

December 2024

Powerlink 2027-32 Revenue Proposal

Appendix 2.01 Business Narrative



Contents

Introduction.....	3
Customer engagement on our business narrative	4
Powerlink’s purpose and guiding principles	4
Powerlink’s role in the energy supply chain.....	4
Customers’ needs are changing	5
Households	5
Commercial and industrial sector.....	5
Agricultural sector	6
The role of distribution.....	6
Business drivers	7
Scale of network investment and build.....	7
Recent changes to the transmission backbone.....	7
Benefits of changes.....	8
Gladstone priority transmission investment project.....	9
Ongoing commitment to reliability and security of supply	9
Network operations management complexity.....	9
Minimum demand	9
Energy and demand forecasts	10
Operating the transmission network into the future.....	12
Supply chain disruption and competition.....	12
Social licence to operate.....	13
Regulation and policy	14
Regulation.....	14
Government energy policy	14
Queensland Renewable Energy Zone (REZ) Roadmap	14
Priority transmission infrastructure (PTI) framework	15
Technology	15
Information security	15
Digital engineering program	16
Financial and economic	16
Environment and cultural heritage.....	16
Resource capability and capacity	17

Introduction

As Queensland's transmission network service provider, Powerlink has a long-standing record of delivering cost-effective, safe and reliable electricity.

We introduced our first business narrative, setting out our long-term vision, opportunities and challenges, to provide context for key positions as part of our [2023-27 Revenue Proposal](#) engagement. This updated narrative has the same key purpose of helping to provide context to our customers of the increasingly complex operational environment and our priorities.

Our operating environment has also been shaped by the release of key policy documents including the:

- [Queensland Energy and Jobs Plan](#) (QEJP)
- [SuperGrid Infrastructure Blueprint](#)
- [REZ Roadmap](#).

These documents identify the need for future network expansion and the integration of renewable energy as we decarbonise the Queensland economy. We acknowledge the change of government following the October 2024 election and the potential changes to policy direction that may occur.

Our operating environment requires a more responsive and adaptive approach to [planning our future network](#), as we connect new generation and storage to replace ageing coal-fired power generators, whilst maintaining energy reliability and resilience.

We are committed to harnessing Queensland's wide range of energy resources to deliver the [lowest cost](#) and cleanest forms of electricity to secure long-term benefits for all Queenslanders.

As an industry, we are facing a range of challenges including:

- increasing costs and lead times for materials
- higher labour costs
- increasing network complexity
- a higher interest rate environment (when compared to the previous Revenue Determination).

These challenges create an environment where transmission costs will increase for Queensland customers in the short term. However, [modelling conducted by EY](#) found that implementing the QEJP would reduce wholesale electricity prices by 15% on average by 2040, contributing to lower costs for both households and businesses.

The other major challenge facing transmission businesses is maintaining and enhancing social licence to operate in communities impacted by development. An [industry survey](#) commissioned by the Queensland Renewable Energy Council (QREC) found community acceptance is both the biggest risk and most significant opportunity for the state's clean energy transition. Authentic and early engagement is key to help build trust and provide meaningful opportunities for landholders and communities to impact planning decisions. There are many examples of how engagement that does not meet community expectations has led to extensive project delays and cost increases.

Customer engagement on our business narrative

We commit to engaging our Customer Panel on our business narrative, incorporating feedback as needed throughout the revenue determination process. This approach aligns with our broader customer strategy, which aims to maintain trust and deliver value throughout the energy transformation by safely delivering an affordable, reliable, and clean electricity system for Queenslanders.

Our customers include households and businesses, large energy users, energy and battery proponents, and non-network solution providers. As our relationship with these customers evolves, we continue to amplify their voices through engagement platforms like our Revenue Proposal Reference Group, a sub-committee of our Customer Panel. This ensures customer input shapes our strategies and keeps their needs central to our decision-making.

This version of the Business Narrative incorporates feedback from our Customer Panel received at the Revenue Determination Engagement Scoping Workshop held in November 2024.

Powerlink's purpose and guiding principles

Our purpose remains to **connect Queenslanders to a world-class energy future** by consistently prioritising their long-term interests throughout the energy transformation. We have four overarching Strategic Objectives that are designed to advance our purpose:

- Drive value for customers
- Be the renewable supergrid
- Guide the market
- Unleash our potential

Put simply, we put customers at the centre of our business and aim to spend no more than necessary in delivering our services to the people of Queensland. We will connect renewable energy projects to the grid to put downward pressure on wholesale prices, while guiding industry and governments in how to navigate the energy transition. Our staff will continue to work together and be innovative to achieve these objectives.

