

# Cairns Regional Council State of the Environment Report 2012/13



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**Cover photograph:** Four Mile Beach Port Douglas



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*Cerbera manghas* photographer Bob Jago



*Gymnostoma australianum* Photographer Bob Jago

# Introduction

This is Cairns Regional Council's fifth State of the Environment Report (SOE). Council believes in the importance of transparent reporting and accountability of its performance to the community and even though there is no legislative requirement in Queensland to prepare an SOE, Council does so on an annual basis.

The State of the Environment Report uses data collected for various indicators, including indicators relating to broader sustainability aspects such as community well-being and governance, and monitors Council's performance against them.

## Structure of Report

This report includes "Snapshots" of key data, a data summary table, explanations of what the data means and related Council stories. The data snapshots should be read together with the explanations to ensure a full understanding of the trends for this year.

This report aims to provide the community with an indication of Council's performance against indicators grouped under the following four themes of sustainability:

- Improving Resource Efficiency
- Conserving Biodiversity
- Enhancing Community Health and Wellbeing
- Delivering Sound Economic Management and Governance

The above themes align with Council's Sustainability Scorecard which is a tool utilised by Council aiming to drive improvement in these four areas. This report delivers a quadruple bottom line to Councils performance over the 2012/13 financial year.



View over Trinity Beach, photographer Daryl Jones

## Waste

- **50,969 tonnes of domestic kerbside waste collected, around 1% more than the previous year.**
- **11,852 tonnes of domestic kerbside recycling collected, around 4.7% more than the previous year.**
- **20,287 tonnes of Green Waste processed, 6.9% less than the previous year.**
- **6,453 tonnes of recyclables sent for recycling, 6.7% more than the previous year.**
- **4,560 tonnes of tyres were recycled, 17.5% less than the previous year.**
- **65,330 litres of oil sent for recycling, 7.1% more than the previous year.**
- **The Bedminster composting facility was not operational for 11 months. During this time waste was taken directly to landfill.**

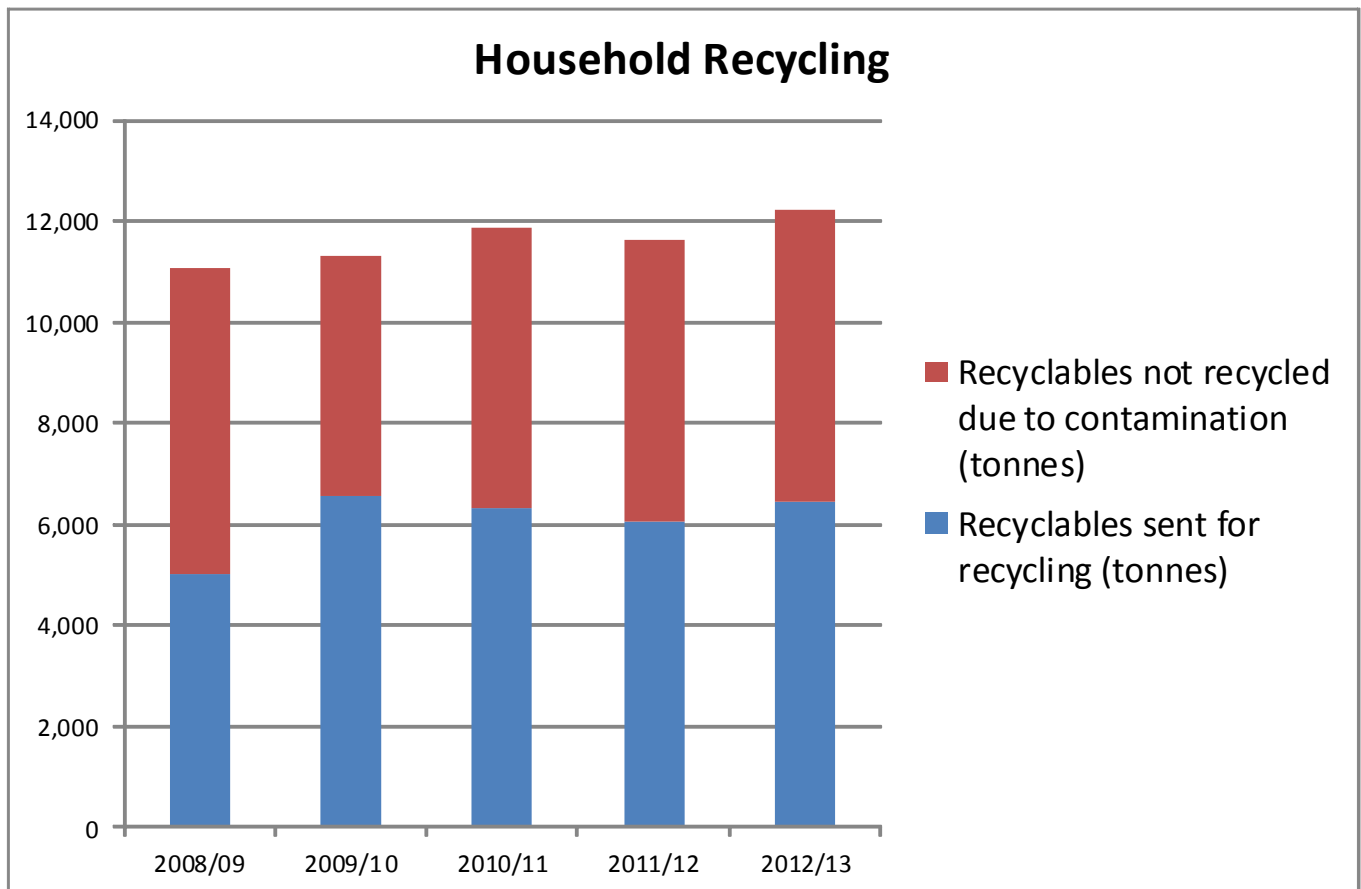
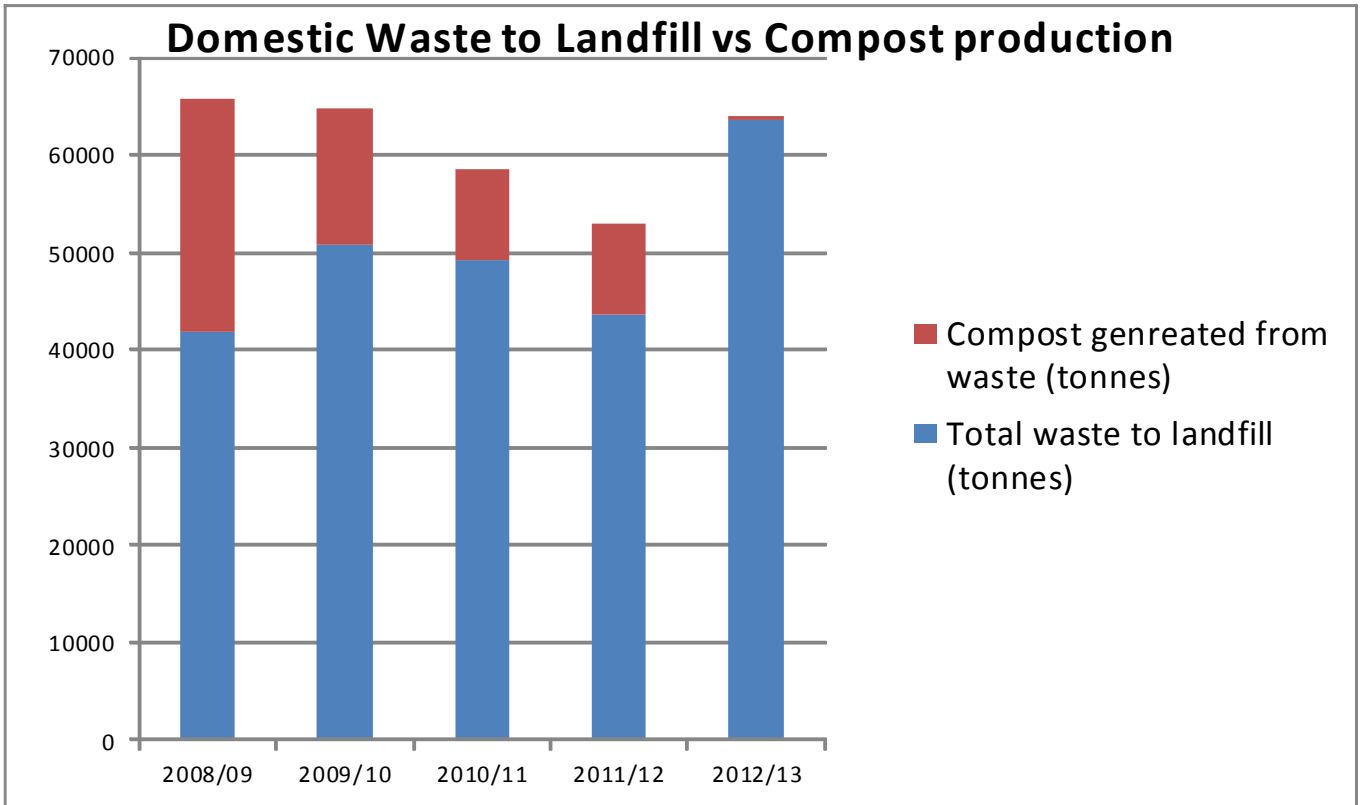
\* *Waste commentary on page 15*



