



21 July 2014

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Senate Economics Legislation Committee Inquiry into Australian Renewable Energy Agency (Repeal) Bill 2014

The Energy Supply Association of Australia (esaa) welcomes the opportunity to make a submission to the Senate Economics Legislation Committee's inquiry into the *Australian Renewable Energy Agency (Repeal) Bill 2014*.

The esaa is the peak industry body for the stationary energy sector in Australia and represents the policy positions of the Chief Executives of 34 electricity and downstream natural gas businesses. These businesses own and operate some \$120 billion in assets, employ more than 51,000 people and contribute \$16.5 billion directly to the nation's Gross Domestic Product.

The esaa is supportive of public co-funding of research, development and demonstration (RD&D) in the energy industry in instances where there are positive benefits to Australia which cannot otherwise be captured by those developing the technology. For the energy industry, RD&D is an important part of the transition to a low emissions economy. It is an area that is likely to suffer from under-investment without appropriate Government policy support.

The Australian Renewable Energy Agency (ARENA) provides a valuable chance for Australia to undertake worthwhile RD&D into energy technologies that will help to support the transformation of the energy sector through the 21st century.

But the esaa considers that ARENA's funding should be used to fund RD&D rather than the deployment of commercial projects. These projects should instead rely on market forces (supply and demand) to bring such projects on-line.

Problems in RD&D funding

There are inherent challenges and uncertainties in investing in RD&D projects. Internal research on RD&D programs by the esaa found that ad hoc programs and arbitrary changes are not conducive to achieving RD&D objectives or managing these uncertainties.

It begins at the research and development phase where outcomes are highly uncertain. At this phase, the aim is to find technological breakthroughs and reduce costs.

Following this, the demonstration phase may be reached where the technology has been proven in practice. At this point, costs are high and funding is often needed to finance all or part of the costs of the project. The US National Renewable Energy Laboratory (NREL) has found that at this point there is a major challenge in financing. The private sector needs to fund projects that will generate a return, and is generally unwilling to provide finance until results are proven. While the public sector is generally unwilling to provide finance on the grounds that it would be seen to be picking winners. A framework that assesses projects on merit provides a transparent process and high degree of oversight can counter the risk of picking winners. This has been one of ARENA's strengths,

The esaa found that government support should provide a long-term commitment (including support for the different stages of technology development), sufficient resources and be appropriately flexible.

Indeed, there has been little or no predictability regarding the level or direction of future funding support for energy RD&D. The ad hoc nature of programs has meant that businesses involved in earlier stages of technology development have no certainty that funding support may be available in later (and more expensive) development stages. A more structured and enduring framework could promote greater levels of private sector investment and more streamlined pathways to technology commercialisation.

The strengths of ARENA

ARENA has showed great promise in delivering some level of predictability for energy RD&D. Although funding for the Agency has been cut or shifted between years, the existence of the Agency has been a positive development for energy RD&D. Repealing the *Australian Renewable Energy Agency Act 2011* may slow the pace of change needed for the energy industry to adapt to a lower emissions economy.

Funding from ARENA is currently underpinning research into energy technologies and demand management systems appropriate for off-grid regions. This is a fruitful avenue for RD&D given that off-grid energy use is growing (unlike demand for grid-supplied electricity). In these areas, the cost of generation using conventional fuel sources is relatively high so renewable technologies can provide generation at a lower cost differential compared to the cost in Australia's major grids. Due to this smaller cost differential it is also an area where the further development of off-grid systems may have the potential to provide multiple benefits through reduced fuel costs, increased energy security and lower greenhouse gas emissions. Retaining ARENA could allow these projects to continue and see the benefits shared across the economy.

The esaa cautions against repealing the *Australian Renewable Energy Agency Act 2011* given that ARENA represents a stable, long-term form of support for energy

RD&D. The provision of such support is important to help the energy industry continue its transformation to a low emissions future.

Additionally, the esaa considers that ARENA should be used to fund the earlier phases of technology development (research, development and demonstration) rather than the deployment of technologies which may be commercial in their own right rather than relying on government support. In general, if a particular technology type has received support for a commercial-scale project in one funding round, then demonstration has been achieved and the same technology should not be eligible for further funding.

Any questions about our submission should be addressed to Ben Pryor

Yours sincerely

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