



# Third Public Report under the Energy Efficiency Opportunities Act (2006)

Covering the Period of 1 July 2006 – 30 June 2010



COCA-COLA AMATIL

December 2010

## Summary

Coca-Cola Amatil's third public report under the Energy Efficiency Opportunities Act in 2010 sees the near completion and or completion of nearly 30% of all energy efficiency opportunities identified over the course of the program in 11 of CCA's major manufacturing sites covering the carbonated beverage, bottled water and food & services divisions. This has resulted in an estimated 94TJ of energy savings per annum. Another 34% of the identified opportunities are either scheduled for implementation or further investigation.

The 2009/10 reporting period has seen several major changes to the CCA business driven by the desire to remain competitive in the marketplace as well as seeking to become a more sustainable business for the future in the key areas of environment, community, workplace and marketplace. To achieve these goals the following operational and logistical changes came into affect:

- Relocation of CCA Head Office from Macquarie Street Circular Quay to a new 6 Star Green & 5 Star NABERS rated building in North Sydney. This new building has incorporated within its design features such as:
  - The latest in efficient lighting and HVAC with sensor controlled illumination
  - Extensive natural light in the building
  - A tri-generation power supply and grey water recycling
- Blow-fill technology for PET beverage production in NSW. The latest in beverage manufacture technology has been employed at CCA Northmead in NSW to both blow PET bottles from "preforms" and immediate fill them on the one production line. This technology will be rolled out around Australia to all PET manufacture over the next 3 years, in using this new process CCA has eliminated the need to:
  - Wet rinse bottles prior to filling
  - Chill the beverage prior to filling
  - Warm containers after filling to prevent condensation in cartonsand further reduced:
  - The weight of PET per bottle, on a like for like basis
  - The plastic used in the closures whilst retaining the ability to maintain carbonation
  - The amount of secondary packaging used in producing a finished carton
- A new Operational Excellence or OE program was rolled out in Victoria during February, in Western Australia during August and scheduled for to begin in early December in South Australia to create a whole of business approach to eliminate waste across the entire Supply Chain. OE rollout will complete its phase 1 rollout nationally by 2012. Using a broad skill range of internal personnel and a prescribed diagnostic approach waste in the business is systematically analysed its root cause identified and measures to permanently eliminate it put into place.

## PUBLIC REPORT 2010

### Controlling Corporation

Coca-Cola Amatil Ltd

### Period to which this report relates

Start 1 July 2009

End 30 June 2010

### Part 1 – Information on assessments completed to date

**Table 1.1 – Description of the way in which the Corporate Group (or part of it) has carried out its assessments**

Since the beginning of the EEO program and CCA's trigger year 2006, energy audits have been carried out at 11 of CCA's major manufacturing sites in both the beverage and food services divisions comprising CSD (carbonated soft drink), bottled water and SPC Ardmona's fruit and vegetable processing. These audits were conducted by an external consultant to AS3598: 2000 level 3.

Collection of energy data was further refined in the 09/10 reporting period for EEO and CCA's second submission of the National Greenhouse and Energy Reporting (NGER) report. For these reports CCA employed external consultants to collate and consolidate the energy consumption data from all CCA operations and regional offices across all divisions in the business.

From the ARS submitted upon CCA's registration with the EEO program in December 2007 CCA has now assessed over 85% of the businesses total energy use on the 2006 baseline, exceeding our obligations under the cycle 1 requirements for EEO assessment.

As of the date of this report CCA, through this audit process has identified 216 energy efficiency opportunities and implemented, begun implementation or has plans to implement 78 of those, whilst another 61 are undergoing investigation to determine their viability. Due to other business activity such as site consolidation, major plant upgrades and other external factors the final 77 opportunities (mostly at SPCA) have been identified as not to be implemented. Regardless of this the energy consumption has fallen by 29% when compared to the 2006 baseline.

Additional opportunities are also identified in during OE diagnostics and day to day business through CCA's intranet site.

