Shooting the Breeze...

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Climate change: can we really do anything about it?

A recent nation-wide Morgan poll showed that 88% of Australians believe that "if we don't act now we will never solve our environmental problems".

Climate change is the single greatest environmental problem facing the world, and a matter of global concern. It is happening now, and accelerating at a rate that has people everywhere deeply worried. Any day of the week you can see or read about melting icecaps, reduced rainfall, increasingly severe storms, species extinctions, severe droughts, crop failures, unprecedented earthquake activity ... There's no longer any doubt that climate change is happening – but what on earth can we, here in Denmark, do about it?

The one thing we must not do is bury our heads in the sand: climate change will affect us every bit as much as it will the rest of the world – maybe later than in some places, but ignoring it and doing nothing will not make it go away.

A popular 1970s bumper sticker read: "I figured that somebody would do something about it. Then one day I woke up and realised I'm somebody".

Everybody will be affected, so everybody shares the responsibility of doing something – switch on one less light in your home tonight, and you are making a contribution to reducing climate change.

There are many ways to help, from the very simple to the very complicated.

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The proposed windfarm is a community-based initiative – not a private venture – to do something positive about our reliance on non-renewable fossil fuels, and reduce local emissions of greenhouse gases (GHG), the largest single contributor to global warming.

The projected world demand for electricity by the middle of this century has reignited the nuclear debate – but it would require literally thousands of nuclear plants to be built, and none would come online for at least ten years, even if construction started today.

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HEADS IN A SPIN. Denmark visitors admire the Albany windfarm during a bus trip last March, organised by DCW. Some had never seen a windfarm before, and comments ranged from "Stunning!" to "I didn't realise they were so quiet, and so beautiful". One visitor even asked if he could have "a turbine or two" on his farm.

Who supports the windfarm proposal?

- 145+ paid-up members of DCW, including 20 who have contributed a total of $25 000 early-investment capital
- The State Government
- The WA Greens
- Greenpeace
- WWF
- The WA Environmental Protection Authority
- The Department of Conservation & Land Management
- The federal Department of Environment & Heritage
- The federal Department of Transport & Regional Services, through its Regional Partnerships scheme
- The Great Southern Development Commission
- The Australian Wind Energy Association
- The Conservation Council of WA
- The Australia Institute
- Senator Lyn Allison, federal leader of the Democrats
- The Denmark Environment Centre
- The Denmark Conservation Society
- The Denmark Chamber of Commerce

Comment:
Making headlines

Unless you've been hibernating, you'd know that our little windfarm project has been making headlines across the country lately.

Federal environment minister Ian Campbell started using Denmark for target practice after he and Wilson Tuckey barnstormed through here on a two-hour "fact-finding" mission last November. (If you'd blinked at the time you'd have missed that, too.)

Senator Campbell knew nothing about the project then, and still doesn't. He has never contacted DCW or responded in any way, but is happy to keep making headlines, based on falsehoods. His proposed national code for windfarms offers nothing that is not already available under WA's existing planning legislation.

Sen Campbell runs hot and cold on wind energy: just after he had fired his opening salvo at Denmark he stood in Tasmania's Tarkine Wilderness and said that Australia had to "throw everything it has" at climate change. A few months later he rejected Victoria's Bald Hills wind project—the now-infamous Orange-Bellied Parrot decision—then went off on a trade mission to China, to "demonstrate the seriousness and extent of Australia's interests and capabilities in [the renewable energy] area." Fortunately, the future of our project is not dependent on him, or additional federal money.

The media has propagated more misinformation about this project than Sen Campbell and local opponents combined. There have been articles about the project since last November, but the press only began contacting DCW a month ago.

Even then, media coverage has mostly trivialised and sensationalised the issue. It has not bothered to separate fiction from fact, and peddled opinions so far removed from reality as to be ludicrous.

So much for balanced reporting.