Powerlink's role in the energy supply chain

We play an important role in the energy supply chain in delivering a safe, reliable, and affordable electricity transmission network. As a Transmission Network Service Provider (TNSP), we connect large-scale generators, large loads and distribution networks to the high voltage network and transport the electricity that ultimately powers businesses and households across the state.

The Australian Energy Regulator (AER) determines the maximum allowable revenue that Powerlink can recover for the costs associated with building, maintaining and operating the transmission network through a process known as the revenue determination. This process sets the ceiling for transmission charges, which are ultimately passed through to end-users in their electricity bill.

Transmission charges account for approximately 9% of a typical residential electricity bill in Queensland. This percentage can vary depending on the customer group and specific usage patterns. In regional Queensland, the Uniform Tariff Policy through the Community Service Obligation subsidises electricity to offset higher electricity supply costs.

Customers' needs are changing

Customers increasingly value energy solutions that empower them to manage their energy consumption and costs more effectively. Transparency in energy pricing, flexible solutions that limit the need for costly transmission infrastructure, and greater control through technology adoption are essential to meeting the expectations of customers seeking affordable electricity.

While flexibility benefits customers and drives the future of energy systems, if not managed well, this flexibility can also present risk to the secure operation of the network and delivery of reliable electricity supply.

Households

The [2024 Queensland Household Energy Survey](#) highlights significant concerns about electricity affordability, particularly among renters (66%), households without rooftop solar (60%), and those with lower incomes (<\$31k per annum) (60%). Many low-income households spend over 37% of their income on housing, intensifying financial strain. Some of the key trends identified in the survey are identified below.

- **Energy Resilience:** Extreme weather events and supply disruptions disproportionately affect rural areas, where infrastructure limitations lead to longer and [more frequent outages](#).
- **Energy Independence:** Households value sustainable solutions [to reduce dependence on energy prices](#), although barriers such as property ownership, upfront costs, and limited resources hinder adoption – especially for renters and low-income groups.
- **Inequities:** These barriers to adopting energy saving technologies exacerbate disparities in energy affordability.

Electricity is an essential service, yet those most affected by higher prices often have fewer options to reduce demand. As rooftop solar and household battery adoption continues to grow, support will be necessary to address the resulting impacts with more vulnerable and lower income groups. We are dedicated to addressing these challenges by advancing a low-cost energy transition, ensuring fair cost allocation, aligned with the principles of distributive and procedural fairness, and building partnerships across the energy supply chain to achieve better outcomes for all our customers.

Commercial and industrial sector

The electrification of Queensland's economy is set to significantly increase electricity demand among industrial and commercial customers over the next decade. This shift is driven by global Environmental, Social and Governance (ESG) commitments by resources and manufacturing businesses.

To provide context, the mining industry alone currently consumes energy equivalent to [87.5% of the total energy used by the residential sector](#), yet only [20% of the energy needs of existing industries](#) are currently met through electricity, with the remainder from energy sources such as petrol, diesel and gas. Around 60% of Queensland's energy consumption has the potential for direct electrical substitution using existing and emerging technologies. The sheer scale of grid-level generation, storage, and use presents a challenge for future network planning.

Agricultural sector

The agricultural sector in Queensland is experiencing several energy-related shifts. A keen focus remains on the affordability of electricity supply, involving energy saving initiatives and tariff reviews, and the reliability of electricity supply. Other specific energy-related activities include:

- **Renewable Energy Adoption:** Farmers are integrating renewable energy sources and storage solutions to enhance reliability and resilience.
- **Electrification:** There's a growing shift towards electrifying agricultural processes, such as irrigation and machinery, to improve efficiency and reduce emissions.
- **Energy Resilience:** Investments in energy storage and microgrids are helping maintain productivity in the face of climate change impacts.
- **Cost Management:** The sector is exploring biofuels and alternative energy sources to mitigate rising energy costs and improve economic sustainability.
- **Biosecurity:** [The Biosecurity Act 2014](#) emphasises a risk-based approach, requiring tailored biosecurity plans to minimise risks, particularly for maintenance activities on agricultural lands.
- **Equity and Infrastructure:** As energy transitions progress, ensuring equitable distribution of infrastructure and benefits remains a priority for farmers.

Despite openness to renewable energy projects, there remains concerns within the agricultural sector on the long-term impacts on farming operations arising from the siting of new renewables and associated transmission infrastructure.

The role of distribution

Transmission and distribution play equally important roles in ensuring a reliable, secure, and efficient power system. Transmission infrastructure acts as the backbone, delivering electricity from generation and storage sources to distribution networks.

Meanwhile, distribution initiatives such as tariffs, distribution Renewable Energy Zones (REZ), and community Battery Energy Storage Systems (BESS) enable localised energy generation, storage, and the direct integration of Consumer Energy Resources (CER). These measures may also reduce dependence on transmission network capacity requirements by supporting local energy use, enhancing storage capabilities, and managing peak and minimum demand.

