line. In consultation with the first line, the second line sets policies and procedures, facilitates the risk framework, collates Group information, tests controls, issues reports and provides assurance to the Board through functional oversight.
Third Line Internal Audit	Internal Audit provides independent and objective assurance on the effectiveness of risk management, control and governance processes.

OUR BOARD

AUSGRID BOARD
Sets the corporate standard, establishes effective governance, oversees business performance and provides ultimate accountability for the Group.

HEALTH, SAFETY AND ENVIRONMENT COMMITTEE	RISK COMMITTEE	AUDIT COMMITTEE	REMUNERATION COMMITTEE	INDUSTRIAL RELATIONS ADVISORY GROUP
Assists the Board to discharge its duties in relation to Work, Health and Safety matters, environmental matters, and legal and regulatory compliance.	Assists the Board to discharge its duties in relation to insurance-related risk management, legal and regulatory compliance.	Assists the Board to discharge its duties in relation to tax-related risk management, financial reporting, accounting policies, internal controls, and internal and external audit performance.	Assists the Board to discharge its duties in relation to executive remuneration, Director appointments and succession planning.	Assists the Board to discharge its duties in relation to industrial relations.

OUR ORGANISATIONAL STRUCTURE

CHIEF EXECUTIVE OFFICER

Nigel Lowry
General Counsel and Company Secretary

Kathrina Bryen
Executive General Manager People

Junayd Hollis
Executive General Manager Asset Management

Rob Amphlett Lewis
Chief Customer Officer

Kelly Wood
Executive General Manager Network Delivery Services

Paul Jones
Executive General Manager Health and Safety

Jason Clark
Executive General Manager Emerging Energy Solutions

Sam Sofi
Executive General Manager Field Operations

Michale Bradburn
Chief Financial Officer

Our value chain

Our core business is electricity transmission and distribution.

The Ausgrid network provides a valuable essential service to our customers and communities. It comprises 511,526 power poles, 51,090km of power lines and underground cables, 231 large electricity substations, and 33,064 small distribution substations.

As part of our network, we provide 261,505 streetlights for 33 council areas across Sydney, the Central Coast and the Hunter region, and maintain these to keep communities safe.

To provide a safe, reliable and resilient network we are continually conducting maintenance, bushfire preparedness and tree trimming.

An integral part of this work is outage management and supporting our customers when experiencing a service disruption, whether as a result of the need to undertake critical maintenance or responding to an event, such as a storm. We strive to have a minimal impact on our customers, particularly our most vulnerable.

We have our own telecommunications fibre network on our infrastructure, which is also used by third parties to connect their communications technology to our assets. This further assists in our commitment to ensuring communities stay connected.

We work with a wide range of customers to plan the connection of new or additional services to our network. To meet our customers' growing needs with electric vehicles, Ausgrid has partnered with JOLTcharge to transform existing street-side electricity kiosks into electric vehicle charging stations.

Our materiality assessment considered our full value chain, as described below.

This Report does not include Ausgrid's affiliate, PLUS ES.

NOTES

1 **Ancillary Services**
   Customer-specific services

2 **Life Support**
   Keeping the power on for our vulnerable customers

3 **Connections**
   These include solar panels, emerging technologies such as batteries, connecting new customers and upgrading existing customers

4 **Streetlights**
   Maintenance to keep our communities safe and upgrading to LED for more energy efficiency

5 **Accredited Service Providers**
   Third parties authorised to work on or near our network on behalf of customers

KEY

■ Ausgrid
■ Third party

Generation

Transmission

ACCREDITED SERVICE PROVIDERS[5]

SHAREHOLDERS | CUSTOMER ADVOCATES | SUPPLIERS | REGULATORS | RETAILERS | INDUSTRY BODIES

Connections[3] | Streetlights[4] | Life Support[2] | Bush Fire Preparedness | Tree Trimming | Maintenance and Construction | Meter Reading | Tele-communications | Outage Management

Transmission and Distribution and Ancillary Services[1]

The Customer

Sustainability at Ausgrid

Sustainability at Ausgrid starts with how we operate. We work safely and responsibly to deliver affordable, reliable and clean energy choices to our customers, now and in the future.

We are committed to continually improving our performance in all material ESG issues across our business. In addition, the UN Sustainable Development Goals and the principles of the Energy Charter are core elements of our sustainability approach.

To be a sustainable organisation, we also follow a set of overarching principles which guide our conduct in all business activities. These principles help us manage present and emerging ESG issues and create long-term value for our stakeholders:

- Supporting the organisation's vision to become a leading energy solutions provider, recognised both locally and globally.

- Supporting the achievement of our business plan and strategic goals by managing material risks to our business.

- Creating a social dividend through our support of the principles of our aligned UN Sustainable Development Goals and applying this in our decision making.

- Fostering stakeholder trust and improving our reputation by taking actions valued by our employees, customers and communities.

- Encouraging a culture of ethical behaviour that lives our values as outlined in our Code of Conduct and External Partner Code of Conduct.

- Increasing business transparency to create legitimacy with our stakeholders.

- Building employee engagement through our sustainability initiatives.

Our material issues

Materiality is a vital sustainability concept which helps organisations identify and prioritise the ESG issues most relevant to their business. It helps to structure how Ausgrid reports on ESG issues and how we shape our sustainability approach.

We have revisited our materiality assessment from the previous year and concluded that the issues, risks and opportunities most relevant to our business and communities are unchanged.

The review of our material issues included:

- A review of external impacts and influences on our business.

- Cross-checking with our strategy and business plan to ensure our material issues are aligned.

- Engagement with internal and external stakeholders in the development of our strategy and business plan to guide any impacts on our material issues.

MATERIALITY MATRIX

Our material issues are linked to our strategy and business plan which reflects their importance.
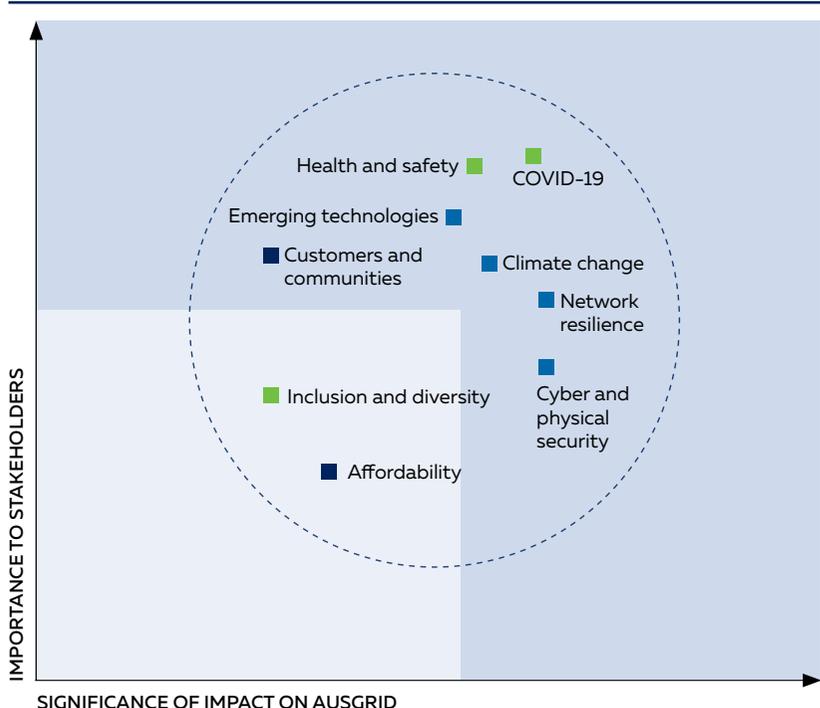
Our material issues cover:

Customers and communities

Customers and communities
Continuing to build trust and social licence to operate, by placing customers at the centre of everything we do.

