Wind Farms – the real story

Local environment group BEAM: Mitchell Environment Group invited Friends of the Earth to work with it to produce this flyer to reinforce the positives of wind farms and counter some of the myths that have been circulating.

Myth: Wind farms cause health problems

FACT: Wind farms have a clean bill of health

- More than 17 independent and peer-reviewed studies have shown turbines do not affect health—that of humans, animals or even earthworms (as suggested by some anti-wind energy campaigners).[1]
- Australia's authority on public health research, the National Health and Medical Research Council (NHMRC), has said: "There is currently no published scientific evidence to positively link wind turbines with adverse health effects."[2] The NHMRC is currently updating its assessment of wind farms and public health and the results of this are due by mid 2013.
- The incidence of reported wind turbine syndrome in Australia is very low compared to the number of people living near wind turbines. Incidence of wind turbine syndrome is more likely where anti-wind turbine activism has taken place.

1 http://tobacco.health.usyd.edu.au/assets/pdfs/WindHealthReviews.docx
2 http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/new0048_public_statement_wind_turbines_and_health.pdf

Myth: Wind farms cause bushfires

FACT: Wind farms are not a significant fire risk

- Wind turbines are predominately sited on managed / grazed grassland. While there have been a small number of fires in turbines recorded in Australia, none have escaped and become wild fires.
- "Wind farms can be struck by lightning, just like tall buildings, but they are equipped with comprehensive lightning protection systems that transfer high voltages and currents safely to the ground."[3]
- New access roads at the wind farm site will improve fire truck access in the area and enhance the ability of CFA to combat bushfires, whatever the cause.
- Fire risk is "less of an issue in comparison to conventional power generation sites as power transmission is located within the towers and underground to the transformers."[4]

3 "The wind energy fact sheet" Department of Environment, Climate Change and Water NSW, 2010
4 http://www.cfa.vic.gov.au/fm_files/attachments/Publications/CFA_Guidelines_For_Wind_Energy_Facilities.pdf

Myth: Wind farms are noisy

FACT: Wind farms are quiet

- Wind farms built in Australia must be built to meet strict noise regulations. Wind farms are substantially quieter than other sounds experienced in every-day life.

Noise source	Noise level (dBA)
Jet aircraft at 250m	140
Pneumatic drill at 7m	95
City traffic	90
Truck at 50km/h at 100m	65
Conversation or busy general office	60
Car at 65km/h at 100m	55
Busy road at 5km	35-45
Wind turbine at 350m	**35-45**
Quiet bedroom	30
Rural night-time background	20-40

Source: http://www.embark.com.au/display/public/content/Wind+myths+and+facts#Windmythsandfacts-Noise

Myth: Wind farms cause disproportionate harm to animals

FACT: Wind farms are one of the most animal friendly forms of energy

- All electricity generators pose risks to wildlife. A 2009 study conducted for the New York State Energy Research and Development Authority found wind farms have the least impact on wildlife compared to other forms of electricity generation.[5]
- Wind turbines have no observable impact on livestock. Cattle, sheep and horses are known to graze and seek shelter around turbines.
- Bird and bat strikes may occur but will not affect the populations of any species compared with population losses which would be caused by climate change.

5 http://www.nyserda.ny.gov/en/Publications/Research-and-Development/~/media/Files/Publications/Research/Environmental/Report-09-02-Wildlife-report-web.ashx

Myth: Land and property will be devalued

FACT: Wind farms do not adversely affect real estate value

- In 2009, the NSW Valuer General assessed 45 property sales within a 10km radius of eight wind farm sites in NSW. It found wind farms do not appear to negatively affect property values. No reductions in sale price were observed for rural properties located in nearby townships with views of the wind farm.[6]
- In Waubra, the location of one of Australia's largest wind farms, the real estate value of residential properties has increased 10% over the last two years.[7]

6 http://www.lpi.nsw.gov.au/__data/assets/pdf_file/0018/117621/t0L51WT8.pdf
7 http://www.pyrenees.vic.gov.au/Your_Council/Councillors/Council_Meetings/21082012

Myth: Wind power is inefficient

FACT: Wind power is efficient & effective

- Wind farms in South Australia have overtaken coal power plants to provide 33 percent of the state's electricity needs. Wind farms have proven reliable.
- Wind varies from location to location, so windfarms distributed nationally ensure a reliable flow of electricity.

Myth: Wind energy is costly

FACT: Wind energy is affordable and reduces the price of electricity

- According to the Australian government Bureau of Resources & Energy Economics research, wind farms will produce the cheapest electricity in Australia by 2020.[8]
- Wind energy companies do not receive taxpayer-funded subsidies. Renewable energy target (RET) legislation compels electricity companies to purchase renewable energy certificates equivalent of 9.15% of their market share (rising to 20% by 2020). In South Australia, where wind energy is lowering the price of electricity, the cost savings for consumers more than offset the impact of the renewable energy target legislation.
- The large-scale RET adds about $36 a year to the average household electricity bill[9].
- Energy analysts from the University of Melbourne Energy Research Institute identify South Australia's large wind energy generation capacity as the reason why the South Australian Essential Services Committee recently ordered retailers reduce their tariffs by 8 percent—saving the average household around $160 per year on electricity bills.[10]

8 http://reneweconomy.com.au/2012/canberra-concedes-wind-solar-to-be-cheapest-energy-by-2030-82930
9 Report CEC00005 to the Clean Energy Council "Impact of renewable energy and carbon pricing policies on retail electricity prices" 2011
10 http://theconversation.edu.au/power-of-the-wind-how-renewables-are-lowering-sa-electricity-bills-9945

Cherry Tree Range wind farm:

Good for jobs, the local economy and our climate

Wind farms strengthen the local community

- The Mitchell Shire region will benefit from the direct and indirect economic activity generated by the Cherry Tree Range wind farm.
- The project is estimated to provide $76,000 p.a. for the Mitchell Shire Council and $500 per MW installed for a community fund managed by locals (est. at $20,000 p.a.).
- Wind farms provide non-rainfall dependent income for landowners—crucial during time of drought.

Cherry Tree Range: planning & public support

- The proposal meets the Victorian government's stringent wind farm planning regulations. Mitchell Shire planners recommended approval for the proposal.
- Yes 2 Renewables listening posts and BEAM's community engagement finds a silent majority of community members support the Cherry Tree Range wind farm
- The Mitchell Shire Environment Advisory Committee and BEAM: Mitchell Environment Group are supportive of the development and believe that environmental issues can be addressed in the planning process. Friends of the Earth Australia also support the proposal.

Helping Victorians to address climate change

- On a per capita basis, Victoria is the most polluting state in the world's most polluting developed country.
- Renewable energy projects such as the Cherry Tree Range wind farm are crucial for Victoria to lessen its climate change impact.
- With a forecast generation capacity of 40 megawatts, the Cherry Tree Range project will provide enough clean renewable energy to power 23,000 Victorian homes annually.
- The project will help Victoria, Australia's most polluting state, avoid the emission of 127 tonnes of carbon dioxide each year—equivalent to taking 40,000 cars off the road annually.

Wind farms create jobs

- During construction, the Cherry Tree Range wind farm would employ hundreds of personnel in civil, electrical and wind turbine works. It will continue to employ several locally-based personnel during its operation.

Friends of the Earth and BEAM (Mitchell Environment Group) are independent environmental organisations, funded primarily by their individual members and supporters. Neither group has received funding from the developer.

For more info visit: beam.org.au - Yes2Renewables.org - foe.org.au or email: beamprowindfarm@gmail.com