



## Module: Introduction - 2011 CDP Water Disclosure

### Page: Introduction - 2011 CDP Water Disclosure

#### 0.1

##### Introduction

**Please give a general description and introduction to your organization.**

Coca-Cola Amatil (CCA) welcomes the opportunity to participate in the CDP Water Disclosure report. An ASX Top 50 listed company, CCA is one of Australia's largest premium branded beverage and food companies and one of the world's top five Coca-Cola bottlers. CCA operates non-alcoholic and alcoholic beverage businesses in Australia and New Zealand and non-alcoholic beverage businesses in Indonesia, Papua New Guinea and Fiji. CCA owns Australia's largest premium packaged fruit and vegetable company, SPC Ardmona.

The major brands we produce, sell and distribute include Coca-Cola, Coca-Cola Zero, diet Coke, Sprite and Fanta, Mount Franklin, Pump, Pumped, Neverfail Springwater, Powerade Isotonic, Kirks, Glaceau vitaminwater, Mother energy drink, Goulburn Valley fruit juices, smoothies and flavoured milks, Deep Spring, Grinders Coffee and SPC Ardmona and Goulburn Valley packaged fruit and vegetable products. Our brands in New Zealand include all the Coca-Cola brands, L&P, Keri juices and Kiwi Blue springwater. In Indonesia, as well as the Coca-Cola brands, we produce Frestea, Ades water, Minute Maid juices and Extra Joss energy drink, and Nature's Own water in Papua New Guinea.

Our CDP 2011 submission compiles and analyses operations data to represent bottling operations across Australia and the manufacturing operations of SPC Ardmona and Neverfail Springwater. These operations contributed 81% of Group EBIT in 2010.

CCA sets continuous improvement quality, environment and safety targets and is particularly focussed on water efficiency, water being the primary ingredient in almost all products manufactured. Every year, CCA's Australian beverage business sets internal water efficiency targets, measured as Litres of water used per Finished Beverage Litre, taking into account water used on site in its entirety against the total beverage litre production of that site. In addition to these targets each site also targets continuous improvement in energy efficiency, carbon intensity, solid waste production and waste recycling.

Our continuing focus on environmental targets has helped us achieve a 7.9% improvement in our water use ratio since 2008, a 10% improvement in our energy use ratio across Australian operations from 2006 to 2009, a 1.5% improvement in our carbon efficiency ratio from 2008 to 2009. Our most recent 2010 Sustainability Report provides further details on our key environmental metrics and can be found at <http://cca2010crr.reportonline.com.au/#>.

#### 0.2

##### Reporting Year

**Please state the start and end date of the year for which you are reporting data.**

Enter the period that will be disclosed.

Fri 01 Jan 2010 - Fri 31 Dec 2010

#### 0.3

##### Reporting Boundary

**Please indicate the category that describes the company, entities, or group for which you are reporting.**

Companies over which operational control is exercised

#### 0.4

##### Exclusions

**Are there any geographies, activities, facilities or types of water inputs/outputs within this boundary which are not included in your disclosure?**

Yes

**0.4a  
List of Exclusions**

**Please describe any exclusion(s) in the following table.**

<b>Exclusion</b>	<b>Please explain why the geography, activity, facility or type of water input/output is excluded</b>
The non-Australian based businesses have been excluded	CCA (Australia) represents 81% of the total CCA Group by revenue and is the only region within the CCA Group located within an area of recognised water stress.
Bluetongue (Pacific Beverages)	Bluetongue is the Australian based beer brewing business undertaken as a joint venture with SAB Miller under the Pacific Beverages brand. CCA does not exercise operational control over the brewery site itself and as such it is not included in this report.

