

Overview of Ergon Energy's Annual Network Plan 2025

A summary of our Distribution Annual Planning Report (2025–26 to 2029–30) for our customers, communities and other stakeholders.



Part of Energy Queensland

Purpose

Ergon Energy's [Distribution Annual Planning Report](#) (DAPR) explains how we are continuing to safely and efficiently manage the electricity distribution network in regional Queensland.

This summary outlines the content in our DAPR with links to specific chapters you can refer to for more information.

The full report details the network's performance in 2024-25 and our plans for 2025-26 to 2029-30.

It provides insights into the key challenges we face and our responses to them, highlighting the areas where we are seeking to work closely with our customers, the community, regulator and different industry partners.

It provides information to assist interested parties to:

- understand how the electricity network works
- provide input to the future development of the network
- identify locations that would benefit from significant

electricity supply capability or demand side management and non-network initiatives

- identify locations where major industrial loads would be best located.

This information is also supported by our [online interactive map](#) of the electricity network.

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Message from our Chief Engineer

I am pleased to share this summary of Ergon Energy's Distribution Annual Planning Report (DAPR) for 2025-26 to 2029-30.

Each year we publish our DAPR that sets out the strategic direction of the network over the next five years in the context of a rapidly evolving technological landscape, changing customer needs and expectations, and ongoing high levels of renewable energy integration. The DAPR provides our customers, communities, and stakeholders with insights into the factors shaping our plans, including electricity demand forecasts, network maintenance and refurbishment needs, customer strategies, natural disaster management, service performance trends and our investment priorities.

What is shaping our plans?

Following the release of the Queensland Government's Energy Roadmap in October 2025, Ergon Energy has committed to supporting its objectives of affordability, reliability and sustainability. Over the coming years, Ergon Energy will continue to strengthen the grid's resilience to severe weather events, enable customers to connect, support growth in network demand, and deliver the community battery program. These priorities reflect Ergon Energy's critical role in powering regional Queensland's economic growth and energy transition.

Population growth, housing shortfalls & affordability

Ergon Energy is introducing a connections guarantee to enhance transparency, and support timely, efficient connections for new generation, storage and load projects. This initiative will play a critical role in facilitating private investment and accelerating the energy transition by ensuring clear service standards and accountability.

Uniqueness of our Network

Ergon Energy's network is unique in Australia as it spans thousands of kilometres across regional Queensland with very low customer density and comprises significant sections of Single Wire Earth Return (SWER). This sparse network, designed to span enormous distances to serve relatively few customers, creates significant logistical, cost and operational

challenges for us. Nevertheless, we are focused on maintaining safety and reliability while driving cost reductions across the business through to 2030.

2025–2030 Distribution Determination

Ergon Energy is subject to economic regulation by the Australian Energy Regulator (AER). On 30 April 2025, the AER finalised its Distribution Determination for Ergon Energy for the 2025-30 regulatory control period which set the revenue cap and expenditure allowances guiding our operations. We remain committed to ensuring all network investments are prudent and efficient, and deliver long-term value for customers. Managing current and future assets is central to our business. Our asset management approach is guided by key principles: ensuring safety for employees and the community, meeting demand, delivering customer commitments, meeting network and service performance standards and maintaining a sustainable cost structure. Cyber security also remains a critical focus to safeguard network and business operations.

Severe Weather Events & Restoration

Ergon Energy takes pride in its ability to respond to natural disasters and restore supply to customers impacted by these events quickly and safely. We place the highest priority on public safety, infrastructure protection, and rapid restoration of supply following high-impact weather events. Our comprehensive emergency management strategy includes a dedicated team focused on planning, preparedness, response and recovery, supported by technology-driven damage assessment capabilities. Seasonal readiness activities include maintaining mobile generation assets, securing critical spares, managing vegetation, and strengthening inter-agency collaboration to enhance resilience against storms, bushfires and floods.

Distributed Energy Resources (DER) – Enabling customer choices and greater control

Across the 800,000 homes and businesses connected to the Ergon Energy network, customers continue to invest in solar, Electric Vehicles (EVs),

Battery Energy Storage Systems (BESS), and other technologies to manage their energy needs in the most cost-effective ways.

The opportunity (and challenge) for us is to harness this customer-led energy transformation to complement efficient network investment, while addressing growing reliance on electricity driven by advanced technologies, electric vehicles and e-commerce. We are working closely with regulators, market operators, industry participants and stakeholders to address challenges associated with high distributed energy resources penetration, electric vehicles integration and emerging technologies such as battery energy storage systems. This collaboration spans market policy development, regulatory frameworks, innovation and trials, consumer engagement and future grid planning.

Gearing up for 2032 Olympic and Paralympic Games

As Queensland prepares to shine on the global stage for the 2032 Olympic and Paralympic Games, Ergon Energy has a significant role to play in ensuring that energy is supplied safely, reliably and sustainably to all venues across regional Queensland, and is well positioned to contribute to the success of the Games.

Thank you – for your support and for being part of our journey!

We extend our sincere thanks to all customers and stakeholders who have engaged with us throughout the past year and contributed to our programs. We also appreciate our industry partners, whose collaboration is vital to the success of our demand management initiatives and the facilitation of network connections.

We are excited to continue working together as we optimise our network investments and refine operational programs to deliver a sustainable and prosperous energy future for Queensland.

Suzanne Shipp
Chief Engineer
Ergon Queensland Limited

Our network

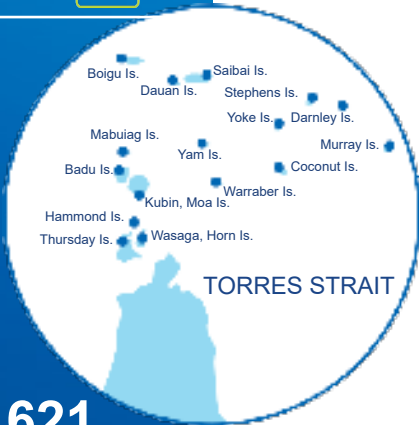


298

zone substations and switching stations

106,202

distribution transformers



987,621

power poles, staked poles and streetlight poles



145,263km

Overhead powerlines



10,156km

underground power cable

801,362

connected customers



Our service area



What is shaping our plans?