Affordability
Managing prices, cost efficiency and affordability, while providing essential services to customers and communities.

Our people

COVID-19
Protecting our employees and customers and keeping our network operating.

Health and safety
Ensuring the health and safety of our people, customers and communities.

Inclusion and diversity
Continuing to build an organisation and workforce that reflects our communities and society.

Energy solutions

Climate change
Reducing our emissions and addressing transitional climate change risks and opportunities.

Emerging technologies
Anticipating changes in our operational environment to provide customers with technologies that enable energy choice, resilience and affordability.

Network resilience
Building resilience in our network, our people and our communities to anticipate, withstand, quickly recover and learn from disruptive events, particularly climate change impacts and the changing use of technologies.

Cyber and physical security
Protecting our assets, operations and information from intrusion, damage and theft.

Customers and communities

Ausgrid is committed to listening and responding to our customers' needs and playing a positive role in our communities.

PICTURED:
Natasha Jordaan
(Head of Customer and Partner Experience)

25%
CLAIMS AND PAYMENT SETTLEMENT TIMES REDUCED BY 25%

$4m
AUSGRID CAPACITY RESET PACKAGE DELIVERED TO REDUCE CAPACITY CHARGES

25
DIFFERENT SERVICES AND MARKET SEGMENTS COVERED IN OUR 'VOICE OF THE COMMUNITY' CUSTOMER ENGAGEMENT PROGRAM

805
SCHOOLS IN OUR NETWORK PARTICIPATED IN ELECTRICITY SAFETY WEEK

108k
RESIDENTIAL AND SMALL BUSINESS CUSTOMERS NOW ON DEMAND TARIFFS

Customers at the centre

Keeping customers at the centre is fundamental to the success of Ausgrid and guides our efforts to connect communities and empower lives.

ALIGNMENT TO STRATEGY

Be safer

Be smarter

Be sustainable

OUR PROGRESS TO DATE

23%

Average days to resolve complaints was 17 days, representing a 23% reduction

17%

Customer Confidence Score of 56% represents a 17% improvement since the beginning of measurement

90%

Contact Centre First Time Resolution was 90% which was five percentage point above the FY21 target

Why is it important to Ausgrid?

The success of our business relies on building trust and maintaining a social licence to operate with the customers and communities that rely on our services. Keeping the aspirations and needs of our customers at the forefront of what we do ensures we are continually finding ways to improve customer outcomes.

Better understanding customer and community needs

Being responsive to the needs and concerns of customers is critical to our success. In 2020, we launched our customer engagement program, Voice of the Community (VOC), to capture customer sentiment and prompt action on our customers' most important issues. FY21 saw the continued expansion of VOC to measure service performance across 25 different services, channels and market segments.

To better understand our customers' pain points and areas for service improvements, we drew on over 16,000 verbatim customer responses and 28,000 surveys. We learned that our customers wanted more affordable energy options, more reliable power supply, faster restoration, and better access to sustainable energy. Customers also wanted access to up-to-date information and an improved resolution process, which meant empowering staff with information and tools to resolve enquiries on first contact.
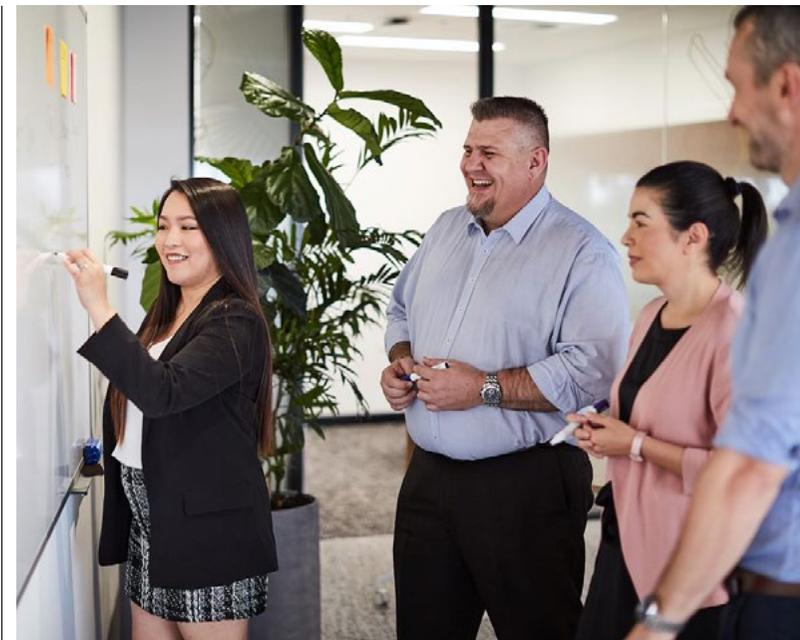
This feedback resulted in the delivery of a range of business transformation initiatives to improve the customer experience, enable affordability, and increase business efficiency. This included the introduction of an automated SMS service for all unplanned power outages, a refreshed website outage page and digital resources for customers, and the digitisation of the claims settlement and payment process, reducing the total turnaround time by over 25%.

Supporting our most vulnerable

Anticipating the needs of – and providing support for – customers experiencing vulnerability (or potentially experiencing vulnerability) is a key priority. This has been especially relevant for customers experiencing difficulties during the COVID-19 pandemic. Ausgrid has strengthened several initiatives to provide support.

Changes include:
· more communications to support customers in bushfire risk areas facing financial hardship, or who required mandatory private electricity rectification works.

This resulted in over 95% of these customers being able to take actions themselves without needing Ausgrid's emergency intervention.

· creating a Customer Assistance Strategy to further enhance support for residential customers experiencing financial stress through simpler and flexible arrangements for direct debts and accessibility to outside support services.

· contributing to the Australian Energy Foundation's (AEF) Life Support Customer Research, which is aimed at providing a better understanding of the personas, needs and other vital information of customers on life support, implementing a range of initiatives to minimise impacts on our most vulnerable customers during the pandemic. This includes customer contact prioritisation and limiting the frequency and duration of planned outages during lockdowns.

Customer Consultative Committee (CCC)

The CCC is our peak customer consultation group. The CCC is our key body to ensure broad customer advocate input to our business planning, ensuring Ausgrid continues to improve its customer focus. The CCC has three sub-committees that provide consultation on specific topics:

Pricing Working Group assists Ausgrid to develop our approach to tariffs to ensure we deliver lower costs for our customers.

Technology Review Committee helps improve transparency of investments in information technology and cyber.

Network Innovation Advisory Committee (NIAC) assists in driving our innovation program to inform our decisions about the trials on distributed energy resources and management of new technologies on our network.

Ausgrid has also recently initiated the Reset Customer Panel (RCP) – an independent panel of customer advocates established to challenge Ausgrid through the development of our 2024-2029 Regulatory Proposal. The RCP draws primarily from members of the CCC, with an independent chair and its own resourcing to ensure independence and robust customer-focused feedback.

Community investment

We remain committed to making a meaningful difference in the communities we serve across Sydney, the Central Coast and the Hunter Valley.

Promoting electrical safety

Since its inception in 2002, Ausgrid has been a proud supporter of Electricity Safety Week. The week was developed by Ausgrid to drive awareness on electrical safety amongst children and forms an integral part of our broader Public Electrical Safety Awareness Program.

In FY21, 805 primary schools from our network registered in the program, equating to a 94% participation rate. In assessing its impact, 89% of the teachers surveyed said the program helped their students have a greater understanding of electrical safety. Our usual approach to staff visiting schools was impacted due to COVID-19, with 30 staff volunteers presenting virtually to deliver key safety messages and answer questions from students.

Sir Roden and Lady Cutler Foundation

Ausgrid has been a tenant of Roden Cutler House since 1975 and continued its proud historical connection with Sir Roden Cutler through our gold sponsorship of the Sir Roden and Lady Cutler Foundation's (SRLCF) 'Pick Me Up' Service – a free transport service across the Sydney region for the seriously or terminally ill, elderly or infirm.

