



EARTHCHECK

BENCHMARKING ASSESSMENT REPORT

VISITOR CENTRE BENCHMARKING

CITY OF MELBOURNE - VISITOR SERVICES - VISITOR CENTRE
MELBOURNE, AUSTRALIA



REPORT DATE: 18 July 2011

Benchmarking Data Collection Period: 1 January 2010 – 31 December 2010

The planet deserves more than half measures

OVERVIEW

This annual assessment of **City of Melbourne - Visitor Services - Visitor Centre** was undertaken against EarthCheck benchmarking indicators and checklists developed for EarthCheck and listed below. ¹ They have been carefully selected to track performance in key areas of environmental and social performance impact. Their outcomes which are presented in this report are used by EarthCheck to evaluate whether the operation has reached the standards necessary to pass the benchmarking requirements, as stated in the EarthCheck Benchmarking Policy. ²

Indicator Measure (Benchmark)		
1	Policy	Policy is produced and in place
2	Energy	Energy Consumption (MJ / Visitor)
		Green Power (%) ³
		Greenhouse Gas Emissions (Scope 1 and Scope 2) (kg CO ₂ -e / Visitor)
3	Water	Potable Water Consumption (L / Visitor)
		Water Savings Rating (Points)
		Recycled / Captured Water (%) ³
4	Waste	Waste Sent to Landfill (L / Visitor)
		Waste Recycling Rating (Points)
		Recycled / Reused / Composted Waste (%) ³
5	Community	Community Commitment (%)
		Community Contributions Rating (Points)
6	Paper	Paper Products Rating (Points)
7	Cleaning	Cleaning Products Rating (Points)
8	Pesticides	Pesticide Products Rating (Points)

¹ Refer to the EarthCheck Sector Benchmarking Indicator (SBI) document for more information. For frequently asked questions (FAQs) about benchmarking or specific help, please log on to 'My EarthCheck' and visit your EarthCheck Benchmarking software.

² To meet the requirements stipulated in the EarthCheck Company Standard, the benchmarks for all the submitted EarthCheck indicators need to be at, or better than, the Baseline level. Baseline and Best Practice performance levels are set with reference to the type of activity (registered sector/s) and appropriate national and international data which take into account social, geographical and climatic impacts.

First-time benchmarking operations that fail to meet the minimum requirements (Baseline performance or better) for up to two submitted EarthCheck indicators (with a third indicator within 10% of the Baseline level), will be permitted to pass benchmarking. The operation is however, given a maximum of 12 months to improve performance in at least one of the indicators to Baseline performance or better. If on the next submission this is not achieved without substantiated evidence that the situation was beyond the control of the operation (e.g., occurrence of a natural disaster), then the right to use the appropriate EarthCheck logo will be withdrawn.

As a standard policy, all EarthCheck indicators are continuously reviewed, along with the performance levels which operators have to achieve in order to meet the requirements of the Company Standard. This review takes into account "business-as-usual" changes in practices and equipment, and is used to update where appropriate Baseline and Best Practice levels.

³ These indicators are for guidance only and do not affect the overall benchmarking evaluation.

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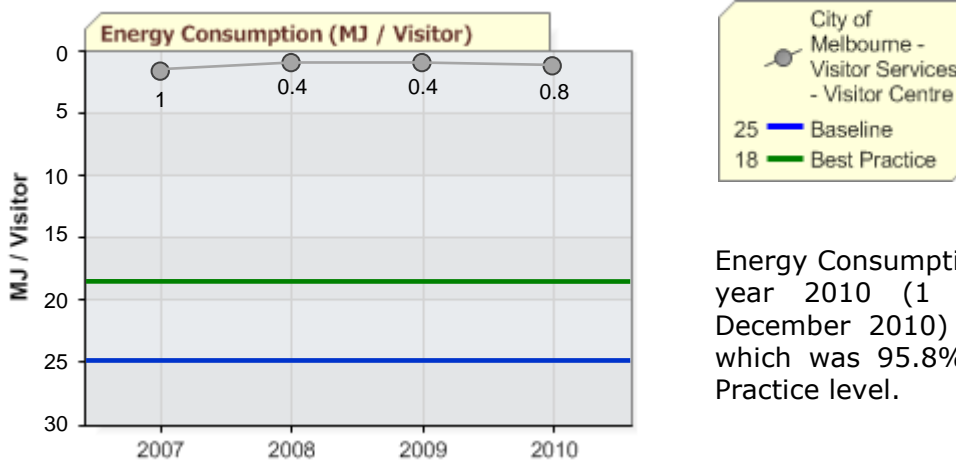
VISITOR CENTRE PERFORMANCE BENCHMARKS