To ensure we meet the needs of our customers and communities, we invest in listening to their expectations, concerns and ideas.

We continue to hear that safety should never be compromised and that electricity affordability remains the overriding concern for our customers. At the same time, beyond keeping the lights on, it is clear our customers want greater choice and control around their energy solutions, with a strong interest in renewable energy, battery storage, electric vehicles and other energy-related technologies.

These insights are shaping our plans.

Safety first: a no-compromise approach

Safety is considered to be of the utmost importance by Ergon Energy and the community. Our focus on maintaining safety outcomes for our staff, customers and communities remains paramount. Community education on electrical safety awareness is also highly important to us, especially during natural disasters.

We are taking a no-compromise approach to community and staff safety. We continue to focus on enhancing safety in our maintenance and replacement practices across all asset categories. As our network ages and the risk of equipment failure towards the end-of-life increases, this becomes increasingly more of a priority. In addition, we are investing in new technology trials that have the potential to deliver improved, safe and efficient outcomes for our customers.





Queensland Energy Roadmap 2025

Following the release of the Queensland Government's [Energy Roadmap: Improving our energy assets while building what we need for the future](#) (Queensland Energy Roadmap) in October 2025, Ergon Energy has committed to supporting its objectives of affordability, reliability and sustainability. Over the coming years, Ergon Energy will continue to align its strategic direction with targeted investments in grid resilience (against severe weather events), community battery programs, customer affordability

initiatives, energy efficiency measures and streamlined customer connection processes. These priorities reflect Ergon Energy's critical role in powering regional Queensland's economic growth and energy transition. We are also enabling our customers to connect more Consumer Energy Resources (CER) and Distributed Energy Resources (DER), progressing network tariff reforms, and developing innovative energy-related solutions.

Energy Queensland's key contributions to the Queensland Energy Roadmap 2025



Community Batteries

Energy Queensland is rolling out community-level batteries across the distribution network and will partner with the private sector to manage minimum system load and support rooftop solar integration. This initiative is directly referenced in the Roadmap as a critical enabler for grid stability and efficiency. The Roadmap includes a \$10M fund for batteries for EQL to administer to encourage private sector investment.



Network Resilience

The business is delivering flood resilience upgrades (e.g., Ingham Substation) and preparing for the 2025/26 severe weather season, supporting the Roadmap's emphasis on asset reliability and disaster preparedness.



Connections

The new Customer Connections group is streamlining developer works and enabling faster connections, supporting Queensland's housing and infrastructure growth in line with the Roadmap's objectives. A "Connections Guarantee" will be developed which relates to the new KPIs we have proposed.



Affordability

A Tariff Review for Agriculture and small business customers. This will be led by EQL in consultation with Government in the lead up to the yearly QCA pricing process for July 2026.



Energy efficiency

As Queensland's largest electricity retailer and sole electricity distributor, Energy Queensland will continue to identify opportunities across CER to support customer affordability, voluntarily increase electrification of their homes and transport, as well as source presently underutilised capacity in the system where this is a lower cost alternative to capital investment and improves reliability.

Distribution Determination 2025–2030

Ergon Energy is subject to economic regulation by the AER in accordance with the National Electricity Law and National Electricity Rules. On 30 April 2025, the AER finalised its [Distribution Determination](#) for Ergon Energy for the 2025-30 regulatory control period. This determination sets the revenue cap and expenditure allowances that guide our operations.

We recognise the ongoing challenges of energy affordability and equity issues within the community. In line with regulatory requirements, we remain committed to ensuring all network investments are prudent, efficient, and deliver long-term value for our customers. More information regarding Ergon Energy's allowed revenues and network prices can be found on the [AER's website](#).



Our customer engagement program



To ensure we meet the unique and diverse needs of our communities and customers during a period of rapid industry transformation, a coordinated, performance-measured, multi-channel community and customer engagement program is essential.

Most recently, we have refreshed our understanding and prioritisation of the economic, governance, social and environmental topics that matter most to our stakeholders.

We are committed to our community and customers with a set of commitments for 2026 and beyond.

Our Customer Commitments:

- Affordability – we continue to seek ways to make electricity more affordable.
- Security of supply – we are here to keep the lights on – providing the peace of mind of a safe, reliable electricity supply.
- Sustainability – we support you in the selection of your energy solutions.
- Prioritisation – we continue to prioritise our investment plans, including the strategies and specific investments reflected in our DAPR.

For more on our engagement program refer to: [Chapter 3: Customer and community engagement](#).

Ensuring prudent network investments

Ergon Energy has a tiered governance process to oversee future planning and expenditure on the distribution network, which includes:

- Asset Management Policy and Strategy - Alignment of future network development and operational management with Ergon Energy's strategic direction.
- Grid Investment Plan - Development of seven-year rolling expenditure programs and a 12-month detailed Program of Works (PoW) established through the annual planning review process.
- Program of Works Performance Reporting - Specific corporate key result areas to ensure the PoW is being effectively delivered with performance standards and customer commitments met.
- Grid Investment Approval - Network projects and programs are overseen by executive management and business cases approved by an appropriate financial delegate.



Brisbane 2032
Olympic and Paralympic
Games Host
Queensland



Gearing up for 2032 Olympic and Paralympic Games

As Queensland prepares to shine on the global stage for the 2032 Olympic and Paralympic Games, Ergon Energy has a significant role to play in ensuring that energy is supplied safely, reliably and sustainably to all venues across regional Queensland, and is well positioned to contribute to the success of the Games.



Making electricity accessible, affordable, safe, secure and reliable

Our customers have told us that, in addition to safety, affordability is their primary concern – both for cost-of-living pressures and business competitiveness. Affordability is more than part of our purpose statement; it is a fundamental consideration in how we manage our network.

