

# Sustainability Case Studies



## Queensland Operators making a difference

### Rethink, Reduce, Reuse, Repair, Recycle (Red Mill House, Daintree)

<http://www.redmillhouse.com.au>

Red Mill House in Daintree, Tropical North Queensland offers deluxe Daintree accommodation to travellers who are interested in nature, wildlife and conservation.

Red Mill House has a strong relationship with Daintree State School - helping them to calculate their environmental footprint and reduce energy and waste levels; taking the children for interpretative walks, donating nature books to the library. They undertake a number of best practice activities include water, electricity and waste management. Through a philosophy of 'rethink, reduce, reuse, repair, recycle' they identify, manage and reduce their environmental footprint.

### Ecologically Sustainable Design (Lark Quarry Dinosaur Trackways, Winton)

<http://www.dinosaurtrackways.com.au/design.html>

The Lark Quarry buildings and infrastructure have been designed using ecologically sustainable design (ESD) principles, for maximum water, waste and energy efficiency.

To conserve and prevent damage to the dinosaur trackways the building was designed to: stabilise temperature and humidity fluctuations; stop water running over the tracks; and keep humans and animals off the fragile trackways.

The design includes: water and waste efficiency; temperature regulation; generate energy; minimal impact construction; solar energy.

### Environmentally Friendly Events (Stradbroke Weddings, Stradbroke Island)

<http://www.stradbrokeweddings.com.au/pages/about-us>

Stradbroke Weddings is committed to creating low impact, environmentally friendly events. This includes meticulous cleaning of areas after events, recycling of glass, paper and plastics wherever possible, daily checks of beaches used for marquees after the event and metal scanning of the area post-event.

Their policy extends to bans on products which resist biodegradation and can harm sea life, including turtles, which inhabit the waters around North Stradbroke Island and nest on the Island's beaches. In June 2008, Stradbroke Weddings celebrated its first year as a carbon neutral business.

### Bio-sequestration with Tree Planting Daintree Discovery Centre, Daintree

<http://www.daintree-rec.com.au/carbon.html>

An external audit of the Daintree Discovery Centre's carbon footprint was conducted by an independent consultant. This included energy consumption; diesel, gas and battery storage; waste management practices; packaging; food disposal; a recycling program; and water/waste disposal.

Development of a Bio-sequestration community project, the Tree Planting Initiative is designed to restore the habitat to protect the endangered species located in the Daintree. Bio-sequestration sequesters or soaks up carbon from the atmosphere because trees absorb carbon through photosynthesis.

### Driving 'Lite' (Down Under Tours)

<http://www.downundertours.com/about.html> The Down Under Tours Group of Companies has made a firm commitment to environmental sustainability through the support and participation in local studies for the Marine and Tropical Sciences Facility, the implementation of staff accreditation and achieving nationally and internationally recognised company accreditation.

It includes the focus on energy management, waste management; contribution to conservation through all levels of the Company; and monitoring and reviewing consumption of fuel/diesel and decreasing emissions in its fleet of vehicles. Throughout a journey, the driver is able to record events - for example, job start time, time taken on the job, idling time, kilometres taken for each job and fuel consumption.

### Waste Minimisation (Doomben Race Course, Brisbane)

<http://www.epa.qld.gov.au/publications?id=1334> Brisbane Turf Club recognised an opportunity to reduce both its annual expenditure and its impact on the environment. After investigation into waste minimisation initiatives, an on-course recycling program was introduced at Doomben racecourse. To encourage patrons to use the bins effectively, they coordinated an awareness campaign consisting of bin stickers, flyers, race book advertising, posters and loudspeaker announcements. On its first day, the Doomben racecourse recycling scheme netted 1.4 tonnes of recyclable plastic, glass, paper and cardboard that would have otherwise ended up in landfill.

### Onboard Environmental Management (Stradbroke Ferries, Cleveland)

<http://www.epa.qld.gov.au/ecobiz>

Stradbroke Ferries introduced a paper/card recycling policy on the vessel and in the office and uses only biodegradable cleaning products. On board initiatives include a tertiary sewerage system (on Sea Breeze) and dual flush toilets. To reduce energy consumption Triphosphate tube lighting was introduced.

### Staff Commitment brings results (Surfers Paradise Marriott Resort & Spa)

[http://www.marriott.com.au/marriott.mi?page=green\\_stories#surfers](http://www.marriott.com.au/marriott.mi?page=green_stories#surfers)

The Surfers Paradise Marriott Resort & Spa implemented an internal "environmental committee" with representatives from all departments to educate associates and implement environmental initiatives. The resort has seen substantial savings of energy, gas and water by implementing initiatives including: recycling of organic waste to use for composting; leak prevention, including installing new expansion joints to swimming pool; Installation of water flow controllers to all rooms and kitchens; Installation of LED lighting in all garden lighting; Reuse of ozone cooling water in decorative water features.

### Hybrid Solar Power Station Generates Real Savings (Lady Elliot Island Eco Resort)

<http://www.ladyelliot.com.au/news/default.asp>

Lady Elliot Island Eco Resort is located at the southern tip of the Great Barrier Reef. The resort wanted alternatives to their reliance upon three diesel powered generators for their electricity. Following an energy audit (Level 3) in consultation with the Great Barrier Reef Management Authority, the resort introduced a number of low-cost, energy saving measures which resulted in a 24% reduction in energy costs. The audit also identified the opportunity to develop a hybrid off-grid power station to reduce carbon emissions, noise and the reliance on fossil fuels.

The resort decided to establish a hybrid power station consisting of 130 square metres of solar panels, battery banks and inverters and a new generator that is a third the size of the existing unit. The resort now enjoys a 40% reduction in fuel consumption and emissions, with this expected to increase further as additional solar panels or wind generators are added over time.

The Power Station was funded as a joint venture between Lady Elliot Island and the Australian Governments Renewable Remote Power Generation Programme.

## Environmental Management System

### Asiana Airlines

Asiana Airlines has established an environmental policy and environmental objectives to minimize pollution. In 1995 Asiana Airlines became the first airline to obtain ISO 14001 (environmental management system) certification. To reduce and exhaust emissions, Asian Airlines maintains and operates Stage III engines only, which comply with the noise regulation criteria set by the ICAO (International Air Transport Association) for all operational aircraft. Use of engine washing saved 7,900 tons of greenhouse gas emissions in 2007-06 and a further 5,055 tons in the first nine months of 2008 alone.

Asiana Airlines conducts a review of its environmental policy every year and encourages a culture of protecting the environment with its staff across the entire spectrum of airline activities. In cooperation with Air Nippon it planted 500 Japanese black pine trees in south central Japan in 2008 as part of a combined effort to reforest a wooded area devastated by insects.

The airline was voted the 2009 Airline of the Year by Air Transport World.