*Portsmouth landfill, Cairns*



*Council hybrid waste truck*



## Water

- Per capita daily water consumption (residential, only) 241 litres per day, 17% more than the previous year.
- Per capita daily water consumption (residential, industrial, commercial and agricultural) 483 litres per day, 3% more than the previous year.
- 1,698 mega litres of recycled water used, 29% more than previous year.

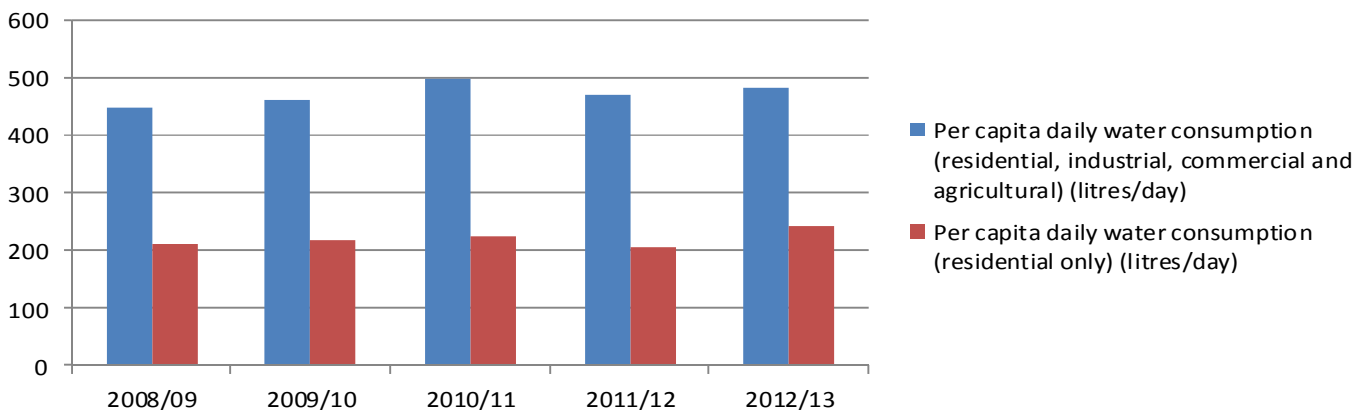


\* Water commentary on page 15



Northern Wastewater treatment plant

### Per capita daily water consumption





## Energy and Emissions

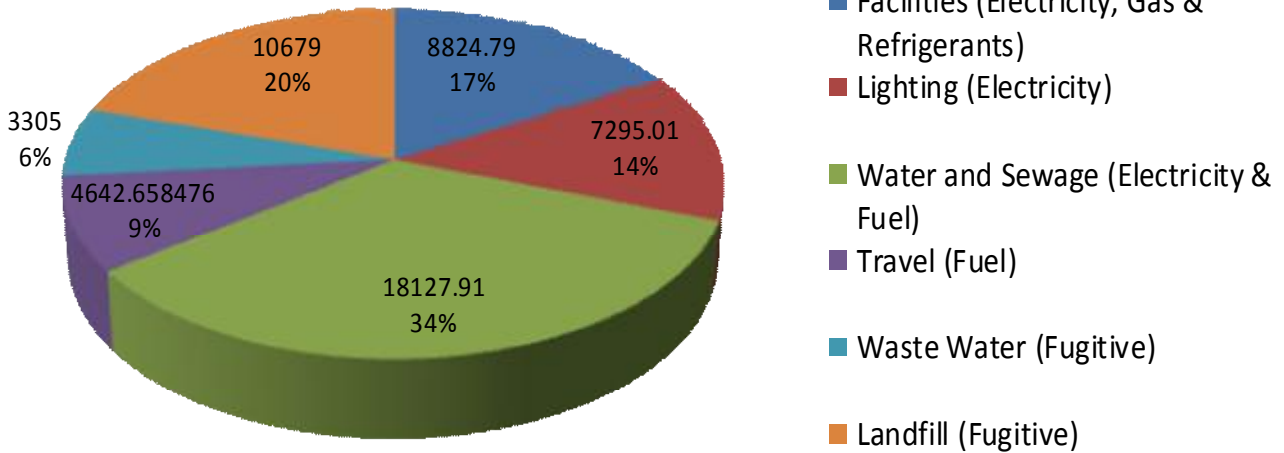
- Council activities emitted an overall total of 52,874 tonnes CO<sub>2</sub> e, 26% less than the previous year.
  - Council has reduced its greenhouse emissions by 41% over the past two years.
  - Council used 39,301,920 kilowatt hours of electricity, (equivalent to 5,380 average Australian homes) 1.9% less than the previous year.
  - Council's electricity use emitted a total of 34,248 tonnes CO<sub>2</sub> e, 5.3% less than the previous year.
  - Council vehicles emitted a total of 4,643 tonnes CO<sub>2</sub> e, 5% more than the previous year.
  - Landfill emissions were 10,679 tonnes CO<sub>2</sub> e, 61.5% less than the previous year.
- \* *Energy & emissions commentary on page 16, 17*