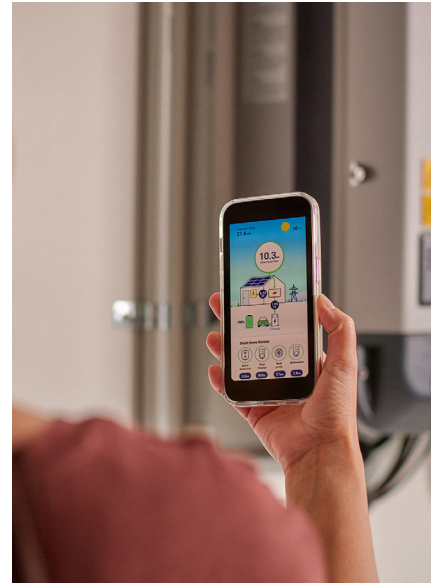
Each year our electricity prices are regulated and set by the Queensland Competition Authority (QCA). Influenced by various network and market factors, this year has also seen an increase in the electricity prices.

The Queensland Government subsidises the price of electricity for regional Queenslanders to ensure parity with other parts of the state, given the vast geographic distances involved in delivering electricity across regional and remote Queensland.

Our forward investment program remains focused on minimising costs to customers while ensuring we meet the outcomes they expect.

Our asset management strategies aim to balance our customers' need for a safe, secure, and reliable electricity supply with their desire for this service to be provided at a minimal cost.

A key part of this process is optimising the economic benefits of network improvements while always considering the potential for non-network solutions, such as demand management.



The growth in solar energy

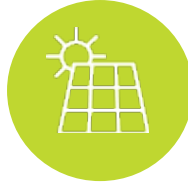
Queensland has one of the highest penetrations of rooftop solar energy systems in the world. The rapid uptake of solar photovoltaic (PV) systems has changed the distribution of electricity; impacting the Low Voltage (LV) network, and creating a number of system design and operational challenges.

At the end of June 2025, a total of 270,967 solar PV systems were connected to the Ergon Energy network with a combined installed inverter generation capacity of 2,768MVA.

Strategic planning initiatives, such as the implementation of the 230V Low Voltage Standard and emergency backstop mechanism, help us manage voltages across the network and enable further uptake of solar PV. In addition, we continue to explore avenues to enable dynamic connections through secure communication between the network and the compatible Distributed Energy Resources (DERs).

For more information on solar energy growth refer to:

- [Chapter 4: Network forecasting](#)
- [Chapter 10: Power quality](#)
- [Chapter 11: Network challenges and opportunities.](#)



1,500

new solar PV connections per month on average



270,967

small-scale solar PV systems connected to the network



2,768MVA

solar inverter generation capacity on the network



42%

of all regional Queensland residential detached houses have rooftop solar PV



The changing use of the network

The increase in the distributed Energy resources (e.g. solar PV) is changing how the network is used, with two-way energy flows and new daily load profiles emerging across the network.

In some areas, this has been quite significant, with the 'hollowing out' of demand at the substation level during daylight hours and a reduction in traditional afternoon electricity peak demands, as shown in the demand profile graph below.

At the same time, significant two-way flows of electricity along local poles and wires occur in residential areas as homes and businesses share their energy output to meet the community's energy needs. And the energy demand continues to peak in

the evening as Queenslanders return home.

The demand profile graph also illustrates how generated solar PV energy helps address the network peak in early afternoons. As the sun and solar generation fade later in the day, a 'de facto' peak emerges (albeit lower than it would have been without the benefit of solar). It is important to note that this effect can vary significantly day-to-day, with demand on the network often rising dramatically when cloud cover reduces local solar energy output. Where solar penetration is high, quality-of-supply and voltage issues also need to be addressed. These challenges are shaping our network plans.

For further information please refer to the following sections of the DAPR:

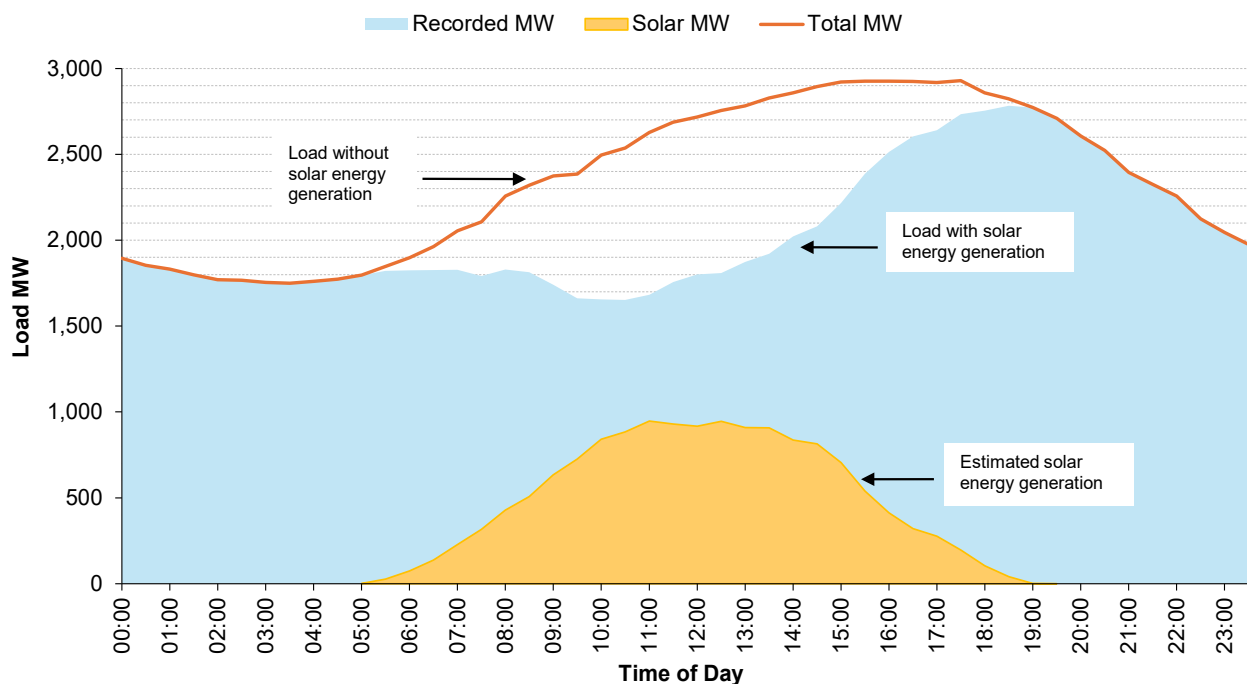
- [Chapter 4: Network forecasting](#)
- [Chapter 10: Power quality](#)
- [Chapter 11: Network challenges and opportunities.](#)



Battery Energy Storage System

Ergon Energy is actively monitoring trends and technologies in the residential and commercial BESS market to update standards, safety and connection requirements. While recognising BESS's potential to deliver both network and customer benefits, we acknowledge the existing barriers to its effective use. As part of its Local Network Battery Plan, Ergon Energy is deploying 4MW/8MWh batteries connected to high-voltage networks near zone substations.

