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## CEO Introduction

The team has had a busy few months since we last updated you in the half year report in April. The undoubted highlight has been gaining IEC certification from Lloyd's Register after four years of intense effort. This recognises the robust design of our turbine, the world class quality of our team and of our suppliers; it opens the door for the marketing phase of our company's development. Complementing this achievement, in the first 6 months of 2010 the availability for Te Rere Hau has been above 96%. This growing track record is also giving confidence to potential customers both in New Zealand and overseas.

Our efforts in promoting the Windflow 500 in overseas markets took a significant step forward in the past months. In August we announced the appointment of Ventus Green Energy as our exclusive distributor in the UK. The demand for 500 kW turbines from the UK market has been unprecedented due to Feed In Tariffs (which incentivise small distributed wind projects at more than five times the revenue projects can expect in New Zealand), and we are targeting sales by the end of the year.

We have ramped up our efforts in Chile as well (having visited several potential sites and customers alongside our agent Seawind), and met with the Chilean Energy Minister during his recent visit to New Zealand. The Minister's acknowledgement of the benefits of a mid-size turbine for Chile reconfirmed our focus on this market and several proposals are in the pipeline.

Progress is also being made in the USA towards securing demonstration sites and potential partners in this growing market. Development of the 60 Hz version of the turbine is required before a concentrated sales effort gets underway.

The Long Gully wind farm, consented for up to 25 Windflow turbines, is now clear of appeals and we are in negotiations with Mighty River Power for Windflow to take over the project so that we can progress the build sooner rather than later. Once the negotiations are concluded we will be able to provide further information about the plans for this wind farm.

Windflow drew a lucky number during the Christchurch Earthquake on 4 September. The factory and offices were basically unscathed, as was the turbine at Gebbies Pass. There have been no staff injured during the quake, but damage to their homes varies from minor breakages to homes being uninhabitable. Our thoughts and support are with those worst affected.

After the difficult dispute last year with NZ Windfarms, it is pleasing to report that they successfully raised \$31.4 million in a capital raising in May, and that Stage 4 of TRH is starting to be built on NZ Windfarms' eastern extension site. We are now working well with NZ Windfarms in accordance with the agreement we reached in early April and we expect that the 48.5 MW project will be fully commissioned in mid 2011.

However the delays with TRH and the other effects of that dispute have hit our bottom line in a number of ways, which have been reported in detail in our Preliminary Announcement of Financial Results, including a loss of \$7.95 million for the year to June 2010, which was released on September 13.

As usual there is no shortage of challenges for this start-up company which is attempting to establish a technologically innovative industry in New Zealand's lean and mean economy. But with so much outstanding technical development behind us and a convincing track record in place, we remain committed to the fundamental rationale for developing the Class 1A Windflow turbine for New Zealand's challenging wind environment and similar niches within the large international market. \$90 billion worth of wind turbines were installed in 2009 world-wide and we are attracting strong interest in the fact that our turbines are proving themselves on the Manawatu Saddle. Exciting and challenging times are ahead for the company as we aim to achieve further sales and move into export markets.

We are particularly thankful for our shareholders, other supporters and suppliers during a difficult period. We are delighted that your support has been rewarded with IEC certification of the WF500 and we look forward to further success as we increase our sales and marketing efforts.

Geoff Henderson  
CEO/Director

## IEC Certification

In May Lloyd's Register completed the IEC design appraisal of the nacelle and rotor. These represent the heart of any wind turbine design and in our case include our proprietary torque-limiting gearbox and teeter control systems, so the nacelle and rotor account for well over 90% of the intellectual property which is key to our innovative, light-weight yet robust design.

We received our Manufacturing Conformity Statement last month which is a tribute to the thorough quality processes in place in our assembly facilities and by our component suppliers. Lloyd's Register issued the tower design appraisal document earlier this month, followed by the main reward, Type Approval.

On Wednesday 15 September, it finally came through – The Lloyd's Register Type Approval Certificate. It verifies that our turbine meets the relevant IEC standards, and is a satisfying reward for more than 2,000 pages of calculations, 200 drawings, 37 specifications and many months of testing.

IEC certification will open up many international markets, especially in the UK right now and also nationally, where several generators demand certification.



