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Powerlink's annual planning review and Transmission Annual Planning Report (TAPR) are central to ensuring the Queensland transmission network continues to meet the needs of customers and National Electricity Market (NEM) participants into the future.

Key highlights

- Powerlink Queensland owns, develops, operates and maintains the high voltage electricity transmission network in Queensland, which provides electricity to more than five million Queenslanders and 241,000 businesses.
- The TAPR provides information about the Queensland transmission network, including key areas forecast to require investment in the 10-year outlook period.
- Powerlink has made a number of enhancements to the TAPR document and TAPR Portal this year.
- Powerlink's role as Queensland's Transmission Network Service Provider (TNSP) is central to the implementation of the Queensland Government's Energy Roadmap.
- A Connections Guarantee was introduced for Powerlink in July 2026, which focuses on connection application performance for large-scale generation, storage and loads.
- Powerlink is committed to effective, targeted engagement with customers, communities, First Nations Peoples and other stakeholders to share information on activities and use feedback received to improve decision-making.

1.1 Powerlink's role in Queensland's power supply

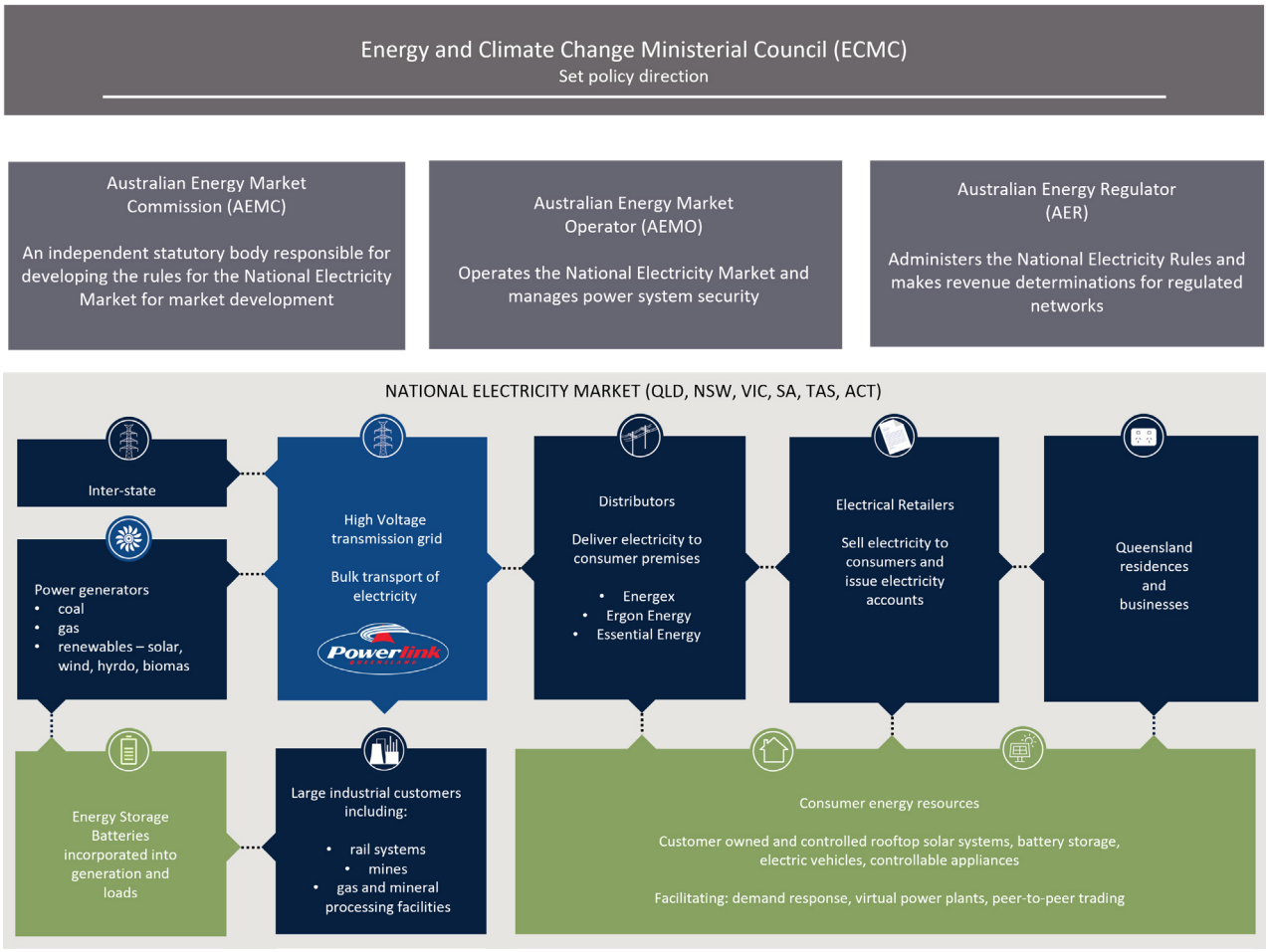
Powerlink owns, develops, operates and maintains Queensland's high voltage electricity transmission network.

