# TCFD Report

**Taskforce on Climate-related Financial Disclosures** 

Ausgrid Group | April 2024







We acknowledge Aboriginal and Torres Strait Islander peoples as the Traditional Custodians of this land and we pay our respect to their Elders past, present and future.

The Ausgrid Group's vision is for customers to have the power in a resilient, affordable, net zero future. In releasing this Climate Report, we commit to ongoing progress in climate and sustainability-related reporting, aligning with evolving disclosure requirements and embracing future developments. We are preparing for the Australian Accounting Standards Board's, Australian Sustainability Reporting Standards (ASRS)<sup>1</sup>, and expect our reporting to continue to evolve in coming years through further integration of climate-related risks and opportunities into our business strategy, governance and risk management processes, and relevant metrics and targets. This report should be read in conjunction with other Ausgrid public disclosures.

<sup>1.</sup> The ASRS is aligned internationally with the ISSB (International Sustainability Standards Board) IFRS S1 and S2, with a climate-first approach. The ASRS will focus on climate-related reporting first (S2), and then incorporate sustainability-related reporting (S1).

**NEXT STEPS** 

#### **About us**

This report is jointly made by Ausgrid and PLUS ES, referred to together as the **Ausgrid Group**.

Ausgrid owns and operates the regulated network of substations, powerlines, underground cables, and power poles that delivers electricity to communities throughout Sydney, the Central Coast, and the Hunter Valley. As the largest distributor of electricity on Australia's east coast, it builds, operates, and maintains this distribution network with a focus on providing a safe, reliable, and affordable energy supply to all electricity consumers in our network area, both now and over the long term. Ausgrid contributes to the majority of Ausgrid Group's greenhouse gas emissions via scope 2 line losses in the distribution of electricity. These line losses are 3.5% of the electricity distributed, and this carbon footprint will decrease in line with the decarbonisation of the electricity grid. Scope 3 emissions from the building and maintenance of the network are the second largest contributor to the Ausgrid Group's carbon footprint.

PLUS ES is an energy services organisation dedicated to helping businesses across Australia optimise their energy usage through advanced data delivery and end-to-end energy infrastructure solutions. PLUS ES is ring-fenced from the Ausgrid regulated network business.

In response to the continuing rise of global emissions (with a short dip due to COVID-19), the international community has begun transitioning to a net zeroemissions economy [see call-out box]. In 2022, approximately \$1.99 trillion Australian dollars was invested globally in the lowcarbon energy transition, with the majority spent on renewables, electrified transport, and power grids.<sup>2</sup>

The Ausgrid Group is working towards a net zero energy system. As households decarbonise by investing in electric appliances to replace oil and gas, and invest in their own rooftop solar, the electricity system will experience more complex power flows, increased demand, and increased customer connections. The Ausgrid Group is transitioning towards a decentralised and flexible system that will enable customer participation in energy markets and greater utilisation of the distribution network. Ausgrid is currently undertaking trials to manage this transition and provide more value for customers and the community.

#### What is 'net zero'?

The Intergovernmental Panel on Climate Change (IPCC) AR6 report states that "limiting human-caused global warming requires net zero CO2 emissions" (Summary for Policymakers, p. 19). Put simply, net zero refers to a state by which greenhouse gases going into the atmosphere are reduced as close to zero as possible, and any residual emissions are balanced by permanent removals from the atmosphere by 2050.



<sup>2.</sup> BloombergNEF, Energy Transition Investment Trends 2023, <a href="https://assets.bbhub.io/professional/sites/24/energy-transition-investment-trends-2023.pdf">https://assets.bbhub.io/professional/sites/24/energy-transition-investment-trends-2023.pdf</a>

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## Our vision is 'for communities to have the power in a resilient, affordable, net zero future'.

The Ausgrid Group acknowledges climate change is a significant risk for our business and the community. In Australia, electricity generation is the largest single source of greenhouse gas emissions, accounting for 33% of national emissions as of March 2023.<sup>3,4</sup> (Transport, 21% of national emissions, and heating and cooking from gas are also meaningful contributors for households). Ausgrid's focus as an electricity distributor is to facilitate the shift to net zero, supporting the decarbonisation of electricity generation, and facilitating the switch from difficult to decarbonise fossil fuels like petrol and gas to electricity. We recognise this as a pivotal opportunity to drive environmental outcomes, reduce customer's total energy bills, and build the value of the Group.

The Ausgrid Group's response to climate change is two-pronged: we are focused on reducing emissions from our business and for our customers (climate mitigation); while taking action to minimise the climate-related impacts on our network and the communities we serve (climate adaptation) (Figure 1). We embrace our role in providing safe and reliable electricity and enabling the transition to a low-emissions future.

While climate risks can impose financial costs on organisations, efforts to mitigate and adapt to these risks can also generate opportunities, such as adopting lowemission energy sources and developing new products and services. The Ausgrid Group's transition to net zero is a clear opportunity driven by our customers' demand for two-way electricity flows and a growing mix of renewable and distributed energy resources.

We are reducing our emissions and helping our customers do the same by connecting solar and delivering new technologies such as community batteries and electric vehicle (EV) chargers.

Adapting to and recovering from disruptive events from physical climate change impacts is also crucial to providing safe and reliable electricity.

#### **Ausgrid's Climate Change Response** Demand management/behaviour **Emergency response** Revising tariffs to support mitigation and Having robust incident management new technology and demand, and plans and coordiation with emergency facilitating regulatory change to support services to recover from extreme accelerating electrification weather events Mitigation Adaptation **Operational emissions** Network resilience **Batteries** Actions that reduce Actions that reduce Reducing scope 1, 2 and 3 greenhouse Hardening our network to weather on grid the impact of climate emissions and our impact physical climate impacts To support clean on the environment change on us energy storage, network stability and demand Making electricity accessible to **Community resilience** mangement accelerate transition Increasing resilience with offgrid Transitional opportunities with: connecting technology; stand-alone power customers; demand management; new systems; and improved technologies such as EVs and batteries; communication with our customers and accelerating electrification **Customer ambition** Our network and systems Research and innovation Meeting customer needs for Enabling technology on our network RACE for 2030 Cooperative for new technologies and to manage Research Centre, collaboration, technology solutions and new technologies, new regulatory network performance climate impacts

Figure 1 – Ausgrid's Climate Change Response

2024 | Ausgrid TCFD Report

<sup>3. &</sup>lt;u>CSIRO</u>, 2022

<sup>4.</sup> Department of Climate Change, Energy, the Environment and Water, 2023



#### **Evolving Disclosures**

As a critical player in the energy transition, our industry must demonstrate to our stakeholders how we embrace this challenge. The Ausgrid Group has an integrated and holistic approach to climate change, which cuts across governance, strategy, and risk management. Managing climate risks and supporting the net zero transition is core to our business as critical infrastructure owners and operators of an electricity network that covers Sydney, the Central Coast, Newcastle and the Hunter Valley. As a regulated entity, under Ausgrid's five-year business plan, it regularly assesses and consults on climaterelated risks and opportunities, incorporating them into the organisation's business strategy and financial planning.

In line with the Taskforce on Climate-related Financial Disclosures recommendations, this report aims to improve our stakeholders' understanding of how we address climate-related risks to support sound risk assessments, informed capital allocation and better strategic planning.

