

Sustainable Regions Program



North Stradbroke Bakery - Case Study

Stradbroke Bakery is the major supplier of fresh bread and baked goods on North Stradbroke Island in Moreton Bay. The Bakery has undergone some big changes recently in replacing their old two burner traveller oven with a new fan forced single burner oven that uses less than half the LPG per hour. The change has led to yearly savings of \$ 26,390 in LPG alone. Further, the bakery is now able to reduce their greenhouse emissions by 41 tonnes of CO₂-e.




1. Getting started

The North Stradbroke Bakery's sustainability journey commenced in 2009 when owner Gloria Jones identified the need to replace the Bakery's inefficient two burner oven. The oven consumed over 12.5L of LPG every hour and in addition to the 35 minutes the oven took to cook the bread, it required an additional hour and a half to reach the required temperature for baking. This meant the oven was switched on for at least eight hours every day while only being used for baking for five. The Bakery decided to take part in the Sustainable Regions program of Tourism Queensland in order to find a way to be more cost efficient.

2. Major initiatives

Through the Tourism Queensland Sustainable Regions program the Stradbroke Bakery measured their carbon footprint using the ecoBiz tool and assessed opportunities to reduce their energy use. In September 2009 the Bakery installed a new fan forced single burner oven. This new oven uses only less than half the LPG per hour (5L/hr LPG) of the



old 2-burner oven and reaches its desired temperature in just 15 minutes. The oven is now only turned on as needed for between 5 to 6 hours a day and cooks the bread in 26 minutes.

3. Key outcomes

The new oven saves 26,390L of non-renewable LPG every year and also saves the business around \$26,390 in LPG costs alone. Furthermore, the oven reduces greenhouse emissions from the bakery by an incredible 41 tonnes of CO₂-e. That is the equivalent of taking 9 cars off the road for a year! The payback period for the project is around 2.5 years.

4. Major challenges

The greatest challenge for the bakery was removal of the old oven and training of staff in the new equipment. Training took 5 weeks during which the team experienced some difficulties in the baking process. However, now that all staff are aware of the correct processes the baking process is much more efficient.

5. Advice to operators

Gloria's advice to other operators is about the purchase of new electric appliances:

"You shouldn't look at the actual retail prices, but rather at the usage numbers. Some appliances might seem very expensive on first sight, but when you calculate their energy efficiency, they can reduce your electricity bill remarkably."

6. Next steps

Having experienced a major win from the implementation of her new oven, Gloria does not want her sustainable actions to stop there. Since she started with ecoBiz last year she has begun to constantly assess the appliances used in the Bakery, with a particular focus on a new way of purchasing. Previously the Bakery's purchasing decisions were based simply on retail prices but they now invest more time into researching the product and the long term effects the new product will have on the cost and energy efficiency of the business.

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