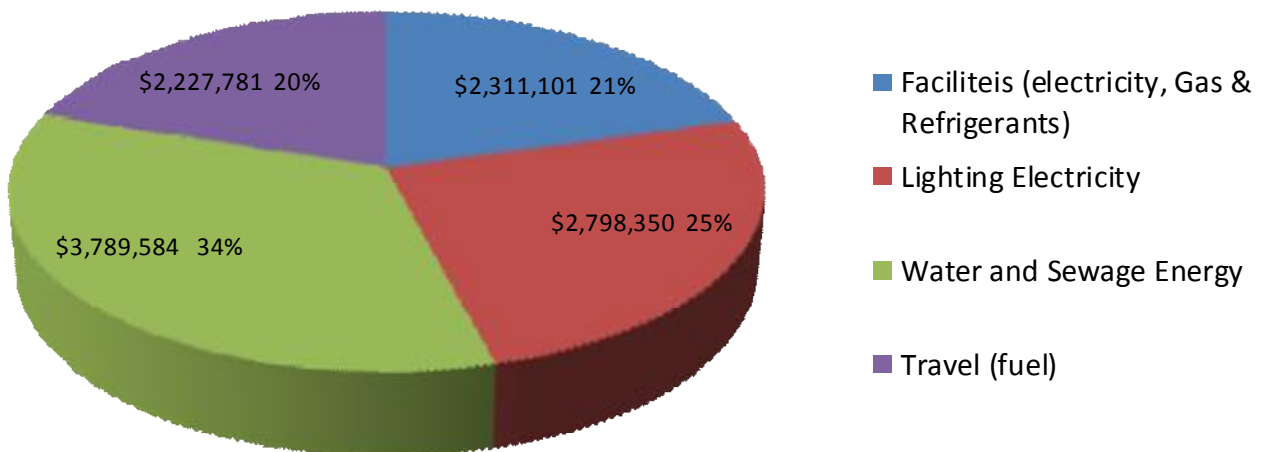
*Installing 20kW solar array*

*Botanical  
Gardens Visitor Centre  
Edge Hill*

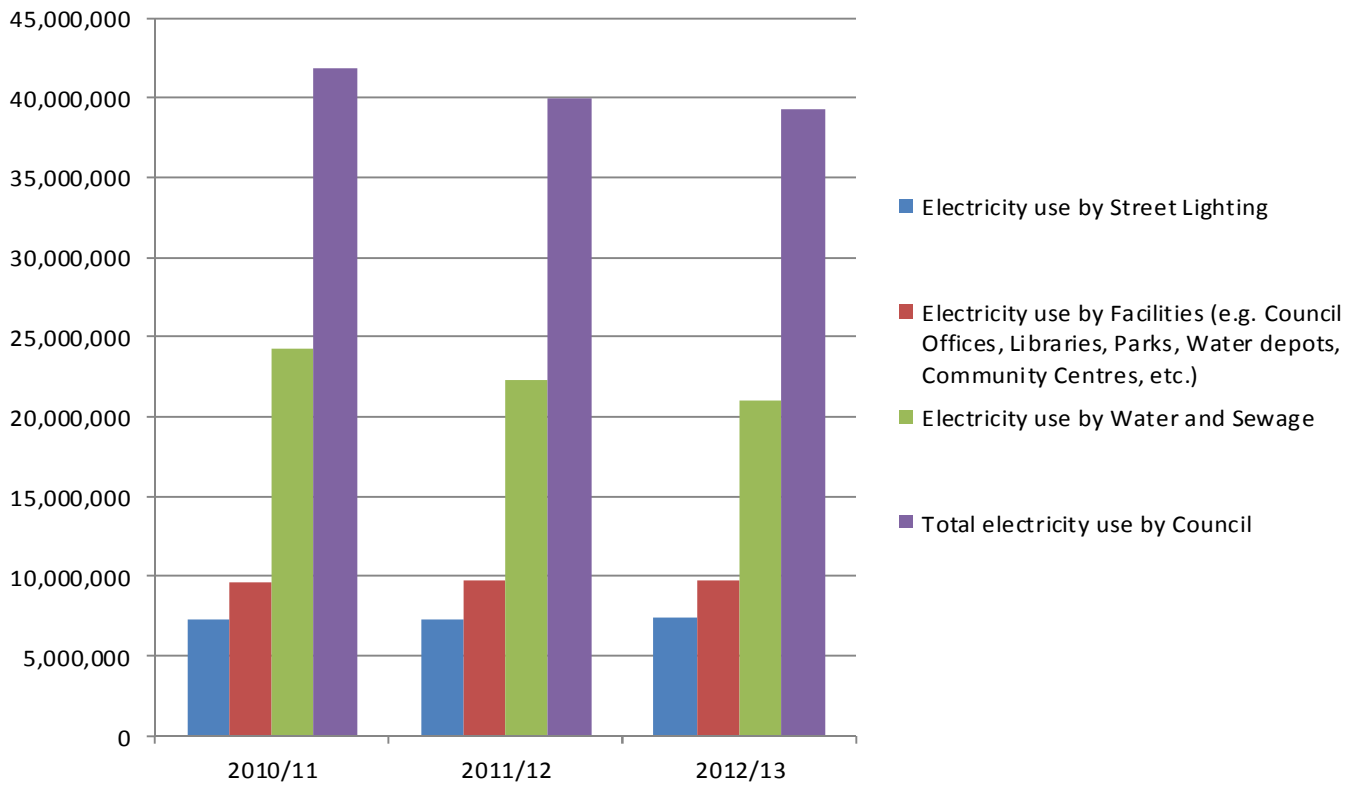
## Council Greenhouse Gas Emissions by activity CO2e (2012/13)



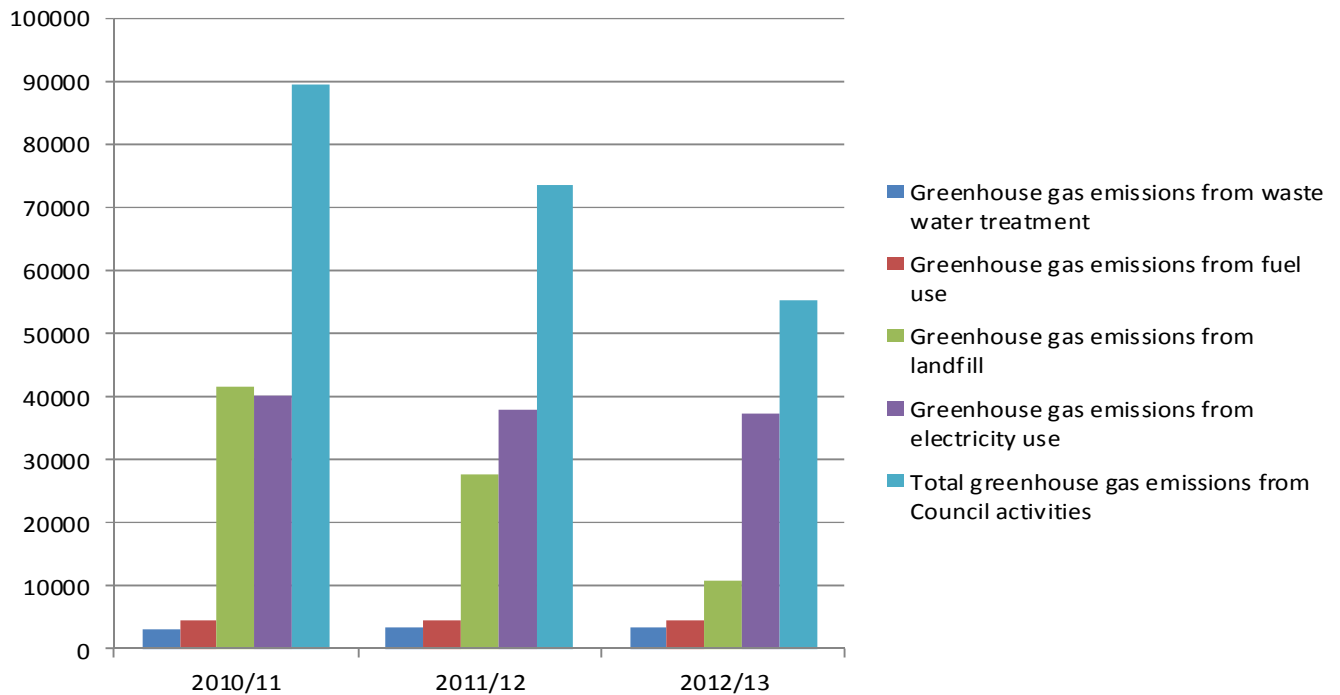
## Energy Cost by activity (2012/13)



