



Powerlink Queensland
Corporate Profile

Powerlink Queensland is a Government-Owned Corporation that owns, develops, operates and maintains the high voltage electricity transmission network in Queensland, one of the fastest growing states in Australia's National Electricity Market.

Our network is valued at over \$5 billion, comprising high voltage substations and transmission lines, and extends 1,700 kilometres from north of Cairns to the New South Wales border – approximately half of Australia's eastern seaboard.



Above: Cairns Central Business District at night.

Cover: Powerlink Barehand Live Linespersons Scott Ferguson and Andre Leebody carry out maintenance on the Woolooga to South Pine transmission line in South East Queensland.



Powerlink's transmission network is the central link in the electricity supply chain.

Powerlink's transmission network is the central link in the electricity supply chain, transporting electricity from power stations where it is generated, to electricity distributors that deliver electricity to more than 1.8 million households and businesses across Queensland.

Powerlink also transports electricity to large Queensland customers such as aluminium smelters and to New South Wales via the Queensland/New South Wales Interconnector.

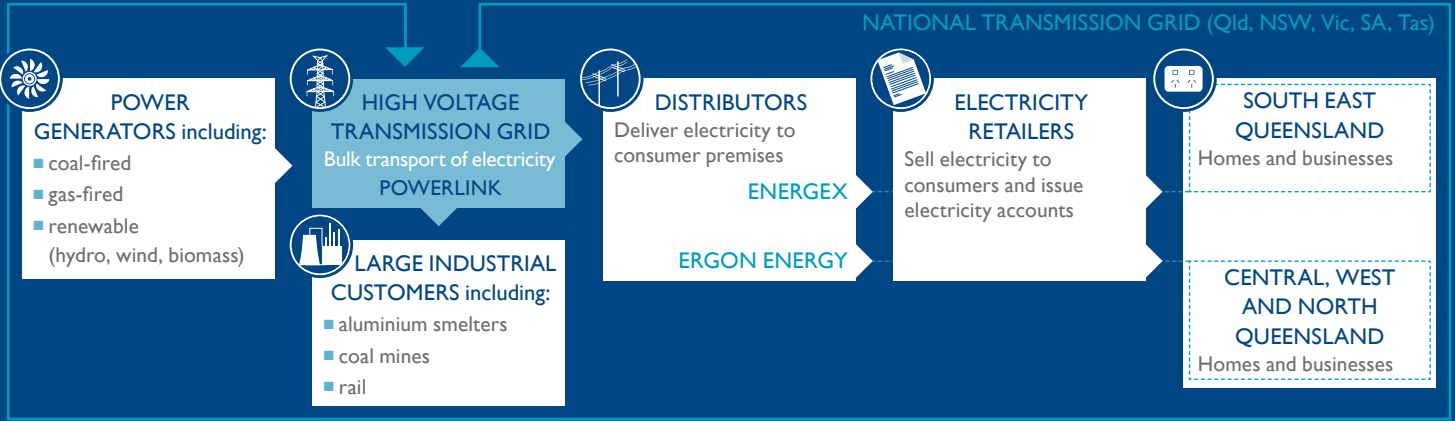
A Transmission Network Service Provider (TNSP) in the National Electricity Market (NEM), our responsibilities are contained in the National Electricity Rules (NER). The NEM is the market for wholesale supply and purchase of electricity in New South Wales, Queensland, South Australia, Victoria, Tasmania, and the Australian Capital Territory.

Power stations sell their power into this wholesale market and retailers make bulk purchases of power from this market to on-sell electricity to their residential and commercial customers.

Powerlink does not buy or sell electricity; rather, Powerlink operates its transmission network to allow the transfer of power between participants within the NEM.

As a TNSP, Powerlink is a regulated monopoly business, with revenues set by the Australian Energy Regulator (AER). Powerlink gains its revenue from charging users of our transmission network in accordance with the pricing arrangements contained in the NER.

A number of different organisations and corporations are involved in electricity supply in Queensland.
This diagram shows where Powerlink fits into the broader structure.



Planning for the future



Heshala Devasirie, Electrical Design Engineer Lines, helps plan the future of Powerlink's transmission network.

Queensland's electricity demand continues to grow, driven by residential and industrial development and the continued installation and use of air conditioning.

Powerlink plays a crucial role in supporting Queensland's growth, with the responsibility for planning the State's electricity transmission network to ensure it provides a reliable and secure supply to customers.

When our planning process identifies emerging limitations in the network, we consult with market participants and interested parties through a transparent process to identify network and non-network solutions.

As required by the AER's Regulatory Test, the most economic solution consistent with reliability and environmental requirements is selected and implemented.

Powerlink prepares an Annual Planning Report that addresses many of these matters. The Annual Planning Report is available on Powerlink's website (www.powerlink.com.au).

Powerlink continues to extend its transmission network to cater for Queensland's residential and industrial electricity needs and long-term electricity growth forecasts. We are focused on ensuring the transmission grid is appropriately developed and maintained so that Queenslanders can continue to benefit from one of the world's most reliable and cost efficient electricity transmission networks.