The Ausgrid Group acknowledges we are at the beginning of our TCFD journey and seeks to increase alignment to industry best practices through future reporting in line with emerging climate-related reporting standards from the International Sustainability Standards Board (ISSB), and the Australian Sustainability Reporting Standards (ASRS) being consulted on by the Australian Government's Australian Accounting Standards Board.

This report forms part of the Ausgrid Group's broader suite of climate-related disclosures, including our:

- Sustainability Policy
- · Annual <u>Sustainability Report</u>
- · Annual <u>Carbon Emissions Performance</u> Report
- · Climate Impact Assessment 2022
- Promoting the long-term interests of consumers in a changing climate -A decision-making framework, and our
- · Climate Resilience Program.

#### **Board Oversight**

The Ausgrid Group views climate change as both a risk and an opportunity, and consideration of both is embedded within our strategy, operations, and risk management processes. As part of our Risk Management Framework, the Ausgrid Group Board Risk Committee provides oversight of climate-related risk management at the Enterprise Risk level on a semi-annual basis.

The Ausgrid Group's Board is actively engaged on the impacts of climate change, given the centrality of climate change and the net zero transition to our core business and strategy. Through oversight of the preparation and submission of Ausgrid's 2024 - 29 Regulatory Proposal to the AER, the Board considered material physical climate risks related to the performance of Ausgrid's network and investment priorities in increasing network resilience.

The Board monitors key environmental performance metrics, including greenhouse gas (**GHG**) emissions, and three Board committees have responsibility for oversight of climate-related risk management: the Risk Committee, the Audit Committee and the Health, Safety & Environment Committee (Figure 2).

#### Management's Role

In 2023, the Ausgrid Group underwent an organisational restructure to align with its refreshed, integrated strategy supporting the transition to net zero. Under the new structure, the organisation is arranged into eight business groups led by the Executive Leadership Team (ELT), with climate-related risks and opportunities addressed across each business group where relevant. Physical and transitional climate-related risks are primarily managed under Asset Risk and Performance and Climate Resilience by the **Group Executive** of Customer, Assets and Digital.

However, the Ausgrid Group's integrated approach to managing climate-related risks and opportunities means other ELT members have climate-related risk management responsibilities, including within Market Development & Strategy, Distributed Services and PLUS ES, Transmission Development and Growth, and Finance & Business Services. With the recent completion of this restructure, ongoing efforts are underway to operationalise and refine the ELT's governance of climate-related risks, opportunities, and broader strategy. Given the Ausgrid Group's focus on transitioning to net zero, the entire organisation now supports net zero outcomes and addresses climate-related risks and opportunities.

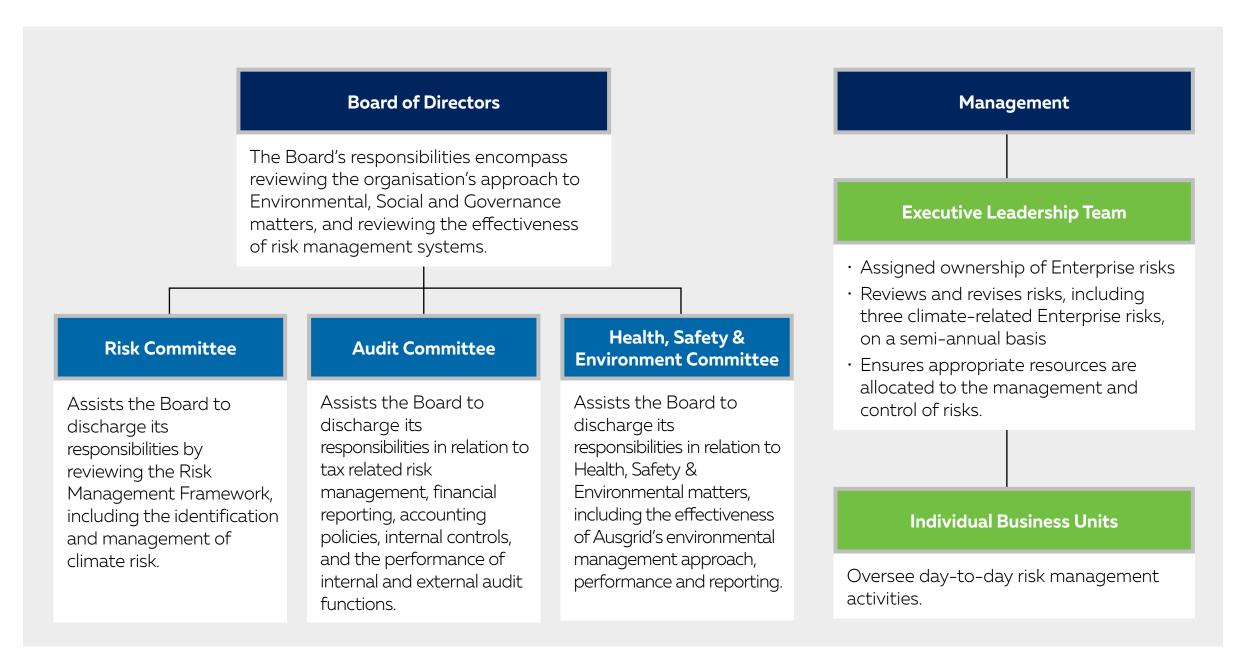


Figure 2 - Governance Responsibilities

**NEXT STEPS** 

# Risk Management

Climate risks have always been a part of the Ausgrid Group's operations, including disruptive weather events such as bushfires, storms, and East Coast Lows. However, the severity and frequency of such events are increasing due to climate warming, as identified in our <u>Climate Impact</u> <u>Assessment</u>. The Ausgrid Group recognises these impacts, and we proactively address the change in climate-related risks and opportunities at the core of our operations.

The Ausgrid Group manages climaterelated risks through our enterprise Risk Management Framework (RMF). The RMF consists of a three-tiered hierarchy, including Enterprise, Group, and Functional risks (Figure 3). This model is designed to facilitate a dynamic risk management approach, such that risks can be identified and managed from both top-down and bottom-up channels.

At the highest level, Enterprise risks are owned by the ELT. These risks are developed through various channels,

including a review of strategic priorities under the business plan, material risks elevated from the Group level, Board insights and industry intelligence. Every six months, an Enterprise Risk Report is provided to the Board Risk Committee. The most recent report contains three climate-related Enterprise Risks:5

- **Network Performance** Failure to adequately maintain/respond to network events results in poor network performance.
- **Growth** Failure to evolve the role of the network and pursue new lines of business to grow the value of our business (e.g. EV chargers, batteries, Renewable Energy Zones).
- **Climate Change** Failure to deliver a fit for purpose business and network to respond to changing climate conditions and to enable the transition to a net-zero electricity system, including attainment of climate-related sustainability targets.

Each Enterprise risk is assigned to a Group Executive as the risk sponsor and is subject to a deep dive prepared by its risk sponsor and presented to the Board or the Board's Risk Committee.

