Ausgrid

connecting communities,
empowering lives

2020 SUSTAINABILITY REPORT

Energy transition for a better world

Connecting communities and empowering lives

We are pleased to be able to provide our annual update on our sustainability performance.

Ausgrid's key stakeholders have made it clear that they want to know what we are doing to put our commitment to sustainability into action.

This Sustainability Report provides transparent information and facts on our progress in becoming a more sustainable and responsive organisation and how we are delivering on the issues that are material to our business.

This Report is structured in three sections – our customers and community, our people, and energy solutions. The areas underpin sustainability for us and play an active role in our transformation to connect communities and empower lives.

This **2020** Report covers the FY2020 financial year from 01 July 2019 to 30 June 2020.

FRONT COVER
Dane Hansen, Cable Jointer

2020 highlights

Energy transition for a better world

As the custodian of an energy network shared by over four million Australians, Ausgrid has a critical role in leading and delivering the transition to low-cost, reliable and sustainable electricity solutions to enable a decarbonised economy.

This transition is an important part of achieving our vision to be a leading energy solutions provider, recognised both locally and globally.

Shaping a better future must start now. We are transforming how our customers interact with our network by developing the technologies and services that our communities will have access to in the coming years.

Customers & communities

Improved our **communication**, **information**, and **support** to our life support customers to help keep them safe

Introduced new **demand-based tariffs** to give our customers more control over their bills

Improved our **storm safety** information to help customers stay safe and prepared

Implemented **emergency support** to customers with our **$3.9m COVID-19 relief package**

Made electricity **more affordable** by reducing our network charges by 12% from the previous year

Launched our **'Voice of the Community'** engagement program with customers to understand our performance on: service resolution; service ease; and measuring our reputation

Ausgrid has a critical role to play in leading and delivering the transition to a low-cost, reliable, and decarbonised economy

Our people

23% reduction in Total Recordable Injury Frequency Rate (TRIFR) from previous year

1,258 Live Work interactions were undertaken where we went on site to observe and confirm our live work controls

Implemented **22 engineering controls** to physically reduce the risk of hazards

Implemented a wide range of measures to keep our employees and customers **supported and safe** from COVID-19

Supported our **employees** with leadership and customer interaction training

Conducted **2,570 medical checks and functional assessments** on our employees as part of our 'Fitness for Work' program

Increased the involvement of our **Inclusion and Diversity Council** with the creation of five employee led sub-committees targeting: LGTBQI; gender diversity; Indigenous employees; disability; and cultural diversity

Energy solutions
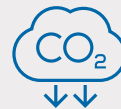
Achieved **11.8% reduction in emissions** against our target of 8% reduction of all emissions (scope 1, 2 and selected scope 3) by FY24

Implemented our **Virtual Power Plant initiative** with our customers where we can access energy stored in our customers' home batteries

Established our **partnership with JOLT** so we can provide electric vehicle charging from our electricity kiosks

Developed our plans to trial three **community batteries** on our network

Developing our **network resilience plan** so our network can better withstand extreme weather events

Engaged with our staff to increase awareness on **cyber security** and keep our systems secure for working from home

CEO's message

A safe, smart and sustainable Ausgrid

This year has been very challenging with COVID–19 placing new pressures on our customers and communities and disrupting how we work. Extreme storm events also impacted heavily on our network and caused significant damage and disruption.

I am proud that Ausgrid responded well to these challenges. During these extraordinary events, we have met our priorities of protecting the health and safety of our employees and communities, and minimising the disruption to our customers.

Despite these challenges, Ausgrid has continued to improve performance in our key sustainability focus areas of customers and communities, our people, and energy solutions.

The events of 2020 have made us even more responsive to our customers' needs and we have worked hard to listen to their concerns. Our 'Voice of the Customer' program has been valuable in providing us with insights on improvements we can make to build our reputation and their trust.

We supported our customers with a $3.9m relief package for assistance during the COVID–19 lockdown, and were able to still reduce our network charges by 12%.

We continued to develop our high performing culture during the year with leadership and customer interaction training. Due to significant financial headwinds, we sadly needed to reduce our workforce during the year. We saw a lot of great colleagues leave the business and they are greatly missed.

During lockdown, we listened to our employees to gauge their work from home preferences. This has accelerated our thinking on blended work arrangements. The inclusion and diversity of our workforce remains important to us and we furthered our engagement with employees to involve them in this process.

The health and safety of our workforce remained a focus in the year with pleasing results. Our total recordable injury frequency rate reduced by 23% from the previous year, a 58% reduction since our change in ownership, and a clear reflection of our focus on this area.

The events of 2020 have made us even more responsive to our customers' needs

Our development of energy solutions and the evolution of our network have been progressing well. Making our network ready for the future, where renewables play a major role in the power mix and households and businesses can sell their energy back into the network, has been an important focus.

Transitional and physical climate opportunities and risks have also played a large role in driving a range of sustainability responses. Our carbon emissions reduction targets, making our network more resilient, and implementing technology innovations, will drive our transformation into the network that our customers will need now and into the future.

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. Sustainability is a crucial enabler for our success, and it supports our purpose of connecting communities and empowering lives.

Richard Gross
Chief Executive Officer

Our vision to be a leading energy solutions provider can only be achieved if, as an organisation, we are safe, smart and sustainable

2020 ACHIEVEMENTS

$**3.9**M

relief package for assistance during the COVID-19 lockdown

12%

reduction in our network charges

$**42**M

investment over five years through our Network Innovation Program: testing new technologies and new ways of doing things in our network

Our organisation

Powering the hub of NSW

Ausgrid's network of substations, powerlines and underground cables and power poles across Sydney, the Central Coast and the Hunter Valley is an asset that connects our customers and their communities

Scone

Muswellbrook

Singleton

Maitland   Nelson Bay

Cessnock

Newcastle

Lake Macquarie

Wyong

Gosford

Hornsby

Sydney

Oatley

NSW

Our organisation

3,052
workforce

48,695km
power lines and underground cables

509,271
power poles

32,939
small distribution substations

255,604
streetlights

231
large electricity substations

22,275km²
of area supplied

Our impact

>4m
customers and users

105
hospitals

1.6m
homes

183k
businesses

20%
of Australia's GDP is supported by our services

1,238
schools

We are the custodians of an asset that connects communities and empowers the lives of its customers, and has done so for over a century on the east coast of Australia.

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 4m 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 and users in the Central Coast and Hunter Valley, and businesses from corner shops to mines.

Our customers and users are from a highly diverse demographic and cultural mix and reflect Australia's multicultural society.

Our vision

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

Our purpose

is 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 joint owned by IFM Investors, AustralianSuper and the New South Wales Government and does not have any other shareholders. Our business benefits from our strong ownership base. We are 50.4% owned by AustralianSuper and IFM, and 49.6% owned by the State of New South Wales. As a partnership we are not required to provide an Annual Report.

Governance

Underpinning our approach to governance are strong risk management principles and our Code of Conduct, which helps ensure we consistently live our values and work towards a sustainability focused 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 stakeholders. Our Board consists of 10 members comprising three women and seven men. The Board maintains five committees: health, safety and environment; finance; risk; audit; and remuneration.

Our Executive is responsible for day-to-day operations.

The governance of our sustainability material issues is addressed in the relevant Board committees and Executive.

We understand that good corporate governance is essential to financial success and the sustainability of our company

Chief Executive Officer

Executive General Manager Emerging Energy Solutions

General Counsel and Company Secretary

Executive General Manager Transformation & Digital Strategy

Executive General Manager Asset Management

Executive General Manager Network Delivery Services

Executive General Manager Health & Safety

Chief Customer Officer

Chief Financial Officer

Executive General Manager People

Executive General Manager Field Operations

Ausgrid value chain

Our core business is electricity transmission and distribution

We have developed a network that provides a valuable essential service to many customers and communities. It comprises 509,271 power poles, 48,695km of power lines and underground cables, 231 large electricity sub stations, and 32,939 small distribution substations.

As part of our network, we provide 255,604 streetlights for 33 Council areas across Sydney, the Central Coast and the Hunter region, and maintain these to keep our communities safe.
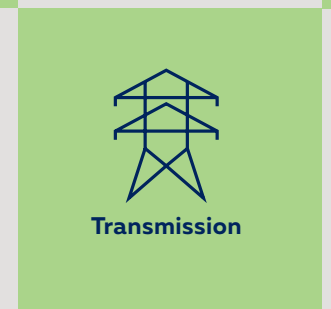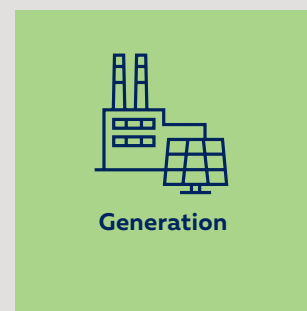
To provide a safe reliable network we are continually conducting maintenance, construction, bush fire preparedness and tree trimming. An integral part of this work is outage management from planned and unplanned events where we work intensely to have the minimum impact on our customers.

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

We work with a wide range of customers to plan their connection of new or additional services to our network and work to forecast and meet the demand required by our customers.

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

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

Generation

Transmission

SHAREHOLDERS · ACCREDITED SERVICE PROVIDERS[5]

SUPPLIERS

RETAILERS

CUSTOMER ADVOCATES

Connections[3]

Streetlights[4]

Life Support[2]

Bush Fire Preparedness

Tree Trimming

Ausgrid

Transmission & Distribution & Ancillary Services[1]

Maintenance & Construction

Meter Reading

Outage Management

Telecommunications

INDUSTRY BODIES · REGULATORS

The Customer

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

Overview

"Our network has an important role in helping our customers make their own electricity and share it with others."