The network extends from Cairns to the New South Wales (NSW) border and comprises 15,559 circuit kilometres (km) of lines and 154 substations, and provides electricity to more than five million Queenslanders and 241,000 businesses.

Powerlink connects large generators to end-use customers through the distribution networks owned by Energex and Ergon Energy (part of the Energy Queensland Group), and Essential Energy in northern NSW, and provides electricity directly to large industrial customers such as rail companies, mines and mineral processing facilities.

As Queensland's TNSP, we link to the NEM via the Queensland to NSW Interconnector (QNI). Powerlink's shared network is regulated by the Australian Energy Regulator (AER) under the National Electricity Law and the National Electricity Rules (NER). Powerlink is also the System Strength Service Provider and Inertia Service Provider for Queensland, with specific obligations defined in the NER.

Figure 1.1 Powerlink's role in Queensland's power supply



1.2 Purpose of the TAPR

The purpose of Powerlink's TAPR is to provide information about the Queensland transmission network to those interested or involved in the NEM. The TAPR also provides customers, communities and other stakeholders with an overview of Powerlink's planning processes and decision-making on future investment.

Readers should note this document and supporting TAPR Templates and TAPR Portal are not intended to be relied upon explicitly for the evaluation of customer investment decisions. Interested parties are encouraged to contact Powerlink directly for more detailed information.

Unless otherwise stated, the information published in the 2026 TAPR is current as at 30 September 2026.

1.2.1 TAPR enhancements

Powerlink conducts an annual TAPR survey to seek insights from market participants and stakeholders about how the quality and presentation of information in the TAPR can be improved. In response to this year's survey, Powerlink has made a number of enhancements to the TAPR document and TAPR Portal, including:

- consolidated visuals and discussion of potential future investments, including strategic projects, by region (chapters 6 to 8)
- one-page overviews of zone and grid performance on Powerlink's website
- a new network capability and performance data workbook
- improved user experience and navigation on the TAPR Portal
  - updated default settings so that key network layers are automatically displayed when the map opens, making it easier to access core planning information
  - enhanced project filtering and selections

  - improved map and legend clarity
  - improved consent options for users to opt out of TAPR specific surveys
  - updated side bar hyperlinks to access relevant planning and connection information
- addition of historical feeder flow data in the TAPR Portal allowing market participants to improve their preliminary self-assessments of project concepts and potential connections to our existing network.

A summary of this year's survey outcomes is detailed in Appendix L.

Feedback on the TAPR and TAPR Portal can be provided to Powerlink at any time via email to NetworkAssessments@powerlink.com.au.