Underpinning Enterprise risks owned by the ELT are additional Group risks owned at the Group level. These risks are informed by the overarching Enterprise risks, external pressures (e.g., compliance obligations), operational hazards and risks identified at, and elevated from, a lower functional level. A risk coordinator is nominated at the Group level to ensure the risk management processes are embedded within operations. Group risks are revised every six months.

Within our RMF, the Ausgrid Group utilises a Risk Appetite Statement (RAS) aligned with our core strategic priorities and risk themes. The RAS is reviewed annually to reflect changes in strategy and/or appetite, and support day-to-day risk management, by providing a basis for assessing the level of controls required for each risk and for monitoring risks and escalating those outside of the agreed appetite. Key measures and controls in response to climate-related risks and opportunities, are contained in the Ausgrid Group's Customer, Environment and Network Operations RAS.

In addition to the risks documented at the Enterprise and Group level, the Ausgrid Group maintains a Critical Infrastructure Risk Management Program in compliance with the Security of Critical Infrastructure <u>Act 2018</u>. This program identifies the natural hazards and associated risks that could impact our network (e.g., flooding, windstorms, cyclones, heatwave events). It documents the measures in place to ensure risks are minimised and mitigated as far as reasonably practicable.

**NEXT STEPS** 

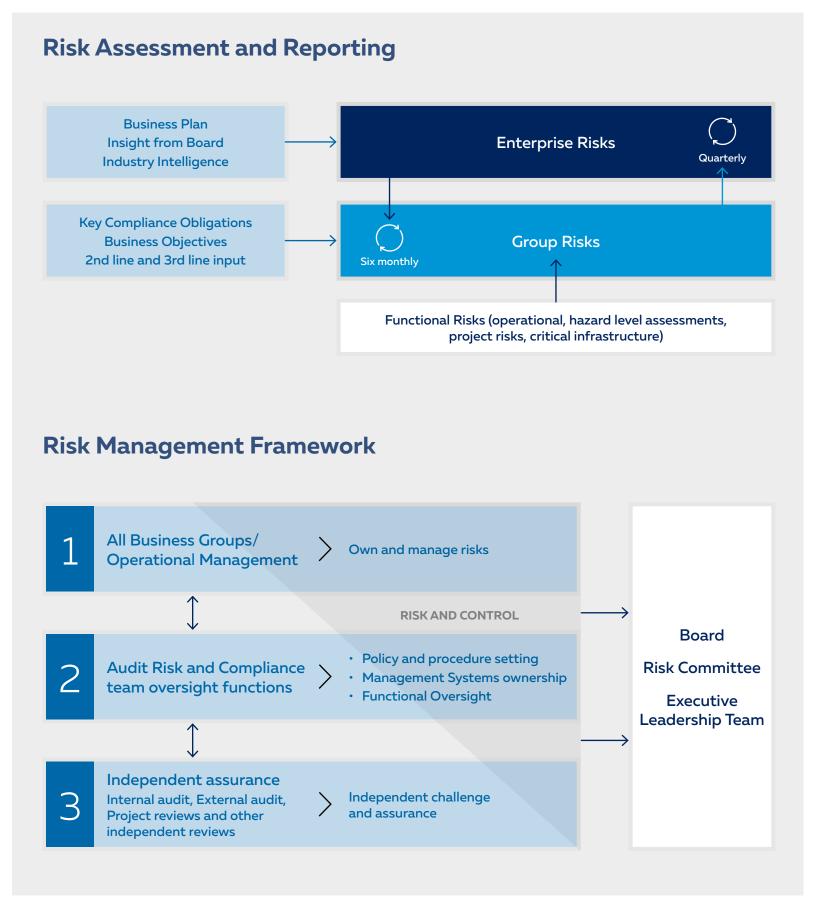


Figure 3 – Risk Management Approach

5. Risk Committee Paper October 2023

#### **Ausgrid Group Vision**

Our vision is for communities to have the power in a resilient, affordable, net-zero future.



#### **Our Strategy**

Ausgrid Group will become a network platform that enables and accelerates the energy transition, facilitating electrification, the connection of new renewables, and enabling greater accessibility in the transition - creating value for society, customers, and shareholders. This will involve embracing an active role at the heart of the electricity system, facilitating the integration and balancing of renewables, flexible demand, distributed storage, and bi-directional flows. This will help create a more efficient, highervalue electricity system – enabling greater accessibility in the net zero transition, and creating value for society, customers, and shareholders.

Our vision is to empower communities toward a resilient, affordable, and net zero future.<sup>6</sup> To achieve our vision, we have adopted six interrelated strategic goals supported by action areas and enablers. Our strategic goals are:

- 1. Building an engaged workforce
- 2. Building our trusted brand
- 3. Decarbonising the energy system
- 4. Driving electrification
- 5. Providing efficient infrastructure
- 6. Growing shareholder value

