

Why wind power generation is essential for Australia

1. Australia already lags the United States, China and Europe in renewable energy production.
2. Australia will lag Europe, China and North America as they transform into post-carbon economies without alternative energy productoin. Great Britain is in the process of significant expansion of wind power generation capacity.
3. Wind power generation produced at the end of 2009 only 1877 MW or 1.3% of Australia's national electricity demand¹. Europe is aiming at a 20 percent component.
4. Failure to invest in wind power and continued reliance on coal in terms of power production and coal exports will leave Australia paying penalties in general international trade in a global post-carbon economy.
5. Opposition to wind farms on NIMBY grounds or in the interests of the coal industry will irreparably damage our future domestic regional economies and disadvantage the nation relative to overseas economies.
6. Wind farms cannot be considered in isolation from other forms of renewable energy and should be regarded as a component of a comprehensive strategy with complementary technologies including geothermal sources where available, solar power generation, and the reduction of power usage by employing “green” architectural principles in new and renovated buildings.
7. A comprehensive renewable energy policy for Australia would include an objective to ensure that every household and business, where possible, becomes responsible for the generation of at least half of its power usage.
8. Australia has already lost power generator production opportunities to the Scandinavian countries.
9. Much opposition to wind farm power generation fails to consider the domestic and international benefits to Australia from wind power generation.
10. A common complaint are noise levels and vibration. My personal experience standing in a field of wind turbines in Cornwall, United Kingdom, was that there was no noticeable noise level from the modern generators used. Nevertheless, as pointed out in point 13 below, wind generators should not be located close to dwellings, and resonance should be investigated as an issue.
11. Another objection raised by opponents of this form of renewable energy is on the basis of higher costs. In 2008, the California Energy Commission and the California Public Utilities Commission found that wind power cost 8.9 cents per kilowatt hour compared to a range of 10.6 – 17.3 cents for coal-fired power generation². However, the usual experience is that there is a premium on wind power generation that should fall with the take-up of wind generation as a significant percentage of world electricity production. The American Wind Energy Association, the industry association reported a fall in contract prices in 2010 to 5 to 6 cents per kilowatt-hour³.
12. While a number of pressure groups overseas have opposed the development of wind farms, the environmental basis for wind farms have much fewer consequences than coal-fired power stations. With a greater reliance on wind power and a decrease in coal-fired power generation, there will be environmental benefits, including improved air quality in regions such as the Hunter Valley, which are presently degraded by coal-fired generators and coal

¹ International Energy Agency (2009).IEA Wind Energy: Annual Report 2008, pp. 79-82.

² http://www.sourcewatch.org/index.php?title=Comparative_electrical_generation_costs accessed 8 February 2011

³ American Wind Energy Association, Press Release, January 24, 2011, http://www.awea.org/rn_release_01-24-11.cfm, accessed 8 February 2011

mining, through reduction in the production of carbon dioxide and particulate matter into the atmosphere as coal-fired generators are phased out.

13. The development and location of wind farms needs to be sensitive to species, especially bird migratory paths, heritage and urban issues. While conventional wind generator towers are aesthetically pleasing [form and function] not all respond to these constructions positively and in any case account has to be taken of prior land usage and human communities.

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