**Module: 2011-Water-Management**

**Page: 2011-Water-1-ManagementGovernance**

**1.1  
Does your company have a water policy, strategy or management plan?**

Yes

**1.1a  
Please describe your policy, strategy or plan, including the highest level of responsibility for it within your company and its geographical reach**

<b>Geographical reach</b>	<b>Description of policy, strategy or plan</b>	<b>Position of responsible person</b>
Australia	CCA's Water Policy covers all aspects of water related operations activities from both municipal and groundwater sources across the beverage and food businesses.	Board/executive board

**1.1b  
Does the policy, strategy or plan specify water reduction, quality or efficiency targets or other water-related goals?**

Yes

**1.1c  
Please describe these water-related targets or goals**

<b>Geographical reach</b>	<b>Type of target/goal</b>	<b>Target/goal</b>	<b>Additional information</b>
Australia	Efficiency	Through our Environmental Management System, continuously improve efficiency of water use in our production facilities.	Each manufacturing site within CCA has a specific water efficiency target which is measured as "water use ratio" or Litres of water used to produce 1 Litre of Finished Beverage.
Australia	Other: Sustainability	Confirm the sustainability of a source prior to it being used for any spring water for CCA products; and only alter water extraction limits when independent assessment shows that this will not jeopardise the quality of the water extracted and the sustainability of the source.	This goal applies to all ground water sources CCA uses in its bottled water production.

Geographical reach	Type of target/goal	Target/goal	Additional information
Australia	Other: Stakeholder engagement	Maintain open dialogue with governments, non-government organisations and local communities about water resource management	
Australia	Other: Management	Maintain site management plans in accordance with our Quality and Environmental Management Systems for mineral water sources, taking into consideration the hydrogeological aspects of each source, their zones of influence, sustainability and use	All CCA Australia manufacturing sites are ISO 14001:2004 certified and the beverage businesses also adhere to The Coca-Cola Company's EMS requirements.

1.2

What specific actions has your company taken to manage water resources or engage stakeholders in water-related issues?

Geographical reach	Type of action	Action	Outcomes
Australia	Supply chain and watershed management	CCA has since 2008 been performing Source Vulnerability Analysis and instigating Source Water Protection Plans on all groundwater sources in addition to the hydrogeological studies performed at each site to determine its suitability and sustainability prior to any extraction from the source.	Recommendations from the SVA (Source Vulnerability Analysis) reports for each site, compiled by independent experts, are placed into the SWWP (Source Water Protection Plan) and actioned based upon a risk hierarchy approach.
Australia	Community engagement	As part of a more broad sustainability focus CCA is committed to working with the local communities in which we operate, an example of which specifically related to water is the irrigation of Arthur Phillip Park in Sydney Australia through stormwater collected on the nearby Northmead production site.	Through the collection of stormwater at CCA Northmead the sporting grounds of Arthur Phillip will be provided with water sufficient to irrigate the playing surfaces and adjacent landscaped areas of the park.
Australia	Public policy	At the Northmead facility and with the assistance of a NSW Govt. grant CCA has instigated a rainwater harvest process collecting rain from the roof of plant buildings before processing and utilising for plant amenities and gardens.	The system recently commissioned is estimated to save approximately 6ML of municipally supplied potable water per annum and has the capacity to expand further with additional source connections.
Australia & New Zealand	Direct operations	In 2007/08 CCA installed Teflon-based waterless lubrication or "dry-lube" on all Australian and NZ production lines and in 2010 began to implement a major capital improvement program across Aust. & NZ of new production lines. The installation of new "blowfill" production lines provides a step change in production methods for the business and virtually eliminates non-product processing water during manufacture.	As a result of the implementation of "dry lube" annual savings of close to 100 million litres of water previously used on production lines to provide lubrication has been realised. To date two new blowfill lines have been installed with all 18 lines to be in production by 2013. The installed lines have so far contributed to an 8% improvement in the water efficiency at the sites.