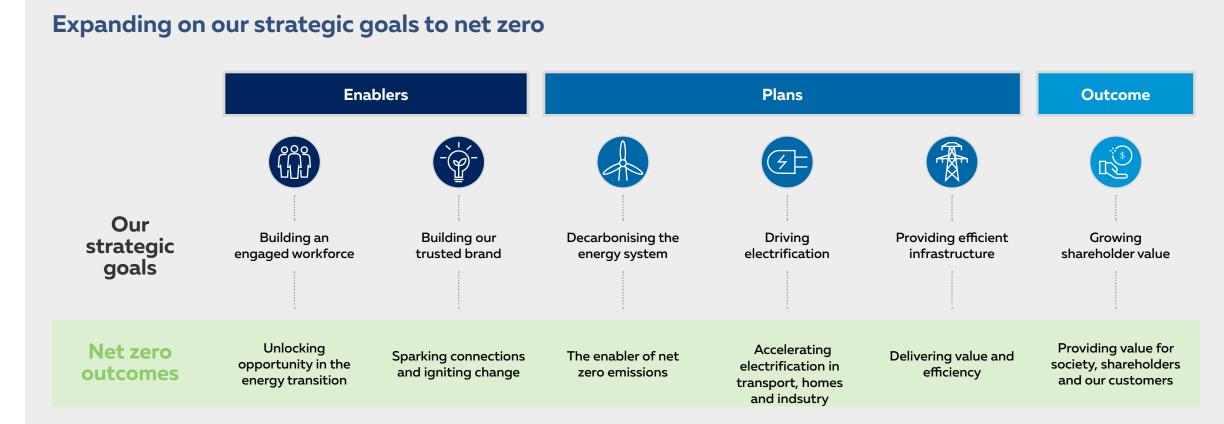


Figure 4 – Strategic Goals to Net Zero

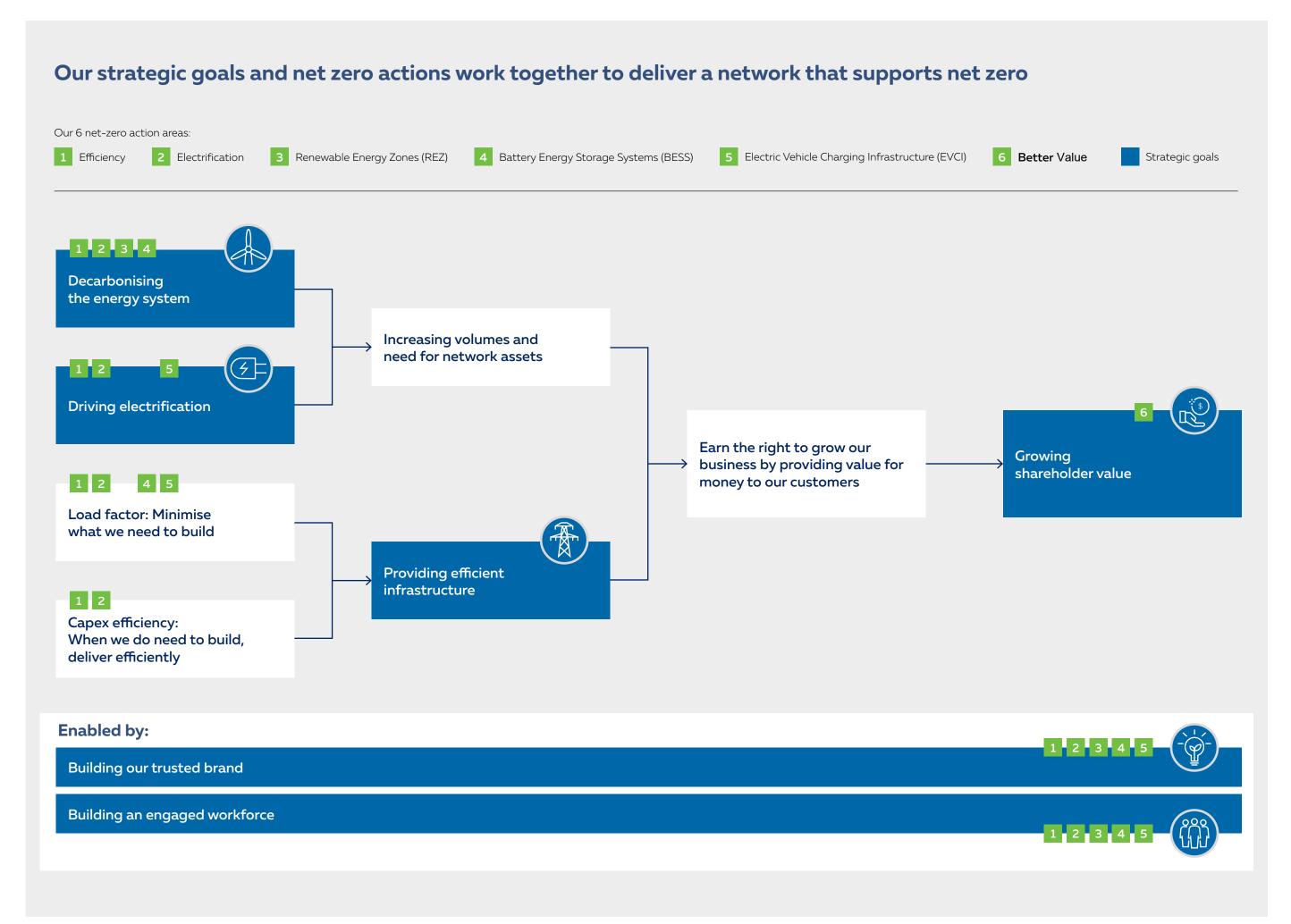
These strategic goals provide net zero outcomes, and the Ausgrid Group will deliver on these goals through six areas of focus:

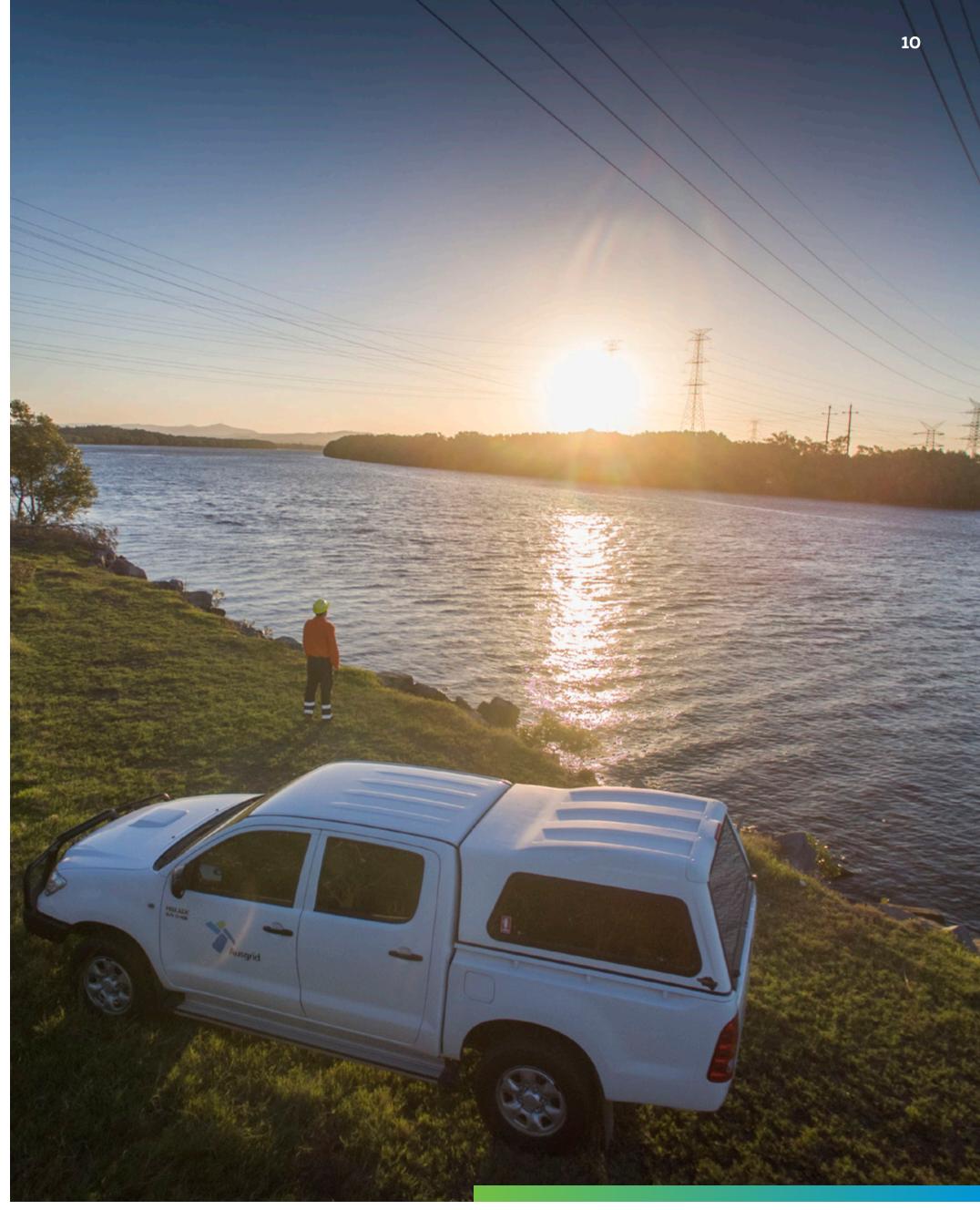
- 1. **Efficiency**: Enhance business and customer service performance through ongoing efficiency improvements
- 2. **Electrification**: Enable and accelerate electrification through reduced connection times and new energy system services
- 3. **Renewable Energy Zones (REZ)**: Deploy new transmission to connect REZ in New South Wales

- 4. **Battery Energy Storage Systems (BESS)**: Develop scalable community battery solutions, including "storage as a service
- 5. **Electric Vehicle Charging Infrastructure (EVCI)**: Build and operate curb-side electric vehicle chargers to encourage EV adoption
- 6. **Better Value:** Maximising our assets to reduce customer bills.