## TRH Performing Well and Stage 4 Under Construction

The 32 nacelles for Stage 4 of NZ Windfarms' Te Rere Hau wind farm (TRH) continue to be built in our assembly factory. They are going into storage while we wait for the civil works and the electrical connection to be ready at the TRH extension site.

The civil works have already been in progress for a couple of months now with road and crane pads being formed and cut on the eastern extension site. Drilling for the single pile foundations began a few weeks ago. Tower erection will follow the drilling and pouring of the foundations. Powerco will begin trenching for the High Voltage cable in mid September with the first site livening scheduled in early November. We plan to erect the first batch of nacelles shortly after that. Approximately two turbines

will be commissioned every second week, with Stage 4 expected to be completed by mid 2011.

The original Te Rere Hau consent was for 97 Windflow 500 turbines. These were split into 4 stages and currently Stages 1 to 3 (65 turbines), are operational. At the end of last year NZ Windfarms applied for resource consent for an additional 56 turbines at an eastern extension site. It was decided to put the 32 Stage 4 turbines of the original application on the new extension site, as it has higher wind speeds. This leaves 32 turbine sites where Stage 4 was planned plus 24 additional new sites at the extension site. We understand that NZ Windfarms is not currently planning to order any extra turbines for those sites.



## UK Distributor Appointed

Photo caption: Nick Bowmar (Sales Engineer, Windflow) (left), Jim Paterson (Co-Director, Ventus) (centre), John Baxter (Sales Manager, Ventus) (second from right) discussing wind energy with potential customers in front of the wind turbine model at the Royal Highland show in Scotland.

In response to the strong demand from the UK market, Windflow has appointed Ventus Green Energy as its exclusive distributor of the Windflow 500 for the whole of the UK.

Ventus Green Energy Limited is a renewable energy company based south of Glasgow, that has sold, installed and serviced over 100 small-scale wind turbines in the past two years. Its clients include farmers, landowners, and small businesses. With many projects likely to consist of 1-3 turbines and owned by the landowners themselves, Ventus Green Energy offers customers a one stop shop to make it easy to develop a wind project by also offering consenting, construction and maintenance services.

If you would like to know more about Ventus Green Energy, you can check out its website: [www.ventus-green-energy.co.uk](http://www.ventus-green-energy.co.uk).



## Interview with Jim Paterson, Co-Director of Ventus Green Energy:

### **How do you view the potential market in UK for the Windflow 500?**

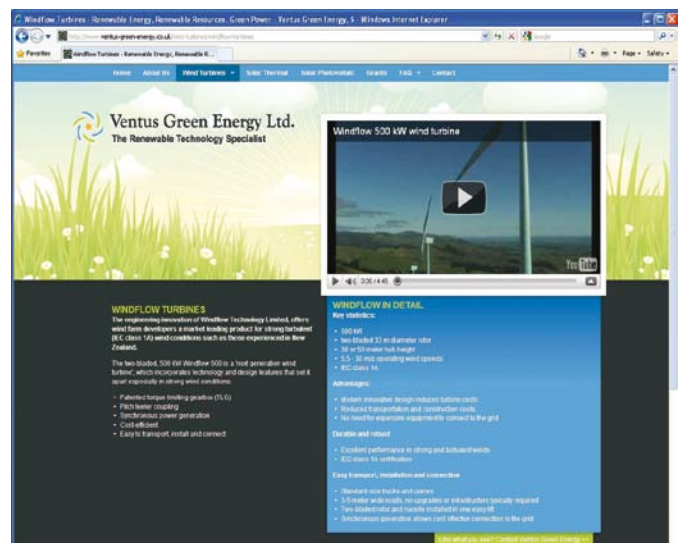
It is massive! There is a lot of interest already and it is only going to increase. A 500 kW wind project is guaranteed revenue of 18.8 p/kWh under the Feed-In-Tariff so a single Windflow 500 turbine could earn the landowner £200,000 – £400,000 per year depending on the wind speed. The rate decreases for larger projects, so the 500 kW size is a sweet spot. (Wind farms of 501 to 1,500 kW earn an FIT of 9.4 p/kWh, 1,501 to 5,000 kW earn 4.5 p/kWh).

### **What attracted you to the Windflow 500 turbine?**

The Windflow 500 is one of the only 500 kW turbines in production in the world, and it has a proven track record of 66 turbines performing in strong winds. This is ideal for Scotland which boasts some of the best wind resources in Europe, and gives customers confidence that the turbines will perform well.