Warwick Kemble, Field Supervisor – Substations

Our assets connect communities and empower the lives of our customers, and have done so for over a century on the east coast of Australia

KEY HIGHLIGHTS

9
MATERIAL
TOPICS

**as part of this year's
materiality review**

5
SUSTAINABLE
DEVELOPMENT
GOALS
IDENTIFIED

**as most aligned to our
business**

3
FOCUS
AREAS

**to enable us to deliver affordable,
reliable and clean energy choices to
our customers now and in the future**

Sustainability at Ausgrid

Sustainability at Ausgrid means operating in a safe, responsible manner that will enable us to deliver affordable, reliable and clean energy choices to our customers now and in the future.

Our commitment to contribute to the UN Sustainable Development Goals and to the principles of the Energy Charter is a core element in our sustainability approach.

We are committed to being a sustainable organisation and to continually improve across all areas of our business to provide services of value to our customers and communities and help make the world a better place.

To improve transparency and trust with our stakeholders we have been developing our sustainability narrative using internationally recognised frameworks

In order to be a sustainable organisation, we apply the following overarching guiding principles in the conduct of our business activities:

- 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 social dividends 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.

About this report

Building trust and transparency

To improve transparency and trust with our stakeholders we have been developing our sustainability narrative using internationally recognised frameworks.

This Report is guided by the Standards from the Global Reporting Initiative (GRI), a widely used global standard for sustainability reporting.

This **2020** Report reflects our performance for the FY20 financial year from 1 July 2019 to 30 June 2020.

Our material issues

We have revisited our materiality review from the previous year to identify if any of the issues, risks and opportunities that have the greatest impact on our business and communities have changed. This is known as a materiality assessment.

An important part of our materiality assessment is to make sure that it aligns with our corporate strategy and business plan.

Our 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 make sure that our material issues reflect our analysis
- Engagement with internal and external stakeholders in the development of our strategy and business plan to guide any impacts on our material issues.

Collaborating with and responding to our customers and the needs of communities

Customers and Communities

Establishing a resilient and innovative network that provides cost effective energy solutions now and into the future

Energy Solutions

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

People

Building a workforce who lives our values, and reflects the customers and communities we serve

Our material issues cover:

Customers & communities

Customers and communities
Our focus is on continuing to build trust and our social licence to operate.

Affordability
Responsibly developing and maintaining our network and giving our customers access to technology choices that provide more control of their energy use.

Our people

COVID-19
Protecting our employees and customers, and keeping our network operating to provide our essential service.

Health and safety
The health and safety of our people, customers and communities is paramount.

Inclusion and diversity
Implementing initiatives to help us progress towards a workforce that reflects our communities and society.

Energy solutions

Emerging technologies
Implementing and enabling new and emerging technologies to change the way our network operates, and how our customers interact with our network, to enable a low carbon economy and response to climate change.

Network resilience
The resilience of 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.

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

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

Our sustainability material issues

Ausgrid materiality matrix
The horizontal axis represents the issues that will have the greatest impact on Ausgrid. The vertical axis represents our stakeholders' views on which issues are important to them.

Health and safety

COVID-19

Emerging technologies

Customers and communities

Climate change

Network resilience

Inclusion and diversity

Cyber and physical security

Affordability

IMPORTANCE TO STAKEHOLDERS

SIGNIFICANCE OF IMPACT ON AUSGRID

KEY
- Customers & Communities
- People
- Energy Solutions
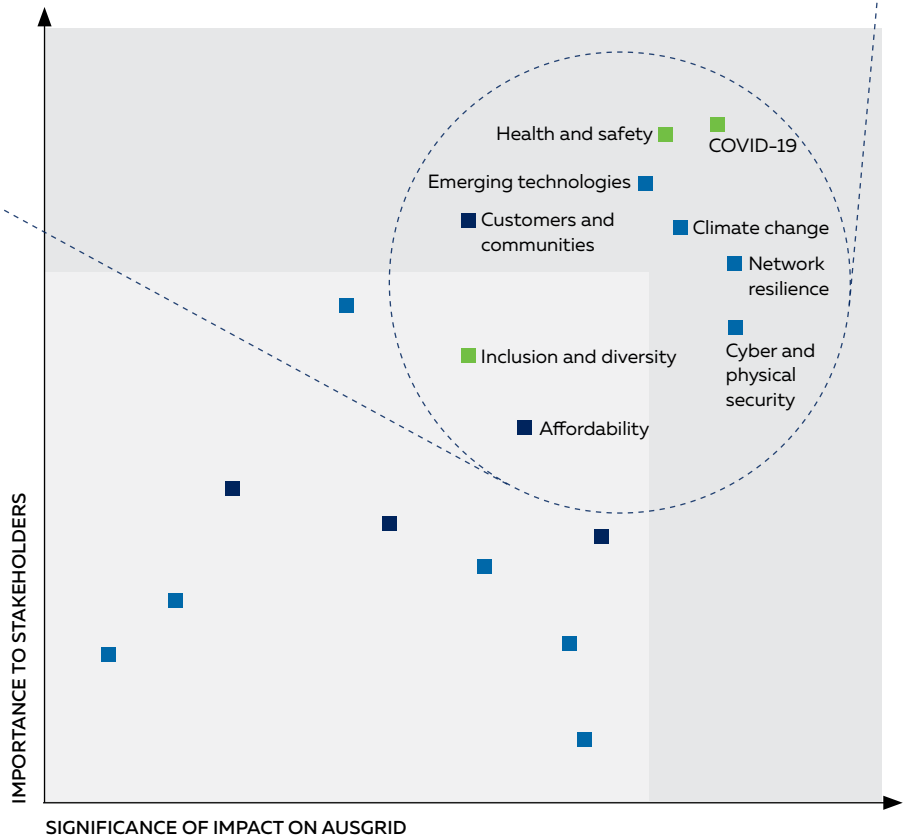
Our strategy

Our strategy at Ausgrid integrates and aligns with our material sustainability issues, which ensures that we have a sustainable strategy. This linkage allows us to address our sustainability issues as part of our business plan and have programs and measures that support their success

OUR VISION

Be a leading energy solutions provider, recognised both locally and globally

OUR PURPOSE

Connecting communities, empowering lives

OUR VALUES

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

Our strategic responses

Be safer
Live our values

Be smarter
Transform the way we work

Be sustainable
Foster community trust. Shape our future

Inclusion & diversity

Health & safety

COVID-19

Cyber & physical security

Material sustainability issues

Affordability

Customers & communities

Emerging technology

Network resilience

Climate change
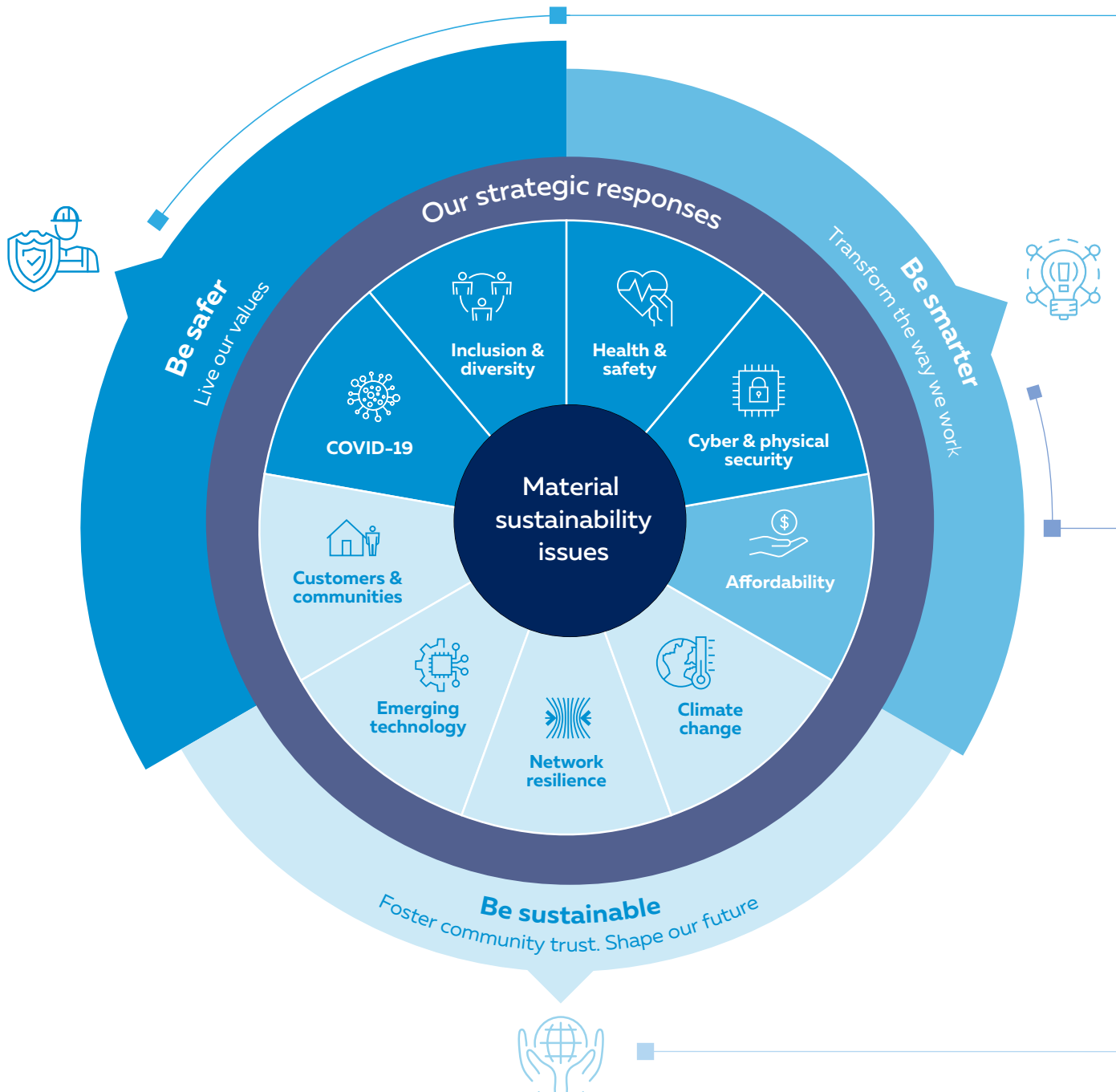
Be safer

PROGRAMS

· Health and safety
· People and talent
· Industrial relations

KEY MEASURES

· No fatalities
· Total reportable injury frequency
· Critical control assurance checks

