



NEWSLETTER N° 5
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Mission Statement

“To become the leading
supplier
of wind turbines for
wind power projects in
New Zealand and Australia.”



Welcome to Windflow

Welcome to our fifth newsletter.

The four months since the last newsletter have been very eventful. Our resource consent was granted by the Banks Peninsula District Council and then appealed to the Environment Court by two neighbours. A new director joined the board, Vicki Buck, the highly capable and popular former Mayor of Christchurch. We had our AGM in late November, which was preceded by a tour of the factory where the Windflow nacelle is being assembled.



The main business of the meeting was a notified motion about the proposed rights issue. The shareholders gave strong support for the proposal. In fact an amendment was moved from the floor and passed supporting the principle of (if need be) more than one rights issue. The amended motion was then passed.

In addition, extensive video footage was shown at the AGM of the various aspects of the engineering progress to date.

The shareholders expressed their appreciation for the progress to date and the direction of the company. (Minutes of the meeting will be circulated to all shareholders in advance of the next AGM.)

Since then the major outstanding components, the gearbox and blades, have been completed and nacelle assembly and testing has proceeded apace. A new staff member has joined on a temporary appointment through to April, Dan Jolly, who has recently completed his mechanical engineering degree at the University of Canterbury.

The appeals have now been resolved and site work has commenced. We are now aiming for installation and commissioning of the first Windflow 500 in March, and planning has resumed for the Stage 2 capital raising (to commence shortly thereafter) by means of a rights issue to existing shareholders.

All in all a busy 4 months, with Christmas somewhere in the middle!

Resource Consent

We are pleased to confirm that we have reached agreement with the two parties who lodged appeals against our Resource Consent for the prototype wind turbine at Gebbies Pass. The Environment Court was then able to issue a Consent Order late in January, which means that we now have our Resource Consent and can proceed with the erection and commissioning of the first turbine during March.

The major concession that Windflow made as part of the negotiations with the appellants was to agree to reduce the consent period from 20 years to 10 years. This was a meaningful concession for the appellants but is of minor consequence for the company, because if the turbine is still operating well in 10 years (as we fully expect it will be) then it will probably make sense to move it to a site along with other turbines. The Gebbies Pass site is well suited for prototype development and was never intended to be the home for a large-scale wind farm.

Several newspapers have reported that there was an additional agreement between the appellants and Windflow. We have been asked by several shareholders (and others) for details of this agreement. Because of confidentiality provisions we are not able to disclose the details except we can categorically say that Windflow has NOT paid any money or transferred any shares to obtain agreement to discontinue the appeals.

Windflow Director, Keith McConnell, handled the negotiations with the appellants and much of the time was spent in clarifying the company's intentions and providing comfort to the appellants that alleged adverse effects would not arise. The agreement embodies the key points of these discussions.

In parallel with these negotiations, we pursued the legal avenues available to us. We retained the experienced Resource Management lawyer, Duncan Currie, who has had a distinguished career working for Greenpeace and other environmental organisations.

He filed two motions with the Environment Court, one of which included letters supporting the "public interest" element of our project from:

- The Mayor of Christchurch, Garry Moore
- Tim Barnett, MP for Christchurch Central
- Chris Pickrill, CEO of the Canterbury Development Corporation
- Heather Staley, CEO of the Energy Efficiency and Conservation Authority.

As a result of this motion we managed to get a priority hearing date for early March. This helped the negotiation process considerably by reducing the time pressure associated with hearing delays. Thanks go to Keith, Duncan and the four VIP's who provided letters of support!

Keith has commented that in many ways it was unfortunate that the appeals arose. Windflow had taken a very flexible and consultative approach throughout the entire Resource Consent process and this was evidenced by our handling of the concerns expressed by the Department of Conservation, which resulted in a Protocol covering any future development plans on Banks Peninsula.

On a positive note the entire Resource Consent process has provided Windflow with much relevant material for dealing with any future consent applications...after all the first turbine is a prototype!!

Marketing

One of the unexpected advantages of the appeals against the Resource Consent was that it drew out a number of offers of help from other parties who have various interests in wind power.

As a consequence of these approaches we have been able to forge relationships with some prospective customers, which will help us considerably as we move into the next stage of the company's development. More specifically we are presently working to finalise arrangements with one interested party, which will give us access to an excellent site without having the need to arrange a Resource Consent, a power off-take agreement or a connection agreement to the local grid.

We have also recently installed a wind monitoring unit on another very interesting site and we are now working with the local landowners to secure an access option. This particular site is of a size and location that would in due course allow the building of a very large-scale wind farm without many of the consent issues that other sites have.