1.3 Context of the TAPR

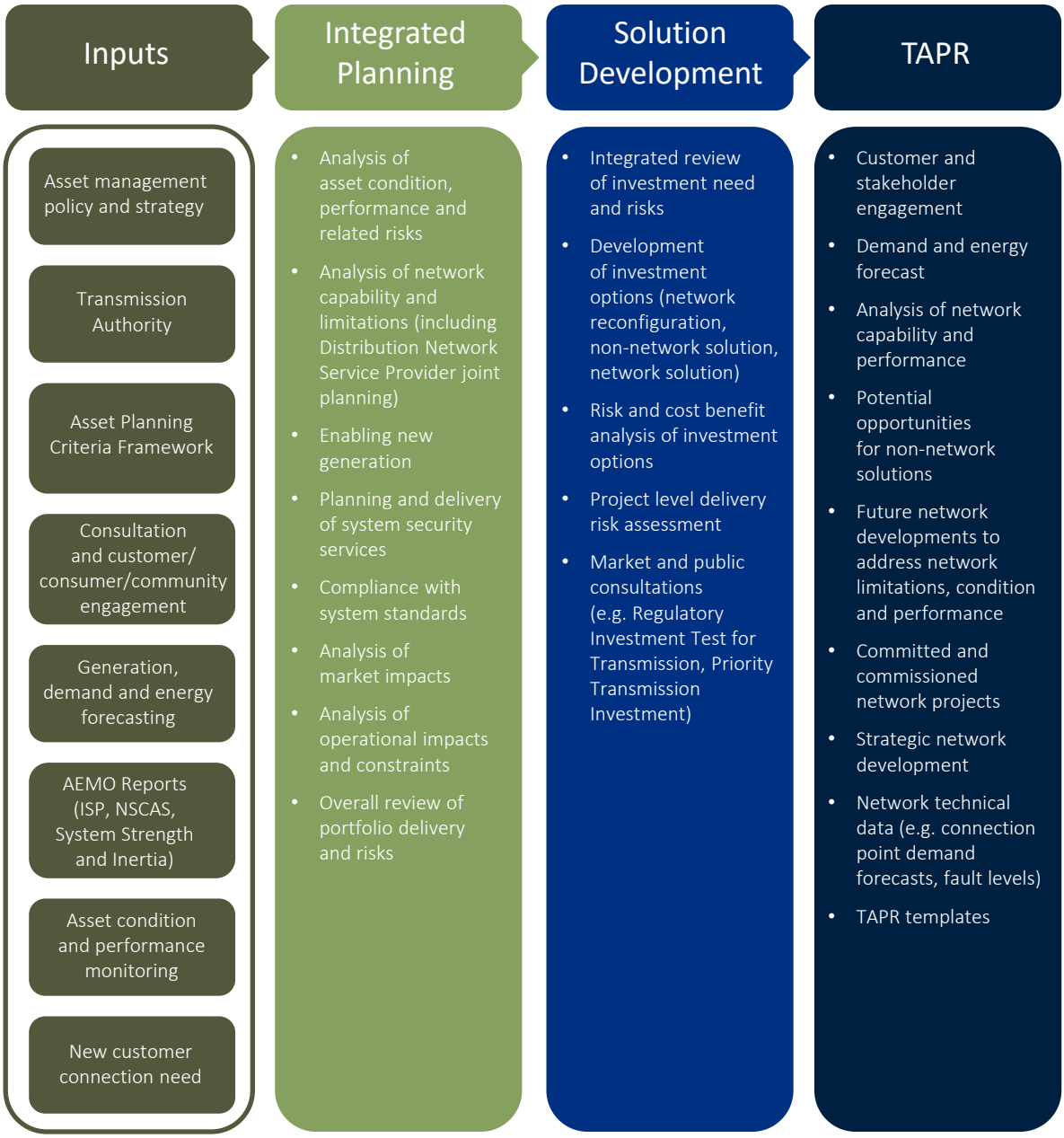
Powerlink undertakes an annual planning review in accordance with rule 5.12 of the NER and publishes the findings of this review in the TAPR and associated templates available in the TAPR Portal.