OUR PERFORMANCE

23%
reduction in total recordable injury frequency rate (TRIFR)

98%
compliance rate within 3,764 health and safety assurance activities

2,570
medical and functional health checks

Be smarter

PROGRAMS

· Customer initiated work
· Planned work
· Unplanned work
· Enabling work

KEY MEASURES

· Transformation program key milestones

OUR PERFORMANCE

12%
reduction in our network charges to address affordability

$42M
investment over five years through our Network Innovation Program

20
group discussion sessions for the 'Voice of the community' program

Be sustainable

PROGRAMS

· Basics done brilliantly
· Serve emerging customer needs and data driven grid
· Accelerate tariff reform
· Build climate change resilience
· Build trusting relationships
· Foster sustainable communities

KEY MEASURES

· New products launched
· Community batteries deployed
· Network resilience
· Reputational net promoter score
· Carbon equivalent emissions

OUR PERFORMANCE

11.8%
reduction achieved in emissions, against our target of 8% reduction of all emissions (scope 1, 2 and selected scope 3) by FY24

1
new partnership with JOLT to support the uptake of EVs

3
trial community batteries planned

As an essential service provider, we have focused our efforts on keeping our network operating with the minimum of disruption

Our COVID-19 response

2020 was a year of unprecedented challenges. The emergence of COVID-19 required swift effective action to keep our employees and communities safe and our business operational. As an essential service provider we know the importance of reliable electricity, and we focused our efforts on keeping our network operating with the minimum of disruption to our customers.

During COVID-19 our priorities have been to:

- keep our employees and communities safe
- continue to provide safe, reliable and affordable electricity supply
- identify risks and quickly respond with practical solutions for our customers and employees.

Operational governance

Keeping our network running was important. To manage the evolving situation, we utilised our Business Continuity Management Framework and implemented our Pandemic Response Plan to quickly adapt to changing circumstances. Maintaining the resilience and protection of our control room as well as essential field and office functions was also a focus, as was prioritising critical maintenance to reduce the likelihood of unplanned outages.

Protecting our people

Leveraging technology to respond to COVID-19 challenges

Technology helped us remain connected to our employees and help keep them safe. To allow us to understand any COVID-19 exposure risks, we developed our own app so we could get daily updates from all employees

on their health and location. To further enhance employee communication, engagement, and information sharing, we implemented the social media tool 'Yammer'.

Our IT systems allowed our employees to remotely access documents and allowed us to provide electronic workflows for staff in the field, while our office-based employees were able to use our cloud services to work efficiently and effectively from home.

New training delivery model

To make sure we comply with our COVID-19 obligations we developed a new training delivery model in line with Government-mandated social distancing requirements. This ensures that our employees can safely undertake their mandatory training so we can continue to maintain the network and undertake critical repairs.

Making it safe for our employees to work

The health of Ausgrid's employees is our priority and as such we implemented a Pandemic Response Plan and implemented numerous measures to help keep our staff safe:

- office based staff work from home where possible and those within the office practise social distancing
- field staff are starting and finishing at home, minimising the requirement to enter the depots
- control rooms have been isolated from all but essential workers, including moving other workgroups away from backup control room sites.

Implemented the 'Give us a wave' media campaign

To engage more with our communities and improve understanding of our need to maintain the network, we created this campaign to increase positive interactions and encourage people to give our employees a wave.

Employee resilience

To provide support to our employees through this difficult period, we implemented our 'Coping with COVID-19' mental health initiative.

The health and safety of our customers and employees was our priority

2020 storms and bush fires

Ausgrid faces an annual cycle of storm and fire season risks and 2020 was a challenging year for these impacts on our operations.

Bush fires

While the terrible fires in New South Wales caused significant damage and unprecedented air pollution, they did not have a large impact on Ausgrid's network infrastructure.

In response to these fires, we provided significant assistance to our peer distribution network service providers to assist their recovery. Many of our employees also provided assistance through their volunteer involvement in the fire or military services, and we were proud to be able to support their efforts with leave for this important work.

Storm season

During the course of the financial year, in November 2019 and February 2020, Ausgrid's network experienced two very significant storm events.

The community impacts of the 2020 storm season were:

16,000
calls to fire and rescue services

2,600
calls to the State Emergency Service

10,000
claims made to insurance companies in 24 hours

$794M
in estimated property damage

Berowra Waters was one of our most remote and severely affected communities during the February 2020 storm. Ausgrid installed 60 temporary generators to power sewage and other essential items on affected properties.

LEFT – Inner city areas such as Artarmon experienced significant storm damage.

The impact on our network was:

169,200
phone calls to Ausgrid's fault line

168
damaged distribution poles, 1,005 services wires and 488 cross arms replaced

2,686
conductor spans repaired

868
Ausgrid field crew and 440 external contractors deployed to repair damage

Storm – November 2019

On 26 November 2019 a storm struck Sydney with wind gusts exceeding 104 kmph. The wind gusts which approached hurricane force speeds were described as a 'mini tornado'.

This resulted in significant damage to our network. Power was cut to 52,000 homes in less than 10 minutes. The most heavily impacted areas were suburbs on the Lower and Upper North Shore of Sydney as a result of trees being torn from their roots and falling on houses, cars and our network. More than 1,800 hazards were cleared during the restoration effort while the State Emergency Service received 1,200 calls for help.

Storm – February 2020

In February 2020, Ausgrid experienced many days of severe weather. On 9 February, cyclonic type conditions caused significant impact and destruction of our network.

The unprecedented impact of this storm event created damage that meant large sections of our network needed rebuilding, resulting in long periods of no power for our communities.

Impact of the storms

The storm season resulted in over 140,000 homes without power. Ausgrid received over 169,200 calls to our fault line.

The significant impact of these storms resulted in longer than usual periods that our customers were without power. Our priority was to make our network safe, that life support customers were safe and supported, and key facilities such as hospitals and nursing homes were provided with electricity.

Customers & communities

"I enjoy understanding customer requirements to plan a safe and reliable network that benefits customers and communities."

Srividya Kannan, Senior Engineer – Asset Investment Planning

Customers have been placed at the centre of Ausgrid's strategy. We know our success relies on collaborating and responding to our customers, and the needs of our communities

12%

reduction in our our average network charges for residential customers during the year

$3.9M

bill relief package co-designed with Energy Networks Australia delivered for customers experiencing hardship due to COVID-19

92%

of schools in our network area participated in Electrical Safety Week

Customers at the centre

To reflect the importance of our customers, we created our new executive position of Chief Customer Officer.

Our most vulnerable segment – Life Support Customers

Our experience supporting customers during the February storms helped us identify where we could improve information and our communication with customers who rely on life support equipment.

Our changes included:
- developing a dedicated life support customer web page
- refreshed our 'What is your Plan B' flyers based on primary market research and translated into the top 10 languages used in the Ausgrid Network Area

- dedicated phone queue when contacting our Contact Centre Emergency and Outages line
- introduced a Customer Impact Score that we use to plan outages, to better understand the impact on our customers, especially our Life Support Customers. We also use this tool during unplanned events to help us prioritise our responses

Better understanding customer and community needs

Customers are the core of our business, so it is imperative to understand their needs and concerns. In 2020, we launched the Voice of the Community program which used surveys to capture customer sentiment in three main areas:
- service resolution (regarding power outages, vegetation management, graffiti and other complaints)
- service ease (regarding connection applications, website interactions and other customer request services)
- Ausgrid's reputation score for each customer segment.

Using customer, partner, and stakeholder forums, we identified the key pain points of customer groups and put forth initiatives to address their concerns

What we learnt was 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, including empowering staff with information and tools so that they are equipped to resolve enquiries on first contact.

The unique issues faced by different customer groups mean segmentation is essential to understanding how we can best meet the needs of our customers. Using customer, partner and stakeholder forums, we identified the key pain points of residential, business, accredited service providers, retailer and Council customer groups and put forth initiatives to address their concerns.

In light of the severe 2020 storm season, we also made key changes to our website to increase the accessibility of storm safety information.

Improving our customer's experience

In 2020 we put considerable effort into identifying where we were not meeting our customer's expectations, so we could improve their interactions with us. Our customer experience initiatives included:

Making streetlights greener

We have been working with our Councils to help progress the LED Streetlight Rollout by connecting Councils with government incentives. These incentives will help Councils fund the conversion of our streetlights to more energy efficient LEDs. This will provide Councils with significant electricity and carbon emissions savings. Replacing legacy technologies with LED reduces energy use by up to 80%.

Simplification of the ASP design process

In response to feedback from developers, we introduced a three-tiered program for Accredited Service Provider designs (Simple, Standard and Complex) which allowed designers to evaluate and produce a more efficient and streamlined design service for customer-funded network extensions.

Simplification of the customer claims process

Customer-based claims for food spoilage, property damage and other impacts due to network outage frequency and duration were simplified and converted into a one-page process. The NMI (National Meter Identifier unique to each electricity meter) was also integrated into the claims process to allow faster issue validation.

Customer Consultative Committee (CCC)

The CCC is our peak consultation group. It is helping us become a customer-focused business and continues to be our key body for broad customer advocate input to our business planning. Most of Ausgrid's important decisions, programs and initiatives are presented to the CCC for its input. The CCC has three sub-committees that provide consultation on specific topics.

Pricing Working Group assists Ausgrid to develop our approach to tariffs to make sure we deliver lower costs and make changes that reflect the objectives of our business plan and benefit our customers.