## Electricity use by Council



## Council Greenhouse Gas emissions



### Conserving biodiversity

- 24,470 trees planted, 3.1% less than the previous year.
- 11,857 trees donated to the community, 3.3% more than the previous year.
- Days spent managing high priority weeds was 606 which is 4.8% more than the previous year.
- 320 feral pigs destroyed in the Daintree, 13.1% more than the previous year.
- 0.5% of total Council budget was spent on management of natural areas, 40% less than the previous year.

\* *Conserving biodiversity commentary on page 18*



Waterfall Frog, photographer Martin Cohen

## Governance & Economic management

- **363 Planning Applications** received, 5.5% less than previous year.
  - **2,463 Building Approvals** issued, 4.1% less than previous year.
  - **Council staff turnover rate 10.7%**, around 31% less than the previous year.
  - **Total Council employees 1,426** which is 6% less than last year.
- \* *Governance commentary on page 16*



School Visits

## Community wellbeing

- **96 square kilometres** of Council area is accessible as parks and land for community use, around the same as the previous year.
  - **476 kilometres** of shared cycle/pedestrian pathway and **6km** of dedicated cycleway in the Council area.
  - **Total Cyclist Count for Super Tuesday** was **1435** up **13.3%** from last year.
- \* *Community commentary on page 16*



Sustainable Living Expo 2013, Fogarty Park

## Data - Improving Resource Efficiency

Indicator	2008/09	2009/10	2010/11	2011/12	2012/13	Trend	✓ ✗ -
<b>WASTE</b> —Some previous financial years figures have been amended as a result of an extensive data cleansing exercise on all waste datasets which should result in more accurate reporting.							
Domestic Kerbside Waste collected (tonnes)	48,913	49,412	50,103	50,458	50,969	1%	-
General domestic waste taken to Transfer Stations (tonnes)	9,481	9,646	10,380	9,608	10,623	2.7%	^
Total domestic and kerbside waste	69,663	66,328	62,147	62,634	64,298	-2.7%	✓
Construction waste to landfill (tonnes)	2,582	272	302	542	740	36.6%	✗
Commercial waste to Transfer Stations (tonnes)	5,222	3,847	4,307	3,828	1,760	-54%	✓
Commercial waste to landfill (tonnes)	3,084	2,363	2,041	2,197	1,048	-52.3%	✓
Total waste to Bedminster (tonnes)	68,663	45,855	63,852	62,634	4,325	-93.1%	✗
Total residential waste directly to landfill (tonnes)**	0	20,473	18,295	0	59,973	-100%	✗
Soil Conditioner exported from Bedminster (tonnes)	23,797	13,946	9,226	9,315	467	-95%	✗
Non-compostable waste exported from Bedminster to landfill (tonnes)	41,896	30,333	31,033	43,563	3,591	-91.8%	✗
Green waste processed (tonnes)	17,180	16,698	21,786	22,110	20587	-6.9%	✓
<b>RECYCLING</b>							
Total recyclables collected (tonnes)	11,068	11,321	11,681	11,644	12,209	4.9%	✓
Total recyclables sent for recycling (tonnes)	5,031	6,544	6,307	6,045	6,453	6.7%	✓
Proportion of collected recyclables sent for recycling	45%	58%	54%	52%	53%	1.8%	✓
Domestic kerbside recycling collected (tonnes)	10,917	11,089	11,357	11,320	11,852	4.7%	✓
Commercial waste recycled (tonnes)	21	34	113	99	81	-18.2%	✗
Metal recycled (tonnes)	3,592	2,396	4,893	3,766	2,763	-26.6%	✗
Tyres recycled (tonnes)	16,522	12,119	9,338	5,527	4,560	-17.5%	✗
Oil sent for recycling (litres)	53,206	73,920	78,730	61,000	65,330	7.1%	✓
Batteries sent for recycling (tonnes)	166	89	72	82	72	12.2%	✓

# Data - Improving Resource Efficiency

Indicator	2008/09	2009/10	2010/11	2011/12	2012/13	Trend	✓ ✗ -
<b>WATER &amp; WASTEWATER</b>							
Per capita daily water consumption (residential, industrial, commercial and agricultural) (litres/day) <sup>#</sup>	447 L/day	461 L/day	497 L/day	469 L/day	483L/day	3%	✗
Per capita daily water consumption (residential only) (litres/day) <sup>#</sup>	212 L/day	217 L/day	223 L/day	206 L/day	241L/day	17%	✗
Total wastewater treated (megalitres)	Not available	Not available	24,849 ML	21,413 ML	20,445ML	-4.5%	✓
Total wastewater discharged (not reused) (megalitres)	Not available	Not available	23,667 ML	21,162 ML	18,214ML	-13.9%	✓
Recycled Water Used (megalitres)	650 ML	1042 ML	1042 ML	1320 ML	1698ML	28.6%	✓
<b>WATER QUALITY</b>							
Compliance with EPA Sewerage Licensing requirements (%)	97%	98%	99%	99%	99%	0%	✓
Gross Pollutant Traps (GPTs) Cairns region waterways	Not available	Not available	Not available	178	187	5.1%	✓
Number of Floating Litter Traps (FLT's)/	Not available	Not available	Not available	2	2	0%	-
Volume of rubbish m3 in FLT	Not available	Not available	Not available	3.5	5	42.9%	✓
Volume of sediment in GPT's	Not available	Not available	Not available	50	30	-40%	✓
Volume of rubbish in GPT's	Not available	Not available	Not available	130	140	7.7%	✓