One of our Directors, Barrie Leay, has recently visited prospective customers and industry groups in Australia. This has confirmed to us that the market potential there is significantly larger than in New Zealand and they are grappling with the same engineering issues that our Windflow 500 is designed to solve.

Stage 2 Capital Raising

We briefed all shareholders about the time of the Annual General Meeting in November of our intention that, should the appeals be cleared away in good time and the first turbine be installed early in 2003, we would proceed with a renounceable rights issue to all existing shareholders pro-rata to their existing shareholding. The funds from that issue would be used to:

- allow the engineering team to continue working on matters relating to the manufacture of further turbines.
- promote the flotation of the wind farm company.
- fund the marketing initiatives that are currently underway.

If sufficient capital is raised then Windflow would commit to the manufacture of a further six turbines.

The Directors are now very much of the view that once the first turbine is successfully commissioned then they should proceed down the path as outlined above and particularly should commit to the manufacture of a further six turbines. This will require the raising of \$5.0 million.

Ideally this will be raised through the proposed rights issue to existing shareholders. However, if not, a further capital raising beyond the existing shareholders will be initiated shortly afterwards.

The Directors are comfortable that they need to proceed boldly and that, based on the enthusiastic support being conveyed by our existing shareholders and the very positive reactions being received from the prospective customers, the proposed course of action is appropriate.

The rights issue will require the preparation and registration of a Short Form Prospectus. Work on this is proceeding and it is planned to have this ready for release in April following the announcement of completion of successful commissioning, which is scheduled for March.

We can confirm, now that the resource consent has been finally determined by the Environment Court, this is our intention.

Site Works

The final determination of the resource consent enabled us to commence site works. The first step was to cut in the access track to the site with a large digger (see the photo at bottom left). Within about three days we were able, for the first time, to drive to the turbine site without engaging 4-wheel drive.

This opened the way to the site for the heavy equipment for digging and laying the foundation.

But before the excavator began work, there was a small ceremony to turn the first sod. Banks Peninsula Mayor, Bob Parker, did the honours between rainsqualls on a day when a strong southerly breeze swept across the site. About 30 well-wishers, mainly neighbours, braved the inclement weather to join us. The crowd, including local Green MP Rod Donald, representatives of the land-owner's family and the local runanga, joined us afterwards for morning tea.



Since then the 8 metre square, 1 metre deep foundation has been dug, the reinforcing is being laid and the 11 kV power line has been installed to the site. Next week the foundation concrete will be poured.

Engineering Progress

Viewing of Rotating Test
Shareholders are invited to a special VIP viewing of the rotating test-rig putting the windmill through its paces in the factory 3.00pm Monday 24th February at:
Bremca Industries Ltd
10 Kennedy Place
Hillsborough, Christchurch

Share Sales

Three parcels of Windflow shares have been traded.

Date:	Number	Price (NZ\$)
13/4/02	2,011	\$1.85
28/5/02	2,000	\$2.10
9/12/02	34,000	\$2.26

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Nacelle Assembly

The major outstanding components, the gearbox and blades, have been completed and delivered to Christchurch. Nacelle assembly and testing has proceeded apace at Bremca Industries. "Nacelle" is a term that the wind industry has somewhat misappropriated from the aviation industry. In aviation, it is the streamlined housing around an aircraft engine. In the wind industry, it is neither streamlined, nor is the term confined to the housing – it is used loosely to denote the contents as well as the housing at the top of the tower. In simple terms it is everything in the windmill above the top of the tower, excluding the blades.

Thus the nacelle assembly consists of the entire drive-train of the windmill:

- the hub and pitch bearings to which the blades are mounted
- the pitch change mechanism within the hub
- the gearbox and its lubrication system
- the high speed shaft
- the generator
- the pallet which supports all of the above
- the yaw bearing and yaw drive (to allow the windmill to face the wind)
- hydraulic equipment for yawing, pitch actuation, brake release and torque limiting
- electrical equipment for ancillary power supply and control purposes
- the cladding which provides a weather-proof and sound-absorbent housing.



Some of the Windflow team with the near-complete nacelle assembly (from left - Geoff, Alan, Wernher, Dan and Warwick)

The rotating test-rig in the factory has been set up to put the whole nacelle assembly through its paces. It will enable the mechanical, hydraulic and electrical systems to be thoroughly tested before the assembly goes to site. Spinning the hub at full speed in the factory makes an impressive sight. It also provides an excellent opportunity to demonstrate the technology to interested parties. And at present the blades can also be viewed at the Bremca factory.

Therefore we hope you will be able to join us for a special VIP viewing of the rotating test rig on Monday February 24th (see box at top left). If this time is not suitable, there will also be an Open Day on Wednesday 26th, from 10 am to 6 pm. We hope to see you there.