Current performance: Below Baseline ✖ At or above Baseline ✔ At or above Best Practice ★

1. Policy ★

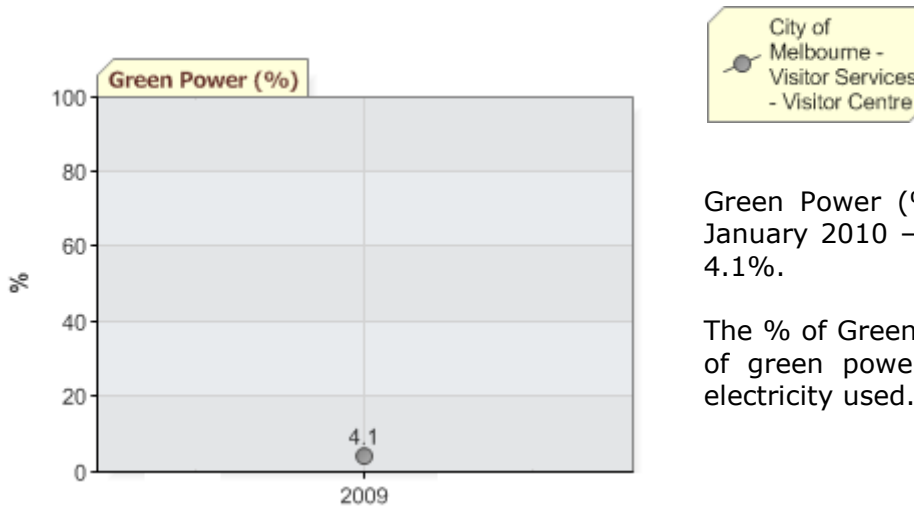
2. Energy

Energy Consumption (MJ / Visitor) ★



Energy Consumption (MJ / Visitor) for the year 2010 (1 January 2010 – 31 December 2010) was 0.8 MJ / Visitor, which was 95.8% better than the Best Practice level.

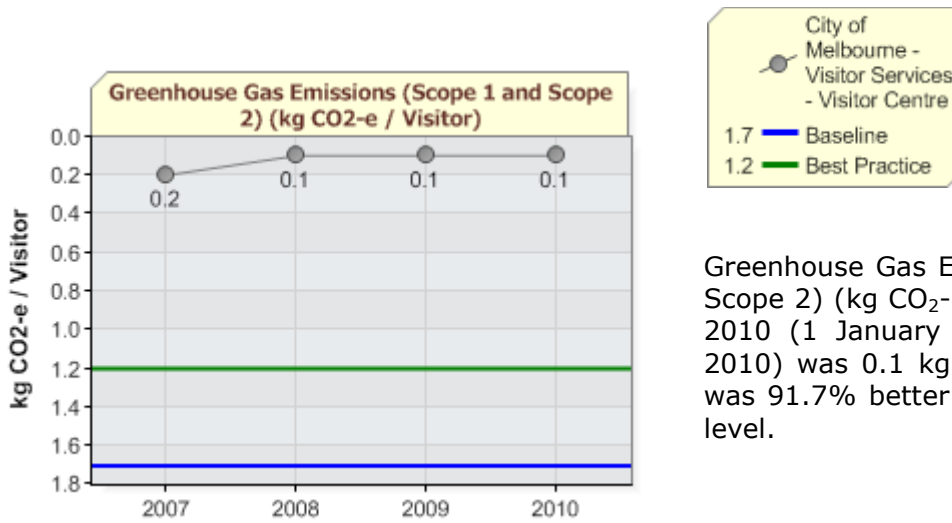
Green Power (%)



Green Power (%) for the year 2010 (1 January 2010 – 31 December 2010) was 4.1%.