### **Why was the Feed-In Tariff (FIT) introduced in UK?**

The FITs have been introduced in order to incentivise small scale (less than 5 MW), low carbon electricity generation. It will allow many people to invest in small scale low carbon electricity, in return for a guaranteed payment both for the electricity they generate and export. It is a win-win situation for both the country which needs more renewable energy and for all the people investing in the systems.



See our video on the Ventus web site, "Wind Turbines/Windflow Turbines" page at: [www.ventus-green-energy.co.uk](http://www.ventus-green-energy.co.uk)

## NZ Timber Design Award

The Windflow 500 is one of the entries to the NZ Wood Award. One of the categories is a People's Choice Award. It would be great if you would vote for us, it is really easy, just requires your name and email address.

Use on the link below, check out the entries and find the Windflow 500. Click the green "vote now" button at the bottom of the page. We are listed under The Windflow 500. You can only vote once.

<http://www.nzwood.co.nz/timber-design-awards-2010>

The winners of the different categories will be revealed at the awards function on 11 October at Te Papa in Wellington.

## Chartered Professional Engineers at Windflow



Back row from left: Neil, Reuben, Jamie.  
Front row: Emma, Jules, Richard.

Six Windflow engineers have recently gained the status of Chartered Professional Engineer (CPEng). CPEng is the most important quality mark attesting to the current competence of a professional engineer in New Zealand. For Windflow it is part of our company building a centre of excellence for the design, manufacture, construction and maintenance of wind turbines and contributing to technological innovation in New Zealand.

Registration is gained by demonstrating competence, which is re-assessed for currency at intervals not exceeding five years. Currently there are just over 2,500 CPEng registered in New Zealand. CPEng provides peer recognition and independent validation of current competence as a professional engineer.

Previously, Geoff Henderson and Tim Armitage were our only Chartered Professional Engineers, but Windflow is encouraging all our engineers to attain the credential. The newly accredited engineers are: Emma Patrick - Project Manager, Reuben Rusk - Mechanical Engineer, Jamie Wallace - Development Engineer, Neil Hudson - Mechanical Engineer, Richard Trudgian - Design Manager and Jules Ganley - Production Manager.

## Australia Market Opportunities

Windflow's Sales Engineer, Nick Bowmar attended the Clean Energy Council Conference 2010 in May in Adelaide. It was a good opportunity to network and raise the profile of Windflow. The conference itself focused on new policies such as the MRET (Mandatory Renewable Energy Target) and the CPRS (Carbon Pollution Reduction Scheme).

Windflow attended and exhibited at EcoGen 2010 in Sydney in September and is also planning to attend and exhibit the All Energy Conference in October in Melbourne. Indications are that there will be a robust long-term market for wind power in Australia, but it will be very price competitive, thus suiting a Class 1A turbine like the Windflow 500 which has been designed for lean and mean economic conditions.

## Long Gully Update

Windflow was responsible for the resource consent application for Long Gully wind farm in Wellington, which was granted consent for up to 25 Windflow 500 turbines in October last year. Two parties lodged appeals, which they have withdrawn leaving a clear consent. With the community being largely supportive of the small-scale distributed project, it is pleasing to have the green light from the Wellington City Council for the project to proceed.

Mighty River Power, who originally intended to own and operate the wind farm, have since changed their policies on owning smaller generation (resulting in divesting some of their smaller geothermal projects) and have decided that they will not proceed with the construction of the 12.5 MW Long Gully project. This is part of a strategy to exit non-core assets. Windflow and Mighty River Power are currently exploring alternatives including power offtake arrangements. Windflow is committed to building the project and is hopeful that an agreement acceptable to both parties can be reached.



## Gebbies Pass Open Days

This year we will repeat the successful open days at the Gebbies Pass wind turbine on the first Sundays of December and February.

- Sunday 5 December and Sunday 6 February from 3-5pm
- Meeting point and car parking: Wheatsheaf Tavern in Teddington
- A bus will leave at 3pm, 3.30pm, 4pm and 4.30pm to transport you to the Windflow 500 turbine
- Bring warm, wind-proof clothes and good shoes

In case of cancellation due to bad weather on the day, please check: [www.windflow.co.nz](http://www.windflow.co.nz) or ring Sheralee on 021-946-333. Anyone is welcome, it is free, and if you know of someone who might be interested, please tell them about it.