CASE STUDY: LED STREET LIGHTING DRIVING ENERGY SAVINGS FOR LOCAL COUNCILS

Street lighting is one of the biggest contributors to energy consumption for local councils. The best way to reduce energy consumption from street lighting is to use LED lamps. In partnership with local councils, Ausgrid is undertaking a program to upgrade streetlights to modern LED luminaires.

Ausgrid has been progressively upgrading luminaires on residential roads since 2019 and, in FY21, installed 30,862 LED lamps. Energy savings of 60% are expected for our council customers. In FY21 alone, estimated energy savings of almost 12,000 MWh were delivered. Significant cost savings through energy efficiency are not the only benefit. The introduction of LEDs also means the removal of old mercury lamps that could pose a danger to people and the environment. The energy efficiency gains also resulted in a reduction in Ausgrid's carbon footprint of 6,778 tonnes.

Sydney Children's Hospital Foundation

Ausgrid continued its support of the Sydney Children's Hospital Foundation's annual Light Up Xmas Appeal. The ongoing pandemic meant we could not assist in person. But we continued our support of this great initiative with a corporate donation of $15,000, and an additional $4,950 raised by staff through our workplace giving campaign. Funds generated from the appeal help support sick children and their families, medical research, hospice support and transport.

Supporting St Vincent de Paul Society through IT donations

The COVID-19 pandemic highlighted the importance of connection and the role technology plays in this. Ausgrid was proud to be able to support the St Vincent de Paul Society, through the donation of 50 iPads to support its Domestic Violence refuge as well as to connect those needing assistance with essential government services.

Our communities, our environment

Ausgrid understands its responsibility to ensure the protection and effective management of the natural environment. In FY21, we continued to enhance our environmental planning and management processes.

Environmental Management System

We use our Environmental Management System to identify environmental risks and put measures in place to effectively manage our performance in the areas of pollution control, hazardous materials, emissions, contamination, waste, ecology and resources. In FY21, we exceeded our environmental incident targets by 18% and achieved external audit accreditation with no non-conformances, maintaining our best practice standard. Our EMS has been accredited to ISO 14001 since 1996 (27 years).

Environmental planning improvements

Throughout FY21 we made significant improvements to our environmental Geographic Information System (GIS) and planning processes, enabling greater efficiency and consistency of environmental impact assessments. Spatial data was incorporated into our environmental GIS and assessment tools to monitor bushfire and flood prone land, and sea level rise. As our communities deal with the impacts of climate change, it is vital that Ausgrid builds resilience into our network infrastructure. These changes to our environmental planning processes will mean that potential climate change impact and adaptation issues are automatically flagged early. This allows us to give proper consideration to potential risks.

Being responsive to the needs and concerns of customers is critical to our success.

CASE STUDY: SEAWATER ENABLING POTABLE WATER SAVINGS

Ausgrid is exploring the use of seawater instead of potable water to maximise on the financial, social and ecological benefits.

A horizontal directional drilling project at Scotland Island used 230,000 litres of seawater for drilling operations in place of potable water. Extensive consultation was undertaken and a number of controls were put in place to protect seagrass, marine life, marine vessels and pedestrians.

Affordability

Keeping electricity affordable is vital to our customers. We are focused on realising cost efficiency in our business, including through the introduction of new technologies, to ensure our network charges remain affordable for customers.

ALIGNMENT TO STRATEGY

Be smarter

OUR PROGRESS TO DATE

108k

Residential and small customers on demand tariffs

18%

Average network charges for residential customers 18% lower than FY17

$18.6m

Business transformation initiatives enabled $18.6 million of cost savings to increase affordability

Why is it important to Ausgrid?

Ausgrid saw many customers continue to be impacted by COVID-19 in FY21, making the issue of affordability more important than ever. Our transformation projects and innovation programs are designed to improve our practices, lower costs and deliver performance improvements for customers.

Driving cost efficiency through business transformation to keep customer bills down

In 2021 we challenged ourselves to achieve more for less by taking steps to cut our operational costs and make our business more efficient.

A key component of this work was a refresh of our transformation program. More closely aligning this program of work to Ausgrid's strategic priorities and implementing a simplified program structure has paved the way for significant operational cost savings in the coming years.

Despite COVID-19 adding to our costs, we were still able to pass on savings to customers. Our average network charges for residential customers increased by only $4.20 per customer or 0.8% during the year. This is well below the rate of CPI corresponding to the same period (3.85%). Average network charges for residential customers are also 18% lower than FY17.

We are also aware of the challenges for small businesses during the COVID crisis. As a result, small business network charges changed by only $14.30 per customer, or 0.3 % during the year.

Further, a $4 million Ausgrid capacity reset package was delivered to reduce capacity charges for our worst affected medium and large business customers during COVID-19.

Advancing tariff reform

Historically, most residential and small business customers have been on flat energy-based network tariffs. These tariffs require customers to lower their usage if they want to lower their bills.

To give customers more control, on 1 July 2019 we introduced demand tariffs for residential and small business customers with smart meters. If passed on by their retailer, these tariffs allow customers to lower their bills simply by spreading out when they use their appliances during peak hours.

Given peak demand is also a material driver of our network costs, demand tariffs are cost-reflective and therefore allow customers to lower their own bills while reducing the overall costs to the network, shared by all.

This change has been a great success. As of 30 June 2021, 108,000 residential and small business customers are on demand tariffs. This is the greatest number

AVERAGE NETWORK CHARGES FOR RESIDENTIAL CUSTOMERS

–18%

Year	Charge
2017	$680
2018	$631
2019	$630
2020	$554
2021	$558

in the NEM and consolidates our leadership in the tariff reform process.

Further, 413,000 residential and small business customers remain on the cost-reflective, time-of-use network tariff.

With 26% of residential customers and 53% of small business customers utilising cost-reflective tariffs, customers have more ability than ever to control their network bills.

With medium and large business customers continuing to face cost-reflective tariffs, 67% of our network charges were derived from cost-reflective tariffs in 2021.

Our people

Our people are central to delivering our strategy. We're committed to continuously improving the employee experience through our focus on engagement, diversity and wellbeing of our people.

PICTURED:
Kevin Li (Field Manager),
Adam Baxter (Estimating and Unit Rates Manager)

17%
REDUCTION IN TOTAL RECORDABLE INJURY FREQUENCY RATE FROM PREVIOUS YEAR

17%
REDUCTION IN LOST TIME INJURY FREQUENCY RATE FROM PREVIOUS YEAR

'FITNESS FOR WORK'
CONDUCTED 1,300 HEALTH CHECKS AND 1,270 FUNCTIONAL ASSESSMENTS ON OUR PEOPLE AS PART OF THE 'FITNESS FOR WORK' PROGRAM

69%
OF EMPLOYEES PARTICIPATED IN OUR FIRST EXTERNALLY BENCHMARKED EMPLOYEE ENGAGEMENT SURVEY

SAFETY AND WELLBEING
IMPLEMENTED FURTHER MEASURES TO ENSURE THE SAFETY AND WELLBEING OF OUR PEOPLE DURING THE COVID-19 PANDEMIC, INCLUDING A DEDICATED NURSE OPERATED HOTLINE AND RESOURCES TO ASSIST WITH MENTAL WELLBEING

Our people

We strive to create a safe, connected, and inclusive workplace where our people embrace our values and live our purpose.

ALIGNMENT TO STRATEGY

Be safer

Be smarter

OUR PROGRESS TO DATE

69%

of employees participated in our first employee engagement survey

EMPLOYEE ASSISTANCE

launched new employee assistance program, Converge

Why is it important for Ausgrid?
An engaged and high-performing workforce is pivotal to how Ausgrid meets its strategic objectives and ensures delivery of essential services to those who rely on us.

