

10 February 2011

Department of the Senate  
PO Box 6100  
Parliament House  
Canberra ACT 2600

By email: [community.affairs.sen@aph.gov.au](mailto:community.affairs.sen@aph.gov.au)

## The Inquiry into the Social and Economic Impact of Rural Wind Farms

Hepburn Wind welcomes the opportunity to provide a submission to the Senate Inquiry into the Social and Economic Impact of Rural Wind Farms.

### Overview

Hepburn Wind is a community co-operative building Australia's first community owned wind farm. Almost 1600 people, most of whom are local to the area, have pooled funds to build a two turbine, 4.1 MW wind farm at Leonards Hill, in Central Victoria.

At the project's core is the shared desire to take constructive action against climate change and in the process directly benefit the community.

### Background

In early 2005 a small group of Daylesford residents attended a community consultation meeting for the proposed Clarkes Hill wind farm. The proponent was given a clear message by an aggressive crowd that the wind farm was not welcome. The proposal was later dropped and some in the community claimed a victory.

This strongly negative initial reaction has become an unfortunately common occurrence in many Australian communities upon encountering wind farm proposals. However in our community the story took another direction.

The Daylesford residents drove home from the meeting, upset by the community's first response. One of members of the party, Per Bernard, was born in Denmark and was very familiar with the Danish model of community ownership of wind farms. Denmark, with less than one-quarter of our population, boasts over 2100 community wind farms, comprising more than 5500 turbines. Denmark produces more than 20% of its electricity with renewables, and more than half of this comes from community wind farms. More than 200,000 Danes are direct beneficiaries of wind energy via a personal stake in a community wind farm.

Led by Per, a dedicated group of Daylesford locals embarked on an ambitious plan – they committed themselves to building a local wind farm that would benefit the entire community. In doing so they would be taking responsibility for a significant part of the local community's emissions as well as sending a signal that our community wanted to see rapid action on climate change.

With the assistance of a small wind farm developer, the group obtained a planning permit for the Hepburn Community Wind Farm in 2007, which was later successfully defended at Victorian Civil and Administrative Tribunal (VCAT). The project also secured critical funding support from Victorian Government.

The wind farm is located in Leonards Hill, on the outskirts of Daylesford, in Central Victoria. With only two turbines, the wind farm is one of the country's smallest. The project has been deliberately sized to match the domestic electricity consumption of Daylesford and much of the surrounding area.

Hepburn Wind has raised more than \$8.7m in capital from almost 1600 members, the majority of whom are local to the area. The project is a community co-operative with members receiving equal voting rights (ensuring democratic control) and proportionate returns from the farm.

The farm is currently under construction and is expected to be generating by the middle of 2011.

## **Noise and health**

We are often asked questions in relation to turbine noise and health effects. We take these questions seriously. Hepburn Wind prides itself as being informed on these issues and finds that there is much misinformation which adds emotion to the debate. We have attended community forums in other towns where much misinformation is given by opponents, and we have witnessed the hysteria that results.

We consequently spend a lot of time on education and providing information such that individuals can develop an informed opinion.

A rigorous noise monitoring protocol was imposed upon Hepburn Wind by VCAT as part of the challenge to our permit in 2007. As a result, we are required to monitor noise levels at 17 houses in the local area before and after the wind farm is commissioned. This is being done to the relevant standards by an independent body and the results will be made public.

To date we have seen no objective evidence which provides any credible link between wind farms and adverse health impacts, however we are very aware that this is a significant concern for some in the community.

As we frequently engage with the public in relation to wind farms, we are acutely aware of claims that have been made about noise and health issues relating to a nearby wind farm. While we do not believe that the characteristics or sound levels from wind farms generally pose a threat to health, we believe that it is in the interest of the entire community for these allegations to be investigated in a very transparent and rigorous manner.

## Set-backs

We strongly object to the notion that a distance based set-back is appropriate for wind farms.

When evaluating a wind farm proposal, the relevant authority needs to take into account:

- visual amenity
- noise
- shadow / flicker
- flora and fauna
- cultural heritage

The various planning systems in each state contain comprehensive frameworks for evaluating the above impacts. If the existing frameworks can be shown to be defective in allowing unsuitable projects to be built, the standards embedded in the planning frameworks should be amended accordingly.