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

CONSUMER CONSULTATIVE COMMITTEE
- **PRICING WORKING GROUP**
- **NETWORK INNOVATION ADVISORY COMMITTEE**
- **TECHNOLOGY REVIEW COMMITTEE**
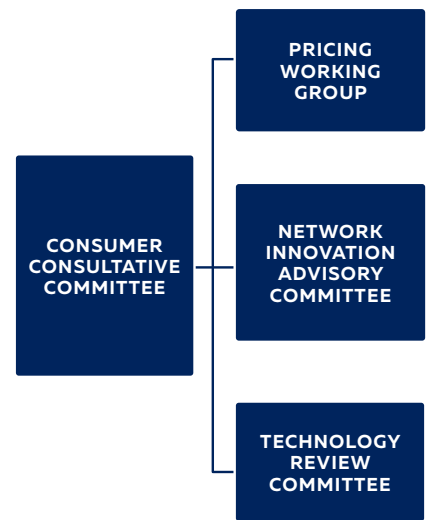
Network Innovation Advisory Committee (NIAC) will assist in driving our innovation program. With new technology a material sustainability issue and an important part of our business plan, this Committee will help inform our decisions about the trials on distributed energy resources and management of new technologies on our network.

Supporting customers during COVID-19

In response to COVID-19 we implemented a range of customer initiatives.

- Keeping our customers on life support safe by implementing a dedicated Contact Centre phone queue, calls ahead of planned interruptions and further information on our website
- Reducing the impact on our customers when they are most vulnerable by only doing work that is critical, to minimise the frequency and duration of planned outages during lockdowns
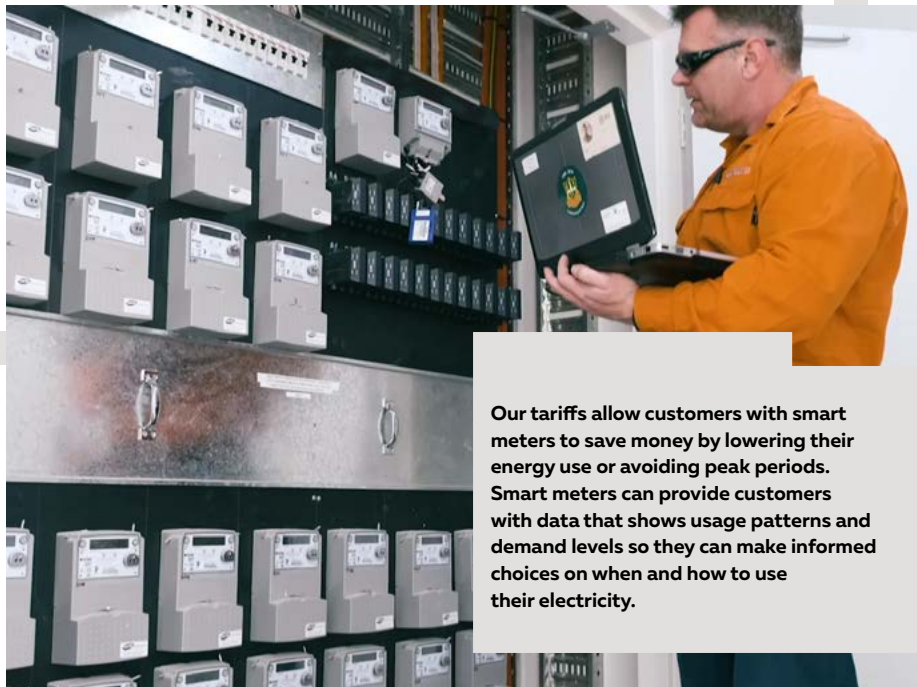
31,000
residential and small business customers on demand tariffs

$3.9m
bill relief package co-designed with Energy Networks Australia delivered for customers experiencing hardship due to COVID-19

$3.7m
Ausgrid capacity reset package to reduce capacity charges for our worst affected medium and large business customers during COVID-19

Our tariffs allow customers with smart meters to save money by lowering their energy use or avoiding peak periods. Smart meters can provide customers with data that shows usage patterns and demand levels so they can make informed choices on when and how to use their electricity.

AVERAGE NETWORK CHARGES FOR RESIDENTIAL CUSTOMERS

–$76 (12%)

$680	$631	$630	$554
2017	2018	2019	2020

Affordability

Keeping electricity affordable

Residential network charges dropped by 12%

In 2020 we challenged ourselves to achieve more for less. We took steps to cut our operational costs making our business more efficient. Despite bush fires, storms and later in the year, COVID-19, adding to our costs and reducing our revenues, we were still able to pass on savings to our customers. Our average network charges for residential customers dropped by $76 (12%) during the year.

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 over their bills, 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 a win-win for both us and our customers.

This change has been a great success. As at 30 June 2020, there were about 31,000 residential and small business customers on demand tariffs.

Further, about 411,000 residential small business customers remain on cost-reflective time-of-use network tariffs.

With 24% of residential customers and 51% of small business customers with cost-reflective tariffs, customers' ability to control their network bills has improved.

With medium and large business customers continuing to have cost-reflective tariffs, 63% of our network charges were derived from cost-reflective tariffs in 2020.

Our female Bright Spark Apprentices attended International Women's Day hosted by our Chief Executive Officer, Richard Gross. They came together to celebrate women's achievements and women's equality and hear firsthand, Ausgrid's focus on creating a gender balance in the organisation.

Below – CEO Richard Gross and MP Matt Kean, Minister for Energy and Environment, engage with students for electrical safety week.

'Sparky' the koala receiving burns treatment by Koalas in Care in Taree. Ausgrid donated first aid kits and burns bandages to support treatment of koalas injured during the terrible bush fires in 2019.

COVID-19 customer relief packages

Early in the pandemic we realised that many of our customers would be impacted and have difficulty paying their electricity bills. In response we designed tailored relief packages for our worst-affected customers and paused disconnecting energy supply to financially impacted businesses.

For residential and small business customers we implemented a $3.9 million bill relief package co-designed with our Energy Networks Australia (ENA) peers. This package provided either a rebate, or a three-month deferral of network charges, for small customers experiencing hardship due to COVID-19.

For our worst-affected medium and large business customers we also delivered a $3.7 million capacity reset package designed to account for customers' lower network capacity requirements during COVID-19.

Community investment

Our infrastructure is embedded in our communities across Sydney, the Central Coast and the Hunter Valley. With a strong purpose around connecting communities and empowering lives we continuously strive to make a positive contribution in ways that count.

Promoting electrical safety

Safety is a core value at Ausgrid and we're proud to have supported Electricity Safety Week since its inception in 2002. This program was developed by Ausgrid in response to the need to drive awareness of electrical safety amongst children. It forms an integral part of our Public Electrical Safety Awareness Program.

Electrical Safety Week is now a State-wide program that shows young people how electricity works, how to use it, and how to stay safe around it. Primary schools can register for the free interactive resource packs. As a schools-based initiative, it was

developed in collaboration with the NSW Department of Education to align with the NSW Science and Technology Syllabus.

In 2019, 789 (92%) of schools in our network area participated and 90% of teachers who participated in our feedback survey believed that electricity safety activities helped their students be safer around electricity.

Our employees are also enthusiastic supporters of this program with 56 staff volunteers visiting 44 primary schools and two Scout groups.

Helping koalas hurt in bush fires

In 2019 we contributed to fire disaster response by donating medical supplies such as bandages, burn blankets and medical supplies for the treatment of koalas injured in the devastating bush fires across the New South Wales Mid North Coast.

Ausgrid delivered these medical supplies to Koalas In Care at Taree who were treating 23 koalas.

92%

of schools in our network area participated in Electrical Safety Week

230K

litres of seawater used rather than potable water for drilling operations at Scotland Island

1.54

hectares

of critically endangered Eastern Suburbs Banksia Scrub being rehabilitated at our Bunnerong Substation

Sir Roden & Lady Cutler Foundation

Ausgrid has a proud historical connection with Sir Roden Cutler, having moved into Roden Cutler House after it was built in 1975. We are proud to continue this connection as a Gold Sponsor of the Sir Roden & Lady Cutler Foundation's (SRLCF) 'Pick Me Up' Service – a free service for the seriously or terminally ill, elderly or infirmed across the Sydney region.

The 'Pick Me Up' Service transports those in need to hospital, medical or any other health-related appointments when referred by a doctor or social worker. On occasion, this service will also transport those in need to social groups if they are socially isolated. Those who call on the SRLCF are either too ill or too frail to travel on public transport while undergoing their treatment. Many, especially the elderly, do not have family support to assist them during these times.

Our communities, our environment

We are committed to preserving our environment and helping make the world a better place.

Keeping our employees and communities safe and protecting the environment is vital in maintaining our social licence to operate.

Environmental management

Ausgrid has an Environmental Management System (EMS) certified to the international standard ISO 14001 since 1996. Our EMS was externally audited and maintained accreditation with no non-conformances.

Our EMS covers all aspects of environmental management including heritage, pollution control, hazardous materials, emissions, contamination, waste, ecology and resources. It includes policies, procedures and training to provide a basis for continual environmental improvement.

We use our EMS to identify environmental risks and put measures in place to effectively manage our performance.

In 2020 we had zero environmental prosecutions, zero licence breaches, and six reportable pollution incidents and one official caution.

Preserving biodiversity and protecting endangered scrub

In 2020 we continued our rehabilitation of 1.54 hectares of critically endangered Eastern Suburbs Banksia Scrub (ESBS) at our Bunnerong Substation near Port Botany, Sydney. Only 146 hectares remains of the original 5,300 hectares between North Head and Botany Bay. This makes Ausgrid's property important for biodiversity.

A grant from our shareholder IFM Investors was awarded to Ausgrid and our partner Bush Habitat Restoration Cooperative to regenerate the ESBS as well as carry out erosion control, monitoring, seed collection and the installation of three native beehives on-site.

This project has made a significant improvement in the health of the ESBS allowing the beauty of this scrub to be revealed by the removal of introduced plant species.

Saving drinking water in our operations

In 2020 Ausgrid tested the use of seawater in place of potable water for drilling operations. At a project at Scotland Island, approximately 230,000 litres of seawater was used to create a drilling fluid.