Powerlink also provides information from its annual planning reviews to the Australian Energy Market Operator (AEMO) to assist in the preparation of its Integrated System Plan (ISP). The ISP outlines an optimal path for generation, storage and network investments in the NEM to meet customer needs and government policies, at least cost, to 2050. The ISP identifies actionable and future projects requiring regulatory consultation, and informs market participants, investors, policy makers and customers about a range of potential future development opportunities across the NEM.

1.4 Powerlink's planning obligations and process

An overview of Powerlink's TAPR planning process is presented in Figure 1.2.

Figure 1.2 Overview of Powerlink's TAPR planning process



Detail on Powerlink's planning responsibilities, criteria and processes is available in Appendix A.

1.5 Queensland Energy Roadmap

Powerlink's role as Queensland's TNSP is central to the implementation of the Queensland Government's Energy Roadmap released in October 2025. The Queensland Energy Roadmap provides clear direction for Powerlink's planning and investment decisions by focusing on the transmission network required to support future generation, energy storage, industrial growth and private sector investment. It reinforces the importance of maintaining an affordable, reliable and sustainable electricity system while ensuring disciplined and efficient investment in network infrastructure.

The Queensland Energy Roadmap emphasises making better use of existing assets, rebuilding ageing infrastructure where appropriate, and targeted transmission augmentation to connect new generation and storage projects, supply existing and new loads and remove significant areas of congestion. It also reaffirms the importance of strategic transmission investments, including the Gladstone Project, while supporting streamlined delivery mechanisms through the Priority Transmission Investment (PTI) framework.

1.6 Network connections

Powerlink remains committed to transparent and efficient connection services and will continue to work with market participants and interested parties to understand the potential for new generation and load connections, and to identify opportunities and emerging limitations as they occur.

Figure 1.3 Overview of Powerlink's network connection process

1.6.1 Summary of connection projects

Table 1.1 provides an overview of the development of connection projects undertaken or being undertaken by Powerlink since 2017 to 30 September 2026.

Table 1.1 Summary of generation and storage connection projects

Status	Number of projects	Total megawatts (MW)
Total completed to date	41	9,242MW
Under construction	16	4,240MW
Current connection applications	115	45,630MW