6. Ausgrid Sustainability Report

STRATEGY





**GOVERNANCE** 



# Physical and transitional climate impacts

#### **Our Regulatory Framework**

The revenue Ausgrid earns and the prices we charge for our distribution network services are regulated by the AER under the National Electricity Rules.

Every five years, we submit a proposal to the AER setting out our plans for serving our communities in the five years ahead, including our planned expenditure and pricing. The AER reviews our proposal to ensure it reflects the services our customers value at the lowest sustainable cost. It then determines how much revenue we can recover from our customers over the five-year period. This process is known as a 'regulatory reset'.

More information on this regulatory framework can be found on our website: https://www.ausgrid.com.au/Industry/Regulation/Regulatory-Reset/Regulatory-framework Climate change has the potential to impact the Ausgrid Group in two ways: through physical risks caused by changes in climate conditions, such as the increased frequency and severity of heatwaves, bushfires, and storms, as well as through transitional risks that arise from the extensive policy, legal, technology and market changes required to shift to a low carbon economy. In our commitment to providing responsible and sustainable energy solutions to our customers and communities, we address and mitigate these risks.

Ausgrid will use our approved revenue for the 2024–29 regulatory period to maintain and invest in our network and ensure we can continue to meet our customers' expectations into the future and support our strategy. We developed our revenue proposal in response to feedback sought from our customers, delivery partners and other stakeholders. These plans respond to our communities' desire for a resilient and net zero future while balancing their ongoing need for an affordable, reliable, and safe energy supply.

#### **Physical Climate Impacts**

Ausgrid's network is susceptible to the impacts of disruptive weather events.

Between FY12 and FY21, these caused 27% of the outage events on our network and 66% of the outage minutes experienced by customers. To better understand and manage this susceptibility, Ausgrid undertook a Climate Change Impact Assessment to understand possible climate futures and the climate risks our network distribution infrastructure and customers can expect to experience over the next 70 years.

The assessment utilised climate modelling under low (RCP 2.6), medium (RCP 4.5), and high (RCP 8.5) emission scenarios to develop climate risk projections for Ausgrid's network area from windstorms, bushfires, extreme heat events and floods. Where possible, the climate projections used in this analysis were based on the climate datasets from many global climate models recommended by climate scientists. Our climate impact assessment has shown that by 2050, under the 'most likely' of the three modelled emissions scenarios (RCP 4.5), our network will face increased exposure to climate

hazards such as windstorms, extreme heat, and bushfires (Figure 6). Windstorm events have historically impacted Ausgrid's network the most. The increasing speed of maximum wind gusts and rising frequency of major storm events to 2050, when combined with Ausgrid network and load data, is projected to result in about a 1% increase per year in asset repair and unserved energy costs across Ausgrid's distribution network.

| Metric                                  | What this means   | Change 2050 | Change 2070 | Change 2090 | Confidence |
|---|---|-------------|-------------|-------------|------------|
| Consecutive Hot Days –<br>Total         | The total number of heatwave days, where a heatwave is defined as 3 or more consecutive days > 35 deg C | 103%        | 123%        | 123%        | Very High  |
| Consecutive Hot Days –<br>Maximum       | The longest run of consecutive hot days > 35 deg C  | 22%         | 24%         | 29%         | Very High  |
| Windspeed Maximum                       | Speed of sustained wind gusts in m/s  | 3%          | 3%          | 3%          | Medium     |
| Windstorm                               | Primarily related to days where East Coast Lows make landfall   | 23%         | 30%         | 30%         | Medium     |
| Very Heavy<br>Precipitaton Days         | Days with more than 30mm of precipitation which is linked to flooding                                   | 20%         | -4%         | 4%          | Medium     |
| High Fire Danger Days                   | Days with a forest fire danger index above 25   | 0%          | 23%         | 17%         | High       |
| Extreme (and above)<br>Fire Danger Days | Days with a forest fire danger index above 50   | 13%         | 21%         | 11%         | High       |

Change baselined to 2022.

Figure 6 – Network Exposure to Climate Hazards (RCP 4.5)

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Our response to physical climate change risks involves building climate resilience through planning and investments to resist, absorb, adapt, and recover from disruptive events. The Ausgrid Group conducts many ongoing activities to manage resilience including network strengthening, testing innovative technologies, enhancing our outage response procedures, and community-focused initiatives to bolster community preparedness. In 2022, we partnered with Ausgrid's Reset Customer Panel (an independent challenge panel as part of our customer engagement for our Regulatory Reset) to co-design a Resilience <u>Framework</u>. This Framework is intended to give our customers, stakeholders, and the AER confidence that Ausgrid's actions and responses to severe weather events are prudent, appropriate and fair to today's customers and future generations.

7. 2024-29 Regulatory Proposal

Through Ausgrid's regulatory proposal for 2024–29, we planned for proactive investment in resilience, using climate impact assessment modelling to inform resilience-related capital expenditure and operating expenditure forecasts.

During a regulatory control period Ausgrid can apply to the AER to pass through to our customers, in the form of higher (or lower) network charges, the cost (or savings) associated with certain pre-defined events that are outside of our control. Cost pass throughs can occur in response to regulatory or tax changes, retailer insolvency, insurance changes or any other events specified in a distribution determination. It also allows for the cost of responding to severe storms or other natural disasters to be pass through to customers. For example, a significant East Coast Low storm event in 2020 caused \$26 million (\$nominal) in damage, which Ausgrid was able to recover via the cost pass-through mechanism.<sup>7</sup>