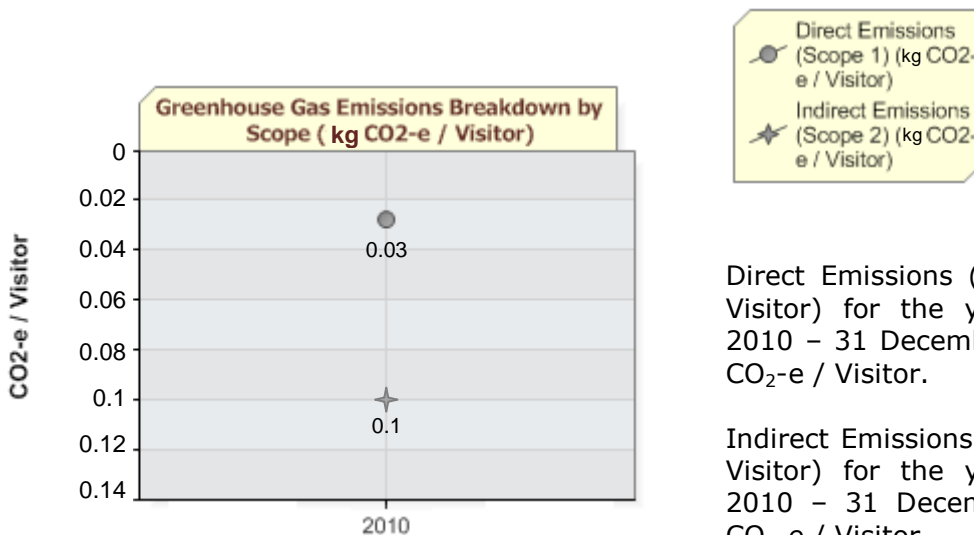
The % of Green power is based on the % of green power purchased of the total electricity used.

Greenhouse Gas Emissions (Scope 1 and Scope 2) (kg CO₂-e / Visitor) ★



Greenhouse Gas Emissions (Scope 1 and Scope 2) (kg CO₂-e / Visitor) for the year 2010 (1 January 2010 – 31 December 2010) was 0.1 kg CO₂-e / Visitor, which was 91.7% better than the Best Practice level.

Greenhouse Gas Emissions Breakdown by Scope (kg CO₂-e / Visitor)



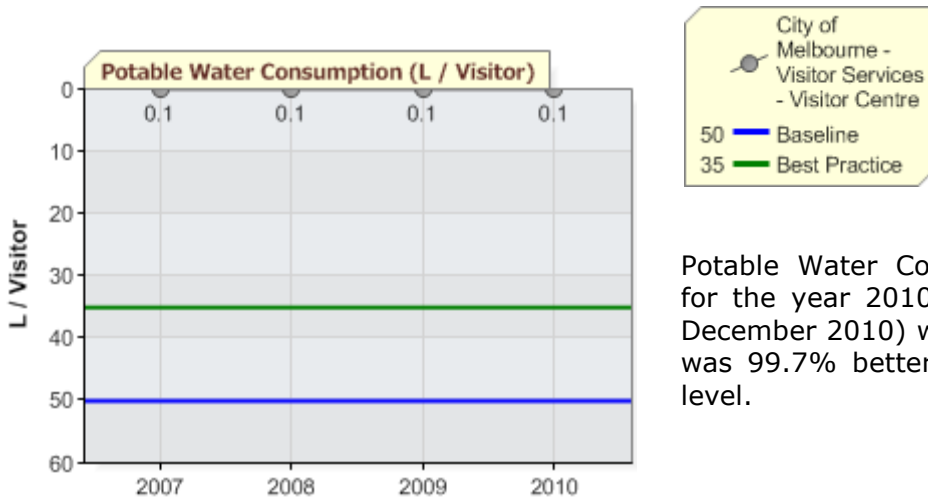
Direct Emissions (Scope 1) (kg CO₂-e / Visitor) for the year 2010 (1 January 2010 – 31 December 2010) was 0.03 kg CO₂-e / Visitor.

Indirect Emissions (Scope 2) (kg CO₂-e / Visitor) for the year 2010 (1 January 2010 – 31 December 2010) was 0.1 t CO₂-e / Visitor.