Using seawater instead of potable water had significant financial, social and ecological benefits. To achieve the best outcome possible, we worked with multiple agencies (Northern Beaches Council, WaterNSW, Roads and Maritime Services and the Department of Primary Industries) to ensure we met our compliance obligations.

Hosting bees in and for our communities

Ausgrid is the proud owner of six native beehives at our depots. These bees are a safe addition to our workplaces as they do not sting and provide valuable benefits to our communities by pollinating gardens and bushland and helping us regenerate sites with endangered scrub.

To further help bees in our community, Ausgrid partnered with Australian AgTech startup Bee Innovative, which uses radar technology, called BeeDar, to help farmers increase crop pollination and improve food security.

As part of working with Bee Innovative, Ausgrid hosted 30 hives of about 120,000 honey bees on its land near rural substations in Newcastle and the Hunter Valley. These locations provide security and reliable supply of food and water for the bees before they get taken to fields in spring.

Our people

"Every week brings a unique challenge that expands my learning and knowledge, and continues to drive my passion for my role."

Thomas Mackenzie, Project Officer
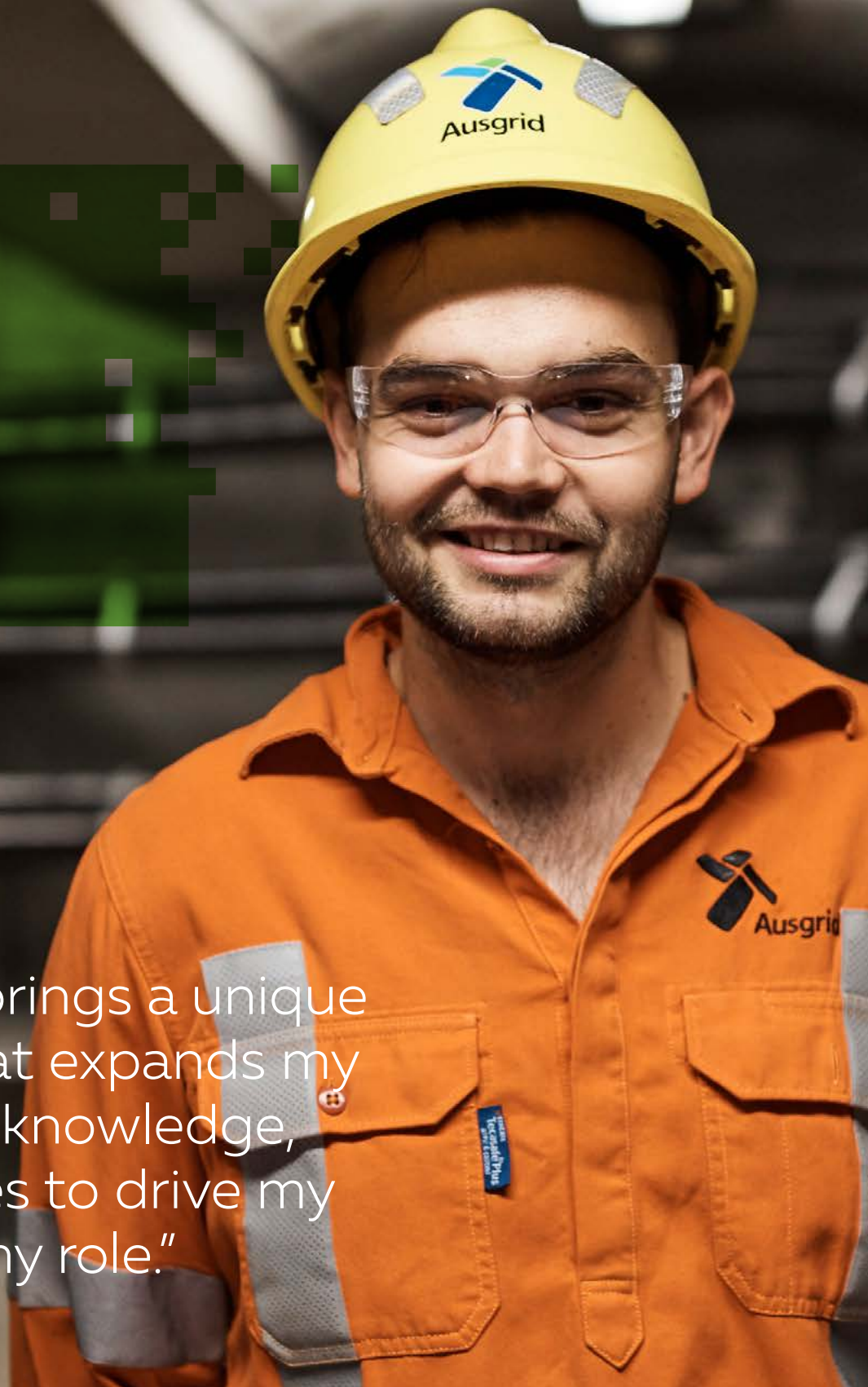
Our people ensure we continue to deliver essential services to those that rely on us. We believe in building a reliable, safe workforce that reflects the diversity of the communities in which we operate

KEY HIGHLIGHTS

98%

3,764 health and safety assurance activities undertaken, resulting in a 98% compliance rate

1,258

Live Work interactions were undertaken where we went on site to observe and confirm our live work controls

420

employees directly participated in inclusion and diversity events held in the workplace

Our people

In 2020 COVID-19 had a significant impact on the world and how we operate. We took immediate and extensive steps to keep our people safe while continuing to build a high performance culture.

Employee feedback survey

In 2020 we conducted an employee feedback survey on how employees prefer to work. We engaged to learn more about working from home preferences and the amount of contact required to remain connected to their colleagues and the organisation.

This informed our response to have our office-based employees return to two days in the office with their team, with reduced numbers in a workspace to provide more space per person. The use of technology and employee preferences has accelerated our thinking on blended working arrangements now and into the future.

Restructuring for the future

Ausgrid's last regulatory determination resulted in a reduction in our allowance to operate and maintain our network. This meant Ausgrid had to review and refine its business to adapt.

This unfortunately meant Ausgrid had to reduce its workforce by 449 people. This has been a difficult decision and these employees are missed.

In response to this reduction in employees, we are working hard to improve and better use processes, technology, and systems to deal with a transformed workforce.

Leadership Development program

To continue to build the capability of leaders in our critical operational areas, a Leadership Development program was deployed to all people leaders in 2020 within our Field Operations and Safety teams. This will support and assist them in having more effective safety conversations to create a safety mindset.

Our revised Health & Safety Management System is easier to use and more accurately reflects how we carry out work in the field

This program was developed to support our broader Live Work program.

In response to our employees working from home due to COVID-19, Ausgrid ran a number of online leadership programs to help leaders to manage remote teams and to effectively support their employees as they work remotely.

Customer interaction training

In 2020 we provided additional training to our employees to assist them with tough conversations. Some of our customer interactions are during periods of high stress due to unplanned outages.

Giving our field and customer employees the skills to manage these conversations is important to allow them to have safe and productive engagement with our customers and the community.

Health & Safety

The physical and mental health and safety of our employees is important to us. We have revised our Health & Safety Management System to better reflect the needs of the organisation and provide simple, clear direction when dealing with health and safety issues.

Our total recordable injury frequency rate (TRIFR) continues to reduce with a 23% reduction from the previous year, a 58% reduction since our change in ownership in FY2017, and a clear reflection of our focus on this area. While our lost time injury frequency rate (LTIFR) has decreased 42% since change of ownership, it increased slightly in FY2020. Our continued focus will be to further improve our performance on these metrics.

In 2020 we also developed our Critical Incident Mental Health Response Procedure.

Pause on live work

Since the tragic loss of one of our colleagues in 2019, a significant decision to pause all live work was made so we could conduct a major safety review to ensure our network is safe for both our communities and our employees. This decision was felt by our customers, accredited service providers, Councils, and our employees.

To ensure we considered these impacts as we developed measures to allow us to safely return to live work, we established a Live Work Industry Consultative Committee comprising the Ausgrid CEO, the CEOs of Endeavour, Essential Energy, Energy Consumers Australia, as well as representatives from the Electrical Trades Union and National Electrical Communications Alliance.

Our internal project team reviewed more than 200 live work tasks and changed the way we plan and perform work whilst minimising disruption to our communities.

Health & Safety assurance

Our 2020 Health and Safety assurance plan was designed to align with the recommencement of live work and the requirement to focus on these high-risk activities as a priority across the network. Throughout 2020, 3,764 health and safety assurance activities were undertaken resulting in a 98% compliance rate. 1,258 Live Work interactions were undertaken where we went on site to observe and confirm our live work controls.

Health & Safety reset

The Health & Safety reset initiative which commenced in FY19 was finalised and resulted in a revised Health & Safety Management System being developed and implemented. The revised system is easier to use and more accurately reflects how we carry out work in the field.

Safety documents were streamlined to remove duplication and link documents to integrate with Ausgrid's collective management systems. This resulted in a reduction of 67% of documents required to keep our people safe and working efficiently. Our system ensures compliance to our regulatory requirements and aligns to ISO 45001.

Hazard assessment app

An electronic hazard assessment app known as the eHAC has been designed and implemented to support changes in work processes such as live work.

This eHAC will enhance the user experience and help all users engage in improved collaborative discussions on the health, safety and risk management requirements for all planned and unplanned work. The new eHAC is designed for live and non-live work tasks.

Fitness for work

In 2020 we implemented a 'fitness for work' program to ensure our field employees are fit and safe to perform their roles. We implemented medical and functional assessments under this initiative with over 1,300 medicals and 1,270 functional assessments conducted.

Inclusion & diversity

Our vision is to be a leading energy solutions provider, recognised both locally and globally. It is about being the best at everything we do. To do this we need to develop the best innovative solutions. This is achieved through idea generation arising from diversity of thought, experiences and backgrounds.

We believe in building a workforce that reflects the diversity of the communities in which we operate, particularly given our purpose is

ABOVE – To support the LGTBQI community and celebrate Inclusion and Diversity, Ausgrid decorated streetlights in Surry Hills and Darlinghurst as 'rainbow poles' during Mardi Gras.

