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Seasons



meridian



Cropping farmer Peter Stuart on his Methven property.

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Power costs diluted by irrigation options

Free, frequent and heavy water early in the season is a boon for any Canterbury cropping farmer. But early this summer few in Canterbury could rely on the skies for free water. This left heavy and frequent water coming only from good irrigation, but at a cost.

Methven farmer Peter Stuart faced the irony of dodging frontal systems when harvesting on his 400ha Kolmar Farm property this February. Many millimetres of rain came after weeks of dry weather that had pushed his irrigation demands to their maximum.

Until then, however, this was not the year to skimp on water supply to Peter's wide variety of crops. These included clover for seed production, maize for silage, potatoes, wheat, barley and peas.

It may have been raining over his wheat harvest, but for the first time in several years Peter says the sun is shining on crop growers.

"Yes, it would have been great to have had the rain earlier, but nevertheless it is good to be harvesting crops that are really worth something this season."

Global grain demand has pushed up the values of crops like wheat and barley to \$400/tonne.

The prices have re-invigorated the arable sector, coming just as the industry teetered on the brink of economic breakdown.

To help maximise the new-found margins on his crops, Peter was keen to examine alternatives to his fixed price contracts he had with his previous irrigation power supplier.

His irrigation water is sourced from 180 metres down using submersible and surface booster pumps for two

centre pivot irrigators. The large property and depth of supply means irrigation costs can account for 20% of his gross income.

Cropping farmers' power usage patterns fall in a very intense period of the year, usually from November to February. With potatoes and maize in the ground until at least March, Peter's demand is stretched further than some.

Discussing his options with Meridian almost two years ago, Peter says he was impressed with the company's progressive approach to farmers like him looking for an alternative to fixed charge supply. "They had investigated how best to supply farmers when they needed power, and introduced me to Time of Use (TOU) metering."

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TOU enables users with significant needs to pick the most economic times of day to consume power.

Meridian provided Peter with power price data in four-hour blocks to help him make informed decisions.

TOU makes complete sense for processors or heavy irrigation users like Peter whose need for electricity is not tied to traditional work hours or peak electricity demand times.

"The most economic time for us to irrigate was early morning from midnight to 4.00am, which I took full advantage of last year, along with good value weekend rates.

"With this year being so dry, we have had to use that period, plus most other hours in the day, just to keep things growing."

Peter says TOU metering has provided a good level of cost control in a business where even one's best budget can be thwarted by the weather gods.

And despite recent rain, the need for cost effective irrigation may not be over yet.

Wheat and barley may be harvested, but Peter still has several weeks to go before harvesting potatoes and maize, meaning cost-effective irrigation remains a priority.

"It is very important with potatoes that we can deliver a consistent size to processors. The only way to control their growth is by consistent water delivery."

The benefits of TOU pricing generally will become even more evident through autumn to winter when power prices start to ramp up. This makes off-peak use periods over the growing season's shoulder even more valuable.

For Peter, with good crop prices, optimal irrigation costs and years of experience behind him, the time for growing is definitely now. ■



Wind turbines preserve farm businesses

A group of farmers from Ohariu Valley, north-west of Wellington, have got together to harness their region's most abundant resource by choosing Meridian's next wind project.

Meridian will shortly be seeking resource consent for the Mill Creek wind farm project. It marks the culmination of 13 years of discussions, planning and partnership with six farming families in the region.

The 71MW wind farm will produce enough electricity to supply the equivalent of 35,000 average homes.

The Mill Creek project was further developed with these families in mind since they wanted to see farming continue for generations to come in the area, but knowing that ability was under threat.

These families did not want to sub-divide their properties. The steep country negates the option of dairy conversions and, with long timeframes to harvesting, forestry isn't an option.

The initial idea for the wind farm project came from former, long-time Ohariu Valley resident Neville Beach. He recognised the potential of wind farming to keep the community a viable, functioning farming district.

Warren Bryant is one of the Ohariu Valley farmers. He says preserving the area's truly rural way of life and income was a priority for the families, all with deep history in the region.

Forming the company Windcorp Limited, the group put a tender document out for parties interested in establishing wind turbines across the properties.