Attachments

[https://www.cdproject.net/Sites/2011/58/3558/CDP Water Disclosure 2011/Shared Documents/Attachments/CDPWaterDisclosure2011/WaterManagementandGovernance/CCA Water Policy.pdf](https://www.cdproject.net/Sites/2011/58/3558/CDP%20Water%20Disclosure%202011/Shared%20Documents/Attachments/CDPWaterDisclosure2011/WaterManagementandGovernance/CCA%20Water%20Policy.pdf)

**Module: 2011-Water-RisksOps**

**Page: 2011-Water-2-indicators-op**

**2.1**  
**Are you able to identify which of your operations are located in water-stressed regions?**

Yes

**2.1a**  
**Please specify the method(s) you use to characterize water-stressed regions**

Method used to define water stress	Please add any comments here:
Environmental assessment Internal company knowledge	Through internal Coca-Cola Company analysis it has been determined that the only CCA operations located in areas of water stress are located within Australia.

**2.1b**  
**Please list the water-stressed regions where you have operations and the percentage of your total operations in that area**

Country	Region within country	Proportion of operations located in this region (%)	Further comments
Australia	Sydney, NSW	0 – 10	Within New South Wales there are four operations sites (two production facilities and two warehousing facilities) which are considered to be operating in the area under water stress
Australia	Melbourne, VIC	0 – 10	Within Victoria there are four operations sites (three production and one warehousing facilities) which are considered to be operating in the area under water stress
Australia	Adelaide, SA	0 – 10	Within South Australia there are two operations (both production facilities) which are considered to be operating in the area under water stress
Australia	Perth, WA	0 – 10	One spring water source, in Western Australia is considered to be operating in an area of water stress.

**2.2**  
**Do you use other indicators (besides water stress) to identify operations which are located in regions subject to water-related risk?**

Yes

**2.2a**  
**Please list the regions at risk where you have operations, the relevant risk indicator and percentage of your total operations in that area**

Country	Region within country	Proportion of operations located in this region (%)	Indicator
Australia	Sydney, NSW	0 – 10	Two operations (production facilities) are located in regions of risk, one from incoming (pre-treatment) water quality issues and the other effluent discharge constraints.
Australia	Adelaide, SA	0 – 10	Both operations in Adelaide, South Australia are required to treat incoming water specifically to reduce water hardness in the area.
Australia	Regional Victoria	0 – 10	CCA's Food Division (SPCA) operates three production facilities in the Goulburn Valley, Victoria an area which has suffered drought for several years.

**2.3**

Please specify the total percentage of your operations that are located in the regions at risk which you identified in questions 2.1 and/or 2.2

26%

2.4

Please specify the basis you use to calculate the percentages used for questions 2.1 and/or 2.2

Basis used to determine percentage	Please add any comments here
Production volumes	Across the CCA Group the 29 production facilities located in Australia, New Zealand, Indonesia, Fiji and Papua New Guinea, produced over 4.3 billion beverage litres. The facilities located in areas of water stress accounted for over 1.1 billion beverage litres of produced volume.

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2.5

Are you able to identify which of your key water-intensive inputs (excluding water) come from regions subject to water-related risk?

Yes

2.5a

Please state or estimate the percentage of your key water-intensive inputs (excluding water) that come from these regions

Inputs	Proportion of material that comes from region at risk (%)	Unit used for calculating percentage	Regional information or further comments
Granular Bottlers Sugar	71 – 80	Value of material purchased	CCA sources its sugar for bottling operations locally as a global commodity with global pricing and supply. Sugar grown in Australia is sourced from Northern NSW and Queensland.
Fruit	71 – 80	Value of material purchased	SPCA's fruit processing business sources its fruit (typically peaches, pears, apricots) primarily from the Goulburn Valley region.

Page: 2011-water-3-riskassess-op

3.1

Is your company exposed to water-related risks (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?