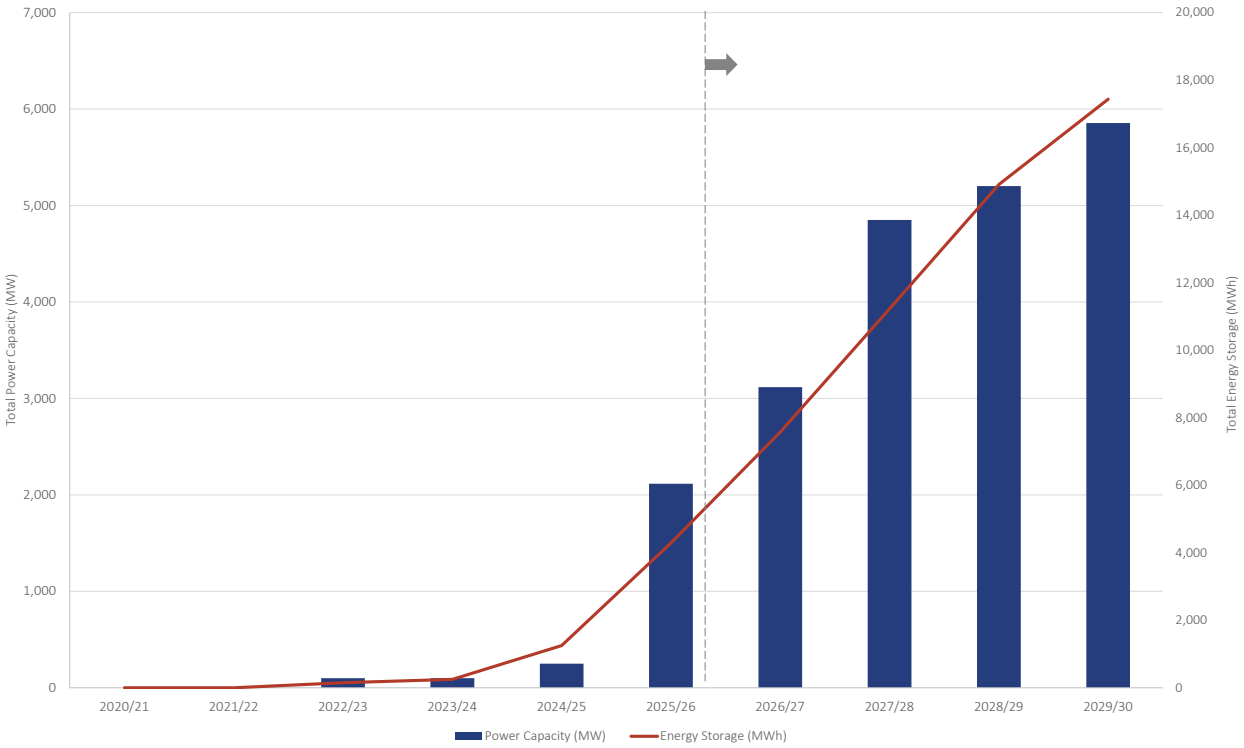
1.6.2 Status of connection projects

Since 2017, Powerlink has completed connection of 41 new generation and battery energy storage system (BESS) projects in Queensland, adding 9,242MW of generation and storage capacity to the grid. During the 2025/26 TAPR reporting period, 3,506MW of semi-scheduled generation and storage capacity has been committed in Queensland, comprising:

- Stanwell BESS
- Tangkam BESS
- Teebar BESS
- Yabulu BESS
- Supernode BESS Stage 3
- Smoky Creek Solar Power Station
- Lower Wonga Hybrid
- Guthrie's Gap Solar Power Station
- Gawara Baya
- Majors Creek Solar Power Station
- Ganymirra Solar Power Station
- Fraser Coast Solar Park
- Ulinda Park BESS
- Broadsound Energy Park.

Figure 1.4 shows the rapid growth in BESS development in Queensland, with both power capacity and energy storage increasing substantially from 2025/26. Based on existing and under-construction projects, total BESS power capacity is expected to increase from approximately 2,100MW in 2025/26 to around 5,900MW by 2029/30, while total energy storage is expected to grow from approximately 4,300 megawatt hours (MWh) to around 18,000MWh. This includes batteries installed as part of hybrid generation and storage facilities.

