Van Wyk Flowers watch energy savings bloom



With the unpredictable price rises surrounding natural gas, the move to this renewable energy (renewable biomass from waste wood which is part of the natural carbon cycle) is not just great for our bottom line, but even more importantly, has allowed us to reduce our carbon (CO2) footprint by a massive margin. Wattly and Northmore Gordon provided a very professional service and the value from the VEU significantly contributed to the capital costs reducing the payback.

- Paul Purcell, Van Wyk Flower Supply Pty Ltd

The Client

Van Wyk Flower Supply Pty Ltd is a longstanding family owned cut-flower/plant farm based southwest of Melbourne. For many years they have grown and sold produce to the flower industry. The intense horticulture used a large amount electricity and natural gas and Van Wyk had already invested in a 350 kW solar system to help power irrigation and onsite functions. Heating is a necessary component of growing to ensure the consistency in quality and numbers. To heat the expansive glasshouse areas the farm had two natural gas boilers (total 7MW) and were looking for alternative solutions.

Key Facts

Equipment Upgraded	Replacement of 3MW gas-fired
	to boiler to biomass
Annual Energy Savings	41,000 GJ Gas
	Abatement: 2,131 tCO₂e, OPEX: ~300,000
Certificate Value	>\$ 450,000 / <5 year payback
Program	Victorian Energy Upgrades (VEU)
Method	Project Based Activities (PBA)
Wattly Partner	Northmore Gordon (Consulting)

The Project

Industry leaders in biomass boilers and energy systems (Enriva Pty Ltd) delivered substantial energy savings by replacing the existing gas-fired boilers to a single 2.95MW biomass plant fuelled by timber residues from Victorian forestry & timber operations. Through a network of heating pipes, the boiler runs continuously and feeds hot water into a large insulated buffer (2,000,000 litre tank). This is a highly innovative and important part of the solution. The tank acts as a large thermal battery allowing the system to deliver very high peak loads and is drawn down overnight and during cold weather.

Challenges

- Competitive pressures from international growers airfreighting flowers and herbs to Australia
- Unstable price of natural gas, due to the world demand increased uncertainty
- Drastic increase of gas prices in 2016-2018
- Little room to increase flower & herb prices

Outcomes

- Gas boiler was fully shutoff
- Natural Gas Supply to the boilers was decommissioned

Our Role

Wattly and Northmore Gordon provided an end to end service to ensure the project compiled with the Victorian Energy Upgrade Program to maximise the financial incentives. Northmore Gordon's Certified Measurement & Verification Professionals (CMVPs) created the M&V plan, collected site data & supporting evidence, and built the baseline amd operating energy models to calculate the energy savings. Subsequently we wrote the M&V report, then created and traded the VEECs on behalf of the client.



Wattly is a leader in environmental certificate creation and trading. We have created the most certificates of all Accredited Persons under the Victorian Energy Upgrades program, an Accredited Certificate Provider in the NSW Energy Savings Scheme, and registered agent under the Federal Renewable Energy Target.

We've provided \$100m of financial incentives for energy efficiency and renewable energy projects at over 35,000 commercial, industrial and residential sites. This has saved our clients and partners gigawatt hours of energy, millions of dollars and reduced greenhouse gas emissions by over 5 million tonnes of CO₂e.

- Melbourne | Sydney | Newcastle Singapore | Phillippines
- **J** 1300 878 500
- info@wattly.com
- www.wattly.com

