



Powerlink Queensland

A partner in sustainability

About Powerlink Queensland?

Powerlink is the State Government-owned corporation which owns, develops and operates a \$5.2 billion high voltage transmission network that extends 1,700km from the north of Cairns to the New South Wales border. Powerlink's primary role is to provide a secure and reliable network to transport high voltage electricity from power stations to the electricity distribution networks owned by ENERGEX, Ergon Energy, and Country Energy. Powerlink also transports electricity directly to large Queensland customers, such as aluminium smelters and Queensland Rail, and to New South Wales Border

Powerlink's role in our electricity supply chain

Powerlink Queensland's transmission network is the central link in the electricity supply chain between power stations (where electricity is generated) and the State's electricity distributors – Ergon Energy, ENERGEX and Country Energy (that deliver electricity to households and businesses). The electricity supply chain comprises four phases.



Electricity Generation

Electricity is produced at power stations using a variety of fuel sources including coal, gas, water, biomass and wind. Powerlink is not involved in the generation of electricity.



Electricity Transmission

Electricity is transported from power stations through Powerlink's high voltage transmission network. Electricity leaves the power stations at a very high voltage so it can travel long distances efficiently. As the electricity approaches where it will be used, its voltage is reduced at Powerlink's bulk supply substations.



Electricity Distribution

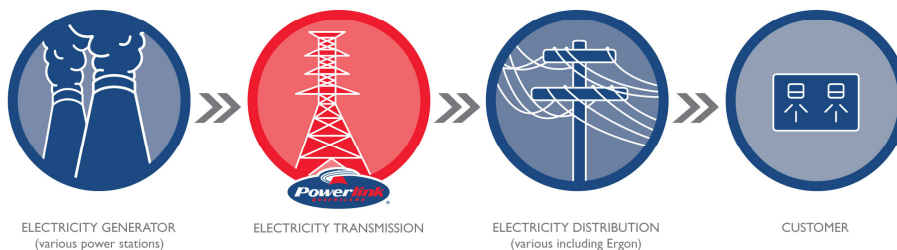
Powerlink's transmission network transfers electricity to a local electricity distribution network via a bulk supply substation. The distribution network consists of transformers, overhead powerlines, underground cables and other network equipment. Substations and transformers reduce the level of the electricity voltage as it is transported to connection points at homes and businesses. ENERGEX owns and operates the electricity distribution network in South-East Queensland. Ergon Energy is the distributor in other areas of Queensland, and in northern New South Wales the electricity distributor is Country Energy.



Retail Customer

Customers arrange to have electricity connected through an electricity retailer (e.g. Origin Energy, AGL and Energy Australia) which then bills the customer for their power consumption.

Electricity Supply Chain



The Borrow Pits Project is a Together Townsville Partnership with Powerlink Queensland