Our people

In 2021, COVID-19 continued to have a significant impact on our business and how we operate. We kept up our rigorous approach to keeping our people safe while continuing to build a high-performance culture.

Throughout most of 2021, our employees that were able to work from home continued to do so. An online leadership program was offered to help leaders manage remote teams and effectively support their employees as they worked remotely. The use of technology and employee preferences on ways of working has accelerated our thinking on blended working arrangements now and into the future.

Employee engagement

In March 2021 we conducted our first organisation-wide, externally benchmarked employee engagement survey, partnering with Culture Amp to measure and benchmark our engagement across the organisation.

69% of our employees completed the survey and we gained a rich set of insights into what was engaging our employees and opportunities for improvement.

People, Leadership and Direction were identified as three key areas for greater focus for our Leadership Team in driving employee engagement. Action plans were developed around these areas and a number of initiatives have since commenced, including:

- the development and introduction of a five-tiered Recognition program from:
  – employee initiated 'Hi 5's
  – to our Annual Awards event recognising outstanding performance in 11 categories
  – the development of the Ausgrid Leadership Success Profile; and
- the implementation of the BIG program aimed at tapping into our employees' knowledge of the business and their work area to identify continuous and step change improvement initiatives.

Leadership development program

Continuing to enhance leadership capability is central to Ausgrid building and maintaining an engaged and high-performing workforce. In 2021, a leadership development program was deployed to equip our people leaders in utilising our performance development framework to engage team members in critical performance conversations. To further support leaders in building this critical capability, field-based people leaders were offered the opportunity to have a 1:1 coaching session with a specialist coach to give them direct feedback and coaching in this area.

Inclusion and diversity

Connecting communities and empowering lives means building a workforce and culture that reflects the diversity of the communities in which we operate.

ALIGNMENT TO STRATEGY

Be safer

OUR PROGRESS TO DATE

18 MONTH

Inclusion and Diversity Action Plan launched

2

Gender targets to be introduced from FY22

5

Employee Resource Groups sponsored by the Inclusion and Diversity Council

Why is it important for Ausgrid?
Embracing a diversity of thought, experiences and backgrounds is key to ensuring the engagement and wellbeing of our people. By creating an environment where differences are embraced and people feel comfortable to bring their whole self to work, innovation flourishes.

Ausgrid reports annually to the Australian Government Workplace and Gender Equality Agency (WGEA), on our performance on gender equity, and our information is publicly available. Our decisions about recruitment, development, promotion and remuneration are based on performance, capabilities and gender equity.

In 2021, Ausgrid launched an 18-month Inclusion and Diversity Action Plan with four overarching goals:

1. Create an inclusive and respectful culture
2. Attract and recruit diverse talent
3. Retain and develop our diverse team
4. Lead and influence with an inclusive mindset

Our Inclusion and Diversity Council

Ausgrid's Inclusion and Diversity Council, chaired by our CEO, is action-oriented to bring about sustainable change. The Council members sponsor several Employee Resource Groups (ERGs) that enable employee member input on a range of issues to make Ausgrid a more inclusive and diverse organisation.

The Employee Resource Groups with the Group names chosen by their members are:

· Pride (LGBTQI+)
· GRID25 (Gender diversity)
· Aboriginal and Torres Strait Islander network (ATSI)
· disAbility (Disability)
· MOSAIC (Cultural diversity)

This year, our Employee Resource Groups continued to thrive, with growing membership from across the business. Each group has their own actions which are assessed and approved by the council, as appropriate, to contribute to our overall inclusion and diversity goals.

Guided by extensive research of best practice and peer review, our Inclusion and Diversity Council introduced gender targets to commence from FY22. These targets are:

· Increase the number of females in people leader roles to 25% by the end of 2025
· Triple the number of women in frontline roles by the end of 2025

To focus efforts in achieving these targets and drive action in their own teams, each Executive General Manager has their own individual Group Inclusion and Diversity Action Plan.

Health and safety

Work safe, live safe is one of Ausgrid's organisational values and is the driving force behind our commitment to ensuring the physical and mental wellbeing of our people.

ALIGNMENT TO STRATEGY

Be safer

Be smarter

OUR PROGRESS TO DATE

17%
Reduction in Total Recordable Injury Frequency Rate from previous year

17%
Reduction in Lost Time Injury Frequency Rate from previous year

1,300
Health checks performed as part of the 'Fitness for Work' program

Why is it important for Ausgrid?

Keeping our people safe, healthy, and engaged is a foremost priority and fundamental to Ausgrid's ability to deliver for our customers and communities.

COVID-19

Our foremost priority throughout the disruption of the COVID-19 pandemic has been keeping our people and our communities safe and our network operational.

During the height of the pandemic, we introduced a nurse-operated hotline dedicated to employees' health and the provision of up-to-date and relevant health information. The Health and Wellbeing team also provided individual care, support and tailored plans for all employees who were deemed vulnerable, including those with compromised health conditions.

The mental health of our people was identified as an important issue to be addressed given the uncertainty that the pandemic brought and the isolation of the new working from home environment. To support our employees, we created our 'Coping with COVID' video series. Mental health was further reinforced with a health and wellbeing online portal containing a library of information on all areas of personal health and wellbeing.

Having changed our ways of working due to the pandemic, we also changed the delivery model of our Employee Assistance Program

(EAP). The improved EAP provides greater support to our people and bespoke service offerings for domestic and family violence, Aboriginal and Torres Strait Islander peoples, our LGBTQI+ people, and support for managers.

Health and Safety Strategy

In FY21 we introduced a refreshed Health and Safety Strategy which is underpinned by four key pillars:

· Define and implement critical controls for high-risk tasks

· Enable leaders to identify and manage controls critical for preventing catastrophic or fatal events, and embed accountability at all levels

· Simplify our systems and processes

· Reduce risk through safe planning, design, and in-the-field handovers to ensure safety and operational continuity

Several key initiatives were delivered through the strategy including:

· Improved incident investigation capability and methodology, achieving a 45% improvement in the timeliness of investigations.

We continued the 'Fitness for Work' program to make sure our field employees are fit and safe to perform their roles.

- Review and simplification of our Health and Safety Management System ensuring alignment with ISO 45001 and focusing our Safe Work Method Statements on high-risk work activities.
- Strengthened the capability of our Health and Safety team and Site Leads through training and workshops covering risk management, incident management, contractor management and coaching.
- Developed the Fatigue Management procedure and FatigueTech app to address the risk of fatigue for our employees.

Live Work/Critical Control Management

As part of our Health and Safety Strategy refresh, we further developed our health and safety program by reviewing our Live Work and Critical Control Management. This review concluded in FY21, and produced several outcomes including:

- Integrating feedback from the field and internal subject matter experts on what is working well and what could be improved in our live work procedures and work instructions.
- Development of an enhanced risk assessment methodology which was used to review existing, and potentially new, live work tasks/areas.
- A recommendation for the planned recommencement of High Voltage Live Line work.

Fitness for Work Program

In FY21 we continued the 'Fitness for Work' program to make sure our field employees are fit and safe to perform their roles. Over 1,300 medicals and 1,270 functional assessments were conducted. The assessments were able to identify a range of health and wellbeing issues among our people and enable early treatment. Where applicable these employees were offered injury prevention programs and lifestyle counselling.

Climate change / Emerging technologies / Network resilience / Cyber and physical security

Empowering Lives
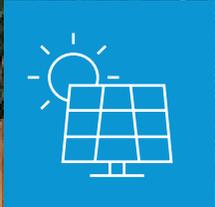
Energy solutions

Through action on climate change and integrating new technologies into our network we can both boost resilience and ensure our customers and communities thrive in the transition to a clean energy future.

