



# Rowes Bay Sustainable House

*A house or a classroom?*

It began life decades ago as a caretaker's cottage, and is similar to many local buildings of its era.

## From an ugly ducking to a swan?

In 2008, a transformation began, with the building 'retrofitted' with energy efficient devices and renewable energy options. New devices, technologies and equipment were installed that weren't available when the building was originally constructed, and offer a working example of ways local residents can use these features in their own homes. The Sustainable House will also have an important part to play in Townsville City Council's hands-on learning approach to sustainability in water, energy and nature

## What makes the Sustainable House sustainable?

- White **solar**-reflective paint used on roof
- Old Cardiff Air whole-of-house extraction fan replaced
- Electric hot-water system replaced with a **solar** heat-pump
- **Water-efficient** shower head and bathroom and kitchen taps installed
- 1.5kW **Solar** PV array installed on the roof
- Strip and circular **fluorescent** lighting retrofitted through out.
- 900W **wind-turbine** (under construction)
- Dry Tropics **Water-smart** Garden (planned).

## What next for the Sustainable House?

A planned indoor-outdoor area, added to the house's eastern side in 2009/10 will demonstrate the latest in solar electric panels – Building Integrated Photovoltaic's (BIPV). The BIPVs will show how to minimise air conditioner use by designing an indoor-outdoor area open to the breezes, and provide a learning space where students and the community can learn about solar power and better tropical building design.

## What can you do at home and school for a sustainable future?

Cut out the following list and place it on your fridge or noticeboard to remind you of these easy actions!

### I'm going to be sustainable by...



- Turning off lights when they're not in use
- Turning off appliances at the wall
- Setting air conditioner to 25 °C in summer
- Taking shorter showers
- Turning off the tap when brushing teeth
- Using door seals to stop cool air from getting out
- Closing curtains to keep cool air in
- Using public transport, walk or cycle to get to school
- Planting local native plants to help remove carbon dioxide from the air
- Installing water saving showerheads
- Switching to energy efficient light globes
- Not standing with the fridge door open, and ensure seals work properly
- Fixing leaking taps to reduce water wastage
- Using nature's cloths dryer – wind and sun
- Recycling and composting
- Purchasing appliances with a high energy star rating