A holistic approach that integrates both transmission and distribution strategies is crucial for driving the energy transition while optimising infrastructure development to minimise costs and maintaining reliability of electricity supply.

Business drivers

There are many business drivers that will impact our activities over the next few years. Some of the key drivers affecting our 2027-32 Revenue Proposal include:

- Scale of network investment and build
- Network operations management complexity
- Supply chain disruption and competition
- Social licence to operate
- Regulation and policy
- Technology
- Financial and economic
- Environment and cultural heritage
- Resource capability and capacity.

Each of these drivers is discussed in this document.

Scale of network investment and build

The new 500kV transmission backbone connections will provide the Queensland power system with increased ability to transfer energy across the state and further build resilience. The transmission backbone will also support deep storage projects and Renewable Energy Zones, enabling the cost-effective and timely delivery of the future energy requirements of the state.

Recent changes to the transmission backbone

Powerlink regularly reviews the planning and delivery of the grid to ensure the future transmission network is delivered in a cost-effective way for Queenslanders. This includes identifying opportunities for the efficient connection of renewable energy sources, as well as ensuring the transfer capacity of our network meets future load growth.

Over the past two years, we have received significant interest from renewable energy companies to develop wind farms to the west of the Great Dividing Range between Southern and Central Queensland. The latest market data shows there is 10GW of wind developer interest in this area – 7GW more than the coastal area.

To leverage this greater interest in wind developments to the west, we have adjusted the proposed alignment of the transmission backbone connection between Southern and Central Queensland from Halys to Gladstone, rather than the potential alternative route between Woorooga and Gladstone. This approach will accommodate wind resources in a cost-effective way that also reduces community impact.

This connection can be built in stages and paced to align with interest for renewable connections. The voltage level of the connection can also be staged to operate originally at 275kV before converting to 500kV, to defer costs until the full transfer capability is required.

Connecting Southern to Central Queensland via Halys Substation, rather than Woolooga Substation, also allows the transmission connections for the Borumba Pumped Hydro Project to be at 275kV rather than 500kV. The change in voltage still allows for the full operation and capacity of the Borumba Pumped Hydro Project.



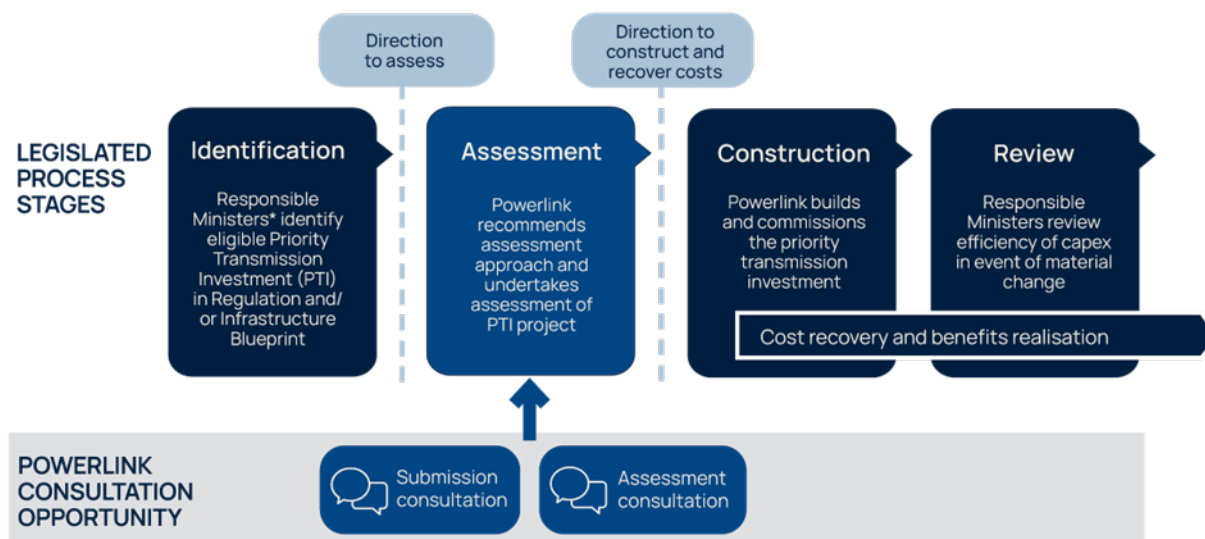
Benefits of changes

Building a connection to the west of the Great Dividing Range is closer to the better quality and higher levels of potential wind generation. This will unlock significant amounts of renewable energy in Queensland while reducing the overall length of transmission line needed to connect wind farms in the area by about 300km.

