Lion Landcare Grants 2016/2017

Project Case Study

Recipient: Elmar Farms Pty Ltd

Project Name: Utilising Solar Power to Reduce Energy Consumption

Location: Leitchville, VIC

Funding Amount: $10,877

Objective: Reduction in power consumption

Reducing greenhouse gas emissions

Background

Steven and Deanne Hore produce over 3.3 million litres of milk annually on their property in Northern Victoria. They are carrying on the family tradition that stretches back 100 years.

Milking the herd of 400 Holstein cows takes a lot of energy, which is reflected in their electricity bills. Power is used to run the milking equipment, cool the milk and to mill grain that is feed to the cows. As the cost of power goes up the Hores' have looked for ways to cut down on the amount of power taken from the grid and at the same time shrink their carbon footprint.

In early 2017, 76 solar panels were installed on top of the dairy shed to provide the farm with 19 kw (produced during peak times). Even as they pay the panels off, they have already made savings that they can use to invest back into the farm, however with further power increases they decided to install more panels to supply a further 8 kw.

Saying the beauty of the solar panels was they generated power year-round with any excess being sold back into the grid.

Lion Dairy Pride Landcare Grant

After reading a few articles that profiled previous grant winners, finding information on data portal 'Milkline', Deanne said the family spoke to their Lion representative to find out how to apply for a grant.

The idea was to apply for funding to expand on their existing network of solar panels that had been installed in January 2017. Given the performance of these panels and the cost savings they've generated, Deanne was confident the further panels would help them achieve further savings and reduce their carbon footprint.

"With the installation of the solar panels we will lift our daily average power generation to 148 kw so that we don't have to draw from the grid at all during peak times." Deanne said.

Outcome

Having already installed solar panels, Deanne and Steve have been able to measure the cost savings and expect the additional panels will add to these savings.

"If the days starts out bright and sunny, especially in the summer months I'm very enthusiastic to see the home screen of the unit light up knowing the panels are generation power for us. That's a good result all round."

"Essential, free power and no emissions. We are always trying to find innovative ways to farm more efficiently and economically." Deanne said.

The initial 19 kw of solar panels have taken $500 to $550 per month off the Hore power bill during summer months, and they expect the extra 8 kw will reduce electricity costs by a further $200 per month.

This additional saving will be used to make further investments such as battery technology while they pay off the 9 kw of solar panels.

"Into the future our system will accommodate batteries to store any power generated rather than feed it back into the grid."