

NOVEMBER 2024



# 2024

## Transmission Network Forum





Powerlink Queensland hosted its annual Transmission Network Forum on Friday 15 November 2024. The forum was held as a hybrid event, allowing regional and interstate stakeholders to join online along with in-person attendees.

The 2024 forum saw record attendance with more than 600 participants, emphasising the important role the transmission network will play in the future of energy in Queensland and the wider National Electricity Market.

This forum provides an opportunity to collaborate with our customers and stakeholders on Queensland's energy future. It is a key engagement event for Powerlink to listen and learn from our stakeholders so we can incorporate these important insights into our future planning.



## State of the Network

Powerlink's Chief Executive Paul Simshauser delivered a 'State of the Network' presentation, highlighting the characteristics that have driven the energy transition from 2020 to 2024 and what is needed to continue a successful transition from 2025 to 2029.

The presentation covered key topics including how to optimise the use of batteries within Renewable Energy Zones (REZs), the importance of community engagement, the latest changes to Queensland's transmission backbone and various innovations and efficiency measures by Powerlink to drive value for customers.

*"The best outcomes will happen when policy, investment and innovation work together."*

Paul Simshauser, Chief Executive,  
Powerlink Queensland





## Australian Energy Market Operator (AEMO) Update

Merryn York, Executive General Manager System Design at AEMO shared an update on network planning in Australia. The presentation covered:

- variability of demand from the transmission system, highlighting the challenges of peak demand during heatwaves and the increasing minimum system load due to rooftop solar generation
- AEMO's system security planning approach to meet Net Zero targets by 2050
- the significance of addressing engineering challenges collaboratively
- the need for substantial investment in plant, transmission and storage to increase system capacity and support decarbonisation of other sectors
- the importance of engaging with a broad range of stakeholders, including communities and landholders, to ensure a safe, secure, and cost-effective power system.



## Decarbonising Central Queensland

Daniel Andersen, Powerlink's General Manager Energy Markets, shared insights on the importance of Gladstone in Queensland's energy transition, discussing key aspects driving decarbonisation in the Central Queensland region.

The presentation discussed forecast growth in electricity demand due to the electrification of industrial loads and potential hydrogen production. This load growth is occurring at a time of planned retirements of coal-fired power stations in the region. He also discussed development of REZs and the need to replace existing generation from other locations across Central Queensland.

He also provided an update on Powerlink's project to reinforce the transmission grid in Gladstone. This is the first project to go through the Priority Transmission Investment (PTI) Framework.

*"Encouragingly, there is a strong pipeline of renewable projects planned for Central Queensland, with more than 30GW of BESS, solar and wind projects in various stages of development."*

Daniel Andersen, General Manager Energy Markets,  
Powerlink Queensland





Following this session, Jacqui Bridge, Powerlink's Executive General Manager Energy Futures moderated a panel of experts which included:

- Vik Selvaraja, General Manager Pacific Repowering, Rio Tinto
- Roger Smith, Director Revenue Reset, Powerlink Queensland
- Daniel Andersen, General Manager Energy Markets, Powerlink Queensland
- Dana Boxall, General Manager Community and Delivery Services, Powerlink Queensland



Each panel member shared insights on key aspects of the transition from their perspective:

**Vik Selvaraja, General Manager Pacific Repowering, Rio Tinto**

- Emphasised Rio Tinto's significant energy consumption in Gladstone and the need to transition to renewable electricity to maintain competitiveness.
- Highlighted the importance of investing ahead of demand and maintaining a strong partnership with Powerlink to support industry growth.

**Roger Smith, Director Revenue Reset, Powerlink Queensland**

- Explained the benefits of the PTI Framework and how it will support the energy transition in Queensland.
- Provided an update on the Gladstone Project, detailing the future stages and engagement opportunities in the PTI Framework process.

**Daniel Andersen, General Manager Energy Markets, Powerlink Queensland**

- Discussed the challenges in planning the future network with uncertainties in load timing and weather-dependent loads.
- Emphasised the need for improved tools to manage these uncertainties and ensure efficient network development.

**Dana Boxall, General Manager Community and Delivery Services, Powerlink Queensland**

- Addressed the importance of efficient environmental and planning approval processes for large-scale infrastructure projects.
- Emphasised the need for early and authentic community engagement, transparent processes, and ensuring communities receive a fair share of project benefits to build trust and social licence.



