GROUNDSWELL BASS COAST WIND ENERGY POLICY - November 2011:

Preamble:

Groundswell Bass Coast believes human induced global warming is real and is accelerating. Greenhouse gas emissions must be reduced drastically in a short time frame if we are to avoid damaging changes to earth's natural systems. Australia is the world's highest per capita emitter of greenhouse gases, and as a nation one of the world's top twenty emitters. Australians enjoy a very high standard of living, partly because of our use of fossil fuels. We are obliged therefore to lead by example and provide solutions to the problem of global warming rather than deny developing countries the opportunities to enjoy a higher standard of living.

In light of the above, Groundswell has framed a wind energy policy.

Wind power as part of a strategy to reduce greenhouse gas emissions:

- The only currently available renewable energy options scalable in the timeframe necessary to
 preserve a safe climate, are wind and solar, and to a lesser extent biomass. Wind and solar
 compliment each other and support the electricity grid.
- Wind power will need to be an important part of the energy mix in Australia over the next decade. (Note that wind already exceeds 20% of electricity generation in South Australia, Iowa and Denmark and is greater than 11% in Germany and Spain.
- Australia and Victoria have a target of 20% renewable energy by 2020. This is unlikely to be met without a substantial increase in installed wind energy.

Siting and planning issues:

- Unfortunately there has been some community opposition to wind projects in Victoria. This is largely not the case in other states. This seems to be the result of poor planning around some existing developments, and both negative rhetoric and legislation from government.
- Detailed and timely consultation with local communities must occur with a full disclosure of relevant information. Communities need to be given some certainty about what might happen in the future.
- State and Local planning regulations need to encourage wind energy as part of the solution to
 ocean and climate change. At the same time projects need to fit within a planning framework
 which ensures all amenity and environmental impacts are minimised to the greatest extent
 possible.

Benefits of wind:

- Every unit of wind energy fed into the grid means the same amount of energy can be removed from production at fossil fuelled power stations. [Ref 1]
- Adding wind energy makes our electricity network more reliable and assists with meeting peak demands. [Ref 2]
- Economic and job benefits come to a region where large wind facilities are built. The Climate Commission estimates that more than \$3 billion in new investment and 7000 jobs would come to regional Victoria if it were not for negative state government policy.
- Wind, having minimal production costs, reduces the wholesale cost of electricity to us all. [Ref 3]
- Community owned wind farms promote a shared awareness, encouraging responsible energy use.
- Small scale wind generation can provide the user in suitable locations with power of the highest efficiency as it is used where it is being generated, avoiding transmission losses.

Negatives of wind:

- Some people believe that their health has been compromised as a result of their proximity to wind turbines, but most reports of adverse effects on health are anecdotal. [Ref 4]
- Studies show wind turbines kill one or two birds each year on average. This is similar to the number killed each year by hitting the windows of a house. Nevertheless bird kill is now being taken into account in the siting of turbines, so fewer should be killed.
- Visual amenity is an issue for wind farms, as it is for power stations, transmission lines, gas wells
 and coal mines. As part of the planning process each community should have the right to identify
 places of special scenic or environmental significance where they feel turbines should not to be
 located. In this process the urgency of the climate crisis and the valuable contribution wind
 energy can make to reduce this crisis must be borne in mind. A compromise on the number and
 size of protected sites, or a priority listing of sites may be required to enable sufficient wind
 energy to be developed.

Government incentives and grid upgrades needed:

All levels of government need to assist the development of appropriate wind energy wherever possible in order to reach the scale required to help reduce greenhouse gases. This should include initial subsidies until increased production brings economies of scale.

Government needs to plan and commission new electricity grid infrastructure to encourage wind farms in the most appropriate locations in relation to wind resource and population centres. [Ref 1]

References:

[Ref 1] Currently this is possible to a penetration of up to 20% renewable energy. Future network upgrades will allow a higher renewable energy input. As part of the federal government's carbon price package the Australian Energy Market Operator will be tasked with preparing plans for the national electricity grid to operate with 100% renewable energy.

[Ref 2] Compared with large, coal fired generators, catastrophic output reductions don't happen when one unit goes off line. Wind power operation is not as severely affected by heat as many fossil fuelled power generators. Sea breezes that typically blow on hot summer afternoons along the Bass Coast provide power to offset air-conditioning use further from the coast. Howling winter winds will also offset heating energy use in winter. Geographic spread of wind across the country means power is being generated by wind in one region even if it isn't in another.

[Ref 3] Despite the higher levelised cost of wind energy compared to baseload coal or the less expensive gas plants in Victoria, the 'merit order effect' means that wind, which has no fuel costs, is always able to bid into the dispatch system at low cost. This keeps the spot price of electricity lower than it otherwise would be. (http://en.wikipedia.org/wiki/Economic dispatch and http://climatespectator.com.au/commentary/why-wind-cutting-energy-costs) and http://www.climatespectator.com.au/commentary/why-solar-parity-scares-big-utilities

[Ref 4] In a study conducted by Professor Wittert, looking for expected medication of real illnesses, (http://www.abc.net.au/news/2011-07-25/research-challenges-wind-farm-illness-link/2808824), he reported, "There is no hint of an effect on a population basis for an increased use of sleeping pills or blood pressure or cardiovascular medications whatsoever". While Groundswell is not opposed to further study, at this stage there is no hard evidence to suggest that wind farms physically affect health. Medical and scientific studies are indicating anxieties and fear of the unknown are being used by vested interests and a sensationalist media. This negativity is leading to real hardships for a few people from perceived ill effects (Ref - Medical Journal of Australia, 7th November 2011 article, Prof Simon Chapman, School of Public Health, University of Sydney). Groundswell aims to counter the negativity and reduce the level of stress some are suffering by publicizing the facts and benefits of wind power.