Yes

3.1a

Please describe the current and/or future risks to your operations, the ways in which these risks affect or could affect your operations and your current or proposed strategies for managing them

Country or geographical reach	Risk type	Risk description	Timescale (years)	Potential business impact	Risk management strategies
Australia	03. Physical: Increased water stress or scarcity (leading to e.g. disruption to operations, higher commodity/energy prices)	Areas of the major metropolitan areas of Sydney, Melbourne & Adelaide as well as the Goulburn Valley in Victoria have been defined	> 20	Whilst no significant direct effects on water quantity or quality have yet been felt by CCA operations, the likely business impacts to	CCA has for the last 4 years been heavily focussed on promoting and implementing water efficiency throughout its operations. Projects for water reduction (blowfill production lines), water reuse and

Country or geographical reach	Risk type	Risk description	Timescale (years)	Potential business impact	Risk management strategies
		as suffering from increasing water stress due to drought conditions and urban population growth across Australia.		CCA of being a high profile water consumer are in pricing from regulators and brand image from the broader community.	recycle and rainwater harvest have been instrumental in CCA Australia achieving one of the best water efficiencies amongst the Coca-Cola bottlers worldwide.

**3.2**

**What methodology and what geographical scale (e.g. country, region, watershed, facility) do you use to analyze water-related risk across your operations?**

Risk methodology	Geographical scale
Source Vulnerability Analysis (SVA) has been used since 2008 across Australia to identify facilities under water stress within their geographical watershed area. The outcome of an SVA is the development of an individual Source Water Protection Plan for the facility (ies) within the watershed in order to minimise water related risk to the business.	Watershed

**Further Information**

When comparing water efficiency amongst the Coca-Cola bottlers world wide CCA Australia at 1.5 L/L is comparable to the USA and Great Britain and more efficient than France at 2.1L/L, China at 2.5L/L, Saudi Arabia at 3.5L/L, Egypt at 4.6L/L, India at 5.2L/L and Japan at 8.6L/L.

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**3.3**

**Do you require your key suppliers to report on their water use, risks and management?**

No

**3.4**

**Is your supply chain exposed to water-related risks (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?**

Yes

**3.4a**

**Please describe the current and/or future risks to your supply chain, the ways in which these risks affect or could affect your operations and your current or proposed strategies for managing them**

Country or geographical reach	Risk type (to supplier)	Risk description	Timescale (years)	Potential business impact (to responding company)	Risk management strategies (by responding company)
Australia	02. Physical: Flooding	Sugar used in bottling operations, sourced locally within Australia is from regions (northern NSW & QLD) which are subject to flooding and or drought. Either climate related	> 20	Short term disruption of supply and increased cost of input.	Sugar as a global commodity is available on the international market.

Country or geographical reach	Risk type (to supplier)	Risk description	Timescale (years)	Potential business impact (to responding company)	Risk management strategies (by responding company)
Australia	03. Physical: Increased water stress or scarcity (leading to e.g. disruption to operations, higher commodity/energy prices)	condition can impact the yield of the crop adversely. Fruit used in SPCA packaged fruit production being sourced primarily from the Goulburn Valley region of VIC has been subjected to drought conditions and this may affect the supply of fruit for packaged fruit production.	11 – 20	Short term disruption of supply and increased cost of input.	Importation of fruit supplies from international sources.

**Page: 2011-Water-4-Impacts**

**4.1**

**Please describe any detrimental impacts to business related to water your company has faced in the past five years, their financial impacts and whether they have resulted in any changes to company practices**

The detrimental impacts to the CCA business with respect to water supply both in terms of quantity and quality of supply have primarily been in the form of various natural disasters over the past five years. Specifically these included:

- The Queensland floods of 2011
- The Victorian bushfires of 2010
- Drought in regional Victoria affecting the SPCA business

A fire in CCA's Neverfail water bottling plant in Townsville (Queensland) Australia in 2009 resulted in the loss of manufacturing capability for several months, during this time all production shortfall was made up from the Neverfail bottling plant in Brisbane.

**Page: 2011-Water-5-Opportunities**

**5.1**

**Do water-related issues present opportunities (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?**

Yes

**5.1a**

**Please describe the current and/or future opportunities, the ways in which these opportunities affect or could affect your operations and your current or proposed strategies for exploiting them**

Country or geographical reach	Opportunity description	Timescale	Potential business impact	Strategy to exploit opportunity
Australia	Upgrade of beverage production lines to "blowfill" technology reducing the amount process water used in bottling operations.	Current	The installation of blowfill lines across Australia and New Zealand is currently underway. Two lines are already installed and operational in NSW and these have shown approximately an 8% increase in the sites total water efficiency due to the combined affect of reduced water consumption in ancillary operations and	Installation of 18 blowfill lines across the Australian and New Zealand businesses.