### Transitional Climate Impacts

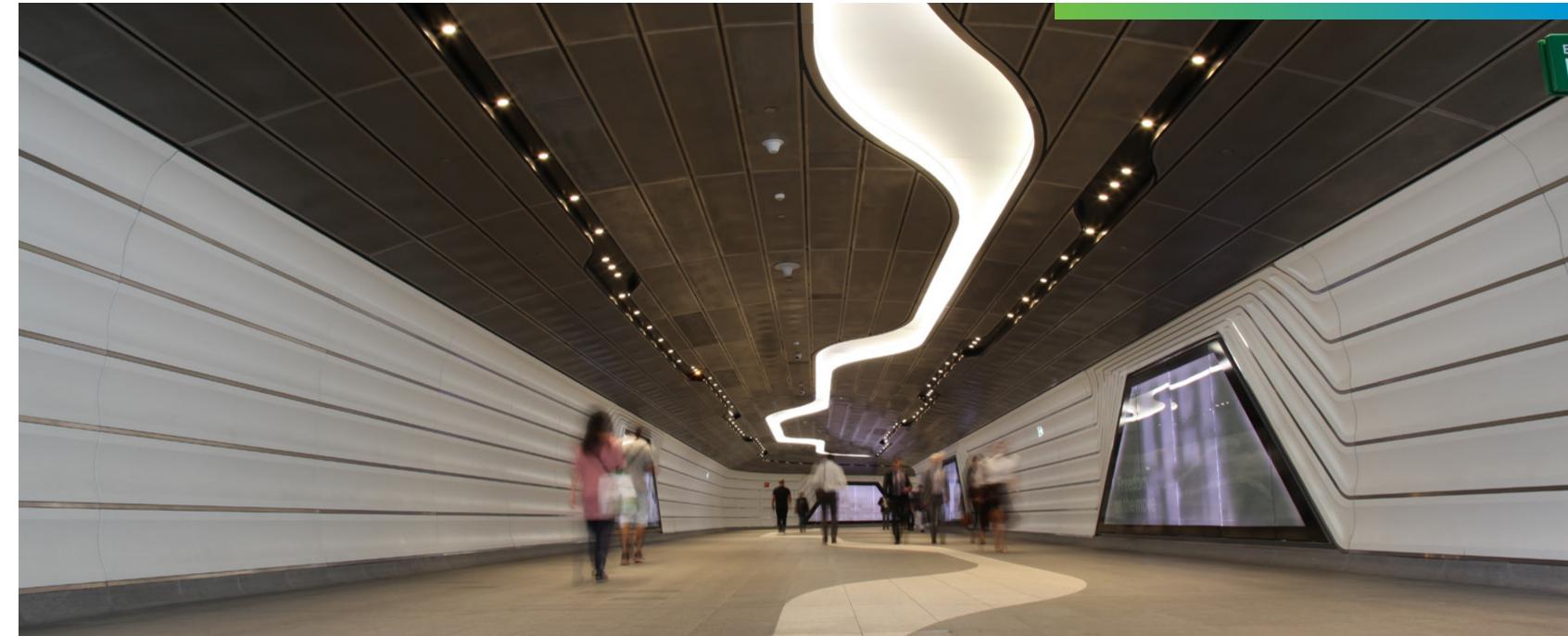
Delivering net zero is one of our strategic priorities, and transitioning to a low carbon society presents risks and opportunities for the Ausgrid Group. The Australian Energy Market Operator (**AEMO**) predicts that 50% of customers nationwide will use a form of Customer Energy Resources (**CER**) by 2030, with further increases expected beyond then. Supporting the transition will require

fundamental changes to how we manage our network, interact with customers, and support the stability of the end-to-end system. Ausgrid has proactively managed transitional climate risks by preparing its network to meet future EV demand and support two-way energy flows through our CER Integration Program.

#### What are Customer Energy Resources?

Previously referred to as Distributed Energy Resources (**DER**), Customer Energy Resources (**CER**) include small-scale energy resources owned by customers, which can produce, store, or vary how they use energy. Forms of CER includes rooftop solar, batteries, electric vehicles and more. (Source: The Australian Energy Market Commission).

CER integration into the distribution network is a key enabler of Ausgrid's vision 'for communities to have the power in a resilient, affordable and net zero future'.



2024 | Ausgrid TCFD Report



The CER integration program sets out a roadmap for establishing the key capabilities to meet our customers' needs through investments in the 2024-29 regulatory period. Successful CER integration will enable our customers' net zero ambitions by improving our capacity to host generation and leveraging network capacity to support electrification.

Our CER integration planning is aligned with AEMO's 'Step Change' scenario. Based on AEMO Step Change modelling, our forecasts of CER in Ausgrid's network area indicate that rooftop solar uptake will nearly double, and home batteries will increase by around 113,000 by 2029.8 Our network must evolve to efficiently accommodate the increasingly complex energy flows this will create (Figure 7).

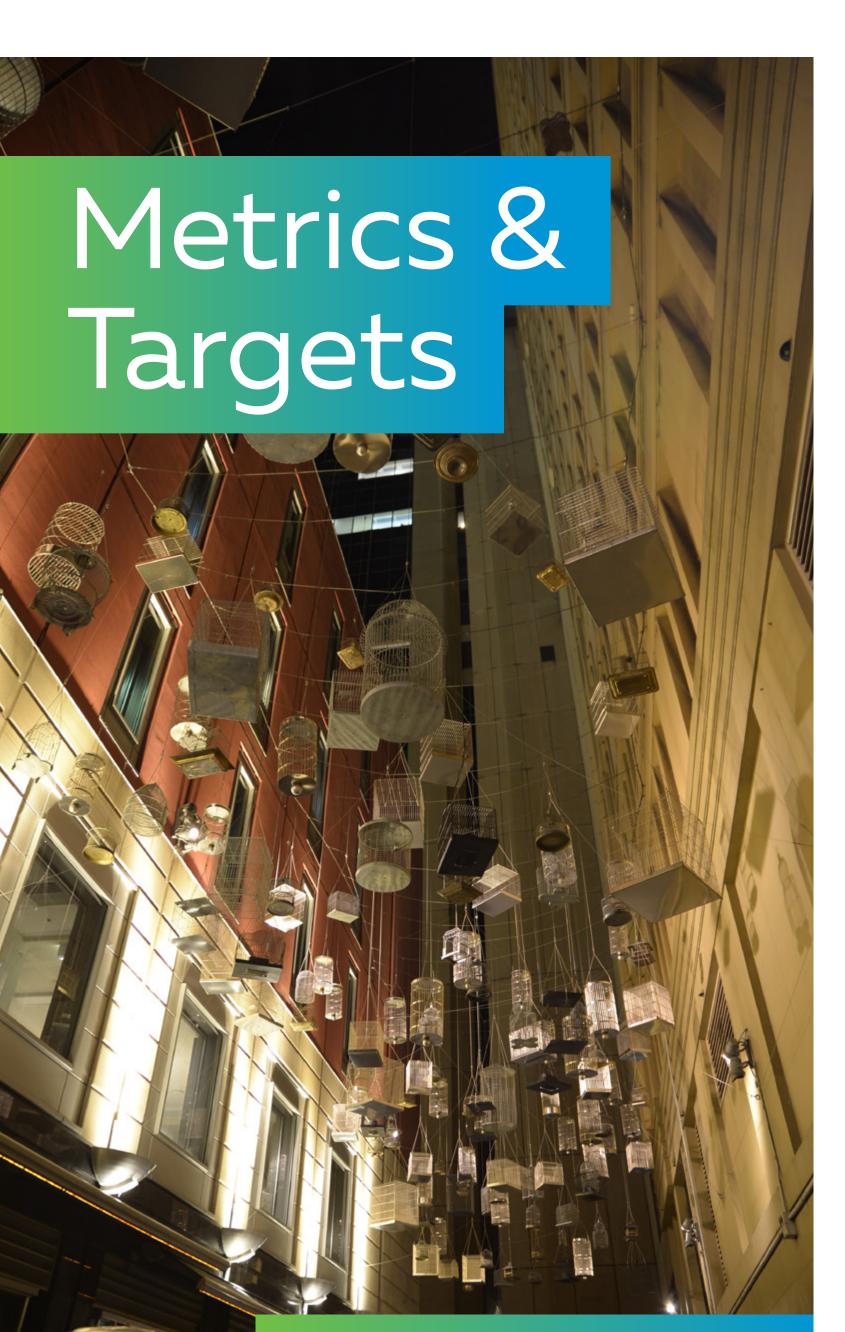
We are actively pursuing CER integration through the regulatory framework. Our proposed plan for 2024–29 includes the capital and operating expenditures required to meet the projected needs for the next five years, focusing on enabling the transition to net zero. The CER program will provide regulated funding to upgrade our network to support forecast growth in rooftop solar, battery build-out, EV charging infrastructure and other CER technologies.