## Part 1 – Information on assessments completed to date

<b>Table 1.2 – Energy use assessed</b>		
<b>Group member and/or business unit and/or key activity and/or site (or part thereof) that has had an assessment completed by 30 June 2010 (Include all assessments completed to date for the current 5 year cycle).</b>	<b>Period over which assessment was undertaken<sup>1</sup></b>	<b>Energy use for the period 1.7.2009 to 30 June 2010 of the assessed entity (or part thereof) expressed in GJ<sup>2</sup></b>
CCA Northmead	Nov 07 – Aug 08	112072
CCA Smithfield	Nov 07 – Aug 08	25698
CCA Richlands	Nov 07 – Aug 08	158442
CCA Moorabbin	Nov 07 – Aug 08	66614
CCA Bayswater	Nov 07 – Aug 08	48226
SPCA Shepparton	Aug 08 – Dec 08	396873
SPCA Mooroopna	Nov 08 – Jun 09	185107
SPCA Kyabram	Nov 08 – Jun 09	56330
CCA Thebarton	Nov 07 – Aug 08	47851
CCA Kewdale	Nov 07 – Aug 08	66430
Neverfail (combined)	Aug 08 – Dec 08	8577
<b>Total energy use of assessed entities (or part thereof)</b>		<b>1172220</b>
<b>Total energy use of the whole corporate group in the period 1.7.2009 to 30 June 2010</b>		<b>1482864</b>
<b>Total energy use of assessed entities (or part thereof) for the period 1.7.2009 to 30.6.2010 expressed as a percentage of total energy use for the period 1.7.2009 to 30.6.2010</b>		<b>79.1%</b>

## Part 2 - Energy Efficiency Opportunities that have been identified and evaluated

### Part 2A - New assessments completed or not reported since your last Public Report

As per the originally submitted ARS all audits were conducted prior to the 09/10 reporting year. As at the end of June 2009 all opportunities at the facilities assessed were further progressed after assessing each site individually.

### Part 2B - Update of assessments reported in previous Public Reports

Name of Group member or business unit or key activity or site: \_\_\_Coca-Cola Amatil Ltd\_\_\_

Total energy use for the period 1.7.2009 to 30.6.2010 of the assessed entity (or part thereof) from which the opportunities identified below were generated (and is reported in Table 1.2).

1.172	PJ
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**Table 2.3 – Opportunities assessed to an accuracy of better than or equal to ( $\leq$ )  $\pm 30\%$**

Status of opportunities identified		Total Number of opportunities	Estimated energy savings per annum by payback period (GJ)						Total estimated energy savings per annum (GJ)
			0 – < 2 years		2 – $\leq$ 4 years		> 4 years		
			No of Opps	GJ	No of Opps	GJ	No of Opps	GJ	
Business Response	Under Investigation	61	22	113,753	38	148,927	1	1,663	264,343
	To be Implemented	13	11	14,558	2	34			14,592
	Implementation Commenced	11	10	12,100	1	1,470			13,570
	Implemented	54	38	61,193	14	9,579	2	16,378	87,150
	Not to be Implemented	77	37	124,641	40	56,915			181,556
Outcomes of assessment	Total Identified	216*	118	326,245	95	216,925	3	18,041	561,211

\*8 additional opportunities were identified since the publishing of public report 2 in 2009, they include: CCA Corporate Head Office relocation (Opportunity 1 in Table 2.5), CCA Smithfield X 2 (Opportunity 4 in Table 2.5), CCA Kewdale (Opportunity 2 in Table 2.5), and 4 others throughout the SPCA business.

## Part 2C - Details of four significant opportunities found through EEO assessments

**Table 2.5 – Description of 3 significant opportunities**

### Opportunity 1

#### **CCA Head Office: Relocation from Macquarie St Circular Quay to Mount St North Sydney.**

In June 2010 CCA relocated its head office from 71 Macquarie St, in the east of Circular Quay Sydney to a new 5 star NABERS rated facility in Mount St North Sydney.