Impact of solar on peak demand (Ergon)



Did you know

Around 70% of the Ergon Energy network runs through rural Queensland making it the largest in the National Electricity Market (NEM), with the second lowest customer density per network kilometre.



Ergon Energy's network-wide maximum demand for 2024–25 was recorded at 2,782MW between 6:30 pm and 7:00 pm on 23 January 2025. PV generation offset the peak by approximately 40MW, as the peak occurred later in the day.

Ergon Energy's network-wide minimum demand for 2025 was recorded at 518MW on 31 August 2025 at 11:30 am. The downward trend in minimum demand is expected, as the continued growth of rooftop PV is shifting load patterns on the network from daytime to nighttime.



Ergon Energy operates 33 isolated power stations supporting 39 remote Queensland communities that collectively form our isolated network.



Looking at trends in electricity use

Ergon Energy's forecasts are based on scenarios with varying economic and demographic assumptions. They indicate that we are likely to see little change in peak demand and in the volumes of electricity delivered through the regional Queensland electricity network over the next few years. However, this masks the fact that growth in customer numbers (and network expansions to connect them) is being offset by higher solar energy system penetration and energy efficiency gains.

Over the medium to longer term, the trend in energy usage from the network will depend on the uptake of other emerging technologies – such as battery storage, electric vehicles, and the next generation of home and commercial energy management systems.

Electric Vehicles

The growth of Electric Vehicles (EVs) in Queensland as a new class of electrical load presents both challenges and opportunities. Charging of plug-in hybrid electric vehicles and battery electric vehicles, collectively termed EVs, is an emerging electrical load that will impact the Low Voltage (LV) electricity network and have limited impacts on upstream aspects of the electricity supply chain. EV numbers are forecast to surge in Queensland as purchase price decreases, model availability increases and more charging infrastructure is deployed.

The growth in EV numbers presents opportunities to collaborate with relevant stakeholders to provide customers with access to optimal private and public charging solutions, based on the affordability and convenience priorities of private and commercial EV owners. If EV owners charge their vehicles outside network peak demand periods and ideally inside peak solar PV generation periods, this will enhance network utilisation, reduce customer charging costs in many cases, and deliver significant benefits to our business and other stakeholders. As the proportion of electricity entering the grid from renewable energy sources increases, the greenhouse gas emissions intensity of grid-supplied electricity reduces, creating an environmental advantage for EVs over

petrol- and diesel- powered vehicles.

During 2024-25, the number of EVs registered in Queensland increased by around 51% to almost 78,000 vehicles, plus around 1,800 electric motorcycles. Less than 11% of EVs are based in regional Queensland, despite the area having around 31% of the state's population. Although passenger EVs still account for only 2.3% of all registered cars in Queensland, 13.4% of cars sold in 2024-25 were EVs, up from 12.3% in 2023-24. There is no evidence that EV charging is overloading any local networks; however, we are preparing for when it will have an impact and seeking to reduce the overall effect.

Ergon Energy is playing its part in enabling EV ownership and optimal EV charging arrangements for residential and business customers to better understand and capitalise on EV charging. To help achieve this, we developed the fourth edition of our [Network Electric Vehicles Tactical Plan](#).

For more on the network challenges refer to: [Chapter 11: Network challenges and opportunities](#).

Network Resilience – where are we focusing?

We always ensure preparedness for regional Queensland's challenging summer season. We continually maintain and renew our network to ensure the safety, security and reliability of supply.

We are also focused on using technology to work smarter, more safely, and more efficiently while delivering positive customer experiences, especially during natural disasters.

High impact weather events



Ergon Energy is conscious that its responses to emergency events, particularly those driven by adverse weather, are delivered in an environment of continually increasing need and expectation from both customers and stakeholders. More than ever, our response must consider the growing customer dependency on electricity as technology and appliances become more sophisticated, and economic activities become more reliant on e-commerce.

Ergon Energy's response priorities during any power outage events, in order of importance, are:

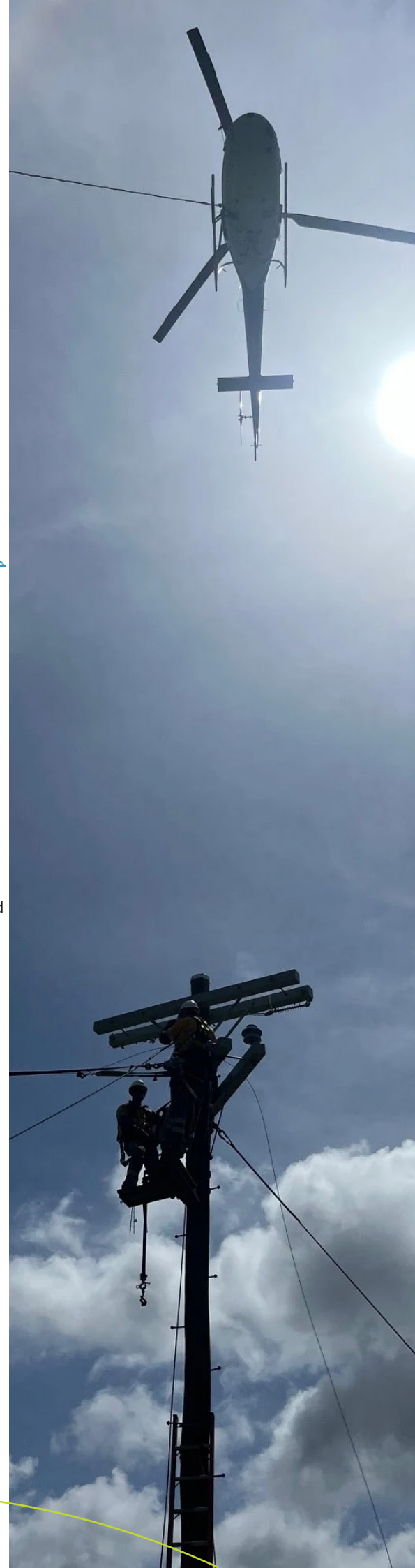
- ensuring personal safety - for both public and Ergon Energy employees
- protecting equipment and infrastructure from damage
- efficient supply restoration - including meeting communication requirements of customers and emergency service agencies.

