

Tourism Operators RESPONDING TO CLIMATE CHANGE



Sustainable
Island
Resorts

*"We operate on a 'Four Es' philosophy - to look after our **E**nvironment we need to be **E**fficient, **E**conomically sustainable and able to **E**ducate effectively."*

Peter Gash,
Lady Elliot Island



Australian Government

**Great Barrier Reef
Marine Park Authority**

Sustainable Island Resorts



What is sustainable resort management?

Sustainable resort management is about finding alternative solutions to resort management issues which:

- Minimise the resort's impact on the surrounding and greater environment, including working towards being carbon neutral
- Reduce resource use (such as energy and water)
- Reduce and recycle waste
- Reduce costs
- Educate staff and guests about more sustainable practices.

In a changing climate, sustainable management is about making changes to how we do business while still offering the same, or enhanced, quality of experience, service and general standards.

Why should I care about managing my resort sustainably?

Visitors come from all around the world to experience the Great Barrier Reef. We want a long-term future for our island resorts and for the Reef so we can continue to offer a special experience for today's guests and for future generations of visitors.

You can lead by example and help educate and inspire your staff and visitors to act sustainably while around the resort, visiting the Reef and in



Photo courtesy Quinton Marais

their homes, which in turn will help:

- Deliver more efficient and cost-effective operations
- Ensure long-term protection and enhancement of the environment you depend on
- Meet the expectations of your guests and maintain your reputation.

How do I make my resort more sustainable?

Start with a review of how you are operating to find what you're doing well and what needs to change.

Be prepared to replace inefficient appliances or retrofit existing equipment to improve efficiency and output and reduce emissions. Find out how much this will cost and work out the cost-benefit.

- Conduct an energy audit and think about more efficient and cost-effective energy use options
- Look at ways to conserve water and use it more carefully (check equipment and behaviour)
- Explore alternative and creative ways to reduce, recycle and dispose of waste
- Train and educate your staff to be part of the process

- Educate your guests and inspire them to act at home
- Promote your actions and make them part of the attraction
- Look after the natural environment around you, plant native gardens and offer minimal impact resort activities
- Become certified under a recognised scheme such as Ecotourism Australia's ECO Certification and Climate Action Certification programs.



Sustainable Island Resorts

Check out the *Certification: Recognising Best Practice* case study for more information at www.gbrmpa.gov.au.

How will my customers react?

Island resorts operate in a closed environment so every move you make is visible to your guests. Make the most of this and tell your guests what you are doing in response to climate change.

Customers will be impressed with innovative thinking and clever management. Most visitors will enjoy being part of protecting the environment that has attracted them. Island resorts can sustain – or even improve – their unique experience and perhaps gain a marketing edge to attract environmentally-conscious guests.

Where can I find out more about sustainable management?

GBRMPA's Take Action on Climate Change
www.onboard.gbrmpa.gov.au/home/high_standards/climate_change_action

GBRMPA Showcasing sustainable island management
www.gbrmpa.gov.au/our-partners/tourism-industry/tackling-climate-change

Department of Climate Change and Energy Efficiency
www.climatechange.gov.au/

Innovative Sustainable Tourism
www.sustainabletourisonline.com/

Australian Government information and rebates for sustainable living
www.livinggreener.gov.au/



Checklist

- ✓ Conduct an energy audit and set targets
- ✓ Review your water use and sources
- ✓ Review your waste management – look for ways to reduce, recycle and dispose of waste sustainably
- ✓ Tell your guests what you are doing and encourage them to support your sustainability measures
- ✓ Use local native plant species for your gardens
- ✓ Become certified as a sustainable operation.





Case Study – Lady Elliot Island Resort

Lady Elliot Island Resort, the southernmost reef island in the Great Barrier Reef Marine Park, has earned a reputation as a sustainable island resort since it introduced and promoted innovative environmental initiatives following a major energy audit in 2007.

When Peter Gash took over the lease in 2005 the resort operated three fuel-guzzling generators and was fitted with energy-hungry appliances. As an active member of the GBRMPA's Tourism Climate Change Action Group, Peter was inspired to make operational changes at Lady Elliot Island.

"The audit showed us how inefficiently we were operating and how much energy we were wasting," Peter said. "With the help of several solar power experts, we set about making changes to reduce our energy consumption and greenhouse gas emissions. We started with the easiest steps and are still making improvements."



Photo courtesy Quinton Marais

In 2008, the diesel generators were replaced with a Hybrid Power System, which uses energy from the sun and diesel during the day, and charges a battery bank for night power. "We're particularly proud of the improvements from this system," Peter said. "We set a target in 2007 to reduce our energy use by 40 per cent and had reached 32 per cent reduction by the follow-up audit in 2009. Now we are closer to 70 per cent reduction, with significant savings all

Gains from Lady Elliot Island's Solar Hybrid Power Station

| | 2005 | 2011 | SAVINGS |
|------------------------------------|-------------------------------|-------------------------------|-------------------------------------|
| Greenhouse Gas Emissions | 540 tonnes CO ₂ -e | 195 tonnes CO ₂ -e | 340 tonnes CO ₂ -e /year |
| Daily fuel consumption litres/year | 550 litres | <150 litres | >350 litres/day (146,000) |
| Annual Running Costs | \$300,000 | \$82,000 | \$218,000 |
| Fuel storage (litres) | 70,000 | 25,000 | 45,000 |

Printed on recycled paper © Commonwealth of Australia. Published by the Great Barrier Reef Marine Park Authority 2012

Efficiency and sustainability measures introduced by Lady Elliot Island include:

- Fitting timers on the pool pump and water desalination pumps
- Replacing electric water heaters with 'on demand' gas hot water systems
- Replacing the electric kitchen stoves with a gas-powered model
- Installing banks of solar panels to power the resort's needs and feed surplus power into the grid
- Upgrading membranes on the desalination plant for more efficient fresh water production
- Trialling the latest energy efficient 'Danfoss water cube' desalinator
- Fitting water saving taps and shower heads in guest rooms
- Using treated waste water to irrigate
- Germinating native trees for island revegetation projects.

round!" With further planned developments Peter expects a further substantial drop in their daily diesel usage.

Peter and his supportive staff have been prepared to modify their behaviour to achieve their objectives and inspire resort guests to follow suit. "Sustainability messages are incorporated into guest inductions and guided tours and discreet reminders are placed around the resort. Most visitors love being part of innovative energy conservation. The back-of-house tour and Climate Change Trail are great hits."

For more information on Lady Elliot Island visit: www.ladyelliott.com.au.