The building has a building council of Australia 6 green star rating and 5-Star NABERS Energy rating, and has a host of facilities to provide an environmentally-sustainable workplace. Our new Head Office has floor to ceiling glass, providing excellent natural lighting which will reduce our energy usage as well as a tri-generation power supply and a grey water recycling system.

It also incorporates a low toxicity finish and a high recycled content; it accommodates CCA personnel from HR, Finance, Supply Chain, IT, Licensed and non-alcoholic beverages divisions, Pacific Beverages and staff from The Coca Cola Company.



### Opportunity 2

#### **CCA Kewdale: Replacement of Boiler for site steam**

The site's steam supply was previously made from a 40 year old boiler and was used to supply the bulk of the daily steam needs of the plant, because of its age maintenance costs averaged \$16000 per annum, it had no O<sub>2</sub> sensor for combustion control, no economiser, no blow down waste heat recovery, no VSD on the combustion fan and stack temperature varied from 180°C to 220°C.

Retrofitting all the necessary energy efficient options individually was not economically viable and so the entire boiler was replaced with a high efficiency model with these features incorporated to it. It is estimated that this replacement has saved 10052GJ, whilst improving the reliability of steam supply to the plant.

### Opportunity 3

#### **SPCA Shepparton: Deionizer energy and water recovery**

Fruit and juice processing requires a considerable amount of heat and water consumption to affect its transition from raw ingredients to final saleable product. Within the juice plant processing of the fruit uses steam for heating and sterilizing the product mash. Along with the processing itself a substantial CIP (or Clean In Place) regime is used to ensure the cleanliness and sanitized condition of the equipment between batches. It has been possible through use of heat exchangers, water and steam condensate recovery systems to better utilize a lot of this previously wasted energy.

By capturing the heat exchanger condensate and returning it to the boiler house hot via a condensate main, significant savings on raw untreated water, chemicals and also the heat required to increase the temperature to the required inlet temperature of the boiler.

By employing these energy and water saving systems by the end of 2010 it is estimated that SPCA Shepparton site will save 19,000GJ of gas and 102,000 KL of water per annum.

### Opportunity 4

#### **CCA Smithfield: Downsize beverage container warmer pumps and improve beverage line insulation**

Premium glass bottled beverage is produced at CCA Smithfield primarily for the HORECA market (HOTel REstaurant & CAfé), during manufacture it is necessary to chill the beverage to improve carbonation efficiency during filling and then bring the filled bottles back to ambient temperature before finally being packed into cartons.

There was previously no insulation on the beverage supply line from the mixer / carbonator to the filler allowing beverage to

gain temperature during its transfer and cause problems with “foaming” especially during the warmer months. Likewise the pumps fitted to the container warmer used to bring the bottles back above their dew point temperature (to prevent condensate forming on them after being packed into cartons) were grossly oversized.

The beverage line was insulated to maintain beverage temperature at close to 4°C and the warmer pumps downsized from a 15kW & a 7kW pump to two 3kW pumps capable of doing the same duty. By doing so it is estimated that Smithfield will save around 200GJ per annum

### Part 3 - Voluntary Contextual Information

**Table 3.1 – Contextual Information**

Please see CCA’s response to the Carbon Disclosure Project at:

<https://www.cdproject.net/en-US/Results/Pages/Responses.aspx?Search=True&Keyword=coca-cola+amatil>

For further information on CCA’s Corporate Responsibility & Sustainability program please see:

<http://ccamatil.com/Sustainability/Pages/default.aspx>

### Part 4 - Declaration

**Table 4.1 - Declaration of accuracy and compliance (mandatory information)**

<p>The information included in this report has been reviewed and noted by the board of directors and is to the best of my knowledge, correct and in accordance with the <i>Energy Efficiency Opportunities Act 2006</i> and <i>Energy Efficiency Opportunities Regulations 2006</i>.</p>	
	<p>Terry Davis Managing Director CCA Group</p>
	<p><b>Date</b></p>