THE ANSWER, MY FRIEND ... The Albany windfarm attracts around 40 000 visitors a year. Denmark's windfarm would bring extra tourist dollars to the community, as well as showing the world that Denmark people are serious about fighting climate change.

What can we do about climate change?

➤ from front page

Nuclear energy currently supplies around 15% of the world's electricity. It is not as clean as it likes to claim, and there remains the question of disposing of radioactive waste. And the lingering legacy of Chernobyl.

Burning coal for power, and oil used as fuel in transport, contribute the vast majority of annual global GHG emissions. And which country has the highest per capita production of GHGs in the world? Australia (see Table 2).

At this stage there are no plans to build nuclear reactors here because coal and gas are still cheap, thanks to huge government subsidies. Solar energy is extremely efficient but very expensive, and other technologies such as biomass and wave power are still in their infancy. Research into geosequestration ("burying" carbon dioxide) is proving hugely expensive, slow to yield results, and remains unproven. So, is there a realistic alternative that will cut our GHG debt, which is cost-effective and available now?

Wind power is the fastest-growing energy sector in the world, last year increasing 43% over the previous 12 months. Wind is free, abundant and non-polluting, so the small community-scaled windfarm proposed for Denmark will reduce our local reliance on fossil fuels—especially coal, which is finite, inequitable and highly polluting.

The country of Denmark provides 20% of its total power requirements from wind. Our Denmark has a long record of innovation in environmental care, so a small-scale windfarm is a great opportunity for us to encourage other communities in Australia to do the same.

Even the small windfarm we propose is a major local business enterprise which will boost the local economy, provide employment opportunities and help to fund other community projects.

We all have to take responsibility for dealing with climate change, so what better way to start than by building something which is environmentally, economically and socially sustainable – and helps to clean up the planet?

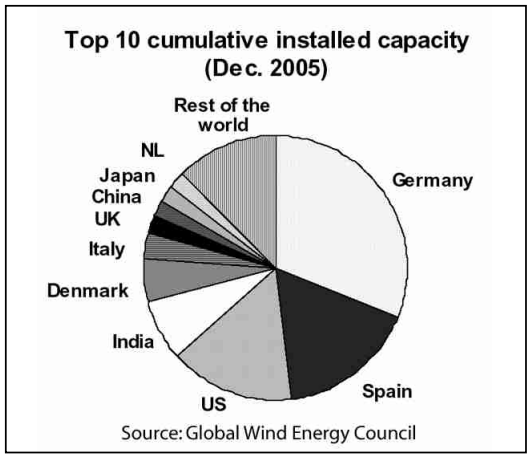

Table 2: As the rest of the world rushes to adopt wind power, Australia – one of the windiest, least-populated countries on the planet – has less than one per cent of the total installed capacity of 11 770 megawatts.

WE SEE BEAUTY through filters shaped by our values and beliefs. Some people think wind turbines are ugly. I think smokestacks, smog, acid rain, coal-fired power plants and climate change are ugly. I think windmills are beautiful. They harness the power of the wind to supply us with heat and light. They provide local jobs. They help clean our air and reduce climate change.

• Dr David Suzuki, in 'New Scientist', April 16, 2005

Facts and fallacies

Why a windfarm ?

Denmark currently spends about $1m a year on electricity generated from coal, so each of us is contributing to climate change, and sending money out of the community. A windfarm owned and operated collectively by the people of Denmark has benefits for the local economy, our own families and businesses … a kind of local "Bendigo Bank" for electricity. The environmental benefits include preventing thousands of tonnes of carbon dioxide and other greenhouse gases (GHGs) entering the atmosphere. Wind turbines are large structures, but they will do a big job for our community.

What are the disadvantages ?

The location presents some technical difficulties, and has caused some disharmony in the community.

Were other sites investigated ?

The whole of Denmark and the western edge of the City of Albany were investigated, and seven potential sites identified. Using industry and government criteria it became clear that Wilson Head was the most suitable site, for a variety of reasons – see Table 1. Lack of federal government financial support for wind power has meant that windfarms have to be on the windiest, most economically-viable sites, which in southern WA are on the coast.

