

Our Services



Delivering
innovative solutions
for our customers



> About Powerlink

Powerlink is a leading Australian provider of high voltage electricity transmission network services, combining innovation with insight to deliver safe, cost effective and reliable solutions.

We have a strong history of connecting customers to the energy they need, providing electricity to almost four million people.

Powerlink delivers critical infrastructure and transmission services to support economic growth and enrich lifestyles across the country. We provide network connections for large-scale generators, as well as for major industrial customers operating rail systems, mines and mineral processing facilities.

Powerlink has delivered more network connections on a commercial basis for customers than any other transmission company in Australia, with these commercial connections representing an asset value of approximately \$1 billion.

Our financial strength allows Powerlink to fully fund and invest in new projects.

Our commitment to delivering value to our customers has seen an expansion in the services we provide.

Powerlink has strong experience in a range of services including:



Network
Connections



Telecommunications



Oil, Insulation and
SF6 Testing



Asset
Management



Construction &
Project Management



Easement
Acquisition



Ongoing Maintenance
& Operations



Sale of High
Voltage Equipment



Property
Services



Consulting
Services



Our transmission network extends 1,700 kilometres from north of Cairns to the New South Wales border, and comprises 15,500 circuit kilometres of transmission lines and 141 substations.

> Innovation and customer service

Innovative solutions to deliver better outcomes for our customers

Powerlink's customer service delivery is built on the key principles of:

- **Listening** – to fully understand what our customers want
- **Trust** – building a strong partnership with open, two-way communication
- **New thinking** – using new approaches to deliver better outcomes
- **Flexibility** – to deliver solutions tailored to specific budgets and timelines.

Complementing this commitment to customer service is our track record of innovation.

Powerlink's reputation of innovation is founded on our ability to use leading-edge technology and look beyond current industry practices to deliver solutions for customers.

Powerlink was the first transmission company in Australia to develop and utilise a shared commercial framework which allows two or more customers to achieve reduced connection charges by sharing common assets. Our flexible approach to commercial arrangements includes joint ventures and project partnerships.

Another example of our innovation is our expertise in construction and maintenance work on fully energised ('live') lines and substations. We were the first transmission business in Australia to undertake this type of work and, over the past 15 years, have developed highly skilled teams to complete this work safely and efficiently.

Powerlink has earned an international reputation for the adoption of new technology and work practices as we design and deliver solutions that generate value for our customers.



> Our services

Delivering the full spectrum of electricity transmission and associated services

Network connections

Renewable energy

Enabling a renewable energy economy is a key focus for Powerlink. Transmission networks will play a vital role in facilitating new, large-scale renewable and low emissions generation.

Powerlink is well placed to support the development of renewable energy sources and deliver efficient connections for large-scale renewable generators to the National Electricity Grid.

Large energy users

Powerlink has extensive experience in the delivery of large and complex transmission solutions having completed more than 30 connections for large energy users including mines, LNG projects and rail loads over the past 15 years.

Powerlink has demonstrated experience with navigating State and Federal legislation and ensuring project approvals are achieved in a timely manner to meet customer requirements.

We are flexible and can provide a scalable solution to meet customer needs.

Telecommunications

Powerlink continues to expand our telecommunications / optic fibre network between Cairns and New South Wales, providing access to a wide range of telecommunication paths and connecting to data centres across Queensland.

We have extensive experience in managing telecommunications and have been doing so for 12 years, with more than 100 agreements in place for carrier devices.

Oil, insulation and SF6 gas testing

Operating from a purpose-built laboratory and backed by more than 30 years' experience in providing specialist oil, insulation and SF6 gas testing and diagnostic services, Powerlink's oil testing services provides a comprehensive transformer, reactor and oil-filled plant monitoring and condition assessment service.

Asset management services

Asset management services

Powerlink's asset management model is designed to optimise flexibility and cost-efficiency. We consistently achieve a balance between reliability, risk and efficiency in managing assets. This is core to our successful business operations over two decades.

Live line and substation work

Powerlink is highly qualified and has extensive experience in the use of live line and substation techniques. Using live line work for network maintenance delivers better network reliability and security by avoiding outages.

We have a reputation for excellence and safety in all aspects of our live work, and are recognised as leaders in this field in Australia.



Operations and maintenance support

Powerlink manages network maintenance programs that ensure ongoing reliability and security of electricity supply.