## Opportunities in Chile Progressed

Geoff Henderson (CEO/Director) and Sheralee MacDonald (Marketing Manager) visited eight potential customers in Chile and several potential wind farm sites, along with representatives from Windflow's agent Seawind in June. Several potential customers and government dignitaries also attended a reception and dinner at the NZ Ambassador's residence in Santiago one evening to learn more about Windflow.

Many of the potential customers are in the mining sector, where the sites are windy and a mid-size turbine has advantages for transport and installation, so they were very interested in the Windflow 500's advantages and track record.

Geoff, Sheralee and John Arimond (Engineering Manager) also met with the Chilean Minister of Energy, Ricardo Raineri in Wellington when he visited New Zealand in June.

During the visit the Minister also met with New Zealand's Energy and Resources Minister Hon Gerry Brownlee. Among other things, the Ministers discussed the Trans Pacific Strategic Economic Partnership Agreement (P4), the importance of energy diversity and security for economic growth, energy efficiency and the growing commercial partnerships between New Zealand and Chile in the energy sector.

A Chilean reporter from a leading newspaper in Chile was also visiting at the same time to cover the story and we took him on a tour of the Te Rere Hau wind farm so he could learn first hand more about wind energy in New Zealand.

Windflow is continuing to work with Seawind to secure projects in Chile.

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## American Wind Energy Market Update

Geoff Henderson (CEO/Director), John Arimond (Engineering Manager) and Jules Ganley (Production Manager) attended the annual conference of the American Wind Energy Association (AWEA) in Dallas in May. Over 20,000 delegates attended the conference, and nearly 1,400 companies exhibited the latest in wind power technology.

New Zealand Trade and Enterprise hosted a 24 May networking reception on behalf of the four NZ companies attending the conference: Windflow, Turningpoint, PowerByProxi and Truescape. Over 60 potential suppliers, customers and partners attended the evening (MC'd by Windflow's John Arimond) and learned about New Zealand's clean technology offerings.

In preparation for Windflow's planned US market entry, Geoff and John also spent time before and after the AWEA conference visiting several potential demonstration sites for Windflow turbines in the high wind regions of southern California, meeting with potential O&M partners and other potential partners and customers. John returned to the US in August to progress negotiations with half a dozen potential partners.

## Increasing our Commercial Strength

Windflow's commercial credentials have been strengthened by the introduction of several new faces at Windflow as described below. Simon Young, John Hunter and Chris Freear all bring a variety of commercial and financial experience to Windflow.

On that note, we are both happy and sad to farewell Warwick Payne, mechanical engineer and Windfarm Development Manager, who is leaving Windflow to join our new UK distributor, Ventus Green Energy, to strengthen sales of the Windflow 500 in UK. Warwick was one of Windflow's very first staff and he has done everything from designing the turbine and installing the prototype to manage the installation of Te Rere Hau. He will no doubt be a huge asset to Ventus Green Energy.

### Simon Young - Director

Simon Young has had a very successful career to date in the electricity industry as a founder/owner of his own energy trading company Opunake Hydro Ltd, Managing Director of Alliant Energy New Zealand Ltd, and as a Director of TrustPower Ltd.



Simon was also co-founder and Managing Director of Empower Ltd, New Zealand's first independent electricity retailer. He holds a Bachelors Degree in Business Studies, a Post-graduate Diploma in Horticultural Science and Masters Degrees in both Science and Economics.

Simon has replaced Ian Fraser, who resigned from the board of directors of Windflow due to other commitments and for personal reasons.

### John Hunter - Chief Financial Officer

In August John Hunter started at Windflow in the new position of Chief Financial Officer (CFO). The appointment reflects Windflow's plans to progress new offshore growth opportunities, particularly in the UK as a result of recent legislative change, and to action the Long Gully wind farm, on the outskirts of Wellington.



John has over 25 years experience in management and CFO roles with a range of companies including PDL and Pacific Retail Group. Most recently he was CFO for Synlait Group of Companies - which has achieved growth in revenue from \$14M to \$300M within the four years John was with them.

John was a key player in successfully achieving this international growth. He has extensive experience in commercial negotiation, infrastructure planning and development, capital raising and legal advisory. John is also a former director of Pacific Retail Group and crown owned enterprises in the Health Sector.

