POLICY TAKEAWAYS

UQ Centre for Policy Futures

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A Roadmap to Queensland's Renewable Energy Target

As part of an Advance Queensland Industry Fellowship, Dr Lynette Molyneaux has developed a **Roadmap** to Queensland's Renewable Energy Target (QRET). The Roadmap is informed by the outcomes of modelling electricity demand-supply balance at each node in the National Electricity Market in the year 2030.

Modelling outcomes indicate that achieving high levels of variable renewable energy (VRE) in Queensland electricity supply is possible but will depend on effective communication between the Queensland Government, investors and electricity industry participants. **Learn more**

Key Takeaways & Recommendations

1

Energy-Gaps can be reduced by managing coal generator unit closures

Modelled outcomes indicate that partial closures at Gladstone, Stanwell and Tarong power stations provide the lowest level of Energy-Gaps, rather than full closures at Gladstone and Tarong.

2

Permission for new power plants should be granted, based on existing and planned transmission infrastructure

To support investment, planning permission for Variable Renewable Energy (VRE) generation should be based on existing available or planned transmission infrastructure to reach the large demand centres.

3

Investment in transmission may be required for energy from new power plants to reach demand centres

Location of VRE is fundamental to achieving QRET. Transmission network augmentation may be required in the following transmission corridors if high levels of VRE is to reach demand centres consistently:

- Central West Queensland to Gladstone
- Wide Bay to North Moreton (Brisbane North)
- South West Queensland to South Moreton (Brisbane South)

4

Investment incentives will be needed for long-term seasonal energy storage

Energy storage is important for securing a managed transition, including shifting VRE from periods of over-supply to periods of high-demand on a daily or weekly basis, but also for longer-term seasonal storage capacity required during infrequent, but extended periods of low VRE supply. Consideration should be given to incentives or ownership models to encourage investment in long-term seasonal storage capacity.

5

Meeting QRET targets through collaborative planning

If NEM governing bodies are not committed to QRET, the target will not be met. There is a need for a joint collaborative body tasked with developing a roadmap to achieve QRET comprised of investor groups, AEMO, AEMC, Powerlink, Queensland generators and the Queensland Government.

For further details, please contact:

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