The updated plan will also result in lower costs for wind generation connections, reducing the overall cost of electricity for Queenslanders.

Gladstone priority transmission investment project

The [Gladstone priority transmission investment \(PTI\) project](#) aims to enhance and expand the transmission network in Queensland's Gladstone region. This initiative supports decarbonisation and economic growth by integrating renewable energy, accommodating emerging industries, and ensuring a reliable electricity supply. Currently, the project is in the Assessment Stage of the PTI framework.



Ongoing commitment to reliability and security of supply

In addition to the major investments necessary to enable the energy transition, Powerlink is committed to delivering a safe, secure, reliable and cost-effective service to over five million Queenslanders. Maintaining the reliability of the transmission network requires that we continuously monitor the age and condition of network assets. As assets approach end of life and become less reliable, we employ prudent asset management practices to program asset refurbishment and asset reinvestment activities to ensure that potential impacts on safety, and reliability and security of supply are managed appropriately.

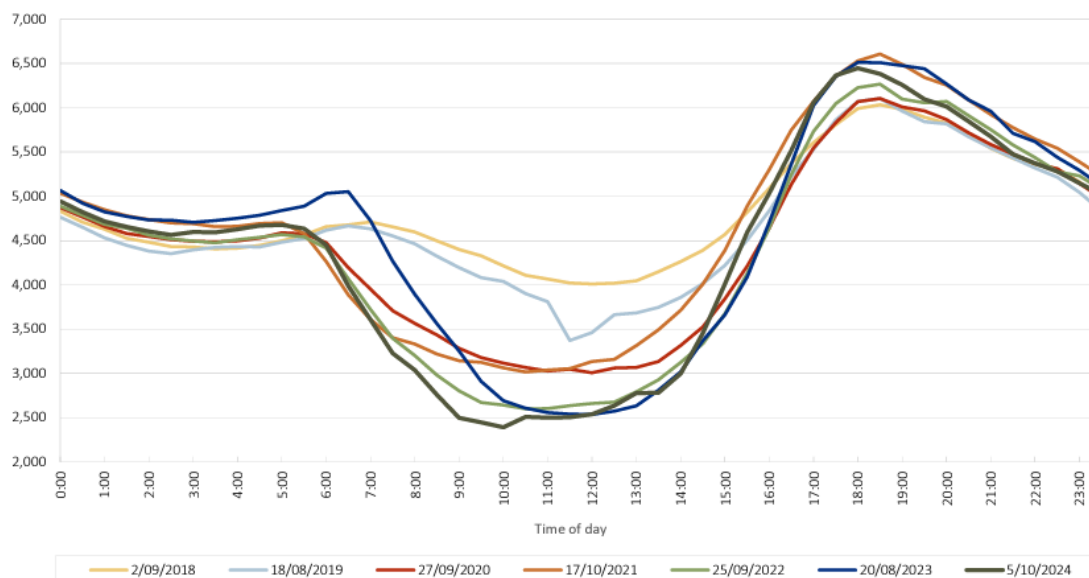
Network operations management complexity

The energy transformation is already in full swing and with the increasing integration of renewable energy Powerlink is learning and adapting to the new ways in which the grid is being used. The variability, intermittency and distributed nature of renewable generation sources require more sophisticated operational and energy management approaches.

Minimum demand

Our operational envelope (gap between maximum and minimum demand) has nearly doubled from 4,200MW in 2016 to 7,909MW in 2024. Deep storage, advanced energy management and demand response systems will be key to managing this complexity in the future, while we also manage security of supply challenges during minimum load scenarios in the near term.

The following graph from Powerlink's [2024 Transmission Annual Planning Report](#) (TAPR) shows how minimum demand during the day has continued to decrease since 2018, while the corresponding peak demand in early evening has remained largely stable, shown in megawatts (MW). This is driven by the significant uptake of rooftop solar, which contributes to meeting demand during daylight hours and resulting in a lower minimum demand on the transmission network.