Gathering stakeholder input is important to our decision-making and planning. The forum included an interactive table discussion, which focused on decarbonising Central Queensland. A number of questions were posed to forum participants, with key highlights outlined below.

### What can Powerlink do to provide more investment certainty in the Central Queensland region?

Stakeholders highlighted the following areas:

- **Transparency and timing:** Stakeholders emphasised the need for Powerlink to provide detailed and transparent information on the timing of infrastructure delivery to help them plan more effectively. This includes regular updates and visibility on progress, as well as clear communication tailored to different audiences.
- **Investment and development certainty:** Stakeholders highlighted the importance of providing certainty through better clarity on transmission pathways, cost estimates, and the benefits of being part of a REZ.
- **Infrastructure planning and risk management:** There is a need for detailed planning, particularly in relation to the development of infrastructure to support REZ projects. It is also important to address the risks associated with REZ projects, including financial, environmental, and community-related risks.
- **PTI Framework:** The PTI Framework was highlighted as crucial for firming transmission delivery timeframes, which flows to generation projects gaining financial commitment.
- **Collaboration and coordination:** There was a strong focus on the need for collaboration between various stakeholders, including developers, government bodies, and local communities. This includes sharing information, coordinating efforts, and ensuring that all parties are informed and involved in the process.





## What else does Powerlink need to consider from a social licence and community perspective?

Key discussion themes from stakeholders included:

- **Invest in the community early:** There was a strong call for earlier community investment in the project lifecycle to build social licence, rather than traditional approaches where community investment aligns with construction budgets.
- **Coordination:** With cumulative impacts of multiple projects in Central Queensland, stakeholders reinforced the importance of a coordinated approach to community engagement by industry, government and Powerlink.
- **Energy education:** The need for broader energy education for communities was emphasised to ensure they understand the impacts and benefits of energy projects.
- **Tell stories to localise the benefits:** The importance of telling community-focused stories, such as Rio Tinto's impact in Gladstone, was highlighted to build social licence and demonstrate the benefits of energy projects.
- **Must be a tailored approach:** Each community is unique and requires tailored engagement strategies that consider their specific needs, concerns, and cultural contexts.
- **Transparency:** Sharing detailed, factual information about projects and their impacts helps build trust and manage misinformation within communities.

## How does Powerlink best time network investment in Central Queensland to meet future load growth?

- **Early rather than late:** The complexity of timing transmission infrastructure with load growth was acknowledged, with a preference for being slightly early rather than late. There were calls for closer engagement with the market in future load growth areas to ensure timely and informed investment decisions.
- **Efficient connection process:** Powerlink was seen as having a significant role in leading the market and sharing lessons learnt with other states to improve connection processes and reduce red tape.
- **Coordination:** There was a call for better coordination of investment plans and activities across jurisdictions to streamline processes and reduce complexity.
- **Meeting current demand:** Concerns were raised about whether the current infrastructure investment and approvals would be sufficient to meet existing demand.

The stakeholder feedback from the interactive table discussions at the forum will influence Powerlink's ongoing network planning and decision making.





## Transmission Annual Planning Report (TAPR) Update

The 2024 TAPR session was presented by Stewart Bell, Powerlink’s Executive General Manager Network and Business Development.

He outlined the strategic approach Powerlink is taking to manage future energy demands and integrate renewable energy sources efficiently. Key areas in the presentation included:

- coordinating EV charging and batteries to manage peak and minimum demands
- engaging with large industrial loads to support decarbonisation efforts
- developing REZs with a market-led approach to reduce costs and impact on communities
- ensuring system stability through ancillary services and innovative solutions like grid forming batteries and synchronous condensers
- optimising the existing network with advanced monitoring, high temperature conductors, and dynamic voltage support.

*“We are very much taking that market-led approach, looking for foundation customers”*

Stewart Bell, Executive General Manager  
Network and Business Development, Powerlink Queensland

The full 2024 Transmission Annual Planning Report is available on our website at [powerlink.com.au/tapr2024](https://powerlink.com.au/tapr2024).



The forum was closed by Powerlink Queensland Board's Chair Kathy Hirschfeld AM who highlighted Powerlink's strong reputation and standing in the industry. The Chair expressed her gratitude to the record number of attendees for their positive engagement, insightful questions and valuable contributions, which will support Powerlink's planning and decision making going forward.

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