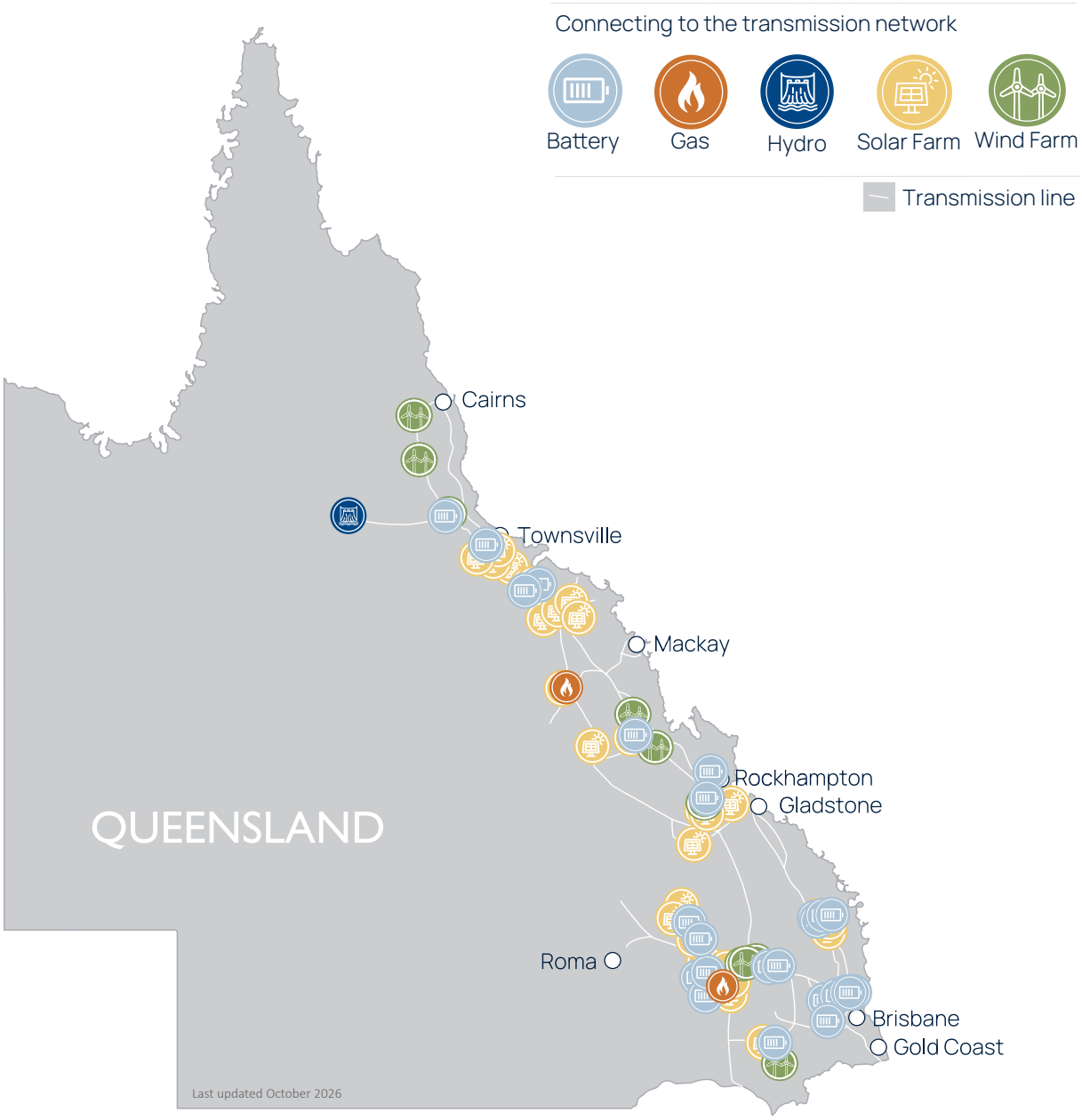
Figure 1.4 Battery energy storage system development trajectory



Approximately 2,049MW of embedded semi-scheduled generation projects exist or are committed to Energy Queensland's network. In addition to the large-scale generation development projects, rooftop solar photovoltaic (PV) in Queensland exceeded 8,066MW in June 2026 (see Clean Energy Regulator website).

Figure 1.5 shows the location and type of generation and storage connected, committed and under construction across Powerlink's network since 2017.

Figure 1.5 Generation and storage connected, committed and under construction since 2017



1.6.3 Connecting to our network

Participants wishing to connect to the Queensland transmission network include new and existing generators, storage, major loads and other Network Service Providers (NSPs). New connections or alterations to existing connections require Powerlink and the connecting party to negotiate a Connection and Access Agreement (CAA), an Offer to Connect (for new connections), and the specification and compliance of the generator or load to the required technical standards. The process of agreeing to technical standards also involves AEMO. The services provided can be prescribed for Distribution NSPs (regulated), negotiated or non-regulated services in accordance with the definitions in the NER or the framework for provision of such services.

1.6.4 Connections Guarantee

A Connections Guarantee was introduced for Powerlink in July 2026, which focuses on connection application performance for large-scale generation, storage and loads. As Queensland's energy system continues to evolve, new generation, storage and load will need to be connected to ensure a safe, reliable and cost-effective supply of electricity.