RIGHT – To recognise International Day of Persons with Disability, Ausgrid was privileged to have Paralympic swimmer Karni Liddell come to Ausgrid and share her stories from her journey to success. Karni's powerful message was that every one of us has a choice in life and that our choices should not be determined by circumstances.

EMPLOYEE PROFILE

Kesaia Takau is a Senior Project Officer in Transformation & Digital Strategy. Kesaia's family originates from Tonga. Joining Ausgrid in 2009 as an apprentice electrical mechanic,

Kesaia said, "I was taken aback by how well I was treated by everyone – teammates, tradespeople, engineers and managers. They're always respectful, open and collaborative."

After finishing her apprenticeship, Kesaia became a Trainee Engineering Officer undertaking an Advanced Diploma rotating across several operational sections, while also completing undergraduate and post-graduate studies part-time.

'connecting communities, empowering lives'. This means creating a work environment that is inclusive and where employee differences are valued. We also acknowledge that people perform the best when they feel comfortable in bringing their whole self to work.

During the year, 420 employees directly participated in inclusion and diversity events held in the workplace, even though part of the year was impacted by COVID-19 lockdowns.

Our Inclusion and Diversity Council

Ausgrid's Inclusion & Diversity Council is chaired by our CEO, Richard Gross. The Council is action-oriented to bring about sustainable change.

The Council has several sub-committees that report to it to provide employee member input on a range of issues to make Ausgrid a more inclusive and diverse organisation.

The sub-committees are:
· Pride – LGBTQI networking group
· GRID 25 – Gender diversity employee resource group

· ATSI employee network
· Disability employee resource group
· MOSAIC – Cultural diversity resource group

In 2020 these sub committees developed actions and deliverables for consideration and approval by the Council to address four overarching goals:
1. Drive an inclusive and respectful culture
2. Attract and recruit diverse talent
3. Retain and develop our team
4. Lead and influence with an inclusive mindset

Rainbow poles

In an Ausgrid first, we decorated some of our own streetlight poles with a rainbow theme for the Sydney Gay and Lesbian Mardi Gras. Poles in streets neighbouring the parade route and at the front of our head office were decorated.

This was a wonderful opportunity for us to experiment with decorating our assets with artwork for the period of the festival and to recognise this important event in the LGBTQI calendar.

Workplace gender

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.

We have conducted an analysis of our payroll to determine if there are any remuneration gaps between women and men, and there is no gap.

Ausgrid is committed to hearing from our female employees about their experiences, and we completed a research project asking women at various career points about their experiences in Ausgrid with a view to continue to improve the experience of women at Ausgrid.

Energy
solutions

"Ausgrid is constantly
evolving to deliver
a stronger network
for our future."

Colette Elysee-Lyons, Executive Assistant – Customer & Strategy

We believe that our network and services are important enablers in supporting a clean energy future in Australia. We are establishing a resilient and innovative network that provides cost-effective energy solutions

9.9%

reduction in selected scope 3 emissions since FY17, in line with our streetlight LED program

11.8%

reduction of all emissions (scope 1, 2 and 3) against our target of 8% by FY24

3

trial community batteries being planned

Climate change

Ausgrid is very aware of its climate change risks and opportunities. We are continually increasing the maturity of our understanding and response to make sure we continue to provide safe, affordable, reliable and sustainable energy solutions while addressing climate change considerations.

Our guiding principles

Climate change is an important issue for Ausgrid. We have developed guiding principles for our business to make sure that it is factored into our decision making. Our climate change guiding principles are:

- Promote decarbonisation of the economy and reduce greenhouse gas emissions in our operations.
- Integrate climate change variables in internal decision-making processes as well as in the analysis and management of the long-term risks and opportunities for the organisation.

- Include in our decision making, ways to harden and increase the resilience of our network and operations to the physical impacts of climate change.
- Consider climate change risks and impacts on our operations and assets and seek opportunities for the organisation to provide innovative clean energy, infrastructure or operational solutions on our network or to our customers.

Transitional climate change

Our strategy has been to provide value to our customers to remain connected to our network, and to encourage choice for our customers in accessing cleaner energy solutions.

We believe this is a key strategic shift from being a traditional distribution network service provider, to being a dynamic mover of electricity and the 'internet of electricity' by allowing our customers to share energy back into the network and for all to benefit from these two-way energy flows.

We have increased our focus on building our capabilities to support our customers as they invest in new energy technologies and we transition to a distributed and renewable system

This strategy provides Ausgrid with opportunities to provide solutions in response to climate change and introduce new technologies and services. These include our trialling of virtual power plants, community batteries, stand-alone power systems, and technology that allows us to better manage our network.

Physical climate change

We are very cognisant of our physical climate change risks, especially the annual bush fire and storm seasons in our network area.

Each year we conduct significant preparations to mitigate impacts, and we believe we have a thorough understanding of these risks and their management. We are developing our network resilience strategy so that we can prepare our network for the future.

Emissions reductions

Ausgrid is committed to achieving its carbon emissions reduction targets as part of our Climate Action efforts in support of the UN Sustainable Development Goals.

We believe our emissions targets are an appropriate first step for us as part of our ongoing response to climate change.

We recognise that expectations on emissions reductions and more ambitious targets are rapidly changing in response to investor expectations, Government policies, the regulatory environment, and the changing expectations of our customers. We will continue to develop our response to these issues and improve our performance.

Emerging technology

We continue to develop our services and capabilities so that we can enable 'the internet of energy' for our customers.

Ausgrid believes it has a significant opportunity to support the climate change transition through the introduction of new technology and services that support our customers' energy choices and access to affordable and sustainable energy.

We are in a unique position to be the enabler for a lower emissions electricity network through our support and implementation of new technologies.

From this we want to provide choices for our customers for a more sustainable future.

The future role of networks – our DSO (Distribution System Operator) strategy

The role of the Distribution System Operator (DSO) includes ensuring reliability and efficiency in the operation of systems that have distributed energy resources (DERs – small-scale power generation sources located close to where electricity is used, typically owned by customers).

We have increased our focus on building our capabilities to support our customers as they invest in new energy technologies and we transition to a distributed and renewable system. This includes progressing initiatives such as community batteries and rethinking how we deliver innovation.

It is important that we continue to maintain efficient, safe and reliable services throughout the transition while finding new ways of optimising value for our customers.

We believe innovation is key to decarbonise the energy supply and improve reliability and affordability, while giving customers more choices.

Our Network Innovation Program

Our Network Innovation Program provides us with opportunities to incorporate growing numbers of DERs and electric vehicles in our network.

This Program, an investment of $42 million over five years, will allow us to test the suitability of new technologies and new ways of doing things to evolve our network to meet changing customer expectations.

Comprised of customer representatives, our Network Innovation Advisory Committee (NIAC) oversees the implementation of this Program. Customers have told us they want a greater role in driving the direction of innovation in electricity networks, hence the establishment of the NIAC.

The Program contains 11 initiatives focused on new grid technologies that improve customer outcomes.

Our Power2U program

Ausgrid's Power2U Program is an initiative that encourages customers to take up renewable energy and efficiency measures such as installing solar systems, lighting upgrades, and sharing their excess stored energy with the grid. Our program seeks to provide more choice to customers about the way they use their energy, maximising grid efficiency benefits and reducing costs for customers.

We are in a unique position to be the enabler of a lower emissions electricity network through our support and implementation of new technologies
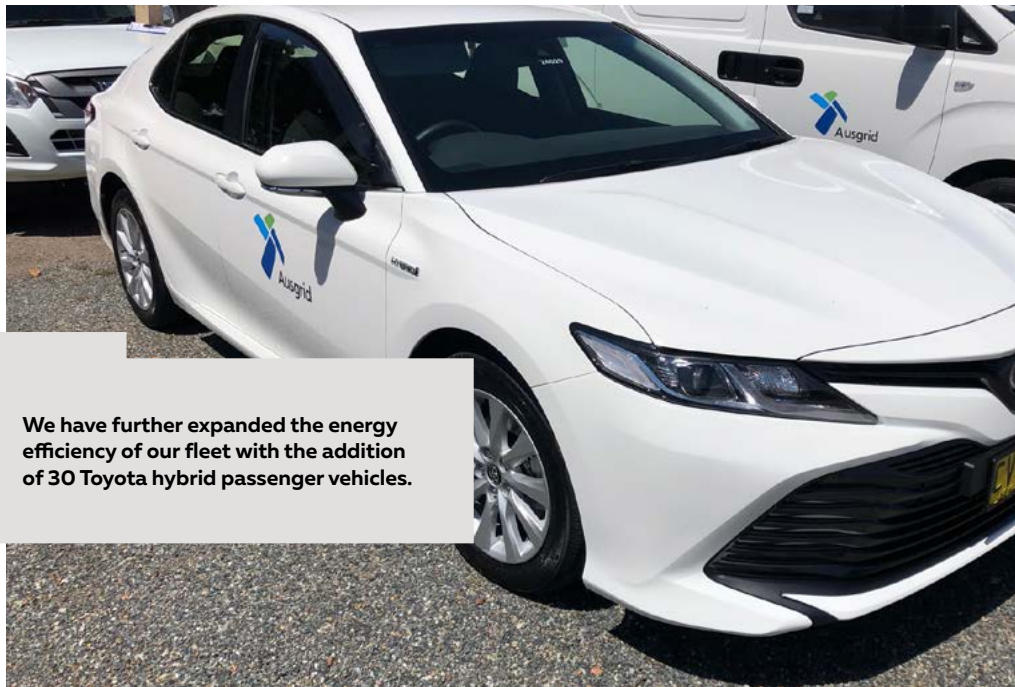
We have further expanded the energy efficiency of our fleet with the addition of 30 Toyota hybrid passenger vehicles.