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| Total number on our network (% of total customers)                               | 2022    | 2029      | 2034      | 2039      |
|--|---------|-----------|-----------|-----------|
| Rooftop solar systems  | 220,000 | 400,000   | 510,000   | 610,000   |
| (% of all customers)   | (12.3%) | (21.7%)   | (26.3%)   | (30.5%)   |
| Behind-the-meter batteries   | 17,000  | 130,000   | 320,000   | 540,000   |
| (% of all customers)   | (0.9%)  | (6.9%)    | (16.7%)   | (27.1%)   |
| Electric vehicles  | 3,000   | 370,000   | 1,110,000 | 2,050,000 |
| Flexible customer load (e.g. swimming pool pumps and electric hot water systems) | 470,000 | 430,000   | 410,000   | 380,000   |
| Total DER assets   | 710,000 | 1,330,000 | 2,350,000 | 3,580,000 |

Figure 7 – Projected CER / DER Uptake

<sup>8. 2024-29</sup> Regulatory Proposal, p. 18



#### Our emissions targets

In FY22, we committed to increasing the ambition of our emissions reduction targets to align with net zero objectives and reflect the significant progress made by Ausgrid and our industry to reduce emissions and decarbonise the electricity grid.

In FY23, as part of our commitment to the Science Based Targets initiative (SBTi), we lodged renewed targets with the SBTi for validation and approval. To meet our commitments, the targets will, at a minimum:

- Achieve a 50% reduction in our scope 1 and 2 emissions by 2030
- Achieve our overarching net zero goal for our scope 1, 2 and 3 emissions by 2045

Our targets are baselined to FY20 for scope 1 and 2 emissions and FY21 for scope 3. Our scope 3 targets include our entire supply chain emissions per the Greenhouse Gas Protocol. This is a major improvement from our previous targets set in FY19 to reduce our scope 1, 2 and selected scope 3 emissions by 8% by the end of FY24 and 17% by 2030 (Figure 8).

#### Greenhouse gas emissions

Our total Ausgrid Group greenhouse gas emissions (scope 1, 2, and 3) in FY23 were 1,036,195 tonnes of CO<sub>2</sub>-e, most of which derived from distribution and transmission line losses of the electricity we carry.

| Total Emissions | 1,036,524 t/CO <sub>2</sub> -e                                     |
|-----------------|--|
| Total Scope 1   | 11,113 t/CO <sub>2</sub> -e  |
| Total Scope 2   | 656,412 t/CO2-e (Line losses are 98.6% of total scope 2 emissions) |
| Total Scope 3   | 368,999 t/CO <sub>2</sub> -e                                       |

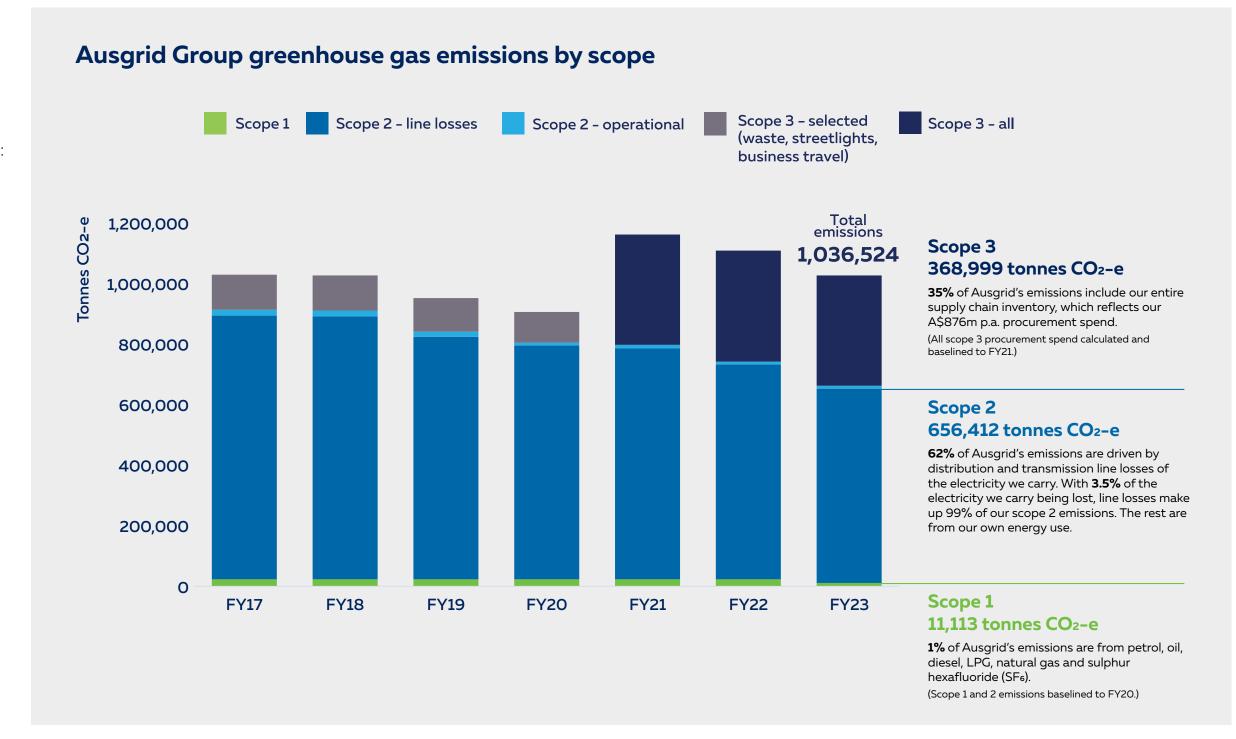


Figure 8 - Emissions Reduction Progress

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Distribution network losses are the difference between the electrical energy that enters our distribution network and the energy that is delivered to our end customers. As electricity passes through our network, a small proportion of it is lost as heat. This is the unavoidable consequence of transferring electricity across the network, but it can be minimised using appropriate technology. To minimise energy costs to consumers, where practical and cost effective, we undertake activities to reduce these line losses. As the proportion of renewable energy that we distribute increases as a result of decarbonisation of energy generation in NSW, the carbon footprint of our line losses is decreasing.

#### Scope 1 emissions

- Total scope 1 emissions have reduced by 50.1% from FY20
- Emissions from transport and fuel combustion have decreased, as have our emissions from Sulphur Hexafluoride (SF6). SF6 has significantly decreased by 82.4% from FY20. SF6 is a potent greenhouse gas used to insulate electrical switchgear and allows electrical infrastructure with a significantly smaller footprint to be safely placed inside buildings.
- Released in FY21, our SF6 strategy details our intent to phase out its use by adopting SF6-free equipment where practicable, better management to

- reduce SF6 gas losses, and improvement in the measurement of our losses to direct measurement instead of using 'default' factors. A significant reduction was achieved in FY23 by measuring actual fugitive losses instead of using default factors.
- efficiencies to help reduce scope 1 emissions by procuring hybrid and electric vehicles. As assets become due for renewal, all passenger vehicles will be replaced with hybrid or electric vehicles to reduce emissions by a minimum of 14%. 49 EVs were delivered in FY23, with 20 hybrids.

