

# Submission to The Standing Committee on the Environment and Energy inquiry into Modernising Australia's Electricity Grid by The ANU Energy Change Institute

- There is a pressing need for a long-term, bipartisan plan for Australia's electricity system in order to encourage much-needed investment by industry.
- The plan needs to have as a key objective the decarbonisation of the electricity sector in order to meet the timetable for the Paris agreement on climate change.
- This will likely require Australia to exceed its target of 26-28% reductions on 2005 levels by 2030, and as the electricity sector is potentially the sector in which the most rapid gains can be made, Government policy should reflect this.
- The Finkel Review of the National Electricity Market delivers a plan which will provide certainty going forward.
- We support the adoption of 49 of the 50 recommendations by COAG, and strongly recommend the adoption of the Clean Energy Target – the 50<sup>th</sup> recommendation.
- While an economy-wide price on carbon or an emissions intensity scheme for the electricity sector are preferred, a CET can still be an effective abatement policy if implemented properly. Its quick adoption will also provide some investment certainty that industry has clearly and legitimately stated for some time as essential.
- As the penetration of renewables increases, there is a need for overcapacity and for storage to address intermittency, and therefore for increased network infrastructure.
- Careful attention therefore needs to be paid to smart-grid software, power engineering technologies and strong network interconnection (HVDC) to optimise the integration of renewables with storage, along with demand side response.
- One mechanism recommended by the Finkel Review to address balancing of intermittent renewables is the Generator Reliability Obligation, which if properly designed could help reduce the risk to energy security - but this should apply to *all* technologies equally – both current and future.
- In order to ensure that the future NEM can evolve without the significant challenges currently being experienced, we support:
  - A technology agnostic approach to market rules and decarbonisation mechanisms
  - Reform of NEM governance structures as suggested by the Finkel Review, with the additional provision of expert advice informed by cutting-edge research to deliver an over-the-horizon perspective, for example through the Energy Research Institutes Council for Australia (ERICA).

Professor Ken Baldwin  
Director, ANU Energy Change Institute