Ergon Energy conducts annual preparations prior to each summer storm season to provide customers across regional Queensland with a reliable network that minimises supply interruptions and other risks during extreme weather conditions such as bushfires, floods and cyclones.

Our comprehensive emergency management strategy includes a dedicated team focused on leadership and planning, preparedness, response and recovery supported by technology-driven damage assessment capabilities. Seasonal readiness activities include maintaining mobile generation assets, securing critical spares, managing vegetation, and strengthening inter-agency collaboration to enhance resilience against storms, bushfires and floods.

These preparations include the review of response programs and processes, resourcing and ongoing network related capital, and operating works prior to summer to maintain network resilience. Comprehensive post implementation reviews are also conducted to identify further opportunities to enhance our processes, plans, technology, people development and overall response capability. These types of reviews are critical for continually meeting stakeholder expectations and reducing the negative impact of large-scale disasters on the Queensland community.

Ergon Energy plans for extreme weather events and has developed a natural hazards strategy (including summer preparedness plan), which is available on our [website](#).



Ergon network reliability

In 2024-25, Ergon Energy's reliability of supply was favourable for three of the six Minimum Service Standards (MSS) related to duration and frequency of power outages quantified by the System Average Interruption Duration Index (SAIDI) and the System Average Interruption Frequency Index (SAIFI) respectively. MSS are defined in our Distribution Authority.

SAIFI performance for all three feeder categories - Urban, Short Rural and Long Rural - was favourable compared to MSS limits. However, SAIDI performance for these three feeder categories was unfavourable compared to the MSS limits due to increased safety-driven program of works.

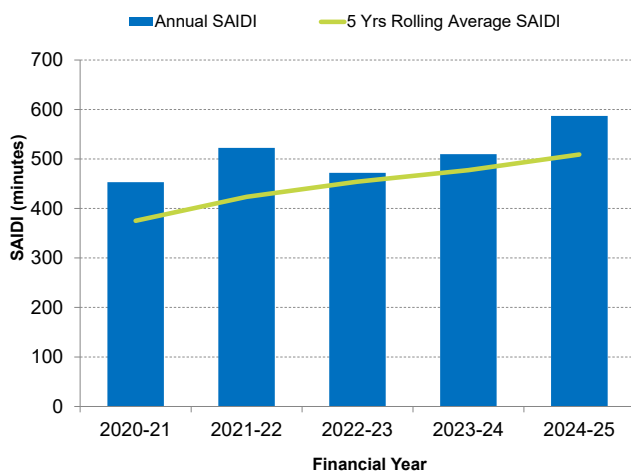
Furthermore, unplanned outages in the Long Rural network were significantly influenced by High Voltage (HV) asset failures (e.g. cross-arm and pole failures), with a large proportion occurring during severe weather conditions.

The graphs below illustrate the five-year trends in outage duration and frequency across our regulated network.

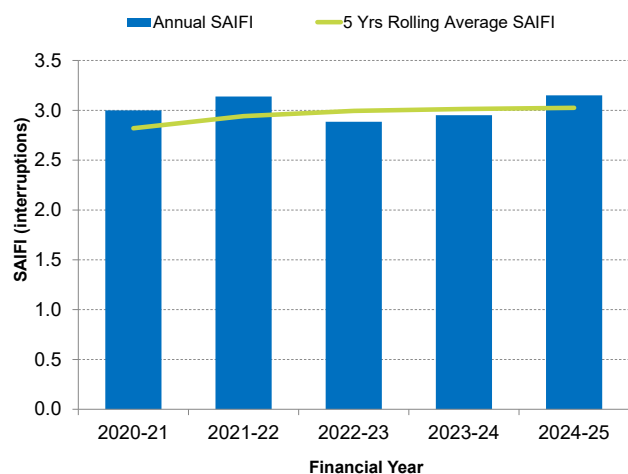
For more on our network's performance refer to: [Chapter 9: Network reliability](#).

