



EMERGING RENEWABLES PROGRAM
GUIDANCE TO APPLICANTS
TECHNOLOGY READINESS LEVEL (TRL)

Last updated July 2012

Applicants interested in submitting a Project Expression of Interest or a Measure Application under the Emerging Renewables Program are encouraged to consider including details of the current ‘Technology Readiness Level’ (TRL) rating scale of the emerging renewable technology in their proposal, measured against a suitable internationally accepted readiness scale determined by the applicant.

TRL rating scale details should be included under either **Projects Merit Criterion B – Technical Strength and Innovation**, or the **Measure Merit Criterion A – Contribution to the Renewable Energy Industry** in the Application form.

The following are examples of various TRL rating scales that may be applicable to various technologies. This is not a definitive list and applicants are encouraged to investigate a TRL applicable to the applicant’s own technology. It is important to explain why a particular TRL scale is used and how it was applied to give the technology rating (i.e. self assessment). Applicants are also encouraged to indicate what improvements on the technology scale will occur for the renewable energy technology following the provision of funding.

NASA – TRL discussion papers and use of a generic TRL calculator:

<http://www.hq.nasa.gov/office/codeq/trl/trlchrt.pdf>

http://esto.nasa.gov/files/TRL_definitions.pdf

&

<http://www.hq.nasa.gov/office/codeq/trl/trl.pdf>

US Department of Energy (DoE) discusses the use of the TRL:

<https://www.directives.doe.gov/directives/0413.3-EGuide-04a/view>

This link provides information from the US audit office on the benefits of a TRL and managing funding programs.

<http://www.gao.gov/highlights/d073336high.pdf>

The CSIRO TRL

http://www.ret.gov.au/energy/Documents/Unlocking_Australias_Energy_Potential.pdf

European Marine Energy Centre – uses the TRL in a marine application,

<http://www.emec.org.uk/services/provision-of-wave-and-tidal-testing/pathway-to-emec/technology-readiness-levels/>



Australian Government
Australian Renewable
Energy Agency

Hydraulics & Maritime Research Centre - discusses the use of TRL directly with marine technology, <http://www.waveplam.eu/files/downloads/SoA.pdf>.

The United Kingdom Department of Energy and Climate Change links the TRL metric with the innovation chain,
http://www.eve.es/jornadas/ponencias_energia_marina_09/Raggatt_Trevor.pdf

Please note: The TRL score submitted will be one of several tools available to the Board and Program Delegate in the merit based assessment of an application and in no way guarantees the provision of grant money from ARENA.