The success of delivering planned maintenance on our transmission lines, substations and communication assets is supported by strategic forward planning. Since 1995, Powerlink has been benchmarked as a top quartile performer in service level and cost effectiveness of operation and maintenance activities among the international transmission businesses participating in the International Transmission Operations and Maintenance Study (ITOMS) benchmarking.

Equipment sales

Powerlink has extensive market knowledge and existing long-term purchase agreements for high voltage equipment, transmission line and substation materials. Our expertise includes qualified staff experienced in the specialised purchasing process for high voltage equipment.

Property services

Powerlink's property services include assessment of development applications, easement and property searches, legislated clearances advice and appropriate land uses and on-easement activities. We also provide expert advice on the co-location of infrastructure near our high voltage transmission assets.

Consulting services

Powerlink has extensive experience and is able to provide consulting expertise in a wide range of specialist areas, including engineering, asset design, and project and construction management.

For further information on Powerlink's services visit www.powerlink.com.au.



> Our approach to project delivery

Powerlink's project delivery model has been developed using decades of experience to deliver the best outcomes for customers, the environment and the community.

To deliver a successful project, Powerlink considers the following key performance factors:

Safety performance	Commercial performance	Operational performance	Environmental performance	Social performance
Ensuring the safety of staff, contractors and the community	Driving efficiency to maximise commercial outcomes for customers	Delivering technical solutions that boost operational performance	Protecting the environment throughout project delivery	Delivering the project in a way that improves the reputation of our customers and Powerlink

Quality assurance

Powerlink has been certified under ISO 9001 standard since 1999 for the project management and delivery of design, construction, testing, commissioning and handover of high voltage transmission line, substation and telecommunications network assets.

Powerlink meets this standard by delivering on the following principles:

- Customer focus
- Leadership
- Process and systems approach
- Continual improvement
- Mutually beneficial supplier relationships.



> Our experience

Our people offer a wealth of knowledge and skills in electricity transmission and associated services.

Powerlink's operational strengths include:

- solid financial position and ability to fund projects
- extensive experience in developing innovative, shared connection options providing cost-effective 'whole-of-region' solutions
- strong relationships with government, industry and service providers
- innovative commercial arrangements
- technical and project delivery capability
- expertise with access and planning approvals
- effective stakeholder and landholder relations.

A strong history

Powerlink was initially a subsidiary of the Queensland Transmission and Supply Corporation (QTSC), formed following the corporatisation of the Queensland Electricity Commission (QEC) in 1994. It became a standalone independent government owned corporation in July 1995.

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- 1995** Powerlink Queensland corporatised
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- 1999** Queensland joined the National Electricity Market (NEM)
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- 2001** Implemented live substation work – an Australian first
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- 2001** Queensland/New South Wales Interconnector (QNI) became operational
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- 2003** Reliability Centred Maintenance introduced
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- 2006** Organisation-wide response to Category Five Cyclone Larry
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- 2009** Queensland fibre network (DWDM) implemented
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- 2010** Organisation-wide response to Category Five Cyclone Yasi – the largest cyclone to cross the Queensland coast

Improving network outage response times

Powerlink provided technical expertise to its South Australian counterpart ElectraNet, to assist with an upgrade of critical network components, and improve response times during network outages.

Powerlink's consulting services assisted ElectraNet to deliver their Static VAR Compensator (SVC) upgrade projects in the greater metropolitan area of Adelaide.

Powerlink has extensive experience working with SVCs and were engaged by ElectraNet to develop and review technical specifications on its upgrade to the Para Substation SVC. This important work extended the SVC's service life by another 20 years and reduced analysis response times following network outages.

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- 2012** Adopted International Electrotechnical Commission (IEC) standard 61850
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- 2013** Introduction of Safe for Life program
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- 2013** Completed seven-year program to replace Far North Queensland's coastal electricity transmission network (replaced 320km of coastal transmission line)
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- 2014** Completed four-year project to rebuild Gladstone Substation to support major customer loads and secure supply across Central Queensland – delivered 16 months ahead of schedule and 20 per cent under budget
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- 2016** Completed Australia's largest commercial electricity transmission network connection project in the Surat Basin



Supporting Queensland's \$60 billion CSG industry

Powerlink has recently completed Australia's largest commercial high voltage transmission project.

Projects totalling \$500 million in the North West Surat region delivered high voltage connections for LNG proponents and included construction of more than 200km of high voltage transmission line and seven substations, powering six gas processing facilities.

Successful delivery of the new high voltage transmission connection to meet customer requirements was achieved through innovative commercial, social, and environmental solutions.