We plan for and build new high voltage transmission lines and substations to help ensure continued security and reliability of electricity supply to customers. However, we also have an obligation to develop our network in line with strict legal requirements.

The *Electricity Act 1994 (Queensland)* and the NER require Powerlink to meet standards for security and reliability of electricity supply, and comply with relevant Queensland and Commonwealth Government environment legislation.

We are aware that the siting of new powerlines and network equipment can directly affect individual properties. Powerlink always seeks to locate powerlines in a way that aims to minimise effects on owners while also minimising impact on the environment.



Michael Craperi, Line Inspector, scoping works for the proposed Yabulu South to Ingham replacement transmission line in North Queensland.

6 Focused on network performance

Powerlink is a world leader in the operation and maintenance of transmission services, consistently benchmarking in the top quartile internationally in the biennial International Transmission Operations and Maintenance Study.

We continually seek to improve the performance of our network by implementing a range of initiatives including strategies to minimise the impact of network outages. These initiatives ensure we maintain the high level of supply reliability we deliver to our customers and to generators who connect to our grid.

Adam Hammersley, Assistant Construction Manager, and Lloyd Warr, Lead Line Construction Manager, supervise helicopter stringing on the South Pine to Sandgate transmission line in South East Queensland.





Powerlink is a world leader in the operation and maintenance of transmission services.

8 Valuing our people



Powerlink has a highly skilled, capable and dedicated workforce comprising professional, technical, trade, and administrative specialists. Together, our workforce forms a cohesive organisation possessing the skills and culture to keep us at the forefront of transmission reliability and efficiency.

We strive to provide a supportive yet challenging workplace culture that encourages people to perform and rewards them for their achievements. We strongly promote ongoing development and technical, personal and leadership skills, and encourage people to plan and pursue their careers within the organisation.

By developing the potential of existing staff, awarding innovation and supporting a strong graduate program, we aim to strengthen Powerlink's capability to maintain our highly competent and committed workforce.

The safety and wellbeing of our staff is a central focus, with safety promoted as a core value within the organisation.

Field Test Apprentice Nichole Willett.

Committed to safety

The safety of our people and the public is Powerlink's highest priority. We are committed to achieving operational excellence in safety through a culture in which all employees regard safety as their first priority.

Safety is systematically and actively integrated into all aspects of work at Powerlink and is also promoted as a core life value, enhancing our employees' awareness of risk and health issues in all areas of their lives.

Comprehensive monitoring and reporting procedures and policies are in place to ensure the safety of the community and our staff, and the continued safe and reliable operation of the transmission network. We also work to develop and implement programs to improve safety awareness and safe practices for our staff and communities near our assets.



Powerlink plans, builds and maintains our transmission network to help ensure continued reliability of electricity supply to Queenslanders.

Building community relationships

Powerlink works hard to be a responsible and responsive corporate citizen. We are committed to building positive relationships with communities near our assets through innovative environmental projects and by supporting initiatives that deliver tangible results for both communities and Powerlink.

In developing our network, we strive to work closely with communities, local government, environmental groups, Traditional Owners and government agencies.

We are committed to developing long-term relationships that endure throughout the planning, development and maintenance of our infrastructure. It is our goal that these relationships will help us achieve positive, sustainable outcomes.

Nicholas Gibson, Construction Manager on the Broadsound to Nebo transmission line project, with a landowner near Mackay.



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Our environmental commitment



Responsible environmental management is integral to our business success, and our ability to meet our customers' demands for a secure and reliable power supply.

Powerlink constructs, maintains and operates its high voltage transmission infrastructure in diverse environments – from lush World Heritage rainforests to arid plains and bustling residential suburbs.

Constructing, operating and maintaining this network to meet the expectations of Queenslanders means we are challenged and empowered to protect, enhance and respect the environment.

We closely monitor our performance against the targets established in our Environmental Management System and the Environmental Management Plans for our assets.

Powerlink works proactively to manage the impact of our operations on flora and fauna.

The challenge of climate change

Powerlink's track record demonstrates a strong commitment to meeting our environmental obligations across all facets of our business – an approach we also extend to climate change.

Climate change policies developed by the Commonwealth and State Governments will drive a shift in the mix of electricity generation, encouraging the entry of new generators with lower or no emissions. Most of this new large-scale development will occur in locations distant from major population centres, and the electricity transmission grid will be strengthened and extended to support these developments. In this way, our transmission grid has a pivotal role to play in facilitating government climate change policies.

We are committed to working with government to simultaneously address the challenges of climate change, while ensuring a reliable long-term electricity supply which supports the growing economy and helps to ensure continued quality of life for Queenslanders.

Within our business, we have undertaken a number of energy efficiency, transport and fleet management initiatives to reduce Powerlink's in-house greenhouse emissions.



Powerlink's electricity transmission network will play a pivotal role in facilitating the development of new large-scale renewable generation in Queensland.



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Powerlink Queensland is the registered
business name of the Queensland Electricity
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