As part of the Connections Guarantee, Powerlink will report against four key metrics:

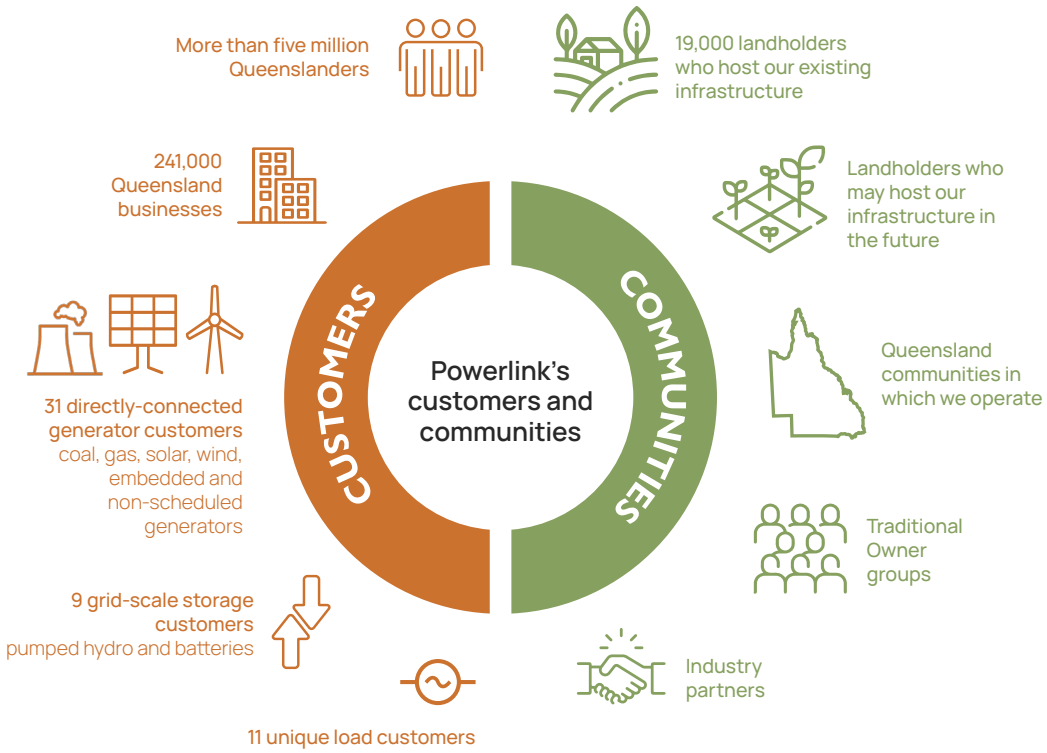
- Response to Connection Enquiry: Powerlink will target 100% achievement for NER connection enquiry timeframes of 40 business days for Designated Network Asset (DNA) connections and 30 business days for non-DNA connections.
- Performance Standard Package Assessment: Powerlink will target a 75% response rate to performance standard packages provided by a proponent within 30 business days.
- Negotiated Access Standards Decision: Powerlink will assess all proposed negotiated access standards for a connection within 30 business days of receiving all required information.
- Connections Delivered On-Time: Powerlink will target a 90% rate for connections delivered on-time as per the executed agreement.

Powerlink will report its performance against these targets on an annual basis. More information on the Connections Guarantee is on our website.

1.7 Customer, stakeholder and community engagement

Powerlink is committed to effective, early engagement with customers, communities, First Nations Peoples and other stakeholders to share information on activities and use feedback received to improve decision-making.

Figure 1.6 Powerlink's customers and communities



Powerlink's engagement with providers of non-network solutions is discussed in Chapter 4.

Engagement Approach

Powerlink's engagement activities are undertaken in accordance with our Community Engagement Approach, which sets out the principles, objectives and outcomes Powerlink seeks to achieve in our interactions with stakeholders and the broader communities in which we operate.

Engaging with communities is essential to providing transmission services that are safe, reliable and cost-effective. Transmission infrastructure typically stays in-service for over 50 years and Powerlink is focused on engaging early and often to build positive relationships and partner with local communities that deliver benefits for the longer-term.