Country or geographical reach	Opportunity description	Timescale	Potential business impact	Strategy to exploit opportunity
Australia	Rainwater harvesting for use in non-potable applications in on-site facilities.	Current	improved line efficiency. Similar results are expected to be replicated across all implementing Australian and NZ bottling operations by the completion of the project in 2013.  Manufacturing and warehousing facilities throughout Australia have installed and are installing rainwater harvesting technology to capture water from buildings to store, treat and then utilise for non-potable requirements.	Infrastructure installed or retrofitted to capture, store and process rainwater from on-site buildings, currently installed capacity is expected to recognise approximately 7ML of rainwater captured per annum.
Australia	Air rinsing of beverage cans. Current practice for manufacture of canned beverage is to rinse each can with a quantity of water prior to filling. CCA's West Australian site will trial an air rinser in Q3 2011 as a potential replacement technology.	Current	Along with the blowfill technology being rolled out across CCA's bottling lines, air rinsing has the potential to eliminate additional process water from the canning production lines.	Replacement of traditional water rinsers on all can lines during any proposed upgrade to the lines with air rinsers.
Australia	Clean process water recycle and reuse. In all water bottling operations some non-product process water is required in production which typically undergoes only heating or cooling before being discarded. Operations are investigating methods to capture this "waste" water at its source for reuse.	Current	Reduced dependency upon municipal water for non-product applications (such as cooling towers) improving site water efficiency and reducing utility costs.	Capture the process water at the point of release to minimise potential contamination, analyse, store and treat (if necessary) before supply to ancillary services.

**Page: 2011-Water-6-tradeoffs**

**6.1**  
**Has your company identified any linkages or trade-offs between water and carbon emissions in its operations or supply chain?**

Yes

**6.1a**



**Please describe the linkages or trade-offs and the related management policy or action**

Linkage or trade-off	Policy or action
Steam condensate recovery at SPCA - Shepparton, Victoria	Through a program of energy efficiency auditing the boiler system of SPCA - Shepparton was found to be losing 102ML of water per annum along with 19000GJ of energy and producing an additional 975T of CO2e emissions. A steam condensate recovery system was installed to eliminate these losses in CCA's Australia's highest energy consuming site.
Relocation of CCA Head Office in Sydney, New South Wales	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.
Boiler replacement CCA - Kewdale, Western Australia	The Kewdale sites boiler was replaced in 2010 due to rapidly escalating maintenance issues and costs. In providing the financial justification for the replacement it was revealed that the site would also gain a more consistent supply of steam and save over 10000GJ (and 515T CO2e).

**Module: 2011-Water-Account**

**Page: 2011-Water-7-Withdrawals**

**7.1**

**Are you able to provide data, whether measured or estimated, on water withdrawals within your operations?**

Yes

**7.1a**

**Please report the water withdrawals within your operations for the reporting year**

Country or geographical reach	Withdrawal type	Quantity (ML/yr)	Proportion of data that has been verified (%)	Comments
Australia	Municipal water	3197.4	76 – 100	Includes all municipal water used for domestic and industrial purposes.
Australia	Groundwater	492.1	76 – 100	Includes all groundwater whether consumed on-site or off-site and whether from wholly owned CCA sources or third party suppliers.
Australia	Surface	60.9	76 – 100	Includes all water consumed by SPCA from non-municipal sources and used in non-potable areas.

**7.2**

**Are you able to provide data, whether measured or estimated, on water recycling/reuse within your operations?**

Yes

**7.2a**

**Please report the water recycling/reuse within your operations for the reporting year**

Country or geographical reach	Quantity (ML/yr)	Proportion of data that has been verified (%)	Comments
Australia	20	0 – 25	This figure is a combined estimate primarily from beverage container rinsing operations in existing lines which is either directly recycled into the process or utilised in ancillary services such as cooling towers.