Is the site environmentally sensitive ?

The Wilson Head reserve has become degraded over many years by fires, grazing livestock, weeds and feral animals, uncontrolled 4wd access … and the lime quarry. Areas disturbed during construction will be rehabilitated to approved standards. Ninety-nine per cent of the reserve will remain untouched.

How big will the windfarm be ?

The proposal is for two or three turbines (not four or five), which will still supply enough electricity for local households. The turbines will be about 25% smaller in size than Albany's.

Will it get bigger ?

It doesn't need to, though the site is big enough to take several more turbines of the size proposed. Two or three turbines will produce enough power for present and likely future demand. Besides, we should all be reducing our power consumption, through energy conservation and using electricity more efficiently.

Does it have to be in Denmark ?

If our community is to gain the environmental, economic and social benefits, the answer is yes. If you don't care where your electricity comes from, or how it is produced, your answer may be no. Quite simply, if the windfarm was somewhere else it wouldn't be Denmark's, so the direct benefits would go elsewhere.

Will I get electricity from the windfarm?

Think of electricity as water: when the "tap" is turned on (the wind is blowing) power will run directly into your home. Any excess will "spill" along the grid, to Walpole and Albany. When the turbines aren't turning electricity will come from outside Denmark.

Will my electricity bill be lower ?

The windfarm will feed electricity into the local grid, so you will still buy your power from Synergy (formerly Western Power). When the wind is blowing you will get power from the windfarm, without paying any extra. If you become a shareholder in the windfarm your annual dividend will be like a rebate on the power you use. (See 'US wind users pay less' on the back page.)

Why can't the wind farm go somewhere else ?

Unlike water, some electricity is lost the further you "pump" it. That's why it's best to put a windfarm as close as possible to the point where its power will be used.

Why can't we use power from the Albany windfarm instead ?

We already do, when Albany's demand is less than its windfarm produces – which isn't very often. Once again, if our windfarm isn't in Denmark our community will get no direct benefits.

How visible will it be ?

The turbines will not be visible at all from Ocean Beach, and from most points in the landscape will be reduced by the hilly topography. Our windfarm is much smaller than Albany's: two or three turbines rather than 12, and not as tall.

Will the turbines be noisy ?

You can hold a normal conversation under a modern turbine. The windfarm will be more than two kilometres from the nearest homes.

Will birds be killed ?

Studies into Australian windfarms indicate one or two bird deaths per turbine, per year, on average. Many more are killed every day by vehicles, cats, powerlines etc – and entire species are already disappearing, through climate change.

Will my property be worth less ?

There is very little evidence of properties near windfarms decreasing in value. Some real estate agents in Albany actually use views of that windfarm as a selling point!

	CRITERION 1=Lowest, 5=Highest	West Denmark	Sleeman River	Sunny Glen Rd	Morley Beach	Sunrise Road	Crusoe Beach	Nonalup Point	Wilson Head
1	**Geographic setting -** extensive flat areas or cleared land, particularly to the NE and SW	2	4	4	5	3	4	4	5
2	**Elevation terrain -** areas above 50m AHD, or gently sloping landscapes	2	3	3	3	5	3	3	5
3	**Surface roughness -** tall vegetation, water bodies, plantations, rocky outcrops	3	4	4	4	3	4	4	4
4	**Proximity to high voltage transmission -** robust 3-phase 22KV powerlines	4	5	5	5	4	5	5	4
5	**Proximity to road access -** within 1.5km of formal access	4	4	4	4	4	4	4	3
6	**Proximity to residential development -** no closer than 800m to homes or accommodation	3	3	2	2	3	1	2	5
7	**Land tenure -** avoid national parks & nature reserves, favour private or shire land	5	5	5	5	5	5	5	5
8	**Environment & amenity -** proximity to wetlands, visibility, existing impacts	5	3	3	3	4	3	3	4
9	**Safety & infrastructure -** proximity to airfields, communication towers etc	4	3	3	3	3	3	3	5
10	**Social & economic -** education values, proximity to tourist routes, competition with other landuses	3	3	3	3	4	3	3	4
11	**Nominal wind resource -** estimated wind energy	2	2	2	2	3	4	4	5
	Nominal score	37	39	38	39	41	39	40	49

