Marinus Link is a proposed 1500 megawatt capacity undersea and underground electricity connection that links North West Tasmania to Victoria. It would also require development of the transmission network in North West Tasmania. TasNetworks completed a positive feasibility and business case assessment for Marinus Link and supporting North West Tasmania transmission developments, in December 2019. Australian Renewable Energy Agency (ARENA) & the Tasmanian Government supported this work.

THE NATIONAL ELECTRICITY MARKET IS CHANGING

Coal generation continues to retire with variable renewable generation, such as wind and solar generation, increasingly taking its place. To support these variable energy sources, the National Electricity Market (NEM) also needs ‘dispatchable’ energy. This is energy that is on-demand, such as hydro electricity and pumped hydro energy storage resources.

COMPAARED WITH MAINLAND AUSTRALIA:

- Tasmanian wind has a 25% higher energy output and capital cost is comparable
- Capital cost of pumped hydro energy systems in Tasmania is 30% lower
- Tasmania has latent, clean and dispatchable hydro capacity
Tasmania has some of Australia’s most cost-effective renewable energy and dispatchable capacity resources.

**BY 2035:**

12,000 MW of coal retiring = 40,000 MW of variable renewable capacity required to replace it + 8,000 MW of dispatchable capacity required to firm the renewables

Marinus Link and supporting transmission help Australia’s transition to a low emissions future by unlocking Tasmania’s renewable energy and long-duration energy storage resources to provide dispatchable energy when it’s needed.

Together they will help address Australia’s energy trilemma by supporting:

- **LOW COST**
  - Wind, solar, hydro and storage

- **LOW EMISSIONS**
  - CO₂ reductions + emissions targets

- **SECURE & RELIABLE**
  - Dispatchable hydro + pumped hydro storage
A POSITIVE BUSINESS CASE

TasNetworks’ analysis shows that Marinus Link and supporting transmission:

◊ Have a positive business case
◊ Are technically feasible and commercially viable for up to 1500 MW and will provide greater benefits than costs
◊ Could be in service from the late 2020s
◊ Will create billions in economic growth, thousands of jobs, and be a source of skills, training and workforce development potential in Tasmania and regional Victoria

PROJECT COST ESTIMATE

Analysis to date estimates Marinus Link and supporting transmission would have a total project cost of around $3.5 billion in today’s (2020) dollars. This estimate includes allowances to reflect the present level of accuracy and contingencies that may arise.

BENEFITS OUTWEIGH THE COSTS

Economic analysis demonstrates that Marinus Link and supporting transmission will provide an economic advantage to Australia, with benefits significantly outweighing costs under all TasNetworks scenarios modelled. In the draft 2020 ISP, AEMO recommends that Marinus Link is progressed to be “shovel ready”.

BROADER BENEFITS

Marinus Link and supporting transmission will add significant economic value to regional communities in Tasmania and Victoria.

**TASMANIA**
- **Economic Stimulus Construction + Operation:** Up to $1.4BN
- **Direct and Indirect Jobs at Peak Construction:** Up to 1400

**VICTORIA**
- **Economic Stimulus Construction + Operation:** Up to $1.5BN
- **Direct and Indirect Jobs at Peak Construction:** Up to 1400

Jobs figures are estimated for the period spanning 2025-27. All figures are estimates based on Ernst & Young modelling November 2019.

They will also unlock a pipeline of investment in renewable energy and long-duration energy storage developments with an estimated value of up to $5.7 billion and an estimated 2,350 jobs.

Jobs figure is the estimated average of direct and indirect jobs at peak construction for the period spanning from 2030 to 2034.

Marinus Link and supporting transmission are estimated to reduce at least 45 million tonnes of CO$_2$ emissions from the NEM by 2050.

**WORKING OUT WHO PAYS**

New pricing arrangements will need to be agreed to achieve fair pricing outcomes. A fair cost allocation methodology for interconnectors is being investigated by the national Energy Security Board. An appropriate pricing outcome is required for Marinus Link and supporting transmission to proceed.
WHERE WILL IT GO?

The proposed route seeks to minimise adverse impacts on landowners, businesses and conservation areas whilst balancing key objectives of cost, efficiency and constructability. To date, work indicates that the proposed routes for Marinus Link and supporting transmission are feasible.
The favoured technical design is for a 1500 MW High Voltage Direct Current (HVDC) interconnector, built in two 750 MW links and supported by an upgraded High Voltage Alternating Current (HVAC) transmission network in North West Tasmania. The design includes modern HVDC cable and converter station technologies that support reliable power transfers across Bass Strait.
Marinus Link and supporting transmission have a positive business case. Work continues to progress this critical national infrastructure to being a ’shovel ready’ project. TasNetworks is committed to working with stakeholders and local communities and to providing opportunities for feedback and comment on the project.

GET IN TOUCH

To learn more about Marinus Link, share your ideas and find out about upcoming stakeholder and community engagement events visit marinuslink.com.au, email team@marinuslink.com.au, or call 1300 765 275.
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