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**7.3**

**Please use this space to describe the methodologies used for questions 7.1 and 7.2 or to report withdrawals or recycling/reuse in a different format to that set out above**

Methods used to collate and internally verify municipal sources are by direct measurement and invoicing from the respective municipal supplier. Groundwater withdrawals are from direct measurement from on-site metering and where the water is removed from site through direct metering at the receiving site also. All metering devices used are regularly calibrated by approved external contractors. Recycling rates of operations capable of reusing or recycling water are estimated based upon a percentage recycle of the incoming flow.

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**7.4**

**Are any water sources significantly affected by your company's withdrawal of water?**

No

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**7.4b**

**You may explain here why your company's withdrawal of water does not significantly affect any water sources**

CCA's use of groundwater for water bottling operations is sustainably managed through hydrogeological assessment prior to any withdrawal commencing and continuous monitoring at the source during withdrawal. CCA has also been undertaking a comprehensive Source Vulnerability Analysis (SVA) program since 2008 on all its groundwater sources to ensure they are sustainably managed. The outcome of each SVA is a site specific Source Water Protection Plan (SWPP) which considers quantity and quality aspects of the source in relation to the entire aquifer recharge area and the local community in which it is located. Through this process CCA can ensure that both its business requirements and community needs can be continuously and sustainably met.

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**Further Information**

The data in question 7.1a has been internally verified by CCA only and not externally through an independent body.

**Page: 2011-Water-8-Discharges**

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**8.1**

**Are you able to identify discharges of water from your operations by destination, by treatment method and by quality using standard effluent parameters?**

Yes

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**8.2**

**Did your company pay any penalties or fines for significant breaches of discharge agreements or regulations in the reporting period?**

No

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**8.3**

**Are any water bodies and related habitats significantly affected by discharges of water or runoff from your operations?**

No

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**8.3b**

**You may explain here why your company's discharge of water does not significantly affect any water bodies or related habitats**

All of CCA's manufacturing operations discharge only to government or privately operated sewage treatment facilities which then treat wastewater to primary, secondary or tertiary level before discharge. Each facility is licenced by the receiving corporation to discharge wastewater with limitations on both quantity and quality of discharge so as to not affect the receiving corporations' ability to treat the wastewater before final discharge. Individual CCA sites treat wastewater on-site to differing levels depending upon the requirements of the receiving facility.

**Page: 2011-Water-9-Intensity**

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**9.1**

Please provide any available financial intensity values for your company's water use across its operations

Country or geographical region	Financial metric	Water use type	Financial intensity (US\$/ML)	Please provide any contextual details that you consider relevant to understand the units or figures you have provided.
Australia	Revenue	Water use in operations	904517	Figures for total revenue for both the Australian beverages and Food and Services division taken from the 2010 CCA Annual report. Water consumption figures taken from the collation of all Australian beverage and SPCA sites.

9.2

Please provide any available water intensity values for your company's products across its operations

Country or geographical reach	Product	Product unit	Water use type	Water unit	Water intensity (Water unit/product unit)	Please provide any contextual details that you consider relevant to understand the units or figures you have provided.
Australia	All Beverage operations	L	Water use in operations	L	1.5	The total water unit includes all water used by the facility, from all sources, including municipal, well, surface water and collected rain water. This includes water used for: production, water-treatment, boiler makeup, cooling – contact and non-contact, cleaning and sanitation, backwashing filters, irrigation, washing trucks and other vehicles, kitchen or canteen, toilets and sinks measured against all beverage litres produced by all Australian sites.
Australia	SPCA Food & Services	kg	Water use in operations	L	8.1	SPCA as a fruit processor measures water intensity in a slightly different manner to the CCA beverage business. The figures shown here have been normalised to the available units of measure.

CDP