While wind strength is important, consistency is vital to provide steady generation patterns for the turbines.

Data collected by Meridian shows Mill Creek has one of the most consistently high wind speeds in the world.

"The Mill Creek wind farm will be generating 90% of the time," says Meridian's Wind Development manager Adam Muldoon.

The site shares the same steady wind patterns as Meridian's West Wind turbine site further south near Makara.

With 31 turbines across the six Ohariu Valley properties, it was critical for the landowners to be able to continue their sheep and beef businesses around the turbines.

Warren says one of the good things about this project is that they can continue farming right up to the base of the turbines which will be 110m in height, including the turbine blades. The farmers also welcome the addition of the all weather access roads installed by Meridian that will double as quality farm tracks. This improved access is a real luxury in this area, where getting around difficult country is no mean feat.

The farmers were reassured by Meridian's professionalism and track record with other sites including Te Āpiti near Palmerston North.

Meridian is liaising with local communities to minimise the turbines' impact on farm operations and the rural environment.

The high-tech Siemens turbines manufactured in Denmark have lowered noise levels from turbine blades and the turbines have been carefully placed to minimise visibility from Wellington and are set back from ridge lines.

Warren says the placement also means the turbines are as far from houses as possible.

Working with Meridian, the group of farmers is helping highlight to the community the project's benefits. Woolshed meetings were held to introduce the project to the farmers' neighbours and open days are part of the consultation process.

"We know that the power has to come from somewhere and if it is from here we know the impact will be minimal, and we can keep farming here for many years yet," says Warren. ■

Meridian Rural Events Calendar

March 13-15 Feilding	Central Districts Field Days The Central Districts Field Days are an opportunity for our clients to visit our site with any queries regarding energy consumption, accounts, and wind farming opportunities in the Central North Island. Site number – E32.
March 18-25 April 1- 29 Nationally	Sharemilker and Farm Manager of the Year Field Days This is your chance to learn the secrets of dairying's high fliers. Meridian's jointly sponsored field days are being held in every province throughout the country. This is an excellent opportunity to pick up some ideas for your own farm business.
March 29 Christchurch	Earth Hour Switching off non essential appliances, lighting and machinery can have a major impact on electricity demand. How much demand reduction can Christchurch achieve in one hour on a Saturday evening? Earth Hour will occur between 8pm and 9pm on 29 March. Electricity users connected to the Orion distribution network, across greater Christchurch, are asked to save as much power as they can in a concerted demonstration of demand control. Consumers, businesses and institutions can show their support for sustainability. Earth Hour is a promotion by The Press and WWF–New Zealand with support from Meridian. See www.earthhour.org for more information.
April Nationally	Network for Women in Dairying Conference – Dairy Days & Conference Dairy Days are being held throughout the country with the topic of Recruitment, Retention and Communication a key discussion topic. Farming Forward is the theme of the Networks National Conference. For more information or to register for these events, visit www.womenindairying.org.nz .
May 23-24 Christchurch	New Zealand Dairy Industry Awards Final

Sponsorship reflects rural vibrancy

Rural customers and the communities they live in have come to play an increasingly significant part in Meridian's sponsorship programme.

Many people may recognise some of the high profile events Meridian sponsors – involvement with New Zealand Dairy Industry Awards, Canterbury Rugby and South Island Rowing.

However, throughout New Zealand there are many other provincial events that Meridian is proud to put its name to as a sponsor. Whether it is the Waimate Strawberry Fair or Meridian Energy Kids' Bike Jams, the range is as varied as it is important to the communities benefiting from these events.

One of the latest rural organisations to benefit from sponsorship is the Network for

Women in Dairying. This year the Network celebrates its tenth year, representing women in a diverse range of roles in dairying.

The Network's membership is growing strongly and, thanks to an emphasis on communications, has developed a strong programme of conferences, educational Dairy Days, an e-digest and discussion forum through its website.

Network for Women in Dairying general manager Lynda Clark says there was much about Meridian that made the company an ideal sponsorship partner.

Aligning with Meridian has helped increase the understanding among members of ways to conserve energy, a significant part of costs on large dairy operations.