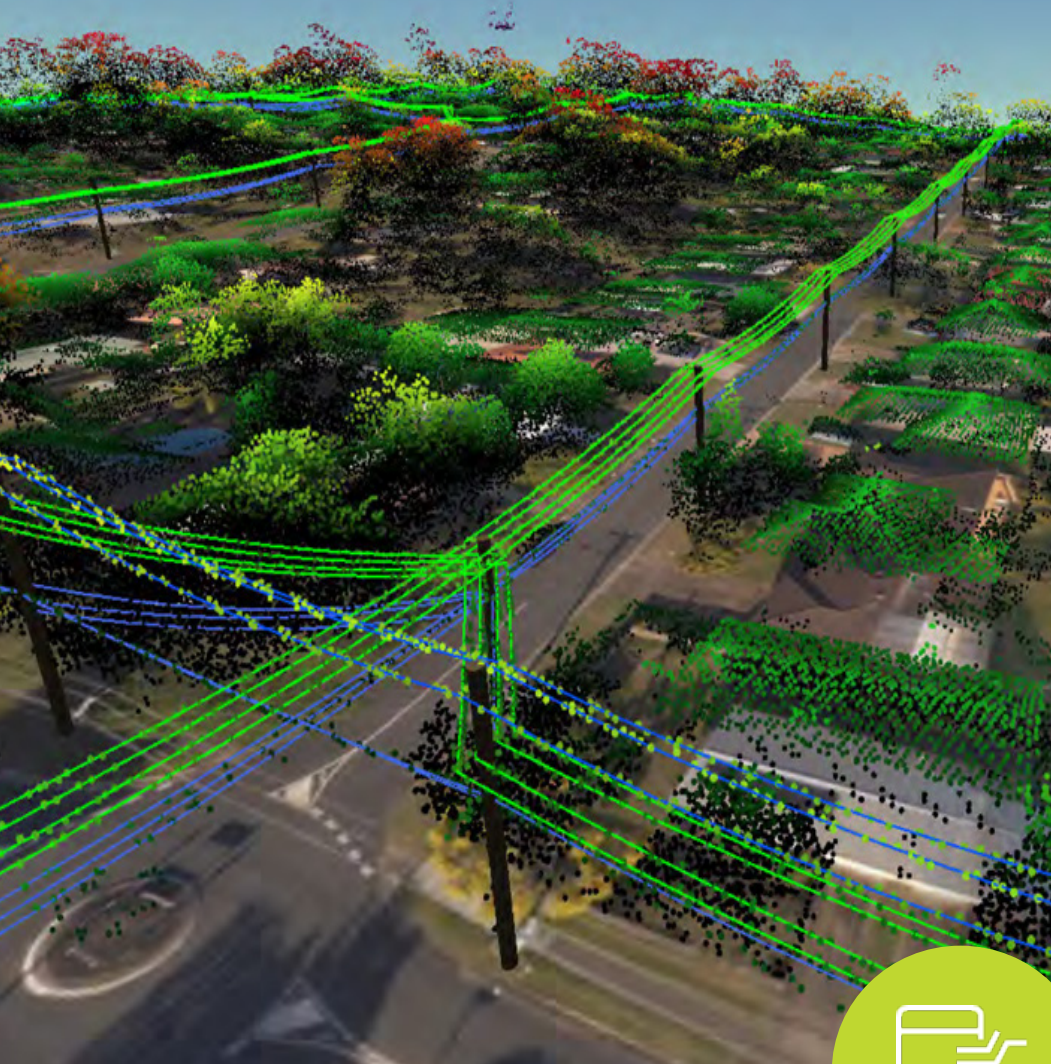


Ergon network outage



Ergon network outage frequency





Managing an ageing network

Our networks are ageing and require regular inspections and condition monitoring. Ergon Energy continues to employ condition- and risk-based asset inspection, maintenance, refurbishment and replacement strategies. End-of-economic-life replacement and life-extension refurbishment decisions are informed by risk assessments considering safety, history, performance, cost and other business delivery factors.

Our assets are inspected at scheduled intervals to detect physical indications of degradation that could lead to impending failures. Typical examples of inspection and condition monitoring activities include:

- analysis of power transformer oil to monitor for trace gases produced by internal faults
- inspection of customer service lines
- assessing the extent of decay in wood power poles to determine residual strength
- inspection of timber cross-arms to detect visible signs of degradation
- electrical testing of circuit breakers.

Ergon Energy has a well-established asset inspection program to meet regulatory requirements. All assets are inspected through rolling-period inspection programs.

Due to age and degrading safety profiles, Ergon Energy's refurbishment program includes an increased volume of safety driven defect rectification works, such as pole replacement and nailing, cross-arm replacement, small copper conductor replacement, and improving network asset clearances to ground and structure.

For more on our maintenance approach refer to:

[Chapter 8: Asset life-cycle management.](#)

Using technology to deliver smarter solutions

Ergon Energy is building its capability with ongoing investment in technologies that improve risk outcomes and efficiency.

These efforts include utilising Light Detection and Ranging (LiDAR) data from the aerial asset and vegetation monitoring management technology. This aircraft-based laser and imaging capture system provides spatial mapping of the entire overhead line network. The data captured is processed to identify and measure the network and surrounding objects such as buildings, terrain and vegetation. This system creates a virtual representation of the real world, enabling fast and accurate inspection and assessment of the physical network and its environment, particularly vegetation (see above).

Integrating this information into our decision-making framework and works planning processes is increasingly delivering productivity and efficiency improvements for vegetation management and other network analytics, such as

clearance-to-ground analysis, clearance-to-structure analysis, pole movement and leaning pole analysis.

Additional innovative identification systems are also being developed.





Finding the best solutions together

To transition to a more sustainable energy system, we recognise that our network must enable customer choice in electricity supply. This requires an intelligent grid and a focus on making connections to the network easier.

We are open to exploring the alternatives

Before investing in high-value network projects, we explore if non-network options could provide a cost-efficient alternative solution by engaging the external market through the Regulatory Investment Test for Distribution (RIT-D) process. From 1 January 2025, the RIT-D process was applied to major projects costing more than \$7 million. The projects that are currently under consultation or recently closed can be accessed on Ergon Energy's website, [Current consultations](#).

Ergon Energy's longer-term program of works includes major projects scoped to address network limitations in the forward planning period. We will also be presenting these to the market through the RIT-D process to test if there are more efficient solutions. For 2025-30 regulatory control period, RIT-D will be applicable to projects costing more than \$7 million.

For more on our recommended solutions to network limitations refer to:

[Chapter 6: Network limitations and recommended solutions](#).

Improving our connection process

During 2024-25, we continued to align the connection process more generally for Energex and Ergon Energy networks to deliver consistent customer experiences and increased efficiencies.

This has included a major system investment and administration reviews, both focused upon improvements to the customer experience, which will enable customer and industry partners access to information and improve the network connections process.

We are also working with stakeholders to evolve regulations around connection requirements to enable innovation for new electricity supply solutions that deliver balanced outcomes.

For more information refer to: [Chapter 11: Network challenges and opportunities.](#)

Population growth and customer connection guarantee

Ergon Energy is introducing a connections guarantee in line with the Queensland Energy Roadmap to enhance transparency and support timely, efficient connections for new generation, storage and load connections. This initiative will play a critical role in facilitating private investment and accelerating the energy transition by ensuring clear service standards and accountability. Through this, we are committed to enabling timely connections for new developments to help address housing shortages in regional Queensland.



Large scale solar

Ergon Energy is supporting the connection of a large number of major renewable energy projects, and has established formal connection agreements with major generators that will provide almost 2.1GW of renewable energy.

We are also working with a number of other generation proponents in the application phase that could further extend committed renewable generation capacity.

Ergon Energy is currently managing more than 90 enquiries, from preliminary to final commissioning stages, for large-scale (>1,500kW) renewable energy generating systems, totalling more than 6.2GW of renewable energy.

