

ATTACHMENT B

Background information on Australia's Future Grid Forum: evaluating whole-of-system options for Australia's future electricity system

As at May 2012

Australia's energy system is expected to undergo a major transformation over the coming decades. This transformation will involve all aspects of the nation's electricity chain.

In preparation CSIRO is convening an Australian-first, whole-of-system Future Grid Forum employing CSIRO's proven 'Futures Forum' capability. By applying this stakeholder-led methodology, the Forum's evaluation of future options will be profoundly influenced by the participating industry stakeholders. Participants will include electricity generators, transmission and distribution network operators, energy retailers, end-user customer representatives, regulators and government (state and federal).

Over a period of twelve to eighteen months, the Future Grid Forum will systematically evaluate all the major options available for Australia's future electricity system from an end-to-end perspective. Beginning with the most efficient pathway under current system settings as a point of reference the evidence-based process will progressively shortlist alternative options with the greatest potential to deliver secure, sustainable future outcomes at lowest system cost.

Importantly, it is expected that this Forum process will help shift the nation's energy debate to a more whole-of-system perspective encompassing the entire energy chain from generation through to the demand-side. By adopting the Energy White Paper's principle of energy productivity, the Forum will provide a roadmap to support investment resulting in sustainable, lowest cost outcomes for electricity users and inform considerations around new regulatory models. The process will complement and build upon the Energy White Paper and reviews carried out by the AEMC, Productivity Commission and others.

During the Forum process, a number of potential scenarios for Australia will be agreed on and explored by the participants. As examples only, the participants may choose to explore the following (or other) scenarios, supported by discipline experts to ensure robust and objective analytics:

- Status quo/counterfactual (based on current industry settings)
- High penetration of renewables
- High demand-side participation, including distributed generation
- Socially constrained / unconstrained technology adoption
- Australia as a clean energy importer (or exporter)
- Evolution under high uncertainty

CSIRO will coordinate the project and partner with selected groups, consultants and academics to deliver quantitative analysis dynamically informed through eight facilitated workshops over twelve to eighteen months.

The communication strategy for the Future Grid Forum will position the project outputs as a highly-credible, transformative road map for the Australian electricity system. The target audience is primarily industry and government, however, several outcomes will be of interest to the general public (particularly those focused on reducing electricity costs and greater customer participation).