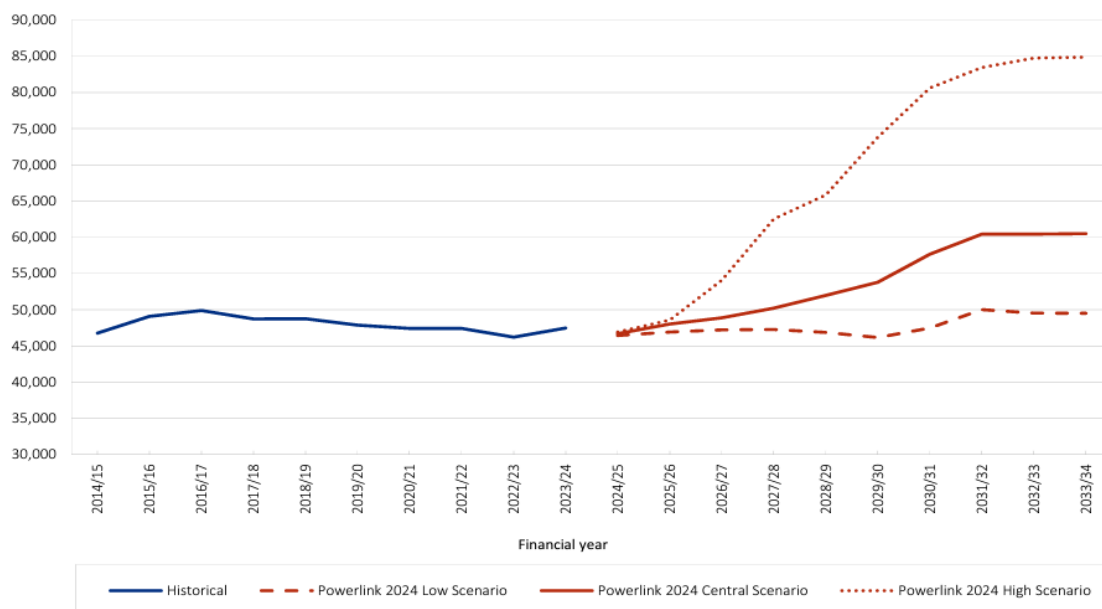


This is a significant operational challenge, and managing minimum demand levels remains a key focus for us into the 2027-32 regulatory period.

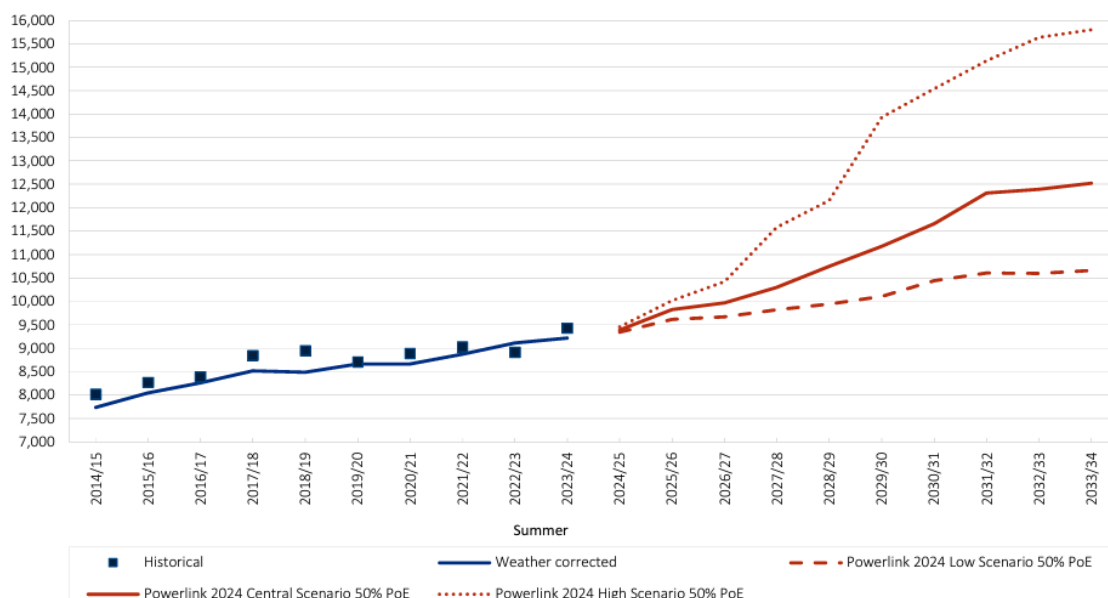
Energy and demand forecasts

The drive to electrify and decarbonise heavy industries, and growth of new loads in energy intensive industries like hydrogen production, will put upward pressure on our need to invest in the grid and to find new ways to manage peak demand requirements.

The following graph from our 2024 TAPR illustrates the expected range in future energy supplied over our network, in gigawatt hours (GWh), arising from the potential conversion of existing industrial loads and establishment of new loads. The forecast increase in energy supplied ranges between approximately 4% and 80% over the 10 years to 2033/34.



The following graph illustrates the corresponding range of maximum demand, in MW, due to the forecast of energy supplied. The forecast increase in maximum demand ranges between approximately 15% and 70% over the 10 years to 2033/34.



The uncertainty in the timing and scale of the forecast energy supplied and maximum demand presents significant challenges to the efficient operation of the network.

Operating the transmission network into the future

The integration of renewable energy sources into the power grid leads to an increased need for outages on our network. Further, the greater variability in electricity output from renewable sources, together with significant variations between minimum and maximum demand on the network, makes the operation of the network during outages more complex, as we manage power flows and maintain system stability.