PICTURED:
Michael Ryan (Distribution Line Worker),
India Matthews-Whelan (Project Delivery Officer)

13%
REDUCTION IN TOTAL CO_2 EMISSIONS AGAINST OUR TARGET OF 8% BY FY24

6,778
TONNE REDUCTION IN SCOPE 3 GREENHOUSE GAS EMISSIONS VIA INSTALLATION OF LED STREETLIGHTS

2,800
CUSTOMERS PARTICIPATED IN DEMAND RESPONSE TRIAL

$42m
INVESTMENT OVER FIVE YEARS IN OUR NETWORK INNOVATION PROGRAM

208
SUBSTATION SITES GIVEN UPGRADED ELECTRONIC ACCESS CONTROL MANAGEMENT SYSTEMS

Climate change

We recognise the role we must play in addressing climate change for the good of our business, society, and the planet.

ALIGNMENT TO STRATEGY

Be sustainable

OUR PROGRESS TO DATE

13%

Reduction in total carbon emissions
(against our target of 8% by FY24 baselined to FY17)

17%

Reduction in scope 3 emissions
(from FY17 baseline)

19%

Reduction in total carbon emissions excluding line losses
(from FY17 baseline)

Why is it important for Ausgrid?

Climate change presents a growing threat to our business, the economy, society, and the planet. Reducing our emissions and understanding our transitional risks and opportunities is vital in providing safe, affordable, resilient and sustainable energy solutions for our customers.

Our guiding principles

We have developed a set of guiding principles to ensure the need for climate action is factored into our decision making:

- Understand climate–related risks and impacts on our business and communities, and act by seeking opportunities to provide clean energy, resilient infrastructure, and innovative network solutions for our customers.

- Actively promote and support decarbonisation of the economy, and work to facilitate emissions reductions in our operations and value chain.

- Integrate science-based, data-driven climate change variables into internal decision–making processes, analysis, and management of long-term risks and opportunities.

- Identify targeted ways to increase the resilience of the most vulnerable communities we serve to manage the physical impacts of climate change.

Ausgrid solar panels at Homebush.

A changing grid and the transitional risks of climate change

The technology, policy and market changes required to transition to a low-carbon economy present transition risks to our business that must be managed. In response, we continue to focus on building capabilities to support our customers as they invest in new energy technologies as part of the broader transition to a decentralised and renewable power system.

We believe this is a key strategic shift from being a traditional distribution network service provider, to a dynamic manager of network capacity, where customers, partners and the electricity system benefit from an optimised network which better supports the matching of customer demand to variable renewable energy supply.

We are supporting our customers to transition to a low–carbon economy through the following actions:

- Making it easy for customers to connect Distributed Energy Resources (DER) to the network.

- Trialling and supporting community batteries to improve access to sustainable energy for all.

- Providing network tariffs which support the integration of DER into the network in a way which is fair to both owners and non–owners of DER.

- Priming our network to assist in the transition of Australia's vehicle fleet from fossil fuel to electric power.

- Supporting the decarbonisation of the electricity grid by facilitating the use of renewable energy.
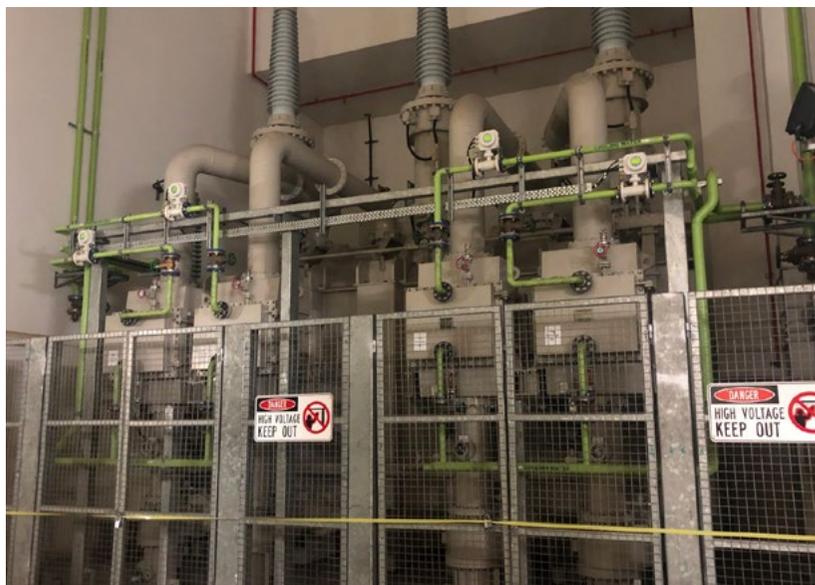
Ausgrid is implementing an SF6 strategy to reduce use and losses of this gas.

Reducing our carbon footprint

Ausgrid is taking action to reduce its carbon emissions and address climate change in support of the UN Sustainable Development Goals. We have set clear emissions reduction targets and are the first electricity distribution network service provider in Australia to set CO_2-e targets.

Ausgrid has two categories of carbon emissions reduction targets (using an FY17 baseline):

- An 8% reduction of all emissions (scope 1, 2 and 3) by EOFY24, and 17% by 2030

- A 44% reduction of all emissions (scope 1, 2, and 3) excluding line losses, by EOFY24

Note: 'Line losses' is the energy lost in the transmission and distribution of electricity. The cost to reduce the 3.7% of energy lost in transmission and distribution across our network is prohibitive. As the generation of clean energy increases and decarbonises the wholesale energy supply, the carbon footprint of line losses will decrease. This change will reduce Ausgrid's carbon footprint.

In FY21, Ausgrid achieved a 13.3% reduction in all emissions, and an 18.6% reduction in emissions excluding line losses.

Scope 1 emissions
(Petrols, oils, diesel, LPG, natural gas and SF_6)

Scope 1 emissions have been reduced by 26.8% from FY14 and by 2.6% since FY17, mainly from fleet efficiencies. While overall emissions are decreasing, Sulphur hexafluoride (SF_6) emissions have increased. Ausgrid is taking steps to reduce emissions of SF_6 through our SF_6 Strategy. SF_6 is an extremely potent greenhouse gas, and while it is normally contained within high voltage equipment, leaks can occur. Our strategy provides a clear action plan for improving organisational handling procedures, improving data collection and reporting, the trialling of new alternative technologies, and applying a shadow carbon price to phase out the use of SF_6 in our business.

Scope 2 emissions
(Electricity use and distribution/ transmission line losses)

Scope 2 emissions reduced 14.1% from FY14 and 13.1% since FY17 as a result of continued grid decarbonisation, reduced demand, and property improvements.

Scope 3 emissions
(Waste, business travel and streetlights)

Scope 3 emissions reduced 17.3% from FY17 and continued to decrease in line with our streetlight LED program which is driving the bulk of our scope 3 reductions.

Our 261,505 streetlights have a significant carbon footprint. We are working with our councils to reduce the carbon footprint of the streetlights by converting them to more efficient LEDs. This project is expected to realise energy savings of 60% and in FY21 alone reduced Ausgrid's carbon footprint by 6,778 tonnes of CO_2-e.

While we do not have a reduction target associated with only scope 1 and 2 emissions, it is pleasing to note that Ausgrid has achieved significant reductions of 38.6% since FY14 and 22.2% since FY17.

External reporting and progress

In managing and monitoring our carbon emissions, we capture data on our annual performance across our full range of emissions and report this information for compliance with the Federal Government's National Greenhouse and Energy Reporting (NGER) scheme for the Australian Government Clean Energy Regulator. While our emissions and environment data are not externally certified, they meet the NGER methods, criteria and measurement standards.

We recognise that expectations on emissions reductions and more ambitious targets are rapidly changing in response to investor and customer expectations, government policies, and the regulatory environment. We will continue to assess our targets and plans in response to these issues and are committed to improving our performance.

In FY22, we intend to commence a review of our emissions reduction targets and align them with our net zero ambitions.