Behana Creek, Cairns Regional Council

## Data - Improving Resource Efficiency

Indicator	2008/09	2009/10	2010/11	2011/12	2012/13	Trend	✓ ✗ -
<b>ENERGY &amp; EMISSIONS</b> —Some previous financial years figures have been amended as a result of a review and upgrade of the Energy Emissions System to more accurately report data.							
Fuel use by Council vehicles – Diesel (litres)	1,311,024	1,216,921	1,336,811	1,366,865	1,465,030	7.2%	✗
Fuel use by Council vehicles – Unleaded (litres)	422,609	331,065	344,980	318,065	242,149	-23.9%	✓
Greenhouse gas emissions from fuel use (tonnes CO <sup>2</sup> e*)	4,854	4070	4422	4,413	4,643	5%	✗
Electricity use by Street Lighting (kWh)	7,119,125	7,323,386	7,242,776	7,985,465	8,482,604	6%	✗
Electricity use by Water and Sewerage networks (kWh)	14,640,973	21,085,947	24,252,727	22,318,110	21,044,484	-6%	✓
Electricity use by Councils facilities <(kWh)	10,334,749	10,205,113	9,655,931	9,759,963	9,774,832	0%	-
Electricity use by Council offices (kWh)	Not collected	Not collected	2,193,026	2,104,739	2,216,183	5.3%	✗
Electricity use by Council pools (kWh)	Not collected	Not collected	1,534,916	1,679,630	1,698,273	1.1%	-
Electricity use by Council Libraries (kWh)	Not collected	Not collected	1,051,542	1,005,507	940,150	-6.8%	✓
Electricity use by Council Depots (kWh)	Not collected	Not collected	1,037,113	918,778	926,328	0.8%	-
Electricity use by Community Centres (kWh)	Not collected	Not collected	289,716	441,489	473,132	5.1%	✗
Total electricity use by Council (kWh)	32,094,847	38,614,446	41,817,461	40,063,538	39,301,920	-1.9%	✓
Total energy cost to Council (\$)	Not collected	Not collected	10,431,225	11,019,550	11,126,817	1.0%	-
Greenhouse gas emissions from electricity use (tonnes CO <sup>2</sup> e)*	33,761	35,310	40,256	36,152	34,248	-5.3%	✓
Fugitive greenhouse gas emissions from waste water treatment (tonnes CO <sub>2</sub> e)	Not collected	Not collected	2,994	3,324	3,305	-0.6%	✓
Fugitive greenhouse gas emissions from landfill (tonnes CO <sub>2</sub> e)	Not collected	Not collected	41,731	27,745	10,679	-61.5%	✓
Total greenhouse gas emissions from Council activities (tonnes CO <sub>2</sub> e)	Not collected	Not collected	89,403	71,633	52,874	-26.2%	✓

< includes– offices, libraries, depots, unspecified, museum/arts, parks, water depots, community centres, amenities, waste facilities



## Data - Conserving biodiversity

Indicator	2008/09	2009/10	2010/11	2011/12	2012/13	Trend	✓ ✗ -
<b>ENVIRONMENTAL RESTORATION</b>							
Number of trees planted by Council	49,166	44,243	43,680	25,263	24,470	-3.1%	✗
Number of trees donated to the community	27,689	13,687	11,108	11,473	11,857	3.3%	✓
Number of trees under management	74, 150	123, 316	167, 559	192,822	72,970	-62.2%	✗
Days spent on watering/maintenance/site preparation	242	310	1442	575	456	-20.7%	✗
Number of seedlings potted	105,675	78,246	63489	42,266	28,418	-32.8%	✗
Number of hours spent on seed collection	248	225	226	210	175	-16.7%	✗
Per cent of annual Council budget spent on natural areas management	0.5%	0.89%	0.96%	0.80%	0.48%	-39.7%	✗
Number of hours spent on revegetating riparian areas	Not collected	Not collected	Not collected	5,716	3815	-33.3%	✗
<b>PEST MANAGEMENT</b>							
Number feral pigs destroyed	706	671	849	652	633	-2.9%	✓
Number feral pigs destroyed (Daintree)	602	589	547	283	320	13.1%	✓
High Priority Weeds (days)	138	164	1128	578	606	4.8%	✓
<b>MOSQUITO CONTROL</b>							
Number of Mosquito Complaints Received	Not collected	227	588	210	345	63%	^
Amount of pesticide sprayed for mosquito control (Reslin and Pyrecide) (litres)	Not collected	431	531	452	1,046	131.2%	✓



*Licuala ramsayi*, Cairns Regional Council

# Data - Community, Governance and Economy

Indicator	2008/09	2009/10	2010/11	2011/12	2012/13	Trend	✓ x -
<b>OPEN SPACE</b>							
Council land area accessible as parks and lands for community (square kilometres)	Not available	Not available	96.1	96.3	96.4	0.1%	✓
<b>COMMUNITY PROGRAMS</b>							
Kilometres of shared cycle/pedestrian pathways within Council region	Not available	423	475 <sup>##</sup>	476	481.4	1.1%	✓
Kilometres of dedicated bikeways within Council region	0	0	6	6	6	-	-
Total cyclist count for Super Tuesday bike count	Not available	Not available	1139	1,267	1435	13.3%	✓
Per cent of Council budget spent on cultural service events, facilities and programs <sup>**</sup>	Not available	Not available	3.03%	2.6%	2.78%	7.3%	✓
<b>COMMUNITY SATISFACTION</b>							
Community Overall Satisfaction rating (% of respondents rating overall satisfaction as average or above average)	Not available	Not available	77.5	Not available	Not available	Not available	-
<b>ECONOMIC SUSTAINABILITY</b>							
Building Applications approved	3,724	3,557	2,653	2,572	2,463	-4.2%	-
Planning Applications received	539	521	376	384	363	-5.5%	✓
<b>STAFF WELLBEING</b>							
Staff turnover rate (%)	Not available	12.22	10.34	15.52	11.5%	-26.2%	✓
Average days of sick leave taken per Council staff member	Not available	7	7.7	7	11	57.1%	x
Employee Overall Satisfaction Rating (out of 7)	Not available	4.22	4.38	Not available	Not available	-	-

<sup>^</sup> Elements for which the trend has neither positive or negative environmental impacts, or for which impacts are unclear.

- Indicates a 'no significant change' from the previous year.

\* Using NGER methodology for GHG emissions calculations (*National Greenhouse and Energy Reporting (NGER) Act 2007*).

# Data is for the Cairns city region (excluding Division 10, previously Douglas Shire)

\*\* Due to Bedminster being out of operation.

## This data has been altered from the previous year due to introduction of a more accurate data set.

++ Due to a restructure of the Creative Cairns branch, some re-calculations have been made to allow a comparison with the previous years data.

# Sustainability Performance Summary

## Improving Resource Efficiency - Waste Composting Facility

Council provides a waste kerbside collection to 75,000 people across the Cairns Region. All general and domestic waste from is taken to the Portsmith composting facility called Bedminster. This facility is operated by SITA Environmental Solutions.

Waste is processed through Bedminster in one of three on site compost tumblers and then placed into wind rows to mature into agricultural grade compost. Residual waste (i.e. non organic waste) that cannot be composted is transported to landfill. In 2012/13 there was 4325 tonnes of waste processed through Bedminster a 93% reduction from the previous year and of that, 467 tonnes was used as compost on local farms; a 95% reduction from last year.

The figures for the waste to Bedminster and the amount of compost produced are low due to the composting facility undergoing maintenance for 11 out of the 12 month reporting period. In 2012/13 a total of 59,973 tonnes of waste was taken to landfill.

## Materials Recovery Facility (MRF)

As part of Council's kerbside recycling service 12,209 tonnes were collected in 2012/13 of which 6,453 tonnes were sent for recycling equating to 53% of the total recyclables collected. There was a 4.9% increase in recycling collected this year due in part to the Councils recycle right program and a slight increase in the number of kerbside collection customers. There was an increase in the recycling of oil by 7.1% and in all other recycling streams of commercial waste, metal, tyres and batteries there was a decrease in the totals for the year.

## Water and Wastewater

Both per capita residential and overall water consumption increased from the previous year (by around 17% and 3% respectively). This may be due to a decrease in rainfall during the wet season this year and a subsequent higher demand for water however over water consumption is at its highest for five years.

Recycled water use increased by 28.6% due to the expansion of the recycled water network particularly from the Marlin Coast facility and increasing demand for recycled water due to dry weather conditions. Recycled water is supplied from the Marlin Coast wastewater treatment plant to Half Moon Bay golf course, Paradise Palms golf course and Yorkeys Knob State School.