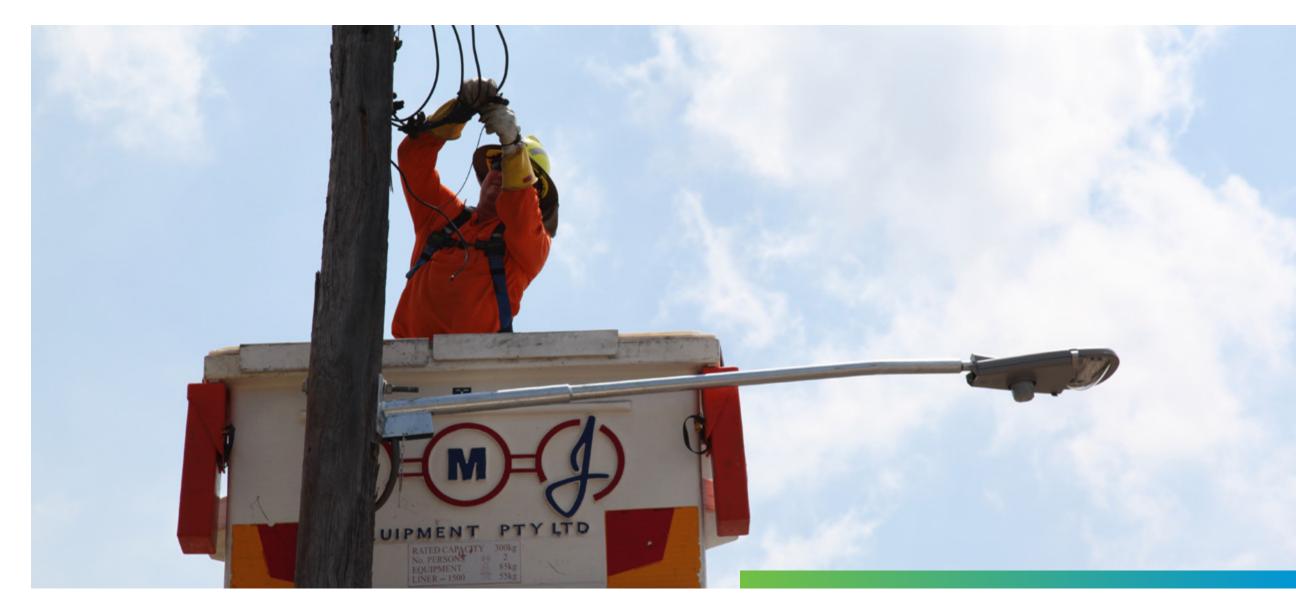
We continue investing in fleet

#### Scope 2 emissions

- Our scope 2 emissions reduced by 16.9% from FY20. These scope 2 emissions include our line loss emissions, which comprise 98.6% of all scope 2 emissions in FY23. Our scope 2 emissions continue to decline due to grid decarbonisation, lower demand and Ausgrid initiatives.
- We have installed solar power generation at many of our depots. From January 2024, all the power we use for our operations will come from renewable sources, with our new electricity contract to supply 100% green power. We are also reducing energy use across our properties through energy efficiency upgrades.
- As part of our EV fleet renewal, we installed five EV chargers at Ausgrid Group depots across our network, with 82 scheduled for FY24. Our purchase of 100% green electricity for our operations will mean that these vehicles will be charged from green power when charged at our premises.

#### Scope 3 emissions

 In FY23, we measured our entire supply chain of scope 3 emissions per the Greenhouse Gas Protocol and established an FY21 baseline. We will work with our suppliers to improve our understanding of our scope 3 footprint and implement strategies to reduce this to net zero by 2045.



#### **Network initiatives**

**NEXT STEPS** 

To support our communities in the transition to net zero, we are actively supporting the deployment of innovative clean energy solutions, with the following progress to the end of FY23:

- · 3 community batteries
- 27 public EV chargers installed on Ausgrid assets to support the 0.8% of roadregistered passenger vehicles in the Ausgrid area that are electric
- · 2 pole-mounted batteries
- · 3 Stand Alone Power Systems
- · 8 behavioural response trials and
- 1,510MW of embedded PV generation connected to our network
- 75% of the 258,541 Ausgrid-owned streetlights converted to LED

These initiatives evidence how our network is evolving, and we will continue to develop these and other initiatives as tangible measures of our success.

Our Executives are responsible for the success of our strategy. Our strategic goals have targets, and these are linked to Executive remuneration. As part of Ausgrid's FY24-26 remuneration framework, all performance metrics are linked to our six strategic goals. Performance metrics include:

- 1. Building an engaged workforce: employee engagement, safety
- 2. Building our trusted brand: reliability and customer service performance
- Decarbonising the energy system: community batteries installed

- 4. Driving electrification: performance in connecting customers to our network
- 5. Providing efficient infrastructure: delivering our capital plan to provide efficient infrastructure
- 6. Growing shareholder value: outperformance against operating expenditure budgets



**ABOUT THIS REPORT** 

# TCFD Progress & Next Steps

In publishing this inaugural TCFD report, we are marking a significant step in enhancing transparency on climate-related financial risks and opportunities. We are committed to ongoing progress in our disclosures, aligning with evolving disclosure requirements and embracing future developments.

|                  | Completed   | Underway   |  |
|------------------|---|--|--|
| Governance       | First TCFD Report 2024  | We are currently mapping our existing documents and  |  |
| Strategy         | Climate Change Impact Assessment 2022   | external disclosures to ensure that we have the information and data necessary to meet the requirements for the      |  |
|                  | Committed to net zero for Ausgrid Group emissions by 2045 for scope 1, 2 and emissions  | Australian Sustainability Reporting Standards disclosure.  Any gaps identified will be addressed so we can report on |  |
|                  | Refreshed strategy to focus on enabling and accelerating the energy transition  | FY25 performance in FY26.  |  |
| Risk Management  | Climate-related risks integrated into Risk Management Framework   |  |  |
| Metrics & target | Set near-term emissions reduction target for scopes 1 and 2 by 2030   |  |  |
|                  | Lodge Ausgrid Group net zero targets with the SBTi in FY23 for validation and approval, including our supply chain scope 3 emissions as per the Greenhouse Gas Protocol |  |  |

This document has been based on the information available at the time of preparation.



#### www.ausgrid.com.au

General enquiries 13 13 65 (9.00am to 4.30pm Monday to Friday)

enquiries@ausgrid.com.au

GPO Box 4009 Sydney NSW 2001

ABN: 78 508 211 731



#### www.pluses.com.au

General enquiries 1300 760 626 (8.00am to 5.00pm Monday to Friday)

info@plusES.com.au

Level 14, 24 Campbell Street Sydney NSW 2000

ABN: 30 179 420 673