Addressing the challenge of large swings in demand and ensuring grid stability at the lowest cost, requires a comprehensive approach such as accelerating non-network solutions, flexible loads, and improving long-term energy storage capabilities.

Powerlink will need to invest in technology to support the changing role of network operations through our Next Generation Network Operations program, including the delivery of a new Advanced Energy Management System (AEMS). Our existing energy management system is at the end of its serviceable life, and was not designed to manage the variability and complexity of today's contemporary grid, especially with the increasing integration of decentralised energy sources.

To mitigate this risk, we require a more advanced system. The AEMS is a key component of our Next Generation Network Operations strategy, aimed at introducing modern network operations capabilities through contemporary practices and technologies. Investing in this advanced system will ensure the sustainability and security of our core operational services while establishing the foundational platform to meet Queensland's future energy management needs.

By enhancing our grid infrastructure and leveraging the capabilities of the AEMS, we will be better equipped to integrate renewable energy sources and efficiently manage reliable energy supply across the state for many years to come.

Supply chain disruption and competition

Global disruptions in clean energy supply chains are driving industry-specific inflation, fuelled by geopolitical instability, competition for carbon reduction initiatives, and demand for renewables transition resources. International policies further escalate demand, making it challenging for Australia, with a very small share of the global market, to compete for materials.

While complicating the accuracy of cost estimates, particularly over longer timeframes, this uncertainty is also being costed in across the industry supply chain including Powerlink, further fuelling industry-specific inflation.

To navigate this inflationary environment, we have prioritised exploring innovative construction methods such as modular and off-site fabrication, modernising procurement systems, operational efficiency (i.e. standardisation), and supplier diversification.

A key component of this approach is the adoption of a "just in case" inventory strategy, which involves maintaining higher stock levels and increasing asset reserves. While this strategy incurs additional costs (e.g., warehousing), it mitigates the risk of supply chain disruptions by ensuring essential materials are available when needed.

By fostering strong supplier relationships, we have been able to improve forward planning and establish more predictable ordering patterns. This has allowed suppliers to accommodate our more modest needs between commitments to much larger global customers. With support from existing suppliers, we have also facilitated technology transfers where new suppliers more suited to our scale and requirements have been identified and agreed to produce for us.

Social licence to operate

Communities and landholders are key stakeholders in the activities of Powerlink.

Social licence to operate, the informal acceptance by stakeholders of our operations within their community, is critical for Powerlink to successfully construct and maintain our network assets. Stakeholders' support to maintain and enhance social licence depends on early, transparent, coordinated and consistent engagement.

As we expand transmission infrastructure to support Queensland's renewable energy transformation, while managing the reliability of the existing prescribed network, maintaining and enhancing social licence is a critical challenge.

Some of our key initiatives in this space include:

Better practice engagement: Powerlink's [Transmission Easement Engagement Process](#) outlines how we will engage with landholders and the wider community as we identify potential transmission corridors, and through the Energy Charter we undertake an [annual accountability process](#) to demonstrate how we implement better practice engagement across Queensland.

Social Performance and Community Investment Framework: procedural and distributional fairness and transparent communication remain central to our engagement strategies. Community investment ensures that communities most affected by our operations receive appropriate funding, fostering long-term, positive relationships. Powerlink's [SuperGrid Telecommunications Program](#) is a key platform of our community investment approach. We also seek to work with communities to identify other [local investment opportunities](#) to enhance social and economic outcomes, and deliver wider benefits to communities.

Landholder payments and support: Powerlink's [SuperGrid Landholder Payment Framework](#), introduced in 2023, significantly boosted payments to landholders hosting new transmission infrastructure. The increased payments are based on property-specific values and impacts, as opposed to using only a flat rate. We were also the first transmission company in Australia to offer payments to landholders with properties adjacent to new transmission infrastructure. Additional incentive payments and allowances for legal and professional advice are also provided to ensure fairness and support.

Energy Engagement and Education Advisor (EEEE): supported by Powerlink, this Queensland Farmer's Federation (QFF) based role aims to ensure that farmers have access to accurate information and can participate effectively in Queensland's renewable energy transition. This initiative seeks to facilitate collaboration, mitigate risks, and help farmers make informed decisions. Our partnership with QFF will strengthen long-term engagement and cooperation between both sectors.

Regulation and policy

Regulation

The regulatory environment is continuing to change. Key consultations underway or expected to commence soon include the following:

- [Improving the cost recovery arrangements for non-network options](#)
- [2024 Review of the Cost Benefit Analysis and Regulatory Investment Test Guidelines](#)
- [Service Target Performance Incentive Scheme \(STPIS\) Review](#)
- [System Security Network Support Payment Guideline](#)
- [Ring-fencing Guideline \(Electricity Transmission\) 2023 Update – Negotiated Transmission Services.](#)

The outcomes of these regulatory reforms could have material impacts on our operations, such as changes to funding models for future network investment and the way revenue is collected.