Direct Emissions (Scope 1)								
Mobile Fuel Combustion (road)								
Type	Quantity	Unit	Energy Consumption (MJ)	CO ₂ Emission Estimate (t CO ₂ -e)	CH ₄ Emission Estimate (t CO ₂ -e)	N ₂ O Emission Estimate (t CO ₂ -e)	Total Emission Estimate (t CO ₂ -e)	
Diesel	19116	litres (L)	737877.6	51.1	0.1	0.4	51.6	
subtotal			737877.6	51.1	0.1	0.4	51.6	
TOTAL			737877.6	51.1	0.1	0.4	51.6	
Indirect Emissions (Scope 2)								
Purchased Electricity								
Quantity	Unit	% Green Power	Provider	Energy Consumption (MJ)	CO ₂ Emission Estimate (t CO ₂ -e)	CH ₄ Emission Estimate (t CO ₂ -e)	N ₂ O Emission Estimate (t CO ₂ -e)	Total Emission Estimate (t CO ₂ -e)
167200	Kilowatt hour (kWh)	0	Australia, VIC	601920.0	-	-	-	204.0
18959	Kilowatt hour (kWh)	40.7	Australia, VIC	68252.4	-	-	-	13.7
subtotal			670172.4	-	-	-	217.7	
TOTAL			670172.4	-	-	-	217.7	
Greenhouse Gas Emissions (Scope 1 and Scope 2)								
GRAND TOTAL			1408050.0	51.1	0.1	0.4	269.3	

3. Water

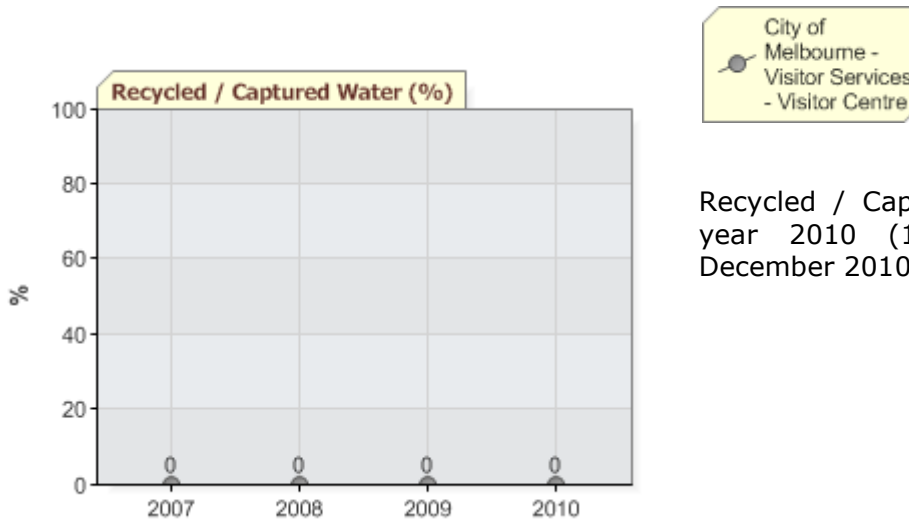
Potable Water Consumption (L / Visitor) ★



Potable Water Consumption (L / Visitor) for the year 2010 (1 January 2010 - 31 December 2010) was 0.1 L / Visitor, which was 99.7% better than the Best Practice level.

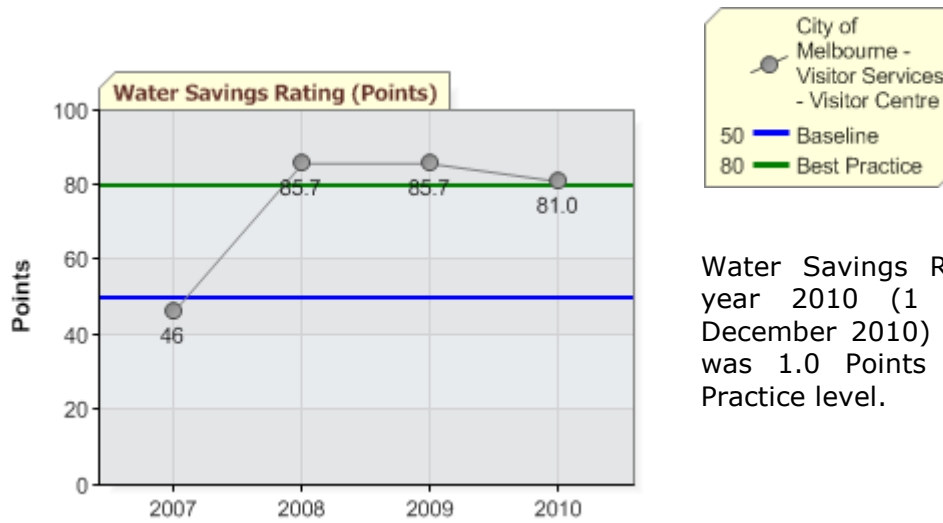
Quantity	Unit	Potable Water Consumption (kL)
177905	litres	177.9 kL
	Totals:	177.9 kL

Recycled / Captured Water (%)



Recycled / Captured Water (%) for the year 2010 (1 January 2010 - 31 December 2010) was 0%.