The nearest house to our turbines is 509 m, and the nearest house not in the ownership of our landowner is 519 m. It should be noted that a 2 km setback would have prevented the development of our site at Leonards Hill, however our project has clearly met all of the relevant planning considerations, and has withstood significant scrutiny during the challenge to our permit at VCAT.

We understand that most wind farms in Australia (operational and proposed) would not be compliant with a 2 km set-back. We fail to see where this number has come from, or what a distance based set-back would achieve, other than to stop the development of wind farms.

We also note that some policy makers have mooted a requirement for consent from all landowners within a certain radius. It is our strong opinion that this would amount to a right of veto for any neighbour and would be practically encouraging extortion.

We do not oppose rigorous controls for all electricity generators, regardless of the energy source, however all controls must be based on objective and scientific principles.

## Property values

Clearly, the value of our landowners property has increased with the addition of an income stream from our project. It should be noted that our project will not have a material impact on the current farming operations, being cattle fattening and potato cultivation.

It is not unreasonable to expect that that other properties in Central Victoria that are suitable for siting turbines have also increased in value.

There have been no claims in our community that the wind farm has affected property values negatively.

The Hepburn Shire is recognised for its focus on sustainability and the environment. Our project is contributing to the area's positive reputation and is providing significant economic and social benefits to the community. While it is very difficult to quantify

impact on property values by any development, we assert that the presence of our project is a positive local attribute.

## **Economic impact**

Hepburn Wind employs three locals in its executive – an executive officer, a project officer and a community relations officer. Along with our core group of volunteers, our executive are rapidly ‘up-skilling’ as we build a \$13m business with a large number of stakeholders in a complex industry.

Hepburn Wind has a local purchasing policy, whereby we strive to use local service providers wherever possible – not just for construction and operations, but for catering, graphic design, internet service provision, accountancy etc.

On the day this submission was completed, our second turbine foundation was poured. The local concrete supplier has provided the vast majority of the concrete for our project and has encountered their busiest days yet.

We are proud to say that, even though our wind farm is yet to be completed, we have spent more than \$2m in regional Victoria.

We are proud to be providing employment and economic opportunities to the local area.

Over the next 25 years our project is expected to sell more than \$49m of renewable energy. Almost \$13m of this is expected to be spent on operating expenses with the remainder payable as dividends and taxes. A significant proportion of our dividends will stay in the local area, owing to our capital structure.

## **Economic efficiency**

The relative cost of wind farms, in relation to other clean energy sources, is not well understood by the general public. Currently wind is the least cost form of renewable energy available at scale.

Wind farms are generally accepted to produce energy at a cost (to the owner) of \$100 - \$120 / MWh. The Solar Credits Scheme provides an upfront payment equivalent to \$300 / MWh. State feed-in tariffs provide an additional \$200 - \$600 / MWh.

Large scale solar has not yet arrived in Australia – our largest farm, 1 MW on the Adelaide Showgrounds, would need to be four times bigger to even rank in the top 500 arrays in the world. The vast majority of solar installed in Australia is on domestic rooftops. While the cost is falling, it is still many times more expensive than wind power.

We welcome the development of large scale solar, geothermal, wave and bioenergy generation in Australia to operate alongside wind power with the necessary transition to a non-polluting stationary energy sector, however these will take time to develop to the point where they become cost competitive to wind power.

Our preliminary analysis shows that community wind power costs approximately \$20 / MWh additional to large scale wind farms – or \$0.02 / kWh.

At a projected final cost of \$13m, Hepburn Wind is equivalent to negating the emissions of 2300 homes for less than \$6000 per household. As such, we maintain that community wind power is the most economically efficient mechanism to allow wide-scale community engagement with renewable energy.

## **Community benefit**

From conception, Hepburn Wind has been determined to ensure that the entire community, beyond the investors, will benefit from our project.

As such we have committed to establish a Community Sustainability Fund which will fund projects that contribute to the social, environmental and economic sustainability of our local area.

We have committed to contribute \$15,000 per turbine annually into the fund. With indexing, this will total more than \$1m over the next 25 years. We are actively working to develop other revenue streams to allow us to increase this commitment.

We believe that this is the most generous community fund in the industry (on a per turbine basis), by an order of magnitude. In fact, we'll be donating more to the community than we pay in lease fees to the landowner at Leonards Hill.