Total wastewater treated was down by 4.5% at 20,445ML and total wastewater discharged was 18,214ML down by 13.9% from last year. The reduction in water levels may be due to a drier wet season and a Council program to reline sewers to reduce infiltration and identify any illegal connections.

Council's four largest wastewater treatment plants (Northern, Southern, Edmonton and Marlin Coast) were recently upgraded so that wastewater discharged from these plants is A+ standard. This means that the discharged water has significantly reduced nutrient loads (5 x less nitrogen, 10 x less phosphorous) ensuring the protection of the Great Barrier Reef.

Council has installed 187 gross pollutant traps (GPT's), up 5.1% on last year. The GPT's collect rubbish and sediment to protect and restore waterways in the region. Council also has 2 floating pollutant traps which collected 42.2% more rubbish compared to last year.

# Sustainability Performance Summary

## Improving Resource Efficiency - Energy and Emissions

In 2012/13 the total emissions from Council activities were 52,874 tonnes of CO<sub>2</sub>e. This is a 26% reduction compared to the previous year. Emissions have reduced by 44% compared to the Council's 2007/2008 benchmark. Given these figures Council continues to be on track to meet its Carbon emission reduction target of 50% by 2020.

### Why did Council's emissions decrease?

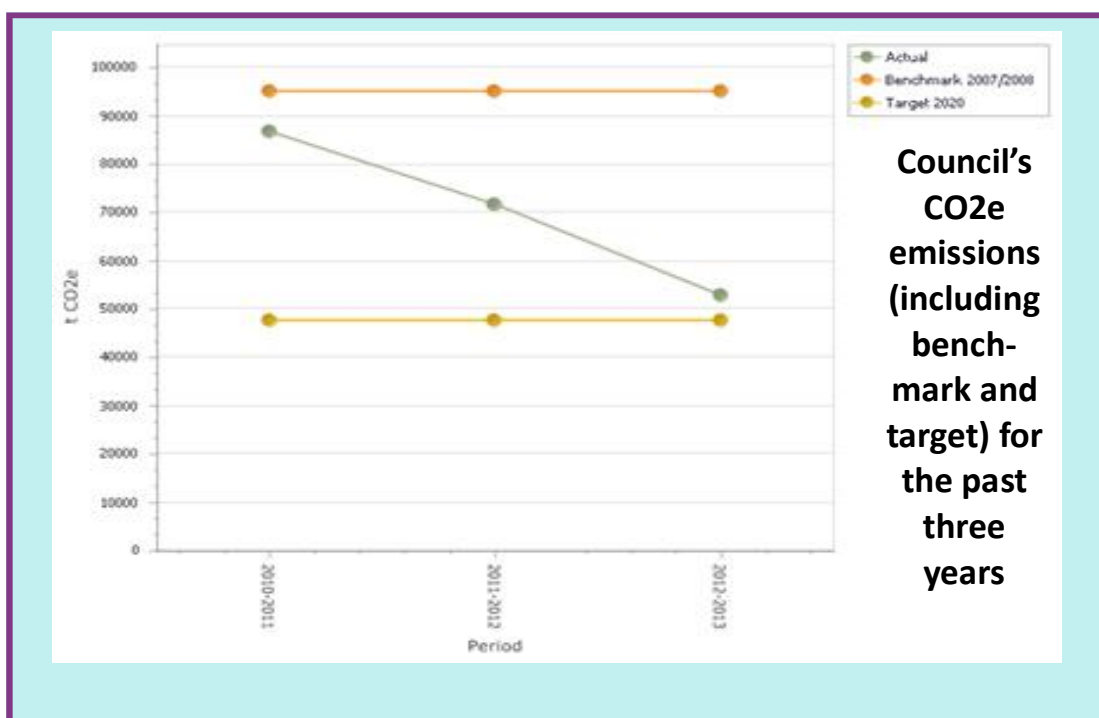
The most significant contribution to this reduction was the flaring of methane from the Portsmouth Landfill. Methane, released from the breakdown of organic waste, is a potent greenhouse gas, 21 times more potent than CO<sub>2</sub>. Council has installed a gas extraction system and flare at the landfill, which allows the landfill gas to be collected and burnt so that the methane is destroyed. This flaring of landfill gas reduced emissions from landfill by an estimated 62%. Energy consumption for Water and Sewerage reduced by 6% compared to last year, while other activities did not change significantly. There was also a general reduction in the reported emissions from electricity due to a change in the greenhouse coefficient for Queensland electricity, reflecting changes to the electricity supply mix.

### What are activities are the greatest emissions contributors?

Energy consumption for water and sewage processing has the highest emissions out of all of the activity groups followed by landfill emissions, facilities, lighting, travel and wastewater (fugitive emissions).

### What is the cost of Council's energy use?

Council's total energy cost for 2012/13 was \$11,126,817, very similar to 2011/12. This figure includes electricity, fleet fuel, generator fuel and gas. Electricity consumption, which accounts for the bulk of this cost, decreased by around 2% from the previous year. In terms of annual operational energy costs per activity, water and sewage treatment contributes the greatest amount to this total energy cost at around \$3.8 million per year, followed by lighting, facilities then travel.



# Sustainability Performance Summary

## Improving Resource Efficiency - Energy and Emissions

### Facilities

There has been no significant change in the total facilities energy use compared to last year. There have been some significant changes in the emissions from specific types of facilities, notable Water Depot emissions decreased by 23%. However, these reductions were offset by increases in other types of facilities, such as Waste Facilities which increased by 10%.

### Street Lighting

In 2012 Ergon Energy completed an audit of street lighting assets which accurately determined the number of streetlights for which Council is responsible. Ergon now provide kWh consumption data with each bill. This has resulted in significant changes to the electricity costs and emissions attributed to Council's street lighting. There has been a 6% increase in the reported annual electricity consumption for Council's streetlights, but a 12% reduction in the cost compared to last financial year. The 12% reduction is a result of Alternate Control Services (ACS) charges being maintenance charges not passed on to the customer. However the Queensland Government has accepted a recommendation to pass on 10% of the ACS or non-energy street lighting charges from the 1st July 2014.

### Water and Sewage

There were significant reductions in energy consumption for wastewater treatment and wastewater pumping. However there were significant increases in water pumping and unspecified accounts. Water treatment and storage did not change significantly. Actions have been undertaken to optimise efficiency of pumps, blowers and other equipment. The figure for fugitive emissions from wastewater treatment has not changed significantly from the previous year.

### Travel

Diesel consumed by the Council vehicle fleet is the greatest source of both fuel emissions and cost. Many petrol light commercial vehicles have now been replaced with more fuel efficient diesel vehicles. This has contributed to a 24% reduction in unleaded fuel consumption and a 7% increase in diesel fuel consumption. Many diesel light commercial and light trucks have been replaced with more fuel efficient vehicles.

### Fugitive waste emissions

A significant reduction in landfill fugitive emissions has been achieved by 'flaring' the methane gas at Portsmouth Landfill. This process involves extracting the gases from the landfill and burning it to destroy the methane and thereby avoiding the release of this potent greenhouse gas. This process has eliminated around 62% of the landfill gas fugitive emissions. Flaring was operational for 10 months of the 2012/13 financial year.