We proactively provide input into these processes from a transmission perspective, but the outcome will be determined by the various bodies involved. We will implement the necessary changes as required.

Within the context of our Revenue Proposal, we are discussing with our customers and the Australian Energy Regulator (AER) how the regulatory framework can enable better consideration of uncertainty and the rapidly changing market.

Government energy policy

As a Government Owned Corporation, Powerlink must be responsive to any specific requirements and policy settings of its shareholder, the Queensland Government.

With the recent Queensland State election, we are working closely with the Energy Division within Queensland Treasury, and across the Queensland Government more broadly, to engage and advise on future policy settings. An update to the Queensland SuperGrid Infrastructure Blueprint is due in May 2025, with Powerlink providing modelling and data to help shape future planning.

While we anticipate policy changes, we consider the core focus of our business will remain unchanged, particularly in the provision of prescribed services that are subject to the revenue determination process, but also in the delivery of Renewable Energy Zones and priority transmission investments.

Queensland Renewable Energy Zone (REZ) Roadmap

Powerlink has progressed the development of three REZs, each based on a market-led approach, with a total of 12 potential REZs identified across the state. Under our market-led approach, we work with renewable energy companies to identify projects of the right size to allow delivery of scale-efficient and cost-effective transmission infrastructure. This results in greater coordination, which can lower the total system cost in the long-term, coordinate community benefits, provide greater access to the best renewable resources, and improve overall system outcomes.

Priority transmission infrastructure (PTI) framework

The Queensland Government introduced the PTI framework as a derogation to the National Electricity Rules in the *Energy (Renewable Transformation and Jobs) Act 2024*. The PTI framework applies to major transmission projects essential for Queensland's energy transition, which are mandated by legislation and guided by a state planning and investment framework.

While the assessment of such projects is outside the revenue determination process, some or all the costs may be added to the regulatory asset base (RAB) and impact customers' bills. We are committed to genuine engagement with our customers, and consequently we will need to consider potential price impacts from PTI projects within our revenue proposal, and provide confidence in the prudence and efficiency of the proposed investments.

The Queensland Government appointed the AER as an adviser ("the suitably qualified person") under the legislation. This means that the AER will assess the economic assessment of the proposed investment for procedural compliance and will also assess the prudence and efficiency of the proposed investment, and advise the Queensland Government on these issues.

Further to this, we engaged members of our Customer Panel as an 'expert panel' to test our assumptions on the changes required to the cost-benefit analysis approach to suit the PTI framework, and to assist in the design of the engagement process. Our approach was based on the intent to provide appropriate transparency and confidence to customers on the prudence and efficiency of the proposed investments.

Technology

Powerlink's Strategic Data Program has advanced data management by consolidating multiple data sources into a single Cloud Data & Analytics Platform. This integrated view strengthens data governance, improving quality and trust in our data. The program also leverages artificial intelligence, enhancing our overall data capabilities and setting a solid foundation for future data-driven decision-making.

As the energy sector becomes increasingly digitalised, to enhance efficiency, reliability, manage costs and enable greater flexibility, the risk of cyber threats grows. Implementing robust cyber security measures, including threat detection, incident response, and regular assessments, is essential for safeguarding critical infrastructure. Compliance with frameworks like the [Australian Energy Sector Cyber Security Framework \(AESCSF\)](#) helps mitigate risks and enhance resilience against cyber-attacks.

Consequently, two major technology areas that require regular review and upgrade, and drive Powerlink's investment plans and operating and maintenance activities, are information security and digital engineering.

Information security

Powerlink's network is identified as critical infrastructure under the *Security of Critical Infrastructure Act 2018*, requiring compliance with mandatory reporting requirements and the development of risk management programs. The Act ensures that entities like Powerlink enhance security and resilience against various threats by implementing measures to mitigate risks associated with cyber threats, espionage, and other security concerns to safeguard essential services. We are advancing the cybersecurity of our operational technology to protect against emerging threats and ensure resilience in digital substations and network management systems.

Additionally, we have made significant improvements in cybersecurity through our Information Security Management Program (ISMP). The ISMP aligns with the Australian Energy Sector Cyber Security Framework and focuses on strengthening response and recovery systems and regular security testing. We have also targeted

work to address risks like third-party data access and aging systems vulnerabilities, ensuring robust protection as security threats continue to grow.

Digital engineering program

This three-year program supports intelligent project delivery and asset management by building a Common Data Environment, using 3D design tools, conducting substation surveys, updating standards, and streamlining workflows. The program improves data accuracy, automation and collaboration, helping us to drive more efficient design outcomes to support ongoing work on the transmission network.

