



BESA
Blue Energy Solutions Australia



CASE STUDY

Rydgges Hunter Valley Heat Pump Project

Project Highlights:

- 132kW Heat Pump system
- Water Park and Main Pool heating
- Displacing 3,900 GJ Annually
- Estimated \$104,000 in annual savings
- Emissions reduced by 210 tonnes annually
- Estimated \$59,000 in ESC funding
- Less than one year payback



The Schwartz Family company, the owner of Rydges Hunter Valley, are well known for their forward thinking when it comes to green energy and sustainability. Schwartz has long been an advocate for heavily reducing their reliance on fossil fuels and traditional energy sources, so when it came time to install a new heating system at the luxury resort, they knew they wanted a more sustainable option.

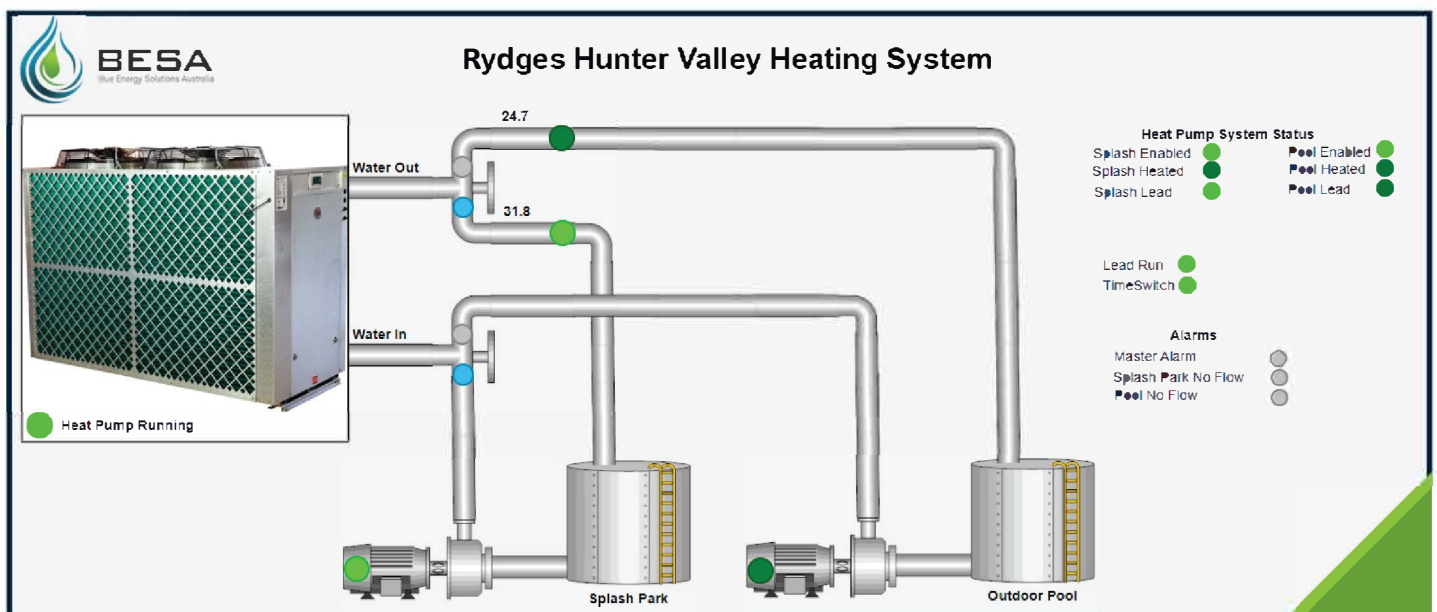
That's where Blue Energy Solutions Australia came in. BESA was proud to be able to install a high efficiency Rheem Thermal Heat Pump System that will generate 132 kW of heat for both the 2-story water park and main pool from as little as 25kW of electricity. This will replace the existing gas heating system at the facility - making Rydges Hunter Valley more environmentally friendly and reducing the hotel's carbon footprint.



