

The Energy Advisory Program Project Information

Coles Sustainable Dairy Development Group



coles
Dairy Farmers

1. Project Background

This trial aims to provide Coles Dairy Farmers with access to expertise to help them improve and optimise their energy management on farm.

The rising cost of electricity, the increasing complexity around network and retail costs as well as advances in technology make it difficult for farmers to know if they are achieving the best energy outcomes for their farms. Estimates from Dairy Australia and industry experts show that energy intensity a present typically ranges from 40-60 kWh per 1,000 litres of milk production. For many farms this is an annual cost of \$50,000 or more, and so any improvements represent an opportunity for ongoing yearly savings. Reducing energy use also helps the environment as energy is a significant contributor to greenhouse gases representing 14% of all dairy farm emissions according to Agriculture Victoria's Ellinbank farm.

During the trial, industry energy experts aim to provide the support and expertise needed to make lasting reductions in farm energy use and cost.

2. Scope of the Trial

The Energy Advisory Program is about helping dairy farmers reduce their energy cost. It is a tailored program to assist participants gain an understanding of the energy used on their farm, where improvements can be made, and the impact they can have on energy demand, energy cost and greenhouse gas mitigation. By the end of the program participants will have the confidence to make changes that lead to better financial and environmental outcomes.

Working as part of a group of 10 farmers across Australia, the key areas of the program will include:

- Tariff optimization to help reduce your network charges
- Energy contract review
- Review of the installed plant and equipment - Energy efficiency opportunities
- Load shedding or load shifting opportunities
- Energy Generation – Solar sizing
- Energy security – Generator sizing
- Operational emission profile

3. Expectations of Farms

To participate in the program, the farms will be required to do the following:

- Supply energy bills and info for the previous 12 months
- Provide annual milk production figures
- Attend the group kickoff and check-in calls (online)
- Consider implementation of the recommendations provided
- Completion of a short survey pre and post program

4. Expectations of the Energy Expert, Simon McKay (Sol Energy Pty Ltd)

Sol Energy is a leading South Australian energy consultancy and renewable energy provider focused on developing an environment that is sustainable for the future. The Director, Simon McKay, is an energy expert and advisor to Dairy Australia, with a Masters in Science (Architecture, Energy, and Sustainability), and key skills in Energy efficiency; Energy Audits; Energy Monitoring and Demand Management; Renewable energy; Sustainability and Sustainable building design.

Simon and his team will be responsible for running the program, including:

- Working with Farmers to collect required energy bills and data
- Analysing the farm energy data
- Providing the report and recommendations
- Supporting farmers in prioritising and planning potential energy reduction activities (online Zoom calls)
- Follow up phone support to farms

5. Project Plan

Activity	Timeframe
1. Participant Selection and group kickoff meeting (Zoom)	13 th December 2021
2. Collection of energy bills and equipment information	Dec 2021 - Jan 2022
3. Energy analysis and report	Feb / March 2022
4. Group progress check-in call (on line)	End March 2022
5. Implementation planning and support (one-on-one by Zoom)	April 2022
6. Farmer feedback Survey	April 2022
7. Report and Recommendations presented to CSDDG	May 2022
8. Field Day – option	June 2022

8. Key Contacts

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