Water Savings Rating (Points) ★

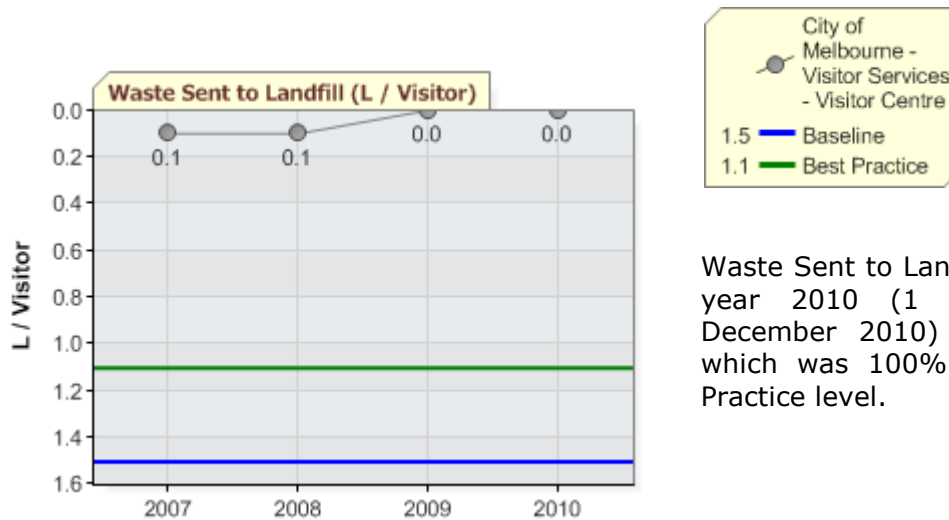


Water Savings Rating (Points) for the year 2010 (1 January 2010 - 31 December 2010) was 81.0 Points, which was 1.0 Points better than the Best Practice level.

Water Savings Measures	Frequency / Percentage Rating	Water Savings Rating (Points)
Check for leaks	Every 2 weeks	88.9 Points
Low/dual flush toilets	100%	100.0 Points
Low flow tap fittings	Not Relevant / Not Available	-
Low flow shower fittings	Not Relevant / Not Available	-
Water sprinklers used after dark	Not Relevant / Not Available	-
Minimal irrigation landscaping	Not Relevant / Not Available	-
Use of recycle/grey/rain water	1-19%	54.0 Points
	Overall Rating:	81.0 Points

4. Waste

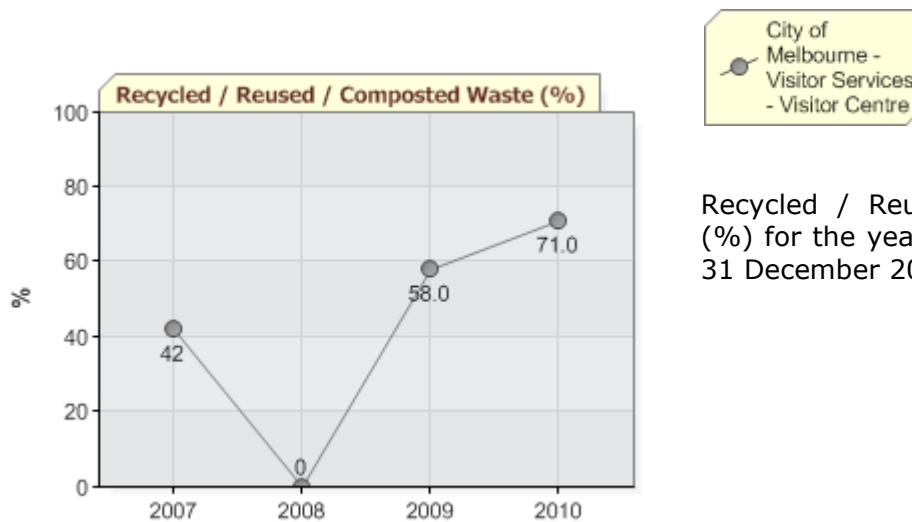
Waste Sent to Landfill (L / Visitor) ★



Waste Sent to Landfill (L / Visitor) for the year 2010 (1 January 2010 – 31 December 2010) was 0.0 L / Visitor, which was 100% better than the Best Practice level.