Since publication of the 2025 TAPR, to ensure transparency and that customers remain up to date with the most recent developments, Powerlink has provided email, LinkedIn and web-based regulatory process updates to interested stakeholders including for our major investment program in Central Queensland.

Transmission Network Forum

In November 2025, more than 500 stakeholders attended (in person and virtually) Powerlink's annual Transmission Network Forum. The forum provided updates on the state of the network, discussion on Queensland's future power system and a technical session on the 2025 TAPR.

As part of the discussion, an interactive session invited attendees to contribute ideas on how Powerlink can continue to strengthen engagement to improve decision-making and better meet industry, community and stakeholder needs. Powerlink is taking actions to improve information provision in response to these insights and will continue to work to improve over time. The live stream recordings, presentations, a summary of insights from the interactive session, questions and answers are available on Powerlink's website.

In August 2026, over 200 people attended Powerlink's second regional Transmission Network Forum, held in Gladstone. With a strong focus on Powerlink's major Gladstone reinforcement project, local procurement, skills and community benefits, the forum brought together government, industry, community and Powerlink representatives.

Customer Panel

Powerlink hosts a Customer Panel that provides an interactive forum for stakeholders and customers to give input and feedback to Powerlink regarding decision-making, processes and methodologies. The panel meets three times a year and comprises members from a range of sectors including industry associations, consumer and community advocacy groups, directly connected customers and distribution representatives. It also provides an important channel for Powerlink to keep stakeholders informed about relevant operational and strategic topics.

Network investment engagement

Powerlink recognises the importance of transparency for stakeholders and customers, particularly when undertaking transmission network planning and engaging in public consultation processes, such as the Regulatory Investment Test for Transmission (RIT-T) or a PTI. Powerlink is guided by the AER's Better Resets Handbook as the benchmark when undertaking public consultations on regulated network investments.

Revenue Proposal engagement

Powerlink has undertaken extensive engagement to inform development of our 2027-32 Revenue Proposal. Engagement formally commenced in 2024, with customers and stakeholders involved early in shaping the engagement approach.

A co-design workshop brought together representatives from Powerlink's Customer Panel, the AER, the AER Consumer Challenge Panel, and Powerlink's Board and Executive to identify and prioritise the topics that would form the focus of engagement. Powerlink subsequently established the Revenue Proposal Reference Group (RPRG), drawing from a sub-set of the Customer Panel members, to provide ongoing customer input and feedback throughout development of the proposal and revised proposal.

The RPRG continues to meet regularly to consider key topics including expenditure forecasts, customer outcomes, major investments, risk and deliverability. Following submission of the Revenue Proposal in January 2026, the RPRG provided a formal submission to the AER's public consultation highlighting areas of support, areas where members held differing views, and observations on the engagement process.

As part of its assessment of the Revenue Proposal, the AER hosted a public forum in April 2026 to provide customers and stakeholders with an opportunity to hear directly from both the AER and Powerlink, ask questions and discuss key elements of the proposal. Discussion included forecast expenditure, proposed investments, customer price impacts and how customer feedback had informed the proposal.

The AER released its Draft Determination on 30 September 2026. Powerlink will now work on submitting a Revised Revenue Proposal in December 2026 before the AER's Final Determination in April 2027. The Revised Revenue Proposal will provide an opportunity to respond to the Draft Determination and update aspects of the proposal where appropriate to ensure we continue to meet regulatory requirements and obligations. Powerlink will continue to focus on delivering a proposal that enables us to meet our regulatory obligations and appropriately balances affordability with providing safe and reliable transmission services for Queenslanders.

Customer commitment – disclosure and accountability

Powerlink is committed to customer governance and accountability processes to support building trust and customer centricity, and improve actionability of customer insights to drive value for Queenslanders.

Our public reporting and disclosure aims to improve transparency of customer outcomes and involves engagement with our Customer Panel, reflecting customer and community priorities in what we measure and the publication of an annual disclosure statement highlighting customer performance outcomes and priorities. Our latest report is on our website.