

VICTORIAN DESALINATION PROJECT

FACT SHEET

**WATER NOW
AND FOR THE FUTURE.
FOR SURE.**

PIPELINE AND POWER SUPPLY

High quality drinking water is transferred from the Victorian Desalination Plant through an 84 km transfer pipeline.

The pipeline follows the same path as an underground power supply, which has been built to deliver power to the plant.

Fibre optic cables have also been laid to provide important monitoring information on the pipe and power networks. Additional capacity will facilitate improved broadband capability to surrounding communities.

Is the water just for Melbourne?

No. Seven water delivery points along the pipeline connect regional communities to the desalinated water supply.

Also, the pipeline is 'two way.' This means that if the desalination plant is not required, water from Cardinia Reservoir can be delivered to communities in Western Port and South Gippsland.

How is the plant powered?

A new underground power cable supplies power to the desalination plant.

Underground power was the State Government's preferred power source for the project as it has the least impact on landowners, farmers and other people living and working in the area.

The 220kV high-voltage alternating current (HVAC) power cable has been constructed in the same easement as the transfer pipeline, branching off at Clyde North to connect to the existing terminal station at Cranbourne.

How much power does the plant use?

Around 90MW is required to power the plant and transfer pipeline when operating at 150GL capacity. This is 100% offset by renewable energy.

What measures have been put in place to increase the plant's energy efficiency?

AquaSure has introduced a range of innovative systems to minimise power consumption, including world-leading energy recovery devices which significantly reduce power consumption in the reverse osmosis process.

The plant's compact, modular design also reduces the amount of pipe work required and maximises energy efficiency.

Further energy is further saved by situating the plant at a low level relative to sea level. This reduces the amount of energy needed to lift seawater into the plant.

Other energy saving features such as variable speed drives, high efficiency motors and low energy use membranes have also been adopted.

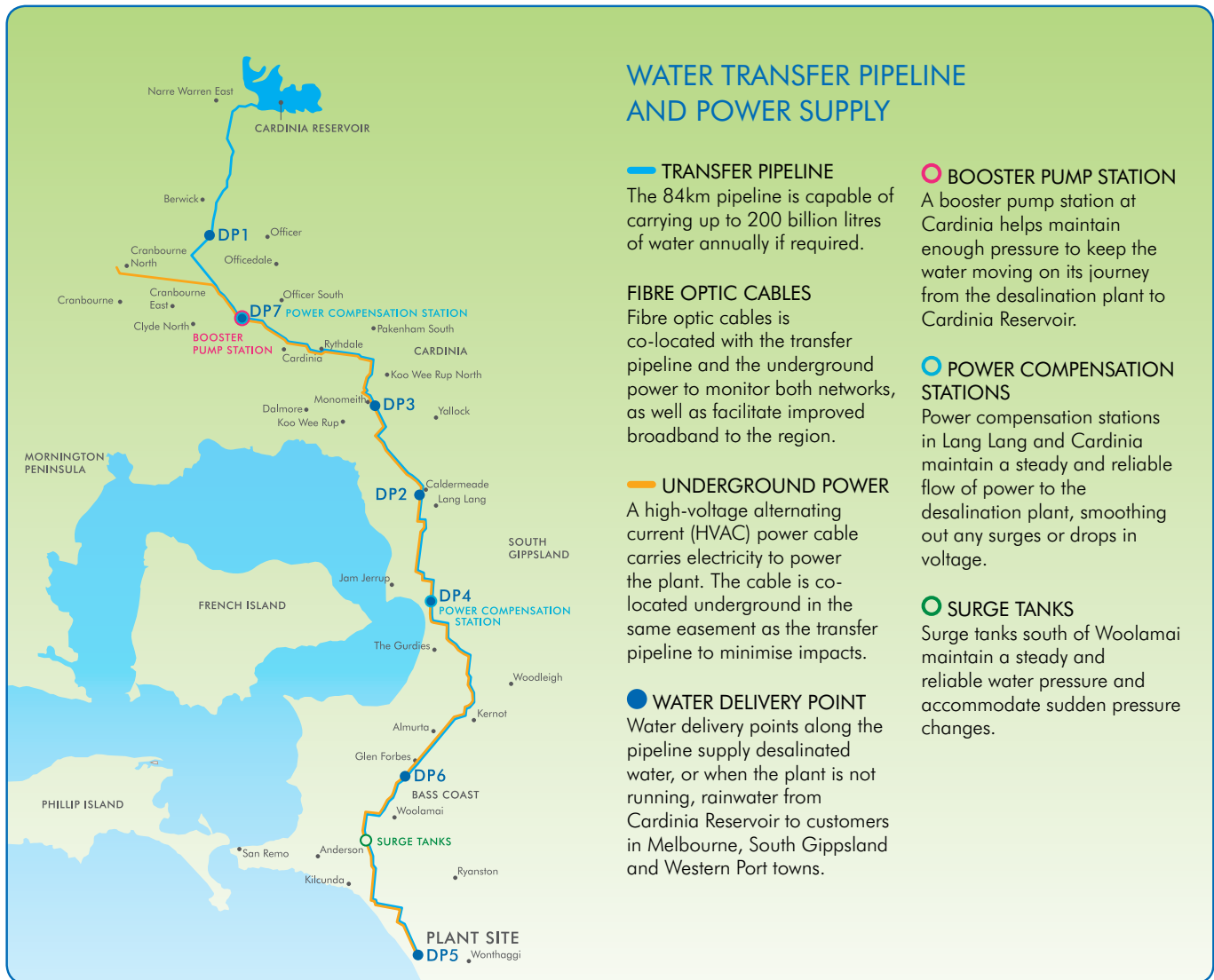
How do the renewable energy certificates work?

It would be impractical to power the plant directly with wind, solar, tidal or other green energy, so renewable energy certificates (RECs) are purchased to offset the electricity that the plant and transfer pipeline use.

AGL supplies RECs from its overall portfolio of renewable energy generation assets, including two new wind farms in Western Victoria.



Far left: Water Delivery Point
Left: Booster Pump Station



Below: Power Compensation Station
Far right: Surge Tank