$**42**M

Investment over five years through our Network Innovation Program

430

NSW EV owners consulted around charging and EV driving patterns

1.54
hectares

of critically endangered Eastern Suburbs Banksia Scrub being rehabilitated at our Bunnerong Substation

Home batteries and virtual power plants

Our virtual power plant trial project, part of our Power2U program, is an innovation that encourages our customers to see value in remaining connected to our network while also providing a mechanism that allows us to defer infrastructure costs to meet peak demand.

During peak demand on our network, Ausgrid can use the energy in our customers' home batteries via the virtual power plant to ensure the network continues to deliver for all customers. Customers who have agreed to be a part of this trial are paid for the exported energy and therefore receive a greater benefit from their solar and battery investment.

Community batteries

As part of the Network Innovation Program Ausgrid is planning the trial of three community batteries to give our customers better access to affordable clean energy choices.

These community batteries will allow our customers to export and virtually store their own solar for later and will provide an affordable option to further support sustainable energy.

They will also be used for demand management to supplement the network in peak times and we expect these will be a common element of our network in the future.

Electric vehicles (EVs)

The electric vehicle market in Australia is currently in its infancy. In 2019, EVs represented only 2,200 vehicles of the 6.6 million registered vehicles in our network area. To inform our planning for EVs, we have conducted research with 430 New South Wales EV owners to investigate opinions and perceived behaviours around charging and EV driving patterns.

We are implementing an Advanced Distribution Management System (ADMS) that will replace our current system to enhance the way we manage our network, simplify our control systems, and enable us to operate in the future 'energy sharing' economy. This multi-year and multi-phase initiative allows us to provide a safe, reliable, resilient and sustainable network.

- 44% reduction of all emissions (scope 1, 2 and 3) excluding line losses, by FY24.

Our targets are baselined to FY17 to coincide with our change in ownership.

In 2020, Ausgrid achieved progress of 11.8% against its target of 8% for all emissions by FY24. We also achieved a reduction of 13.3% against our target of 44% for all emissions excluding line losses, by FY24.

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

Ausgrid reduced these emissions by 4.8% since FY17 mainly from fleet efficiencies. While overall these emissions are decreasing, SF_6 (Sulphur Hexafluoride) emissions have increased and a strategy to curb and reduce these is underway.

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

These reduced by 12.2% since FY17 as a result of grid decarbonisation, reduced network demand, and from Ausgrid initiatives related to property improvements and the installation of solar generation.

EV charging infrastructure

To manage potential 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 locations suitable for charging points.

To support the uptake of EVs, we are very excited to have recently partnered with JOLT who will use our kiosk substations as EV charging points.

With our infrastructure ever present in our communities this is an excellent partnership to use our assets as vehicle charge points across our network. We expect the first kiosks to go live in 2021.

Further technologies

As part of our innovation programs we are testing several additional new technologies which include:

- Advanced Voltage Regulators
- 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

Reducing our carbon footprint

We are the first electricity distribution network service provider in Australia to set CO_2-e targets

Ausgrid is doing its part to address climate change by reducing its own emissions and we have produced our 2020 Carbon Emissions Performance Report that provides information on our targets, our emissions and activities that have influenced change.

Ausgrid has two categories of carbon emissions reduction targets.

- 8% reduction of all emissions (scope 1, 2 and 3) by FY24 and 17% by 2030.

SCOPE 1, 2 AND 3 EMISSIONS EXCLUDING LINE LOSSES

■ Scope 1   ■ Scope 2   ■ Scope 3

Tonnes CO_2-e

FY2017   FY2018   FY2019   FY2020
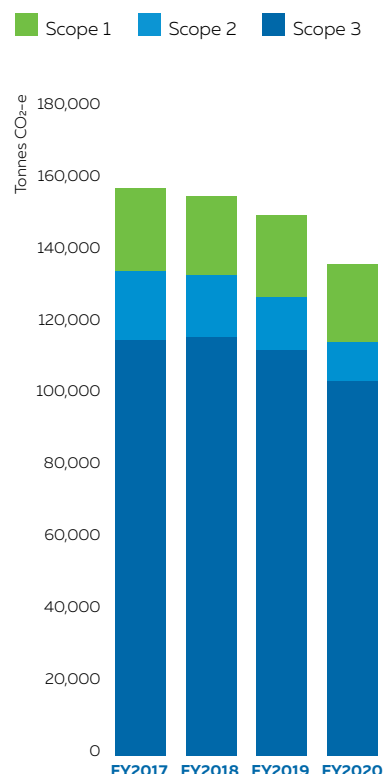
Our 2020 Carbon Emissions Performance Report provides information on our targets, our emissions and activities that have influenced change

Scope 3 emissions (waste, business travel and streetlights)

Ausgrid reduced these emissions by 9.9% from FY17 and they continued to decrease in line with our streetlight LED program which represents the bulk of these emissions.

Our 255,604 streetlights have a significant carbon footprint. We are working with our Councils to further reduce the carbon footprint of the streetlights by converting them to more efficient LEDs. At the end of this reporting period, 91,821 streetlights were LED. Our local Councils pay for the electricity for these streetlights and the streetlights are their scope 2 emissions.

External reporting and progress

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 22.7% since FY17 and 42.5% since FY09 when National Greenhouse and Energy Reporting (NGER) was introduced.

Our emissions and environment data is not externally certified. Our emissions data is reported annually to the Australian Government Clean Energy Regulator and meets the NGER methods, criteria and measurement standards.
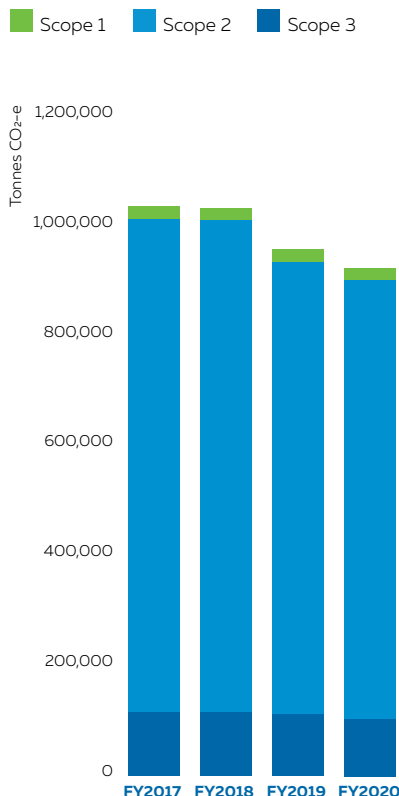
Phasing out SF$_6$

Ausgrid has taken the first step in our Sulphur Hexafluoride (SF$_6$) management strategy to remove SF$_6$ equipment from our network. SF$_6$ is 23,500 times worse than carbon dioxide, and whilst it is normally satisfactorily contained within high voltage equipment, leaks can occur.

We have established a contract for the purchase of new technology non-SF$_6$ live tank 132kV circuit breakers which instead use vacuum interruption and dry air insulation.

Network resilience

Developing resilient communities in response to climate change

We accept unequivocally that human-induced climate change presents a growing threat to the planet, and to society, the economy and our business. Ausgrid has two key physical climate change risk areas:

- Bush fires affecting our network and the risk of our network starting bush fires especially in periods of drought
- Extreme weather events such as East Coast Lows, severe thunderstorms, and heatwaves

During the year we conduct ongoing activities to prepare for and mitigate these physical climate change risks and to make our network more resilient.
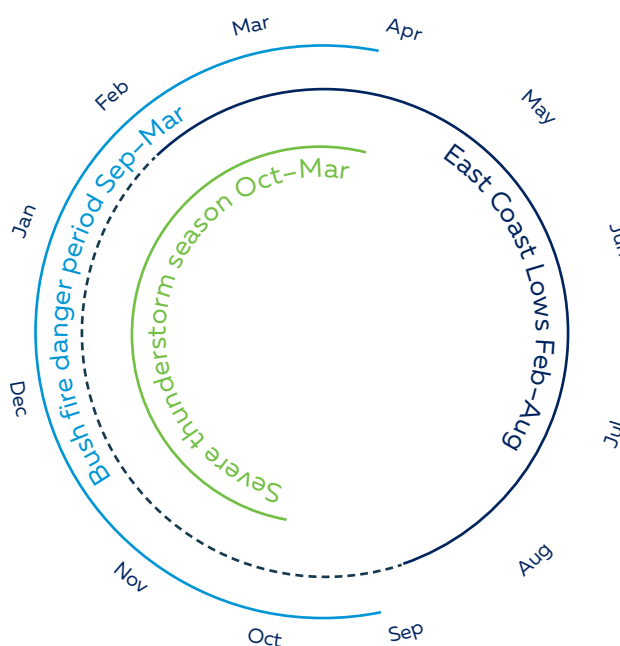
Mitigation activities

Preparation

Each year, Ausgrid intensively prepares for the bush fire and storm season.

We invest significant resources in vegetation management to make sure minimum clearances between vegetation and our assets are met. Clearances

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SCOPE 1, 2 AND 3 EMISSIONS

BUSH FIRE AND STORM PERIOD CYCLE

In 2020, we have been using the experience of the extreme storm events we faced as valuable learning on how to make our network more resilient

monitoring is informed by aerial scanning of network using LiDAR (Light Detection and Ranging) which provides detailed information for monitoring.

An electrical asset inspection and maintenance regime (including high definition photography in fire prone areas) is also conducted.

During

During high-risk periods we operate at a heightened state of alert and work to ensure the network is in the optimal state to face the risks at hand.

We work closely with emergency services such as the NSW Rural Fire Service to protect infrastructure and to turn off power when instructed.

After

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

To manage the inevitable challenges that arise, we maintain significant resources and spare equipment – in addition to assistance from other distribution network service providers, contractors and accredited service providers where required – so we can quickly restore a safe network and service.

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

Network resilience

In 2020, we have been using the experience of the extreme storm events we faced as valuable learning on how to make our network more resilient.

We are now investigating and using solutions such as:

- stand-alone power systems to support more vulnerable parts of our network
- improved customer resilience through timely and better information

- access to portable or large generators for worst affected areas or vulnerable customers
- making our network stronger by using technology to improve our response and management of the network.

