



**Eco warrior:** Ferguson Plarre Bakehouses co-director Ralph Plarre inspects the production output of recycled heat

CASE STUDY

# EMISSION MAGICIAN

A bakery franchisor gives the green light to a range of environmental innovations. **Report: Sam McKeith**

● Ferguson Plarre Bakehouses is full of hot air and is using it to slash its carbon emissions. The company, which reports annual turnover of \$15-\$40 million and employs about 200 people, is recycling heat from the baking process to drive cake and pastry production, cutting its carbon output by more than 5000 tonnes a year.

The Melbourne bakery franchisor appears to be the exception to the rule. Businesses in Australia have yet to take action on the environment in big numbers. Just 22 per cent have internal policies aimed at cutting emissions, PricewaterhouseCoopers' 2008 Carbon Countdown survey shows.

The lack of action comes despite estimates suggesting that while carbon output from small businesses is negligible on an individual basis, their cumulative emissions may make up as much as 70 per cent per cent of global pollution.

The key to Ferguson Plarre's success has been channelling excess heat back into cake making, general manager Steve Plarre says. "We're generating hot water for cake production using waste heat captured from our refrigeration plant. The result has been a 76 per cent reduction in gas per meter squared,

equal to 646 tonnes of carbon. We've also used heat recovered from freshly baked products to heat the main production area in winter, thereby eliminating heat bleed into refrigerated and climate-controlled areas, which has resulted in savings of 2734 tonnes of greenhouse gas annually."

The initiatives have also improved the image of the company and allowed it to avoid the entanglements of the proposed emissions trading scheme by dealing with energy inefficiency before the cost of carbon is embedded in the supply chain.

"It confirms the brand as one of genuine caring, transparency and family oriented, something that is increasingly valued in the aftermath and excesses of the global financial crisis," Plarre says. "It also provides potential franchisees with the choice to engage with an environmentally committed franchisor, enabling customers to purchase their cakes and pastries from an environmentally committed company ... and has promoted Ferguson Plarre as a capital-attractive investment."

As well as recycling steam, the company is diverting rainwater from its roof to office toilets and planting more than 14,000 trees to offset emissions, and it has fired up the nation's first diesel hybrid truck, which it developed with the help of Sustainability Victoria.

"All printer cartridges are recycled using a free collection and recycling service, all hard-copy journals and unsolicited mail are unsubscribed or swapped to email delivery, and all administrative procedures are reviewed

in light of our aim to create a paperless office using email and PDF document distribution," Plarre says.

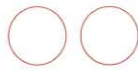
Even the cafeteria menu has a green tinge. "We now know that meat has a much higher carbon footprint than vegetables. And while we're unlikely to eliminate meat from our menu entirely, this knowledge will certainly drive us to consider more vegetarian options."

The environment is a priority at every staff meeting. "Our induction procedures ensure new employees know of our sustainability policy and how they can contribute to it. We use newsletters, signs, lunch-room green boards and executive green teams to ensure our environmental-management system is being executed. Every management and tool-box meeting has a sustainability item on the agenda."

Other plans include a giant worm farm, a biogas installation that creates heat from food and water waste and a chemical-free sanitisation system that uses electrolysed water.

Plarre says that while \$300,000 was spent on green initiatives, electricity savings alone add up to about \$290,000 annually. "We estimate that we spent an additional 3-4 per cent on building costs and we saved that back in the first year of our new bakery in electricity alone."

Some savings cannot be measured in carbon or dollars. "Through building our new bakery, we saw an opportunity to not only reduce our own environmental footprint but to help create an awareness in our employees, suppliers and customers of how they can help improve the world we live in," Plarre says. **BRW**



**We're generating hot water for cake production using waste heat captured from our refrigeration plant**

Steve Plarre

● SNAPSHOT

## Credit crunch

**Turnover above \$40 million**

Experienced reduction in debt facilities **24.7%**

Experienced an increase in debt margins **16.4%**

**Turnover below \$40 million**

Experienced reduction in debt facilities **33.1%**

Experienced an increase in debt margins **19.1%**

Source: BRW ANZ Private Business Research 2009