"Passing that knowledge to dairying women is effective and

smart because they are often the ones who pay the bills and are looking for cost effective solutions on the farm," says Lynda

For many in the dairying industry, a work highlight is the New Zealand Dairy Industry Awards (NZDIA). The NZDIA have gone from strength to strength with over 300 entries this year spread across three sections; Dairy Trainees, Farm Managers and Sharemilkers.

Meridian's sponsorship of these events underpins the company's recognition of the importance of the dairy sector both as customers, and to New Zealand's economy.

"The sponsorship has done a lot to build a relationship between the energy sector and dairying, one of the country's biggest users of electricity," says NZDIA convenor Chris Keeping.

Chris says the sponsorship does much to support a competition focussed on promoting achievement right across the industry.

Meridian's sponsorship programme also extends to community events reflecting the vibrancy and variety of New Zealand's provincial communities.

Nationally, Meridian is the primary sponsor of Project Crimson, a trust that has for the last 17 years worked to pull back from extinction the nation's iconic pohutukawa and rata. Project Crimson has re-established thousands of trees throughout New Zealand.

Since 1999, Meridian has also been proud to support the Royal New Zealand Ballet. ■

Bio-Diesel in the Right House

As oil prices approach the US\$100/barrel point and the US continues to try to reduce its reliance on Middle East oil, bio-fuels have become the focus of a world desperate to continue feeding its growing energy demands.

In fact, in just one year, corn to ethanol policies, along with demand has pushed corn prices up by over 30%.

A recent OECD paper highlights the criticisms of bio-fuel crops, including the lack of land for food and fuel contributing to continual rises in food costs for the next 10 years.

Here in New Zealand the options for bio-fuel production are only now being explored, with exciting new technologies emerging from what New Zealand does so well – growing tree and plant crops.

Salix is one example of a tree that can be grown for use as a bio-fuel. It is a hardwood, shrubby willow high in cellulose and is an ideal feed stock for ethanol production.

Like pine trees, the willow has the advantage of being able to grow on marginal land that would not otherwise be suitable for cropping, and re-growth is rapid after harvest. It offers a cropping opportunity for farmers in areas like Taupo and the Central Plateau.

Other bio-fuel opportunities include using the meat industry by-product tallow as a source for diesel production.

Research efforts on crop-to-fuel projects in New Zealand include a focus on renewable crops that do not compete with human food production and increase food costs.

Meridian’s subsidiary, Right House, has entered into a supply arrangement with a bio-fuel producer to promote a bio-diesel that offers real advantages as a “green” fuel in the truest sense, sourced from a feedstock that does not impact on food costs.

Right House provides energy efficient solutions to customers, targeting new projects and home builders.

“We offer a number of household and commercial boilers and burners, and wanted a supplier who could provide a genuinely green diesel fuel source for those products,” says Right House project manager James Capper.

Environ Fuels of Te Kuiti has been producing an extremely high grade of vegetable-based bio-diesel for the past 18 months. The fuel has been tried and tested on the owner’s own fleet of heavy earth moving equipment.

“Through Environ Fuels we can arrange direct supply agreements



for customers wishing to use a B100 (straight bio-diesel) to a B20 (20% bio-diesel) product,” says James.

Environ Fuels CEO is Warren Holden. The bio-diesel his company produces is sourced from canola rape seed grown on marginal land. He says opportunities are opening up for farmers in both islands to consider growing the crop as a feed stock.

Environ Fuels clients include an East Coast farmer who uses 100% bio-diesel in his tractor, and another who blends it to put into the farm’s Toyota Landcruiser.

Warren says working with Right House has provided Environ Fuels the opportunity to participate in a ground-breaking sustainability project on Stewart Island. The power station there is about to start trialling 100% Environ Fuels Bio-Diesel in their generators, and by doing so will help the island lower its carbon footprint.

National demand for the bio-diesel is growing steadily, and future research is focussing on lifting the purity levels of the company’s bio-diesel and trialling other fuel stocks, including algae. ■

We’d like to hear from you

We’d like to hear what you think about *Seasons*, and what you’d like to see in future issues.

Please let us know by writing to us at:

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