## **Wider social benefit**

Members of Hepburn Wind frequently attend public meetings and we have read many of the submissions to this Inquiry. One thing very clear to us, and not surprising, is that the level of fear, opposition, anger and general emotion in relation to a wind farm proposal is directly proportional to the lack of familiarity and knowledge.

Like almost everything in the planning system (and perhaps general society), fear and opposition quickly wane once the community is familiar and informed.

On 29 April 2010 the Shire of Moorabool held a community evening to hear opinions on two wind farms in that shire. A crowd of more than 200 assembled in the Ballan Mechanics Institute. With the exception of three or four supporters, the crowd – made up of alternatively angry and afraid citizens – sent the clear message to the councillors that the proposals were not welcome in the shire.

The prior evening, 28 April 2010, Hepburn Wind held their second Annual General Meeting in the Daylesford Town Hall. More than 120 people turned out to hear the exciting news that the project had signed the construction agreement and the wind farm was progressing. The excitement in the room was palpable as our community came together to celebrate a remarkable achievement.

We are often amused at the accusation that wind farms divide communities. In our community, our project has brought many together. It is ignorance, misinformation and fear that drive a wedge between community members. Watching the bullying tactics of some strong opponents at work, it is clear that many are not sincerely interested in community cohesiveness.

We believe that the difference in our community has been our consistent efforts to educate our community about wind energy and to provide meaningful benefit to the community via our model.

Over the life of our project we have:

- run more than 120 street information stalls in the local area
- conducted more than 80 personal home visits to local residents
- run seven bus tours allowing more than 250 people to visit wind turbines at nearby wind farms
- sent information letters to local residents
- sent over 30 press releases and been featured in numerous articles in local, state and national print, television, magazine and radio media
- written letters and advertised in the local paper
- sponsored numerous events including the International Day of Climate Action and Walk Against Warming
- appears at events such as Sustainable Living Festival, Alternative Energy Association meetings, Chill Out, Swiss Italian Festa, Daylesford New Years Eve Parade
- actively engaged with local sustainability groups such as WISE, MRSG, MASG, BREAZE, HRN and others
- sent more than 25 newsletters to an email list of more than 5000 people who have registered their interest in the project
- actively engaged on-line using the our website, Twitter and Facebook
- run and sponsored public forums about our project and general sustainability issues.

This level of engagement is unprecedented for any wind farm in Australia. However, clearly we have an advantage – it is much easier to have this much contact with the community if you are part of the community and can also draw on a large number of volunteers over a sustained period.

We cannot claim to have won over everyone in our community. When our planning permit went before council, 18 letters of objection were received, along with 325 letters of support. From polling and anecdotal evidence from our street stalls, we believe that this ratio is indicative across our community.

We continue to respectfully attempt engagement with the few remaining objectors to our project and we sincerely hope that their fears will be allayed once the wind farm is operational.

## **Conclusion**

The success of Hepburn Wind has inspired many other communities to follow suit. We have already created several thousand new stakeholders in renewable energy and have shown that, under the right conditions, wind energy facilities can receive overwhelming support.

We strongly believe that renewable energy, and in particular wind energy, creates positive opportunities for Australian communities, and to this end we believe it is worth our advocacy.

Together with other communities, and now aided by Embark (the peak body for community renewable energy in Australia) we are looking forward to creating opportunities for hundreds of thousands of Australians to become beneficiaries in Australia's clean energy future.

As a final point, we'd like to suggest that the Inquiry pays particular attention to the role of community wind farms in establishing the much needed social licence for this important energy source. We believe that if Australia had started building small wind farms first, particularly with local ownership opportunities, there would likely not have been the perceived need for this Inquiry.

We invite the Senate Committee to visit our project and we would welcome the opportunity to present to the Committee during your Inquiry.

Thank you for the opportunity to be heard.

Yours sincerely,

Simon Holmes à Court  
Chairman  
Hepburn Wind  
(Hepburn Community Wind Park Co-operative Ltd)



Construction of the first wind turbine foundation at Leonards Hill, February 2011



The ground-breaking ceremony at Leonard's Hill, October 2010





Hepburn Wind's Annual General Meeting March 2010



Hepburn Wind's float in the Daylesford New Years Eve parade, 2009