Our FY21 Emissions Performance Report provides more detailed information on our targets, our emissions, and the activities that have influenced change.

Emerging technologies

The effects of climate change and the transition to a low-carbon economy will change the way the grid must operate. We are introducing new technologies and innovation to ensure access, reliability and affordability are maintained for our customers as the transition accelerates.

ALIGNMENT TO STRATEGY

Be sustainable

OUR PROGRESS TO DATE

2
Community batteries installed in FY21

42m
Investment over five years in our Network Innovation Program

ELECTRIC VEHICLE CHARGING

Announced partnership with JOLT to bring free electric vehicle charging to our communities and support the uptake of EVs

Why is it important for Ausgrid?

Ausgrid has a significant opportunity to support action on climate change and the transition to a low-carbon economy. We can deliver this through the introduction of new technology and services which provide sustainable and affordable energy choices for our customers. Enabling electrification of energy consumption and facilitating renewable energy in our network to lower emissions are key priorities for our business and customers.

The future role of networks – Distribution System Operators

The role of the Distribution System Operator (DSO) includes ensuring reliability and efficiency in the operation of systems that have distributed energy resources (DERs – energy technologies typically owned by customers such as batteries, solar, smart air conditioners, etc). As a DSO, we dynamically manage capacity and operate our network to maintain efficient, safe and reliable services, while optimising value for our customers and supporting the renewable energy transition.

In FY21, we increased our focus on supporting energy technologies connected to the distribution network. We developed our short- and medium-term solutions with Ausgrid-owned technologies such as community batteries, while concurrently building a longer-term vision for our network.

Our focus is maintaining efficient, safe and reliable services throughout the transition while finding new ways to deliver value to our customers.

Our Network Innovation Program

We believe innovation is key in decarbonising the energy system, improving reliability and affordability, and giving customers more choices.

Our Network Innovation Program finds ways to incorporate the growing numbers of DERs, including electric vehicles, into our network, optimise our investments, and improve the customer experience.

With an investment of $42 million over five years, the program allows us to test the suitability of new technologies and new ways of doing things in our network, with the aim of increasing efficiency and meeting changing customer expectations.

Customers have told us they want a greater role in driving the direction of innovation in electricity networks. In response, Ausgrid has established a Network Innovation Advisory Committee (NIAC). The committee consists of a broad range of customer representatives and oversees the implementation of the program.

Ausgrid community battery in Bankstown.

Our Network Innovation Program is currently testing a range of new technologies including:

- Community batteries
- Advanced Voltage Regulation devices and systems
- Network Monitoring Devices and Systems (Network Insights)
- Fringe of Grid Optimisation
- High-Voltage Microgrids
- Portable All-in-One Off-Grid Supply Units
- Self-Healing Networks
- Dynamic Load Control
- Asset Condition Monitoring
- Line Fault Indicators

CASE STUDY: SUPPORTING THE ACCELERATION OF ELECTRIC VEHICLES WITH CHARGING STATIONS

Ausgrid has partnered with JOLT to transform existing streetside electricity kiosks into EV charging stations.

These stations will offer 7kWh of free charging, which gives 45 kilometres of range on average – covering the commute for most drivers.

The first 15 minutes of charging will be made free by selling advertising on the screens which funds the capital and ongoing costs, in a similar way to bus stop advertising. Extended charging will be available via a paid model in the JOLT app. The charging stations will be powered by 100% local, green energy.

Demand response trial

Ausgrid has partnered with AGL and EnergyAustralia to incentivise customers to voluntarily reduce energy usage during times of peak demand on the network and shift energy usage to times when renewable energy supply is high. The trial is dependent on participants making behavioural changes such as using their appliances before or after the peak period or changing the temperature setting on their air conditioner or heater.

The trial aims to enable better integration of renewable energy into the grid, reduce network costs, and lower costs for customers and retailers.

In FY21, over 2,800 customers in Sydney, Newcastle and the Upper Hunter areas participated in the program with 10 demand response event days over summer and winter.

We are currently expanding the program with the addition of a third participating retailer, increasing the number of customers and testing the use of automated devices in homes.

Community battery trial launch

As part of the Network Innovation Program, Ausgrid has begun a trial of community batteries to give our customers better access to affordable clean energy. Ausgrid is partnering with SwitchDin and Simply Energy to trial this innovative solution. Community batteries will allow customers to export and virtually store their own solar energy for later use, providing an affordable option to support sustainable energy.

In FY21, batteries in Beacon Hill and Bankstown were installed. Recruitment of customers has commenced, with 20–30 customers anticipated for each battery. The trial is expected to deliver estimated cost savings of $100–$300 per year, per customer.

The batteries will also be used for demand management to supplement the network in peak times and soak up excess solar during sunny periods. We expect community batteries will be a common element of our network in the future, allowing more customers on the network to install solar and export energy to the grid.

Electric vehicles (EV)

The electric vehicle market in Australia is currently in its infancy. In 2020, EVs represented only 6,500 of the ~7m registered vehicles in our network area. However, with the introduction of new models and improved affordability, EV adoption in our network is expected to accelerate.

EV charging infrastructure

To manage future EV charging connections to our network, we are working with various bodies representing the electric vehicle sector, and government, to identify the lowest impact connection locations, understand future demand, and publish maps that show suitable locations for charging points.

EV trials

Ausgrid has partnered with retailers Origin Energy and AGL to explore EV charging and how we can best serve customers. In supporting Origin's Electric Vehicles Smart Charging Trial program, launched in July 2020, we are exploring how innovative charging can enable customers to respond to network events and tariffs, leading to lower electricity costs for consumers. AGL's Electric Vehicle Orchestration Trial project similarly aims to accelerate EV charging management and orchestration to benefit both customers and the electricity grid.

Network resilience

The increasing frequency of extreme weather and natural hazard events due to climate change is impacting our communities and our network. Since 2015, Ausgrid has experienced two of its worst storms, totalling $71 million in cost pass throughs and leaving hundreds of thousands of customers without power – some for over a week.

Ausgrid is looking at how to best address climate change risks to our communities and networks to ensure a reliable and safe electricity network.

Ausgrid crew repair storm–damaged power pole.

ALIGNMENT TO STRATEGY

OUR PROGRESS TO DATE

Be sustainable

VEGETATION MANAGEMENT

Invested significant resources into our vegetation management and council engagement to ensure a safe distance between our assets and tree canopies

COMMUNITY RESILIENCE

Hosted a 'Summer Readiness' forum with emergency service providers, raising awareness of Ausgrid's actions to prepare for the bushfire season and to develop a shared understanding of our roles and responsibilities to support communities in the face of climate change

NEW TECHNOLOGIES

Trialling and deploying new technologies such as Standalone Power Systems, advanced fault locating sensors, and distribution monitoring and control devices to improve the resilience of our network and response to incidents

Why is it important for Ausgrid?
Our customers have told us that electricity plays an important role in their resilience during extreme weather and natural hazard events. With several escalating challenges presenting risks to electricity networks, the resilience of our network, our people and our communities has never been more important. The ability to resist, absorb, accommodate, adapt to, transform and recover from the effects of hazards (particularly those driven by climate change), is crucial to Ausgrid's ability to serve its customers.

Physical risks of climate change

Storms, extreme heat days, bushfires, coastal inundation and riverine flood all pose physical climate risks to our network. Our initial climate impact assessment shows us that the frequency of key climate hazards such as extreme heat days and storms will increase on average by 20% over the next 30 years, with some parts of the network more exposed than others.

