

**Submission
No 103**

INQUIRY INTO RURAL WIND FARMS

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**Submission to:
Legislative Council General Purpose Standing
Committee No. 5 (Parliament of NSW)
Inquiry into Rural Wind Farms**

21 August 2009

1. Introduction

Vestas Australian Wind Technology Pty Ltd is the local subsidiary of Vestas Wind Systems A/S, the world's largest manufacturer of wind turbines.

Australia is the headquarters for Vestas in the Pacific region. We employ over 200 staff in Australia, more than half of which are employed on wind farm sites around Australia performing operations and maintenance roles. However Vestas is not a developer or owner of wind farms or wind energy projects, and so does not seek planning permits.

Worldwide, Vestas employs more than 21,000 people in the design, manufacture, sales, installation, operation and maintenance of wind turbines. While the home country of Vestas is Denmark, we have significant operations all across the world and are experienced in comparing policies and regulations in all our markets.

2. Background to this submission

Vestas is a member of the Clean Energy Council (**CEC**), and for detailed responses to the terms of reference for this parliamentary inquiry we would refer the committee to the CEC's submission.

Vestas has participated in the drafting of that submission, and is available to provide staff to appear before the Standing Committee to expand on the CEC submission as well as Vestas' own.

Accordingly, this submission from Vestas does not strictly follow the terms of reference for the Rural Wind Farms inquiry.

3. Recent development of wind energy in Australia

Over the past decade in Australia, the wind energy industry has grown substantially in almost all states and territories, to the point where more than around 1500 megawatts of installed wind capacity is now operating. A further 6000 megawatts of new wind energy projects are currently being investigated or are in the planning stages, many of them in New South Wales (**NSW**).

Part of the reason for the industry's growth has been the Federal Government's Mandatory Renewable Energy Target (**MRET**) scheme, which has driven most of the investments in wind energy in Australia since 2001. The recent decision by the Australian parliament to lift that target to 20% by 2020 will continue that growth over the next decade.

The other key driver behind this growth has been the policy imperative for all nations around the world to cut greenhouse emissions in an effort to reduce the impact of climate change. Wind power is the most cost-effective form of renewable energy, and is forecast to retain this status for many years to come.

However the development of the wind energy industry has been particularly successful in some states but less so in others such as NSW.

On February 27 this year the Premier, Nathan Rees, announced at the NSW Job Summit that he would soon be taking a number of steps to increase the level of renewable energy investment in his state, particularly in the case of wind energy.

He followed this on August 17 with an announcement of a series of measures to build on his earlier statements as part of a strategy to boost clean energy investment in NSW and create employment opportunities associated with clean energy projects.

4. NSW Renewable Energy Target

In 2007 the *Renewable Energy (New South Wales) Bill* entered the NSW Parliament.

The aim of this legislation was to lift the level of renewable energy as a proportion of NSW's electricity consumption up to 10% by 2010 and 15% by 2015.

With the election of the Rudd Government at the Federal level in November 2007, this legislation was put on hold. One of the Rudd Government's policies was a promise to lift Australia's renewable energy target to 20% by 2020, amending the existing legislation underpinning the MRET scheme.

While the federal legislation has now been passed, it took more than 18 months since the Rudd Government was elected for this to occur. This caused a stalling of investment in a number of states, including New South Wales.

5. Reasons for lack of wind energy investment in NSW

To understand the various reasons for the slow start to the wind energy industry in NSW, Vestas has spoken to wind farm suppliers and developers in NSW, many of whom have successfully completed projects in other states and are in a good position to compare their experiences.

A number of issues are recurrent, and many are related to the process for obtaining a planning permit:

- A lack of coordination between Government departments and agencies adds complexity and time to the planning process;
- A lack of clear timeframes for decision making increases uncertainty for project developers;
- A lack of clear guidance about the approaches and methodologies that should be applied to assess the benefits and impacts of a proposed wind farm;
- The fees associated with planning are more significant than in other states.

Many of these issues have been addressed by the recent announcement from the Premier, in which he outlined a number of new initiatives to speed up the planning process so more clean energy projects could be built faster.

These are summarised in the following extract from the Premier's media release on August 17:

Key components of today's additional measures include:

*- **FOUR MONTH TURN AROUND** - Clean energy projects anywhere in the state qualifying as critical infrastructure will have planning process managed by the department's 'go-to' people within 4 months;*

*- **FINANCIAL INCENTIVES** - Critical Infrastructure fees will be waived (projects of 30 Megawatts or more) from August 2009 to 30 June, 2011; and*

*- **BETTER COMMUNITY PARTNERSHIPS** - New dedicated environment staff for each precinct to drive our clean energy agenda and work with the community.*

However, there are other barriers to wind energy developments in NSW unrelated to the planning process. Most of these relate to electricity networks.

The process of connecting a wind farm to the distribution network and/or the transmission network is onerous, and poses a significant barrier to new wind farm developments.

In addition, there is a lack of transmission and distribution capacity in some areas of good wind energy potential.

Despite its rich wind resources, one of the biggest issues for NSW is its lack of transmission and distribution assets in a number of areas where the best wind energy sites are.

This is not a problem unique to NSW, but it is one that needs to be addressed if NSW is to reach its full potential in relation to wind energy generation.

The challenge is to trigger new electricity network investment to unlock NSW's significant untapped wind energy resources, which are in many cases located well away from existing power stations, transmission and distribution lines and load centres.

Additionally, as the Australian Energy Market Commission has recently stated, the existing model for bilateral negotiation for new connections will not cope efficiently with multiple connection applications.

However, other states and nations have faced this challenge and found solutions. The most widely known seems to be the concept of Competitive Renewable Energy Zones (**CREZs**) in Texas USA, administered by grid manager ERCOT.

Under that model, the regulatory body mandates investment in new transmission assets in area rich in renewable energy resources but poor in terms of transmission. This cost is initially passed on the end consumer of electricity, but as each new wind farm connects to the grid, the developer pays a connection fee and correspondingly reduces the amount paid by energy users.

This approach has already been trialled in Victoria, where the Parliament in 2004 passed the *Electricity Industry (Wind Energy Development) Act*, mandating a similar approach to distribution assets.

Vestas considers that this approach should be adopted in NSW for both distribution and transmission assets.

Further questions

The continued growth of the wind energy industry will attract a number of significant investments to NSW, and will also create a many new jobs in the planning, design, construction and operation of wind farms in NSW.

Vestas staff would be pleased to appear before the Standing Committee on September 11 to discuss our submission and answer any other questions Committee members may have. Contact details are on the covering email that attaches this submission.