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Wind Turbine Testing



rise
Research Institute for
Sustainable Energy

Background

RISE has played an important role in supporting the development of the Australian wind turbine industry for over 15 years. Building on this track record, in 2008 RISE was awarded a \$1million grant from the Federal Department of the Environment, Water, Heritage and the Arts to establish the National Small Wind Turbine Test Centre. This new Centre will augment the existing wind turbine monitoring and assessment resources available at RISE. The Centre will play a leading role in encouraging the adoption of emerging wind turbine technologies in those parts of Australia which have suitable wind energy resources.

Performance Testing

The Centre consists of an experienced team of engineers and technicians together with infrastructure, expertise and state-of-the-art test equipment. The Centre undertakes the evaluation and performance testing of small wind turbines up to 50 kW in size. Each turbine is tested over a six month period to establish the following key parameters:

Power curves - validation of the manufacturer's performance claims over a range of wind speeds, aggregated over time.

Energy yield - determination of the amount of energy likely to be generated per annum, for a specific average wind speed.

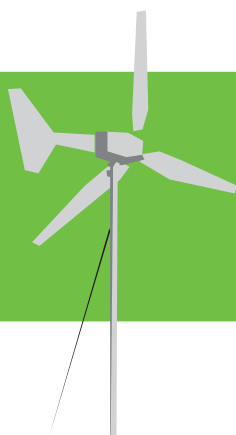
Acoustic noise level - measurement of the noise footprint using internationally agreed techniques.

Standards Development & Labelling

The Centre complies with the IEA's testing practices and provides input into both Australian and IEC standards for small wind turbines, including labelling. Development of internationally agreed consumer labelling for small wind turbines will provide enormous benefit to consumers, manufacturers and installers as it will enable purchasers to make informed comparisons between different types.

Industry Support

The Centre will test and label Australian designed and manufactured turbines at a heavily subsidised rate, as well as offer training courses for professionals and installers of wind turbines.



For more information on the services offered by the National Small Wind Turbine Testing Centre, please contact Andrew Beveridge

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