### Top sites

The electricity consumption of Council's top 20 consuming electricity accounts, contribute 74% of the total electricity consumption. The top 6 sites include; Northern and Southern Waste Water treatment Plants (WWTP), street lighting, Marlin Coast WWTP and the Spence street administration building. The complete greenhouse inventory is available on Council's website [www.cairns.qld.gov.au](http://www.cairns.qld.gov.au).

# Sustainability Performance Summary

## Conserving Biodiversity

The number of trees planted and propagated each year fluctuates according to phases of revegetation planting and maintenance. During some years, Council staff concentrate on weed management and tree maintenance rather than propagating and planting new trees.

The number of trees donated to the community increased by 3.3% and the number of trees planted by Council decreased slightly by 3.1% from the previous year. The number of seedlings potted decreased by 32.8%, and hours spent on seed collection decreased by 16.7%. The per cent of annual Council budget allocated to natural areas management was 0.5%. This was a decrease of 39% which has contributed to the reduction of seedlings potted, seeds collected and trees planted. This reduction in budget was partly due to the reduction in external funding from Terrain Natural Resource Management.

The number of trees under Council management decreased by 62.2% as previously planted trees have grown to a certain stage where they do not require ongoing maintenance. A 60% decrease in days spent on watering and maintenance is partly due to the Council having less trees under management, less trees planted and a reduction of staffing levels.

## Pest Management

The number of feral pigs destroyed decreased by 2.9% in and around the Cairns region, there was a 13.1% increase in the Daintree area. Due to the variable nature of trapping programs comparisons between years and locations is difficult. The same resources and efforts have been put into the feral pig trapping program this year as compared to previous years. There was a 4.8% increase in 'High Priority weeds days' an important area for Council resource allocation.

## Mosquito Control

Due to dengue outbreaks over the last year, the number of mosquito complaints increased by 63% to 345 complaints. In response to the dengue outbreak and the complaints, Council increased the amount of pesticide sprayed by 131.2%.

Council Nursery  
Stratford



# Sustainability Performance Summary

## Enhancing community health and wellbeing

The amount of land area available to the community as parks and lands remained the same as the previous year.

The amount of shared cycle/pedestrian pathways increased by 1.1% to 481.4 km. The Super Tuesday Bike Count, which started in Cairns in 2010, recorded a total of 1,435 cyclists, 13.3% more than last year. Council has an Active Transport Officer who commenced in 2012 and works towards encouraging pedestrian and cycling as a healthy transport option in the region. Free community bike rides and BBQ's are co-ordinated each month and have become very popular.

In 2012/13 2.78% of Council's total budget was allocated to the 'Creative Cairns' branch (an increase of 7.3% from the previous year). As mentioned on page 14, the data previously reported for last year has been altered following a restructure of the organisational structure to allow an accurate comparison between years. The Creative Cairns Branch is responsible for delivering a large number of cultural activities and services provided by Council, including running the Civic Theatre, the Tanks Arts Centre, and organising events such as the Cairns Festival, Carnival on Collins and youth arts programs.

## Delivering sound governance and economic management

The number of planning applications received decreased by 5.5% to 363 from the previous year, while the number of building applications approved fell by 4.1%. These figures have been low for the past few years as a result of the economic downturn which has affected the building industry in the region.

The percentage turnover for Council staff fell by around 26%. This is due to the end of the Voluntary Redundancy Program where staff in certain positions were offered redundancy packages—staff turnover levels have returned to levels seen in 2010/11. The average days of sick leave taken per Council employee was 11 in 2012/13 which is an increase of around 57% from the previous year.

The employee and community surveys were not conducted during this reporting period. For this reason these indicators are not reported on.



CBD to Aeroglen Cycleway



Community bike ride

## Related stories - Improving resource efficiency



### Green Thumb Program

On World Environment Day 2013 (5 June), Council launched *Green Thumb, sustainable living for the tropics*, a program that aims to help residents reduce their living costs, protect the local environment and support the local economy by taking action in six areas of everyday life.



Green Thumb is promoted to the community in the following ways:

- An interactive website where people can post comments, download resources and win prizes.
- Displays at community events, such as the Cairns Show and Sustainable Living Expo
- Editorials and advertising in local print media
- Interviews and advertising with local radio stations

Green Thumb communicates Council's role in urban sustainability, bringing together information on waste and recycling services, bushland management, cycle-way provision and other services related to environment, community and economy. In doing so, Green Thumb is helping to:

- Improve access to local sustainability information
- Encourage community discussion on lifestyle and environment
- Assist Council to refine its environmental education messages

To find out more about Green Thumb visit [www.yoursay.qld.gov.au/greenthumb](http://www.yoursay.qld.gov.au/greenthumb) or search for 'Cairns Green Thumb' on the internet.



### Communication and Education Campaign for Waste and Recycling

After being launched by the Mayor in November 2012, the media campaign for Year 1 of the 3 year Communication and Education Campaign for Waste & Recycling was successfully implemented over the remainder of the 2012/13 financial year. At the peak on the campaign in January 2013 over 1,200 tonnes of recycling was collected in a single month, breaking the previous record by almost 100 tonnes.

The primary objective of the Education campaign is to deliver effective and integrated waste communications and education resources that build the capacity of people to move towards more sustainable behaviour.

In accordance with Community Based Social Marketing (CBSM) models, the Education Strategy delivers a range of messages and tools across waste and recycling designed to empower community-led change. The simplified objective for Year 1 of the Education Campaign was to increase non-contaminated kerbside recycling by giving the community the right tools for checking when they are not sure what goes into the recycling bin – we're taking the guesswork out of recycling.

The creative concept, design and tag lines were aimed to synergise with the existing Water Demand (sponge) Campaign and regional environmental messages. A TV commercial aired on all regional free commercial stations, it can be viewed from CRC website and related links to the CRC YouTube site.

A double-sided pantry card, available as printable PDF version on the CRC website was developed and an interactive web-based application, which is mobile friendly and adaptable to all smart phones and tablet uses, was launched.

Year 2 of the Education Campaign promises to continue to take the guesswork out of recycling and start to encourage the community to look for ways to reduce waste, especially hazardous items contaminating the MRF and Bedminster.



# Related stories - Improving resource efficiency

## Targeting the Top 20 - Energy upgrades in Council facilities

Four of Council's highest energy consuming facilities are slashing their energy consumption by 20% by retrofitting office lighting and other appliances as part of the Targeting the Top 20 – energy upgrades in Council facilities project under the Australian Government's Community Energy Efficiency Program. The grant provided over \$280,000 in funding for the project.

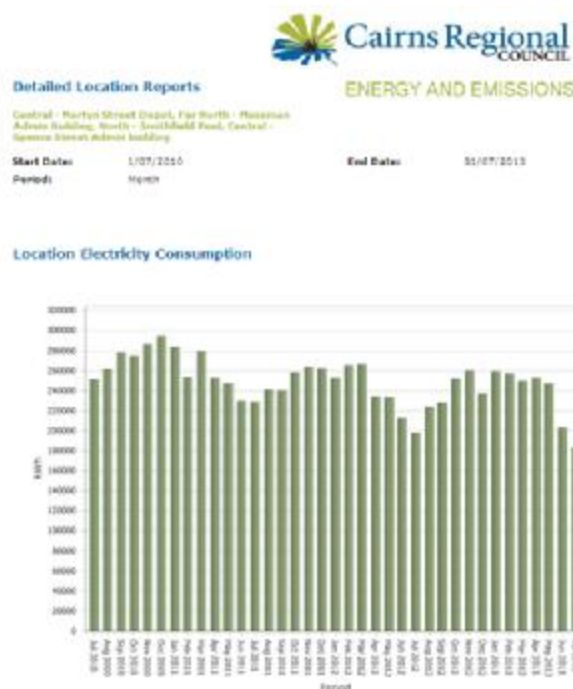
The Community Energy Efficiency Program is providing \$112 million in grant funding to 170 local Government and non-profit organisations across Australia for energy efficiency upgrades.