Cyber & physical security

Cyber and physical security requirements and considerations continue as a key focus for Ausgrid. With our electricity grid recognised as critical infrastructure, we know that keeping it safe from intrusion is crucial and essential for providing a safe and reliable electricity supply.

During the year:

- 69 million SPAM emails were blocked
- we stopped 843 million scans of our network
- 3 million websites were blocked due to suspicious or malicious software

Keeping our systems secure during COVID-19

Our ongoing priority during this time was to make sure that our workforce can remain connected at any location and meet our cyber and physical security requirements to keep our employees safe.

We were able to swiftly put in processes to remotely update and secure our IT assets and engage with our employees on best cyber security practices.

Very early on in the pandemic, we communicated regularly with our employees on password security, provided Working from Home Toolkits so they could check if their home networks were vulnerable, and provided information on how to work cyber safe from home.

We also introduced new artificial intelligence controls to automatically check for threats to maintain the integrity of our cyber security.

Creating awareness and testing skills in identifying cyber threats

To help minimise the threat risk of a cyber event, we continued to engage with our employees during the year to make them aware of phishing emails (emails that look legitimate but are sent to gain access into the computer network or exploit personal information) to increase their awareness and give them examples of what cyber threats might look like.

We conducted several in-house 'phishing awareness' campaigns to test our employees. This allowed us to measure our employee skills in identifying and responding to a phishing email and help create awareness of how hackers use real-world events to target and exploit them. These campaigns provide valuable feedback on the effectiveness of our training and feedback to our employees.

Employee engagement with Cyber Champions

As part of our engagement, we have a Cyber Champions network of employees who can also promote cyber security awareness and good cyber health across our organisation. Our Champions are empowered to share information, provide feedback on our various education and awareness campaigns and learn more about what happens at a corporate level to keep our systems and premises safe.

Annexures

"At Ausgrid, I like being part of a close-knit team which shares the same passion and dedication for helping our customers."

Brodie Marr, Senior Investigations & Recoveries Officer

Data tables

Workforce (Headcount)

	FY2020	FY2019	FY2018	FY2017
Total	**3,052**	**3,493**	**3,716**	**3,841**

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.

Employee information	FY2020			FY2019			FY2018			FY2017		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Employees	485	2,416	2,901	523	2,760	3,283	539	2,927	3,466	602	3,050	3,652
Employees (%)	17%	83%	100%	16%	84%	100%	16%	84%	100%	16%	84%	100%

Employees by employment type and gender

	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Full time (%)	14.5%	83.0%	97.5%	13.7%	84.0%	97.7%	13.3%	84.3%	97.6%	13.5%	83.4%	96.9%
Part time (%)	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	**16.7%**	**83.2%**	**100.0%**	**15.9%**	**84.1%**	**100.0%**	**15.6%**	**84.4%**	**100.0%**	**16.5%**	**83.5%**	**100.0%**

Gender diversity

	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Executive Managers	2	10	12	2	9	11	2	9	11	3	6	9
Managers	30	147	177	35	149	184	30	147	177	37	139	176
Supervisors	40	216	256	38	272	310	36	265	301	39	236	275
Non-managers	413	2,043	2,456	448	2,330	2,778	471	2,506	2,977	523	2,669	3,192
Total	**485**	**2,416**	**2,901**	**523**	**2,760**	**3,283**	**539**	**2,927**	**3,466**	**602**	**3,050**	**3,652**

New hires

	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
External Appointments	71	75	146	59	55	114	50	127	177	16	37	53
Internal Appointments	36	204	240	32	123	155	125	276	401	122	393	515

Parental leave by gender

	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	50	220	270	39	211	250	44	219	263	45	201	246

Workforce (Headcount) continued

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

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

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

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

Indigenous employees				
Number of Aboriginal and Torres Strait Islander employees (voluntarily self–identified)	50	61	24	30

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

Data tables continued

Health & Safety

Safety	FY2020	FY2019	FY2018	FY2017
Managing Personal Safety				
Total recordable injury frequency rate (TRIFR)	6.4	8.3	13.6	15.1
Lost time injury frequency rate (LTIFR)	1.9	1.7	1.9	3.3
Employee fatalities	0	1	0	0

Employee Health

Injury	FY2020	FY2019	FY2018	FY2017
All injuries (including First Aid and No Treatment)	176	259	280	339
Manual handling injuries (all injuries)	81	91	105	94
Total recordable injuries	38	60	102	113
Lost time injuries	11	12	14	25
Preventative				
AEDs owned (automated external defibrillator)	1,052	1,052	85	85
Mental first aid trainers	102	112	78	70
Health checks (voluntary)	0	640	0	589
Medical and functional checks	2,570	–	–	–
Vaccinations – influenza (voluntary)	1,682	1,609	1,493	1,191

Community Health & Safety

Public safety	FY2020	FY2019	FY2018	FY2017
Electrical Safety Week – primary schools (in our catchment area) participation	92%	92%	92%	95%
Electrical Safety Week – primary schools (in our catchment area) participation	789	782	813	812
Incidents				
Third party motor vehicle pole collisions	503	491	439	441
Third party motor vehicle pillar kiosk collisions	107	97	71	47
Third party contact with overhead assets	319	374	351	211
Third party contact with underground assets	99	128	142	99

Environment

Emissions	Unit	FY2020	FY2019	FY2018	FY2017
Greenhouse gas emissions					
Total carbon emissions (Scope 1, 2 & 3)	tCO$_2$-e	915,530	959,125	1,033,714	1,037,443
Carbon footprint Scope 1					
Carbon footprint Scope 1	tCO$_2$-e	21,950	22,855	21,958	23,047
Carbon footprint Scope 1 component parts					
Stationary energy use	tCO$_2$-e	180	415	396	335
Transport energy use	tCO$_2$-e	8,621	9,409	8,614	10,474
Sulphur Hexafluoride (SF$_6$)	tCO$_2$-e	13,088	12,987	12,829	12,068
Other	tCO$_2$-e	61	44	119	170
Carbon footprint Scope 2					
Carbon footprint Scope 2	tCO$_2$-e	789,287	823,503	895,352	898,646
Carbon footprint Scope 2 component parts					
Property electricity emissions	tCO$_2$-e	10,741	14,937	17,449	19,241
Line losses during distribution of electricity on our network	tCO$_2$-e	778,546	808,566	877,903	879,405
Average line losses on our network	%	3.7%	3.7%	4.0%	3.9%
Carbon footprint Scope 3					
Carbon footprint Scope 3	tCO$_2$-e	104,293	112,767	116,404	115,750
Carbon footprint Scope 3 component parts					
Business travel	tCO$_2$-e	588	804	653	305
Waste	tCO$_2$-e	1,105	1,601	1,530	948
Streetlights	tCO$_2$-e	102,600	110,362	114,221	114,497

Energy Use and Efficiency

	Unit	FY2020	FY2019	FY2018	FY2017
Energy consumed					
Energy use (Scope 1 & 2)	GJ	3,637,838	3,759,806	4,024,722	4,019,237
Percentage reduction in emissions from FY2017					
Emissions reduction (excluding line losses) – scope 1, 2 and 3	%	-13.3%	-4.7%	-1.4%	–
Emissions reduction (all emissions) – scope 1, 2 and 3	%	-11.8%	-7.5%	-0.4%	
Emissions reduction (excluding line losses) – scope 1 and 2	%	-22.7%	-10.6%	-6.8%	–

Data tables continued

Environment continued

Power Generation and Production	Unit	FY2020	FY2019	FY2018	FY2017
Renewable energy generated for our use					
Solar	kWh	2,029,191	843,571	26,503	26,503
Tri Generation	kWh	43,394	116,800	150,661	173,726

Waste

Waste types					
Solid waste	tonnes	2,353	3,208	3,581	3,557
Liquid waste	kL	12	15	54	45
Hazardous waste	tonnes	63	82	718	841

Recycling & recovery					
Waste diverted for recycling	%	28	24	8	9
Waste diverted for energy/recovery	%	3	3	3	3
Total waste diverted for recycling/recovery	%	31	27	11	13

Water

Potable water					
Potable water used	kL	166,850	186,948	99,439	136,129

Captured/self sourced water					
Captured self sourced water	kL	68,400	46,080	46,080	48,000

Water discharged					
Water treated and discharged	kL	66,235	68,456	76,000	76,268

Environmental Management Systems

Environmental management system certification coverage	%	100%	100%	100%	100%

Environmental Compliance

Legal action					
Prosecutions	Number	0	0	0	0

Other non-compliances					
Licence breaches	Number	0	0	0	0
Reportable incidents	Number	6	3	2	9
Written warnings or infringement notices	Number	1	0	0	0

Note: In FY20 Ausgrid NGER (National Greenhouse and Energy Reporting) data 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.

Power Supplied

Power delivered	Unit	FY2020	FY2019	FY2018	FY2017
Power delivered to residential customers	GWh	8,640	8,623	8,494	8,738
Power delivered to business customers	GWh	16,294	16,801	16,892	16,931
Total Power delivered	**GWh**	**24,934**	**25,424**	**25,386**	**25,669**

Number of customers

		FY2020	FY2019	FY2018	FY2017
Residential customers (households)	Average customer numbers	1,578,910	1,564,021	1,545,428	1,524,732
Business customers	Average customer numbers	183,169	182,253	181,866	182,182
Total number of customers	**Average customer numbers**	**1,762,079**	**1,746,274**	**1,727,294**	**1,706,914**

Reliability

		FY2020	FY2019	FY2018	FY2017
System Average Interruption Duration Index (SAIDI)	Average time that a customer is without electricity in minutes	92	74.69	69	79
System Average Interruption Frequency Index (SAIFI)	Average number of service interruptions to each customer	0.68	0.656	0.68	0.71

Power prices

		FY2020	FY2019	FY2018	FY2017
Network charge – average residential customer revenue	$/year nominal [1]	553.52	630.46	630.52	680.03

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

Ausgrid

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empowering lives

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