Table 1. Wilson Head was chosen because it best meets the criteria for a successful windfarm. None of the other sites investigated would be economically viable, or has nearly as much wind. The chosen site also meets the national guidelines of the Australian Wind Energy Association (AusWEA) and the WA Planning Commission.

US wind users pay less

(from The Los Angeles Times, October 15, 2005)

Skyrocketing oil, natural gas and coal prices mean that Colorado's 29 000 wind-energy customers will next month pay less than 1.3 million customers using conventionally-generated power.

Fuel costs will force the Xcel power utility to raise rates by $116m for its conventional customers, enabling wind-power customers to save an average of $10 a month.

In Edmond, Oklahoma, wind-power users already pay less than other customers, and the wind program in Austin, Texas, will cost less than conventional power from January.

The price of natural gas has tripled in the past three years,and the price of coal, the other fossil fuel used to generate electricity, has also shot up.

Many energy experts see conventional fuel prices remaining high, and say that the new savings to wind customers indicate a fundamental shift.

"As you see lots of different utilities moving to renewables, I think that will spur innovation that will bring the cost down. Green power will make even more economic sense in the future," says Los Angeles Department of Water and Power spokeswoman Kim Hughes.

Advocates say the cost stability of wind power, compared with the fluctuations of coal and gas, is one of its best attributes.

Final feasibility report due this month

The long-awaited final feasibility study for the windfarm is due any day, and will indicate whether the project is financially and technically viable.

Watch this space!

Like to join us?

What's in a name?

Not much, if the name is "CONSERVE" or "South Coast Landscape Guardians".

As part of their misinformation campaign some local windfarm detractors claim to represent one or other of these "groups", giving the impression that they have meaningful numbers or organised backing.

However, neither name is registered with the Department of Consumer and Employment Protection (DOCEP), the government agency responsible for registering business names and incorporating associations.

"The opponents continue to downplay the level of support for the project, by claiming that we have only about 30 members," said DCW chairman Craig Chappelle.

"In fact DCW currently has more than 140 members, and the number is growing steadily. Each of our four or five most vocal opponents, on the other hand, has a membership of one."

> THE WORLD has been trashed for centuries by our quest for mineral fuels ... Windfarms will be part of our landscape by 2010. Will we then wonder what all the fuss was about? Provided we site the farms out of wildlife's way, we won't damage the land in our search for power.
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> • Birds Australia,'Wingspan', March 2005

Want to know more?

Call a DCW management committee member if you have any questions or want to know more about the proposed windfarm - or visit our website: www.dcw.org.au The committee is: Craig Chappelle 9848 1150, Murray Thornton 9848 1917 (a/h), Roger Seeney 9840 9036, John Sampson 9848 1629, Gary Schwab 9840 9123, Duncan Archer 9840 9940, Peter Keynes 9840 9230, Arley Egerton-Warburton 9840 9422, Cheryl Reid 9840 9002.

Denmark Community Windfarm Inc is registered as a voluntary, not-for-profit association, and is made up of local people who care about the world we live in and making it better for future generations.

Denmark Community Windfarm Inc

PO Box 518 Denmark 6333 • ABN 72 668 575 623

Membership application

Dnk Bulletin 657

Name/s (PLEASE PRINT).....

Postal Address .....

Residential Address (IF DIFFERENT).....

Phone..... Fax.....

Email (PLEASE PRINT) .....

Fees enclosed: $5 individual > ☐ $10 household > ☐ $25 corporate > ☐

Signed..... Date .....

Please post your completed form, with your payment, to the address above. Thank you.

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Mbsp Yr Date Rec / / Rcpt No