### Chris Freear - Windfarm Development Manager

Chris Freear has rejoined Windflow part time to assist with new business opportunities. Chris has spent almost 20 years working in the NZ energy industry, with particular focus on energy efficiency and renewable generation. Chris was the founding CEO of NZ Windfarms, and served as a director of the NZ Wind Energy Association for a number of years. Nowadays Chris fills his time with a combination of consulting and directorships.



Windflow will be looking to leverage Chris' knowledge of the NZ wind market to help realise the now consented Long Gully wind farm project plus other opportunities in NZ.

## Welcome New Staff

### Stephen Riddy – Windsmith

Stephen joined Windflow's Te Rere Hau team August 2009 as a windsmith. Stephen is a marine electrician by trade and worked eight years in the Navy. For his OE Stephen worked 3 ½ years in the UK for Aggreko (generators) and doing ship repairs. Stephen has also worked 18 months in Rotorua as an industrial electrician but is originally from Fielding.



### Jonathan Radcliffe - Quality Assistant

Jonathan has 14 Years of experience in the electronics manufacturing industry working for Tait Electronic, Allied Telesis and Dynamic Controls. He joined Windflow in April 2009 on contract and became permanent in April 2010. Jonathan has a Diploma in Electronics and Computers. He is Christchurch born and bred, enjoys sporting activities and spending time with his family.



### Bruce Hansen – Windfarm Support Coordinator

Bruce joined the Te Rere Hau Windflow team this September in the newly created role of Windfarm Support Coordinator. Bruce did his apprenticeship as a diesel mechanic in the Manawatu. Bruce has worked 15 years for Fonterra in both Taranaki and later Timaru, where he eventually became a planner/team leader with 16 mechanical technicians working under him. Bruce grew up in Feilding, so he has returned home for this job. For eight years Bruce was racing motor cycles in the Suzuki road race series and NZ national road race series. Nowadays he does a bit of casual car racing.



### Dan, Adam and Mark – Windsmiths

Dan, Adam and Mark all joined Windflow's Te Rere Hau team this year. They have mechanical and electrical backgrounds.



## Share Graph

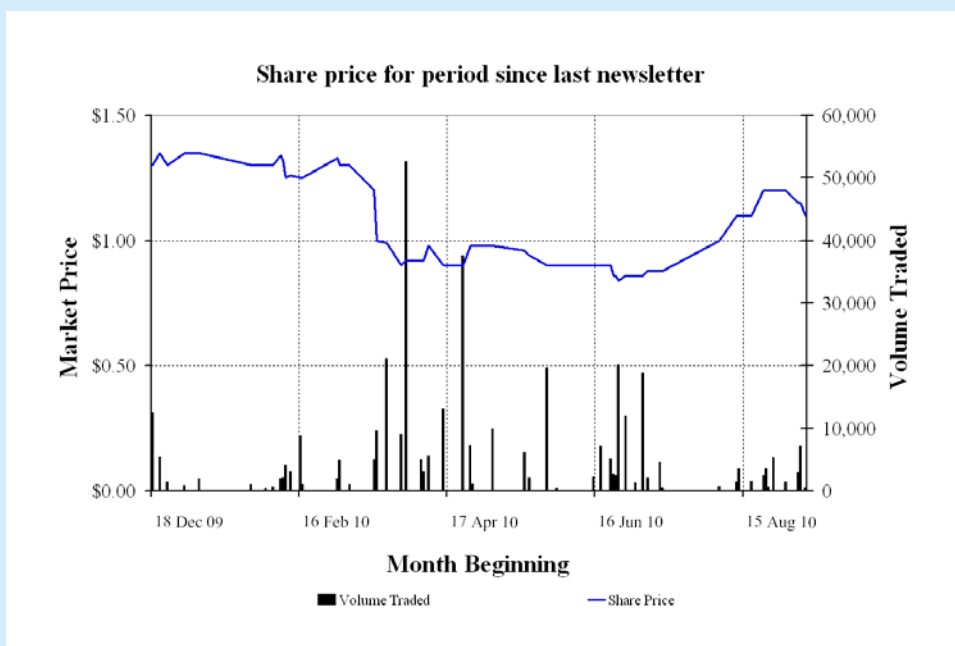
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