The Spence Street and Mossman Administration buildings and the Martyn Street Depot will drop their energy use by around 20% by replacing twin fluorescent lights with single fluorescent lights in open plan office areas. In addition to using 50% less electricity, these new lights flicker less, making them easier on the eyes and contributing to a better workplace. Halogen and metal halide downlights have been replaced with LED lights which reduce energy consumption by up to 70%. In addition, daylight sensors, movement sensors, additional switching and smart metering have been installed to maximise the savings and to monitor the benefits.

Smithfield Pool has received new energy efficient pumps which allow for variable speeds of operation. The new pumps can be adjusted based on pool usage, rather than constantly running at full speed. A thermal pool blanket has been installed on the heated pool which will stop heat loss and evaporation, and more energy efficient lighting has been installed in the kiosk and reception area.

Overall the project is estimated to save Council around \$120,000 per year in electricity costs. The return on investment is around 5 years. Local contractors were used to retrofit each facility, feeding the benefits back into the community.

The graph below illustrates the energy consumption drop across the four facilities. The outcomes will contribute to Council's target to reduce greenhouse emissions by 50% by 2020.



Council's Energy & Emissions System collates, monitors and reports on corporate energy consumption, costs and emissions. This report shows the reduction for two months the retrofit in the four facilities (June July '13).

### Cassowary Creek bank stabilisation and connectivity project

The Water Quality Improvement Program which is managed by the Natural Areas Department identified Cassowary Creek as a degraded system in need of restoration works. A remediation action plan was drafted to identify priority areas throughout the catchment.

On ground works were completed between 2011 to 2013. Over two kilometres of creek bank along Cassowary Creek have been restored, 8356 native plants have been planted, approximately 13 ha of, elephant grass *Pennisetum purpureum* have been treated, and a total of 1174 man hours have been spent on site. Future works will endeavour to progress efforts working strategically downstream linking remnant native vegetation to reduce soil erosion, increase biodiversity and restore connectivity for wildlife corridors.



Before

After



## Related stories - *Conserving biodiversity*

### National Tree Day Cattana Wetlands

Sunday 28th July 2013 was Planet Ark's 18th annual National Tree Day. A community tree planting at Cattana Wetlands was held. Over 70 volunteers from the local community and nearly 1500 trees on the Cattana site. The Cattana Wetlands is around 80 hectares of degraded land which Council has rehabilitated into a nature conservation park. It's situated off Dunne Road in Smithfield, accessed by either Yorkeys Knob Road or McGregor Road, approximately 20km north of the CBD.

All who participated and supported this event, were Treeforce, Greening Australia, Conservation Volunteers Australia, GBRMPA, Barron River Catchment Care, Enviromart and also Cairns Regional Council, not only for your partnership on the day but for all of your continued efforts towards the maintenance and protection of the Cattana Wetland ecosystem.



Tree Planting at Cattana Wetlands

## Related stories - Enhancing community wellbeing

### The Annual Sustainable Living Expo - A huge success!

Council and TAFE held the region's 5th annual Sustainable Living Expo on 14 July 2013. Over 5000 people; double last year's attendance numbers, enjoyed the event at it's new location in Fogarty Park. More than 50 exhibitors displayed a diverse range of products and services. Visitors could explore everything from renewable energy, green banking, eco-friendly cleaning to sustainable building, reef and biodiversity protection, water saving devices and fair trade products.

Kids had a ball too with jumping castle, face painting and fun workshops to make groovy creations from recycled materials. Local bands Chillax and the Hot Wet Swing Set entertained while Expo attendees relaxed on the lawns. Roving performers dressed as dragonflies and a Ulyses butterfly weaved their way through the crowds.

A colourful fashion parade by TAFE fashion students showcased garments made from marine debris. Students from Holloways Beach Environmental Education Centre and Gordonvale, Woree and Edge Hill Sate Schools displayed sustainable projects they had created throughout the year. Council and TAFE thank Expo co-sponsors Queensland Country Credit Union and the Great Barrier Reef Marine Park Authority.



Fashion and Stall Holders from the Expo

For further information regarding Council's programs and activities please visit Council's website [www.cairns.qld.gov.au](http://www.cairns.qld.gov.au)



### Healthy Active School Travel Program (HAST)

Cairns Regional Council commenced the HAST program with 5 primary schools in Term 1 2013. This project is a joint Australian, State and Local Government initiative under the National Partnership Agreement on Preventative Health – Healthy Children’s initiative. Ride2 School Day on 22 March inspired teachers at Edge Hill SS to run their first ever bike bus. Around 250 students and their parents participated, joined by Cr O’Halloran and the Police bike squad.

This was followed by an event at the school which included bike skills and a healthy breakfast. Throughout bike week the police visited the school parades to deliver bike safety talks. Bicycle maintenance workshops have been delivered at Woree SS, Redlynch SS and Edge Hill SS, with more planned for term 4.



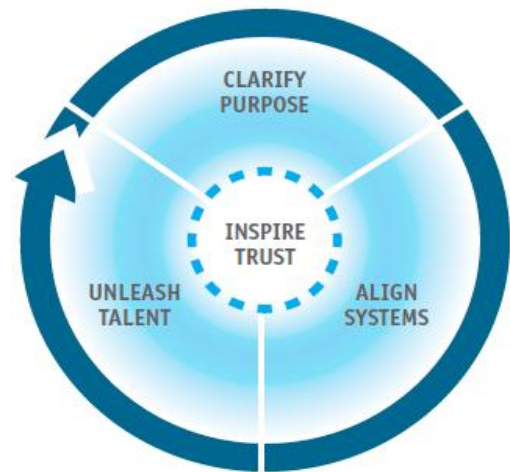
For further information regarding Council’s programs and activities please visit Council’s website [www.cairns.qld.gov.au](http://www.cairns.qld.gov.au)

### Leadership Training

Council has been running a series of leadership programs for staff to improve leadership skills across the organisation. The Frankiln Covey Leadership: Great Leaders, Great Teams, Great Results program has been run for 94 staff and Frankiln Covey Leading with the Speed of Trust to 74 staff.

The Great Leaders training has the following aims:

1. Build trust and influence with others;
2. Define their team's purpose and their "job to be done."
3. Create a strategic link between the work of the team and the goals of the organisation;
4. Connect the work of the team to the organisation's economic model;
5. Align the four essential systems of execution, talent, core work processes, and customer feed back.



The Speed of Trust leadership development program has the following aims:

1. Choose to make building trust an explicit goal of their work;
2. Learn how others perceive their trustworthiness from their personal tQ report;
3. Understand the real, measurable Trust Taxes they may be paying without realising it;
4. Change Trust Taxes to Trust Dividends, which are the benefits that come from growing relationships out of trust;
5. Make action plans to build Trust Accounts with all key stakeholders;
6. Begin using the language of Trust as an important cultural lever.

**Cairns Regional Council**  
**State of the Environment Report**  
**2012/13**



*Phaleria clerodendron*, photographer Bob Jago.