For a more in depth look at our approaches to large scale solar farms refer to: [Chapter 11 Network challenges and opportunities.](#)

Sustainability - the future is in intelligent grid

We continue to transform our networks into an intelligent grid so that our customers can leverage many benefits of digital transformation, distributed energy resources and other emerging technologies (such as solar, battery storage and electric vehicles), as well as the next generation of home and commercial energy management systems.

We see this as fundamental to our role in the future, which is supported by our customers' feedback from recent engagements. More importantly, we see ourselves increasing collaboration with our customers and market proponents to help leverage the benefits of this new technology across our network, and deliver overall improved outcomes for customers.

Dynamic Connections

Another smart initiative we are implementing is dynamic connections. A dynamic connection is an innovative option that allows customers to export more of their excess solar generation. This supports ongoing renewable DER installations while ensuring a safe and reliable electricity network.

Our utility server facilitates secure communication between the network and compatible consumer energy resources, conveying active constraints and export/import opportunities as Dynamic Operating Envelopes (DOE). This is a crucial capability to enable dynamic connections for the benefit of all customers. The focus now is collaborating with third-party original equipment manufacturers to ensure their equipment is tested and certified to support this new customer offering.

Demand management and other non-network solutions

Our Demand Management (DM) program forms part of an integrated approach that also includes our forecasting, planning, intelligent grid and tariff strategies to help lower electricity charges for our customers. When it is efficient to do so, the implementation of non-network solutions will replace or complement the need for network investment.

This involves working with end use customers and our industry partners to reduce demand to maintain system reliability in the short term, and over the longer term improve and complement efficient investment in the network. The implementation of a non-network alternative is commonly referred to

as demand management. Through our Demand Management Plan customers are incentivised to reduce demand. This includes incentivising our customers and DM providers to modify demand and/or energy consumption, which in turn will reduce operational costs or be an alternative to capital expenditure. The more capital expenditure that can be deferred or avoided, the greater the savings to our customers.

For more on Demand Management go to:
[Chapter 7: Demand Management activities.](#)

Fringe of grid customers

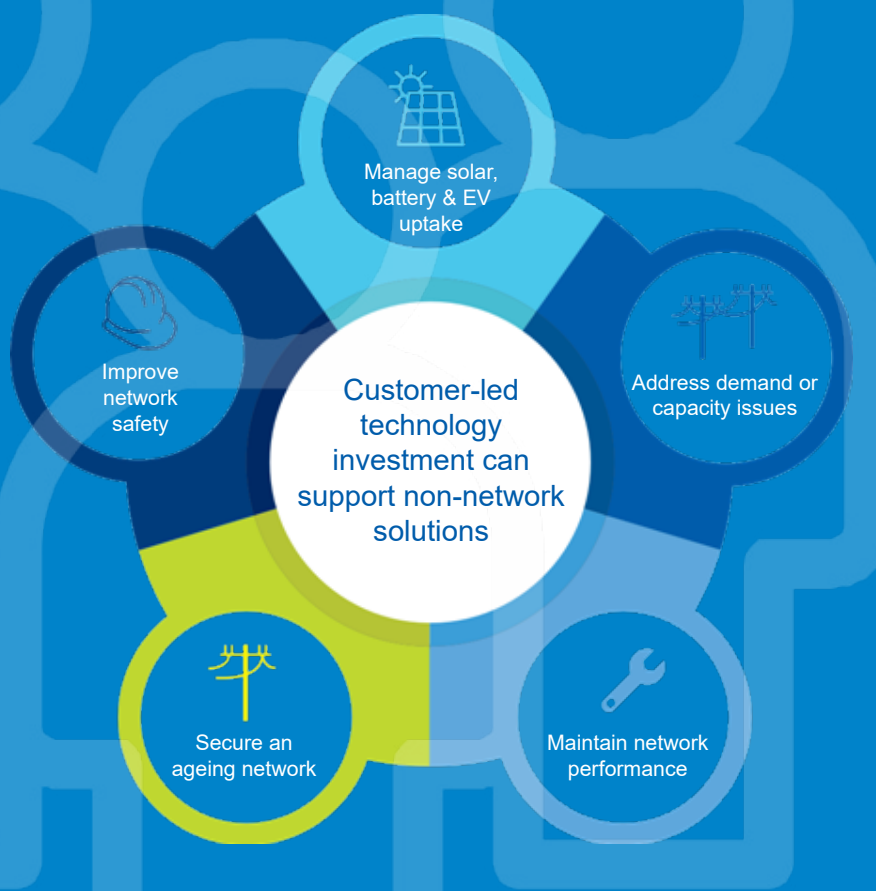
Ergon Energy's infrastructure includes one of the largest Single Wire Earth Return (SWER) networks in the world, with approximately 62,028 kilometres of overhead lines supplying 4 percent of its total customer base. The majority of this SWER network was installed in the 1970's and 1980's and is largely situated in sparsely populated Western Queensland.

Providing cost-effective and reliable electricity supply in remote locations is challenging, and as the network approaches the end of its life, alternative future supply options are being investigated. Stand Alone Power Systems (SAPS) are one of our initiatives focused on delivering alternative supply model solutions for our fringe-of-grid (i.e., remote) customers.

SAPS typically include renewable generation (predominantly solar PV) and battery storage with backup diesel generation. Advances in battery management systems and reductions in the cost of battery technologies have enabled SAPS to become increasingly economically viable compared to traditional network supply by poles and wires in remote locations.

These technologies will help improve the service experience, particularly for remote customers who receive electricity over long distances, while providing the opportunity to lower ongoing future service costs. We are trialling SAPS as an alternative to network supply for individual customers supplied by long SWER lines, and exploring alternative long-term opportunities.

Customer-led technologies





Cyber Security

Cyber security remains a critical focus as we adapt our strategies to safeguard network and business operations. Ergon Energy operates in one of the most commonly targeted sectors for cyber-attacks. As these threats continue to evolve, reaching into industrial control systems and supply chains, they require even greater efforts to manage the risks. In 2024-25, our Cyber Uplift Program (CUP) delivered a targeted suite of initiatives aimed at strengthening organisational identity and access management.

The Cyber Threat Management Standard was published, establishing a consistent framework for identifying, assessing and responding to cyber threats. Security monitoring tools were optimised for faster identification and response to cyber incidents. A Cyber Threat Intelligence Platform was implemented to centralise threat feed collection and enable proactive hunting of emerging risks, further strengthening our cyber defence capabilities.