Financial and economic

Powerlink faces a challenging economic environment shaped by persistent inflation, elevated interest rates, and broader financial volatility.

Higher Interest Rates and Borrowing Costs: The sustained high-interest rates increase borrowing costs, directly impacting our financial strategies. The Australian Energy Regulator (AER) considers these rates in setting the Weighted Average Cost of Capital (WACC), which determines the allowable rate of return on Powerlink's regulated assets. As borrowing costs rise, WACC adjusts accordingly, influencing revenue outcomes and customers' bills.

Economic Uncertainty and Inflation Control: The Reserve Bank of Australia (RBA) has identified in its recent [Statement on Monetary Policy](#), 5 November 2024, that Australia's inflation remains high, despite the series of interest rate increases since 2022. Headline inflation eased to 2.8% for the 12 months to September quarter, but underlying inflation for the same period is still above the RBA's target range at 3.5%. The RBA expects a gradual return to target inflation by late 2026. However, the overall economic outlook remains highly uncertain.

In response to these economic pressures, Powerlink integrates contingency measures and scenario-based planning into its financial strategies. This approach promotes flexibility and resilience under changing conditions, ensuring that financial plans can withstand various scenarios. By openly communicating the assumptions and methodologies behind these plans, we will strengthen customer and stakeholder trust and enhance our ability to manage economic volatility during the revenue determination period.

Environment and cultural heritage

Expanding infrastructure while conserving biodiversity, promoting sustainable land use, and protecting cultural heritage is challenging, with climate change impacts, such as more frequent extreme weather events, adding further complexity.

Climate Resilience and Grid Management: Increased severity of weather events and shifting water resources heighten risks to transmission infrastructure. Building climate resilience requires adapted infrastructure and a proactive approach to managing the grid under changing conditions.

Biodiversity and Biosecurity: Expanding and augmenting the transmission network can disrupt ecosystems and elevate biosecurity risks, including land degradation and invasive species. To mitigate these risks, Powerlink and its contractors employ stringent land access protocols and conduct continuous monitoring. We also collaborated with the RE-Alliance and Queensland Conservation Council to create a [Better Practice Renewables and Biodiversity guide](#), promoting best practices at the intersection of renewable development and biodiversity conservation.

Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act): This federal legislation protects areas of national environmental and cultural significance. Projects impacting World Heritage sites, Ramsar wetlands, and nationally threatened species or ecological communities must undergo federal assessment to ensure compliance. We have been working closely with the commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) to support collaboration and improvements related to our most important environmental assessments.

In October, Powerlink and DCCEEW finalised a Memorandum of Understanding (MOU) which outlines how we will work together on initiatives to support environmental assessment of our projects under the EPBC Act. This MOU provides a framework for collaboration and efficient project approvals, which can be adapted for similar initiatives at the state level. It covers efforts to de-risk assessments, improve approval processes, and develop offset strategies to ensure robust evaluations of projects impacting Matters of National Environmental Significance (MNES) under the EPBC Act.

Cultural heritage: Powerlink recognises the importance of building long-term relationships with Aboriginal groups on whose lands its infrastructure is situated. By fostering stable partnerships and supporting capacity development through relationship agreements, we have a unique opportunity to assist groups to ensure benefit sharing.

Resource capability and capacity

The energy industry faces significant skills and capacity challenges. These challenges are driven by several key factors.

The rapid growth of renewable energy projects, infrastructure development, green manufacturing, and the mining sector within Queensland, is reflected both nationally and globally, which is intensifying the demand for skilled labour. This increased competition is stretching the capacity of the workforce, potentially impacting timelines and resources for critical projects.

The shift towards renewable energy also requires new skill sets in areas such as grid integration of renewables, energy storage solutions, digitalisation, and cybersecurity. Currently, there is a need for significant upskilling and retraining within the workforce to meet these emerging demands.

These issues impact the ability for Powerlink to attract and retain appropriate skilled labour but is more prevalent in the ability for construction contractors in the energy industry to secure necessary resources. The volatility of project work often does not meet the certainty required by contractors, hence there are costs and pressures that arise from the need to build capacity and to retain the necessary skilled workforce.

We are dedicated to boosting employee engagement, job satisfaction, and career development through upskilling and reskilling initiatives, equipping our team for the evolving energy landscape.

Contact us

Registered office	33 Harold St Virginia Queensland 4014 ABN 82 078 849 233
Postal address	PO Box 1193 Virginia Queensland 4014
Telephone	+61 7 3860 2111 (during business hours)
Email	revenueresetteam@powerlink.com.au
Website	powerlink.com.au
Social	    