This new system is set to displace 3,900GJ of gas per year which will effectively reduce emissions by 210 tonnes annually - equivalent to taking 42 cars off roads each year.

BESA has taken a unique approach to ensure both the pool and waterpark are heated effectively, by designing an innovative control system; one heat pump can be used for two separate systems without mixing their streams. This optimizes investment return while eliminating the need for a second unit.

Through remote set points and real-time feedback features, this solution allows each destination's comfort needs to be met day or night with minimal energy use, providing maximum efficiency at all hours of operation.





PAYBACK AND ENERGY SAVINGS CERTIFICATES

The BESA Heat Pump System will provide a reduction in operational costs for the resort by approximately \$104,000 per year and accordingly is expected to pay itself back in less than a year.

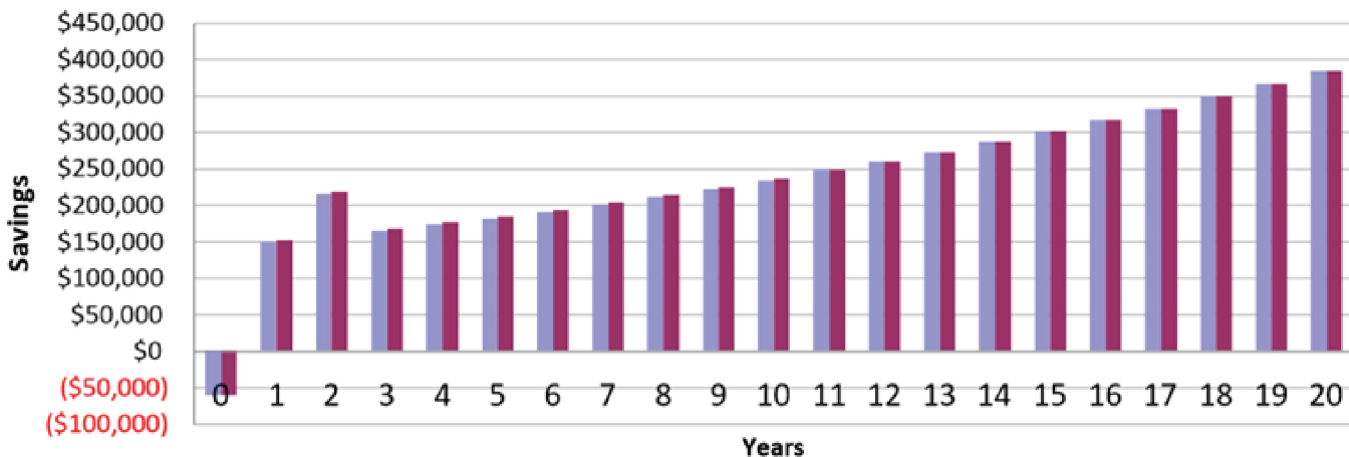
In addition to the impressive financial returns, Energy Savings Certificates further increase the return on investment of the system. ESCs are a type of incentive program that encourages businesses to reduce their energy use and make their operations more efficient, by providing financial incentives to businesses in Australia. ESCs can offer the potential for returns on investments made in improving a business's efficiency and sustainability. A recent rule change allows 10 years of ESC's to be packaged up and delivered to eligible recipients as a lump sum payment in the second year of operation.

This System in particular is expected to obtain 312 ESC's per year, and provide approximately \$59,000 in additional revenue, delivered in the second year of operation.

To deliver these Certificates, BESA has partnered with Northmore Gordon. Northmore Gordon also assist in providing the facilities with up-front funding opportunities. In addition to the impressive financial returns, BESA and Northmore continue to look for ways to further assist their customers. These systems are applicable for the NSW government's offer of up to \$25,000 for industry and business to encourage investment in high efficiency, low carbon HVAC systems.

These grants are in addition to the ESC's that could be produced through the installation of a BESA Heat Pump System, along with general savings on energy usage.

Yearly Cashflows



If you would like to hear more about this opportunity and get started on the integration of efficient heat pumps and intelligent control systems into your commercial pool facility, contact us today on **02 8644 8177** or at sales@bluenergy.com.au

