



# green sky thinking

by Rob Fyfe



Publicly, however, the most important aspect to be addressed is that the fossil fuel used to power planes contributes toward global warming. Although there is some emphasis on the potential ability of new aircraft design and technology to assist with the amount of fuel use, a major one is on finding alternative fuels.

The recent flight by Virgin Airways using 20 per cent biofuel made from coconut oil and babassu, caused controversy among some environmental groups, who claimed it was a gimmick. This detracted from the positive outcome of the flight, which highlighted that new fuels are on the horizon and will probably be available within the next five to 10 years.

Last year, Air New Zealand announced that we would undertake a test flight using a sustainable biofuel, and it will take place later in 2008. The growing awareness of the potential downsides of biofuel, such as the use of arable land to grow crops for it, is an issue — but the feed stocks being considered by Air New Zealand for the biofuel trial will overcome this. Two possible sources are under consideration: jatropha which grows on marginal land which cannot easily be used for other crops, and algae which grows on sewage ponds or in seawater.

Access to the required amount of suitable biofuel to conduct the trial will guide the timing of the flight, but it is planned to use it in one engine of a Boeing 747 on a test flight out over the Tasman Sea between Australia and New Zealand.

Unfortunately, there is no magic bullet that will be able to solve the biofuel challenge. Yet there is no doubt that algae does have advantages over other feed stocks as it can grow in waste water and only requires sunlight and carbon dioxide. It is also endlessly renewable.

The ultimate aim is to find a commercially viable alternative fuel for the airline from a New Zealand-based source, so algae will likely have the most potential.


Air New Zealand is keen to encourage research into alternative fuels and wants to work hand-in-hand with industry partners and the New Zealand Government in promoting this type of activity.

Alongside the biofuel initiative, we have already made significant steps toward the goal of becoming the world's most environmentally responsible airline through investing in new fleet. The Boeing 787 Dreamliner, due to come into Air New Zealand service in 2010, will save 20 per cent more fuel than similar aircraft, through a combination of new technology and weight reduction.

Together with the Boeing 777s currently flown by the airline, this will mean that Air New Zealand has one of the youngest, most technologically advanced, fuel-efficient and environmentally friendly long haul fleets in the world.

Within the company, we are working toward establishing an environmental management system with the target of attaining ISO14001 by 2010. Already projects are underway in waste management and energy auditing, along with regular compliance programmes.

Staff have been given the opportunity to think more about how they can be environmentally aware in their own lives, the community and at work by joining our Green Team. Nearly 20 per cent of Air New Zealand staff have already joined the team, which has champions across the business helping to get staff involved in environmental activities.

Other initiatives such as general fuel saving, weight reduction and flying techniques go a long way to already positioning the airline at the forefront of environmental responsibility. 

Perception of the environmental issues around air travel may cloud the reality of the size of the industry's contribution to global warming, but it is clear that airlines now face a real challenge in developing publicly acceptable environmental performance.

Less than three per cent of global carbon dioxide emissions currently come from aircraft and, although air travel is destined to increase over the next two decades, aviation will continue to remain only a small part of the big problem of climate change.

Air New Zealand is a small airline from a small country but the company sees the challenge of climate change as an opportunity.

As a country, New Zealand is committed to global leadership in environmental issues. We have a government pledged to environmental sustainability and an image as a 'clean, green country' to protect, both for the health of the planet and for economic necessity, as New Zealand's economy relies heavily on tourism.

As part of this commitment, Air New Zealand would like to become the world's most environmentally aware airline by incorporating environmental standards, products and practices into all areas of the business over the next few years.

Credibility needs to be an integral part of any company's environmental programme, as consumers have already become attuned to 'greenwash'. It is essential that environmental programmes operate not only at the airline's external face but throughout the company, with the engagement and involvement of employees.