Information, communications and operational technology

Our Information and Communications Technology (ICT) and Operational Technology (OT) teams are enhancing our technology infrastructure to support evolving business needs, a distributed workforce and the complex cyber security landscape.

Information and Communications Technology

Ergon Energy leverages ICT as a key enabler for efficient network and business operations, customer service and safety. Our digital strategy focuses on secure, sustainable and cost-effective technology solutions through consolidation across the organisation. Key priorities for the year included:

- implementing Enterprise Asset Management for fleet lifecycle
- modernising supply chain and warehouse management systems
- strengthening cyber security maturity
- investing in reliable ICT infrastructure.

Operational Technology

Ergon Energy classifies Operational Technology (OT) as the systems, applications, and intelligent devices and their data that can directly or indirectly monitor, control, or protect the power network. Our key strategies for OT include:

- independent development of technology and telecommunications environments
- separating data governance from data usage for better insights
- centralised support and maintenance of intelligent devices
- embedding security and resilience into system design.

Our forward program prioritises systems and infrastructure for data collection, management and remote network operations, while maintaining a standards-based approach for all current and future OT systems and interactions.

For more information on ICT and OT refer to: [Chapter 12: Information, communications and operational technology systems.](#)

Our online interactive network map

Ergon Energy's Emerging Network Limitations Map shows the distribution network and the areas forecast to have emerging network limitations.

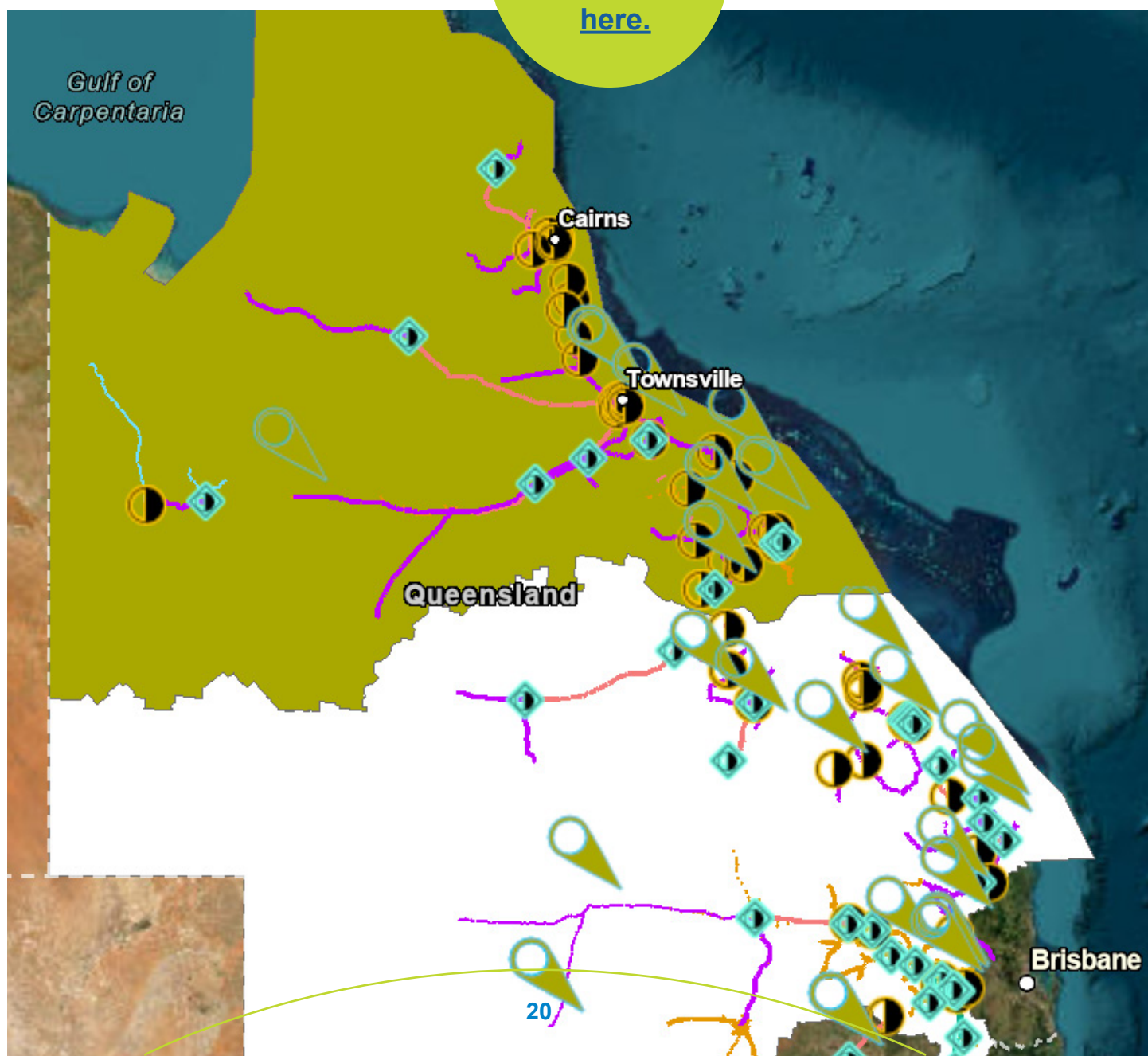
This tool enables interested parties to understand how the electricity supply system supports customer and participant needs, as well as provides input into future development plans. It also shows stakeholders where significant electricity supply capability or demand side and non-network initiatives could assist, or where major industrial loads would be best located.

Ergon Energy's DAPR and Interactive Network Limitations Map are prepared and made available solely for information purposes to

support effective engagement around our network planning processes. Importantly, they do not show how the network is operated electrically.

All information provided in the DAPR map should be independently investigated, reviewed, analysed, and verified, and must not be relied upon in connection with any investment proposal or decision.

Visit the
interactive map
[here.](#)





Our belief

We believe our customers are part of the solution to the challenges we face together. The DAPR provides our stakeholders with the opportunity to review our plans and engage with us on our path forward. It is only through collaboration that we will be able to properly target our future investments and be able to work together to deliver the best outcome for regional Queensland.



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