BUSHFIRE AND STORM PERIOD CYCLE
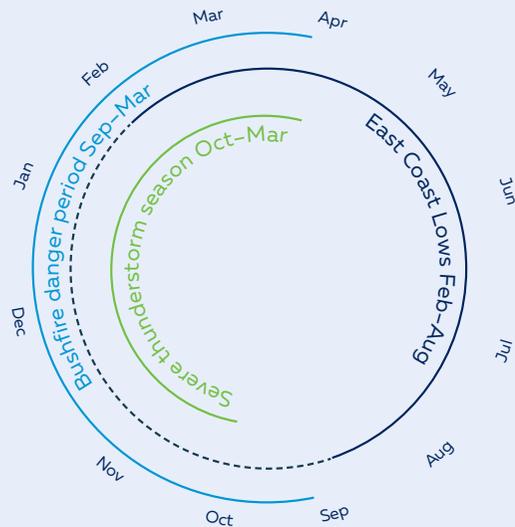
Our approach to addressing the risks and impacts of climate change is guided by science. In recent years we have experienced the significant impacts of climate change on our network. These impacts have led to long duration outages for customers and can affect communities' ability to respond to and recover from natural hazard events. We have used the experience of these recent events to shape our approach to resilience.

In FY22 we are undertaking a climate impact assessment, including scenario modelling. This process includes an overlay of future climate models, with geospatial information of asset data to identify a change in risks at an asset and organisational level, allowing us to understand the areas of our business most vulnerable to the impacts of climate change. With this understanding, we seek to identify the highest risk communities and areas of our network. We will look at opportunities to improve resilience, as well as our oversight and governance processes in relation to climate risk.

Mitigation activities

Preparation

Each year, Ausgrid intensively prepares for the bushfire and storm season. One of the ways we do this is by investing significant resources into vegetation management to ensure minimum clearances between vegetation and our assets are met. Clearance monitoring is informed by aerial scanning of our network using LiDAR (Light Detection and Ranging) which provides detailed information.

An asset inspection and maintenance regime, including high-definition photography of fire prone areas, is also conducted to ensure readiness. Identified bushfire defects are rectified in accordance with our Bushfire Risk Management Strategy.

During

During high-risk periods we operate at a heightened state of alert and have processes in place to ensure our network and staff are optimally poised to deal with potential incidents.

We work closely with emergency services such as the NSW Rural Fire Service to ensure the safety of communities and to protect our infrastructure during bushfires and extreme weather events.

After

Following an extreme weather event or bushfire, our priority is to quickly assess and address any safety risks.

To manage the inevitable challenges that arise, we maintain internal resources, and seek assistance from other distribution network service providers, contractors and accredited service providers – so we can quickly and safely restore our network.

The safety of our people and communities is our highest priority.

We will continue to assess and evolve our resilience strategy as needed. This process will be undertaken in collaboration with our customers, industry peers and other stakeholders. Our future approach will be guided by climate scenario modelling and inform investment decisions to improve resilience over the long term.

Plans for FY22

- Perform a climate impact assessment on our network area to understand the growing risk of extreme weather and natural hazard events into the future.

- Actively collaborate with government, industry, customers and external stakeholders to align our approach to long-term resilience planning.

- Learn from our customers about the lived experience during prolonged outages so that we can better understand how to help communities.

- Develop a joint industry definition and understanding of resilience and the impacts of climate change to energy networks.

Cyber and physical security

We are continually developing capabilities and building resilience to ensure the security of our network from cyber and physical threats.

ALIGNMENT TO STRATEGY

Be safer

Be smarter

OUR PROGRESS TO DATE

7b+
Perimeter scans detected with no significant external breaches

12m
Malicious and spam emails were blocked

208
Upgraded Electronic Access Control Management systems at 208 substation sites

Why is it important for Ausgrid?

Our electricity distribution network is critical infrastructure. Keeping it safe from intrusion is essential to providing a safe and reliable electricity supply to customers and communities.

Keeping our systems secure

In FY21, we implemented a range of initiatives to improve our preparedness and guard our network against the threat of cyber events.

These initiatives included:

- Developing a consolidated protective security strategy that covers cyber, physical, personnel and operational technology programs of work.
- Defining a cyber defence framework that establishes staged business and control restrictions in the event of a cyber event.
- Implementing third party supplier cyber security reviews across key vendors.
- Undertaking cyber–attack simulations, clarifying roles and responsibilities, and identifying process gaps.
- Upgrading Electronic Access Control Management systems at 208 substation sites to bolster physical and personnel safety.

Increasing our resilience to cyber threats

To help minimise the threat risk of a cyber event, we continued to engage with our employees during the year through an internal campaign to increase awareness of phishing emails – emails that look legitimate but are sent to gain access into the computer network or exploit personal information.

To support this campaign, we had a 'Pause for Cyber' event where executives engaged with employees and we discussed cyber security practices, cyber security observations on employee behaviours, and the need for increased awareness.

Data tables

Workforce (Headcount)

	FY2021	FY2020	FY2019	FY2018	FY2017
Total[1]	2,750	3,052	3,493	3,716	3,841

1 Includes Ausgrid, Emerging Energy Solution employees and labour hire. Excludes PLUS ES and contracted services.

The following workforce headcount information does not include PLUS ES, labour hire or contracted services employees.

	FY2021			FY2020			FY2019			FY2018			FY2017		
Employee information	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Employees	429	2,275	2,704	485	2,416	2,901	523	2,760	3,283	539	2,927	3,466	602	3,050	3,652
Employees (%)	16%	84%	100%	17%	83%	100%	16%	84%	100%	16%	84%	100%	16%	84%	100%
Employees by employment type and gender															
Full-time (%)	14.1%	83.5%	97.6%	14.5%	83%	97.5%	13.7%	84%	97.7%	13.3%	84.3%	97.6%	13.5%	83.4%	96.9%
Part-time (%)	1.8%	0.6%	2.4%	2.2%	0.2%	2.5%	2.2%	0.1%	2.3%	2.3%	0.1%	2.4%	3.0%	0.1%	3.1%
Total	**15.9%**	**84.1%**	**100%**	**16.7%**	**83.2%**	**100%**	**15.9%**	**84.1%**	**100%**	**15.6%**	**84.4%**	**100%**	**16.5%**	**83.5%**	**100%**
Gender diversity															
Executive Managers	3	8	11	2	10	12	2	9	11	2	9	11	3	6	9
Managers	32	141	173	30	147	177	35	149	184	30	147	177	37	139	176
Supervisors	28	198	226	40	216	256	38	272	310	36	265	301	39	236	275
Non-Managers	366	1,928	2,294	413	2,043	2,456	448	2,330	2,778	471	2,506	2,977	523	2,669	3,192
Total	**429**	**2,275**	**2,704**	**485**	**2,416**	**2,901**	**523**	**2,760**	**3,283**	**539**	**2,927**	**3,466**	**602**	**3,050**	**3,652**
New hires															
External Appointments	37	61	98	71	75	146	59	55	114	50	127	177	16	37	53
Internal Appointments	39	173	212	36	204	240	32	123	155	125	276	401	122	393	515
Parental leave by gender															
	31	179	210	50	220	270	39	211	250	44	219	263	45	201	246

Workforce (Headcount) continued

Employee age groups	FY2021	FY2020	FY2019	FY2018	FY2017
16–24	1%	1%	1%	1%	2%
25–34	17%	19%	19%	21%	22%
35–44	36%	35%	34%	33%	32%
45–54	31%	30%	29%	29%	29%
55–64	14%	14%	16%	15%	14%
65+	1%	1%	1%	1%	1%

Employee tenure					
<1 year	3%	5%	3%	4%	1%
1–2 years	4%	2%	4%	1%	1%
2–5 years	6%	5%	2%	2%	3%
5–10 years	5%	10%	15%	21%	27%
10–20 years	60%	57%	55%	51%	47%
20+ years	21%	20%	21%	20%	20%

Employee other					
Redundancies	187	449	209	282	239
Attrition rate excluding redundancies	3.3%	3.6%	2.6%	2.1%	2.4%

