

Clever Energy 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 at 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 Clever Energy Program is about helping dairy farmers get 'clever around energy'. 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 in Gippsland, the program includes:

- Analysis of farm energy bills and equipment energy usage
- An on-site energy audit and report
- A group workshop (face-to-face) to share findings and discuss opportunities
- Support in planning implementation of any projects selected
- Group catchup session (online) to check in on progress
- Some ongoing phone-based support

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
- Take temperature measurement of their plate heat exchanger (using a simple temperature strip that will be provided)
- Host the energy expert for the on-site energy audit (approx. 2-3 hours)
- Participation in a half day group workshop (face-to-face) in Gippsland in March 2022 with other farmers who took place in the trial
- Attend a check-in call (online) in April with other participants from the trial to discuss your experience.
- Completion of a short survey pre and post program

4. Expectations of the Energy Expert, Gabriel Hakim (AgVet Projects Pty Ltd)

With over 30 years of experience working in the dairy and energy industries, Gabriel Hakim has worked across Australia supporting farmers, technicians, veterinarians and students. He has a Graduate Diploma in Agribusiness and various other industry-related qualifications including a Master of Engineering (Sustainable Energy) through RMIT University.

For the last 15 years Gabriel has focussed on energy efficiency and sustainable energy technologies and how they may be best utilised in the dairy industry. At the practical level he has developed a dairy farm energy assessment tool for the industry, trains and mentors energy assessors and provides advice on evaluating technology options.

Gabriel will be responsible for running the program, including:

- Analysing the farm energy data
- Conducting the on-site energy audit and report
- Running the half day group workshop (Gippsland) in March
- Supporting farmers in prioritising and planning potential energy reduction activities
- Follow up phone support to farms

5. Project Plan

| Activity | Timeframe |
|--|---------------------|
| 1. Participant Selection | December 2021 |
| 2. Collection of energy bills and info | Dec 2021 - Jan 2022 |
| 3. On Farm energy audits | February 2022 |
| 4. Audit report | March 2022 |
| 5. Group workshop (face to face) | March 2022 |
| 6. Group progress check-in call (on line) | April 2022 |
| 7. Farmer feedback Survey | April 2022 |
| 8. Report and Recommendations – presented to CSDDG | May 2022 |
| 9. Field Day – option | June 2022 |

8. Key Contacts

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