The development of a shared network was a cost efficient outcome for proponents and resulted in less landholder and social impacts. We worked closely with the proponents' technical representatives in our network design and ensured a shared approach to problem solving and technical interfaces between asset boundaries.

These projects injected more than \$25 million into local businesses and \$225,000 into local community projects while also supporting 850 jobs.

Project facts:

Power demand of

600

Megawatts

565

towers

77,500

insulators

2,340

kilometres of circuit powerlines

12,000

tonnes of steel

12,500

cubic metres of concrete



> Our focus on safety and the environment

Essential to everything we do

At Powerlink, safety is essential – for our employees, contractors and the community. Our Safe for Life program consolidates our focus on safety across all aspects of our business – from workplace health and safety through to electrical safety. We aspire to an interdependent safety culture and expect and support safe behaviour at all times.

We are also committed to working proactively to protect and respect the environment, and manage our operations in ways that are environmentally, socially and economically sustainable.

Through our Environmental Management System, we develop asset-specific plans for activities that may have an environmental impact and monitor construction and maintenance activities.

Environmental assessments are undertaken for all new infrastructure developments, and environmental risks are managed through our risk management process.

SAFEFORLIFE
Everyone. Everywhere. Everyday.



> Our focus on the community

Focused on making a positive contribution

At Powerlink, we are committed to working closely with a range of stakeholders including electricity consumers, our customers and the communities in which we operate to understand their expectations.

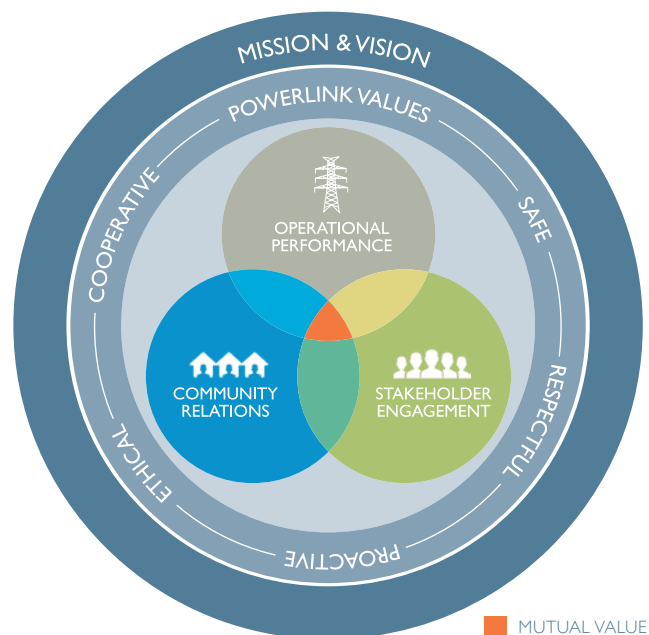
In carrying out our business activities, Powerlink acts as a good corporate citizen through its operational performance, engagement with stakeholders and community relations activities.

Our community activities are based on three key focus areas:

- environment
- education and technology (focusing on engineering, energy or the environment)
- safety.

Stakeholder engagement at Powerlink is a part of business-as-usual operations. We focus on ensuring engagement is meaningful and appropriately influences decision-making, leading to better outcomes.

We don't assume we know what our stakeholders want. To ensure we better understand matters of importance, we conduct in-depth stakeholder research to obtain feedback on what's important to them to create mutually beneficial outcomes.



Powerlink's Corporate Citizenship Framework



Case study – QMDC

Powerlink and the Queensland Murray-Darling Committee (QMDC) partnered to deliver a successful community relations program to enhance biosecurity and weed management in the North West Surat Basin.

The partnership focused on environmental rehabilitation and weed control in areas in the Surat Basin that were impacted by our operations.

In total, 105 school students and 80 community volunteers delivered 720 hours of volunteer work and 175 new trees in four communities across the North West Surat Basin.

In addition to on-ground works such as tree planting, extending garden beds and installing irrigation, the program supported the development of interactive tools such as a smartphone app designed to better equip landholders and stakeholders with information about local weed issues.

The program produced tangible and lasting outcomes that have made a positive difference for communities near our electricity infrastructure.



Contact us

Registered office	33 Harold St Virginia Queensland 4014 Australia
Postal address:	GPO Box 1193 Virginia Queensland 4014 Australia
Telephone	(+617) 3860 2111 (during business hours)
Email	pqenquiries@powerlink.com.au
Internet	www.powerlink.com.au
Social media	   