Employment arrangements					
Employees on Enterprise Agreement	93%	94%	95%	96%	93%
Employees not on Enterprise Agreement	7%	6%	5%	4%	7%

Indigenous employees					
Number of Aboriginal and Torres Strait Islander employees	45	50	61	24	30

Employees with a disability					
Number of employees with a disability (voluntarily self–identified)	27	35	41	47	53

Health and safety

Safety	FY2021	FY2020	FY2019	FY2018	FY2017
Managing Personal Safety					
Total recordable injury frequency rate (TRIFR)	5.4	6.5	7.4	13.6	15.8
Lost time injury frequency rate (LTIFR)	1.0	1.2	1.7	1.9	2.8
Employee fatalities	0	0	1	0	0

Employee health					
Injury					
All injuries (including First Aid and No Treatment)	191	232	290	279	328
Manual handling injuries (all injuries)	81	93	111	112	100
Total recordable injuries	42	54	71	102	118
Lost time injuries	8	10	16	14	21
Preventative					
AEDs owned (automated external defibrillator)	1,047	1,052	1,052	85	85
Mental Health First Aiders	102	102	112	78	70
Health checks (voluntary)	0	0	640	0	589
Medical and functional checks	1,100	1,500	–	–	–
Vaccinations – influenza (voluntary)	1,142	1,682	1,609	1,493	1,191

Community Health and safety					
Public safety					
Electrical Safety Week – primary schools (in our catchment area) participation	94%	92%	92%	92%	95%
Electrical Safety Week – primary schools (in our catchment area) participation	805	789	782	813	812
Incidents					
Third party motor vehicle pole collisions	465	503	491	439	441
Third party motor vehicle pillar kiosk collisions	83	107	97	71	47
Third party contact with overhead assets	326	319	374	351	211
Third party contact with underground assets	91	99	128	142	99

Environment

Emissions	Unit	FY2021	FY2020	FY2019	FY2018	FY2017
Greenhouse gas emissions						
Total carbon emissions (scope 1, 2 and 3)	tCO_2-e	899,063	914,279	959,125	1,033,714	1,037,443
Carbon footprint scope 1						
Carbon footprint scope 1	tCO_2-e	22,438	21,950	22,855	21,958	23,047
Carbon footprint scope 1 component parts						
Stationary energy use	tCO_2-e	218	180	415	396	335
Transport energy use	tCO_2-e	8,343	8,621	9,409	8,614	10,474
Sulphur Hexafluoride (SF_6)	tCO_2-e	13,804	13,088	12,987	12,829	12,068
Other	tCO_2-e	73	61	44	119	170
Carbon footprint scope 2						
Carbon footprint scope 2	tCO_2-e	780,844	789,287	823,503	895,352	898,646
Carbon footprint scope 2 component parts						
Property electricity emissions	tCO_2-e	10,444	10,741	14,937	17,449	19,241
Line losses during distribution of electricity on our network	tCO_2-e	770,400	778,546	808,566	877,903	879,405
Average line losses on our network	%	3.7%	3.7%	3.7%	4.0%	3.9%
Carbon footprint scope 3						
Carbon footprint scope 3	tCO_2-e	95,781	103,042	112,767	116,404	115,750
Carbon footprint scope 3 component parts						
Business travel	tCO_2-e	51	588	804	653	305
Waste	tCO_2-e	1,159	1,105	1,601	1,530	948
Streetlights	tCO_2-e	94,571	101,349	110,362	114,221	114,497

Data tables

Environment continued

Energy Use and Efficiency	Unit	FY2021	FY2020	FY2019	FY2018	FY2017
Energy consumed						
Energy use (scope 1 and 2)	GJ	3,598,012	3,637,838	3,759,806	4,024,722	4,019,237
Percentage reduction in emissions from FY2017						
Emissions reduction (all emissions) – scope 1, 2 and 3	%	–13.3%	–11.9%	–7.5%	–0.4%	
Emissions reduction (excluding line losses) – scope 1, 2 & and 3	%	–18.6%	–14.1%	–4.7%	–1.4%	–
Emissions reduction (NGER emissions) – scope 1 and 2	%	–12.8%	–12%	–8.2%	–0.5%	
Emissions reduction (NGER emissions excluding losses) – scope 1 and 2	%	–22.2%	–22.70%	–10.6%	–6.8%	–
Emissions reduction – scope 3 only	%	–17.3%	–11%	–2.6%	0.6%	–

Power Generation and Production						
Renewable energy generated for our use						
Solar	kWh	1,799,233	2,029,191	843,571	26,503	26,503
Tri Generation	kWh	32	43,394	116,800	150,661	173,726

Waste						
Waste types						
Solid waste	tonnes	2,171	2,177	3,054	3,993	4,186
Liquid waste	kL	262	198	202	205	166
Hazardous waste	tonnes	62	64	82	145	91
Recycling and recovery						
Waste diverted for recycling	%	26	29	25	8	9
Waste diverted for energy/recovery	%	3	3	3	3	3
Total waste diverted for recycling/recovery	%	29	32	28	11	12

Data tables

Environment continued

Water	Unit	FY2021	FY2020	FY2019	FY2018	FY2017
Potable water						
Potable water used	kL	53,646	166,850	186,948	99,439	136,129
Captured/self sourced water						
Captured/self sourced water	kL	72,216	68,400	46,080	46,080	48,000
Water discharged						
Water treated and discharged	kL	66,184	66,235	68,456	76,000	76,268

Environmental Management Systems						
Environmental management system certification coverage	%	100%	100%	100%	100%	100%

Environmental Compliance						
Legal action						
Prosecutions	Number	0	0	0	0	0
Other non–compliances						
Licence breaches	Number	0	0	0	0	0
Reportable incidents	Number	6	6	3	2	9
Written warnings or infringement notices	Number	0	1	0	0	0

Notes:

- Waste emissions are based on data from our current key waste contractor who took over Ausgrid's entire network area in April 2018 and their emissions data was only available for part of FY17, which accounts for the lower values for FY17 and FY18 compared to the waste volumes (includes entire disposal data for the FY17/FY18 period).
- In FY20 and FY21, Ausgrid NGER reporting excluded PLUS ES data which can be up to 4% of (fleet, property, waste, business travel) emissions and energy, and water totals. PLUS ES was formed in FY18. FY18 and FY19 data has been similarly adjusted to exclude PLUS ES energy, emissions, waste, water and business travel.
- In FY21, the incident measure changed from reportable controllable incidents to reportable pollution incidents.
- Waste data has been adjusted to better reflect waste categories and minor rounding/apportioning errors.
- Due to data disruptions for solar generation, the reported number is completed from statistical modelling.

Data tables

Power supplied

Power sold		FY2021	FY2020	FY2019	FY2018	FY2017
Power delivered to residential customers	GWh	8,597	8,640	8,623	8,494	8,738
Power delivered to business customers	GWh	15,860	16,294	16,801	16,892	16,931
Total power sold	**GWh**	**24,457**	**24,934**	**25,424**	**25,386**	**25,669**

Number of customers						
Residential customers (households)	Average customer numbers	1,590,154	1,578,910	1,564,021	1,545,428	1,524,732
Business customers	Average customer numbers	184,050	183,169	182,253	181,866	182,182
Total number of customers	**Average customer numbers**	**1,774,204**	**1,762,079**	**1,746,274**	**1,727,294**	**1,706,914**

Reliability						
System Average Interruption Duration Index (SAIDI)	Average time that a customer is without electricity in minutes	70.7	92.2	74.7	69.0	79.0
System Average Interruption Frequency Index (SAIFI)	Average number of service interruptions to each customer	0.56	0.68	0.66	0.68	0.71

Power prices						
Network charge – average residential customer revenue	$/year nominal[1]	$557.68	$553.52	$630.46	$630.52	$680.03

1 Includes Ausgrid distribution charges, transmission charges and NSW Government Climate Change Fund costs.

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