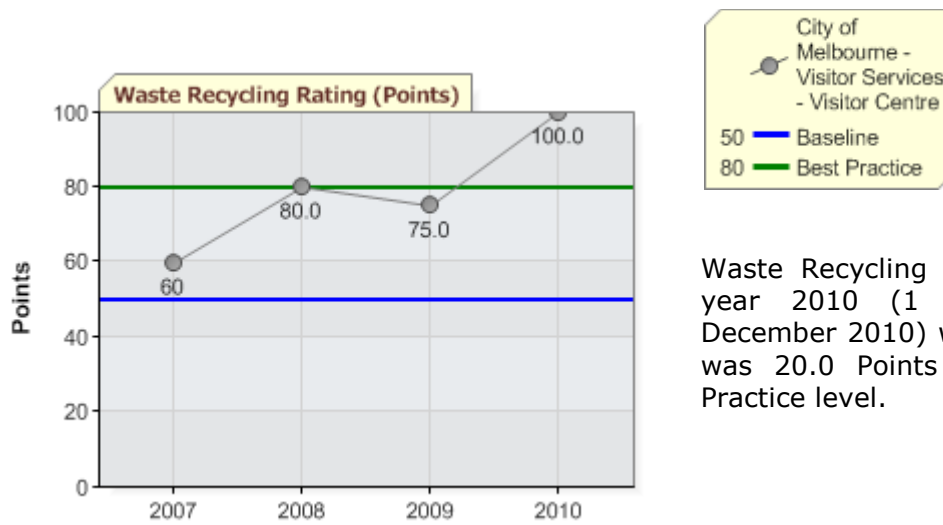
Quantity	Unit	Waste Sent to Landfill (m ³)
43800	litres	43.8 m ³
	Totals:	43.8 m³

Recycled / Reused / Composted Waste (%)



Recycled / Reused / Composted Waste (%) for the year 2010 (1 January 2010 – 31 December 2010) was 71.0%.

Waste Recycling Rating (Points) ★

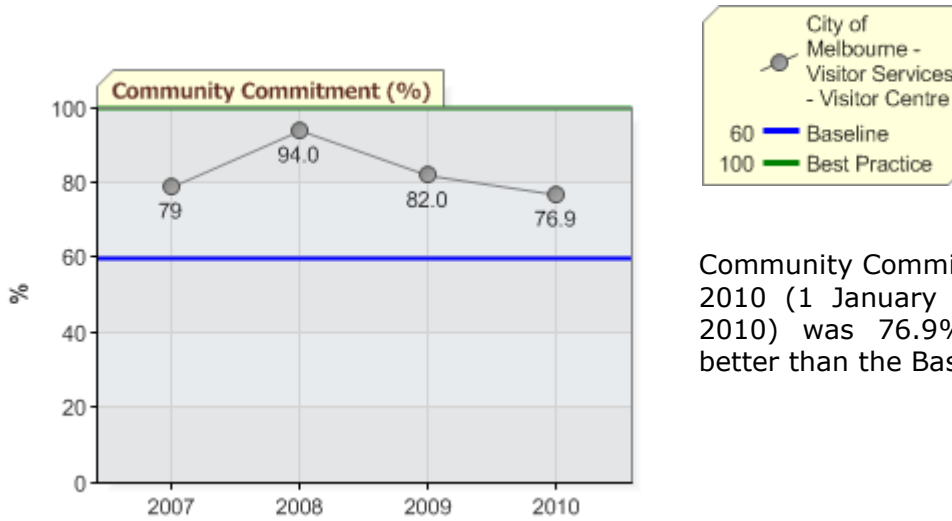


Waste Recycling Rating (Points) for the year 2010 (1 January 2010 - 31 December 2010) was 100.0 Points, which was 20.0 Points better than the Best Practice level.

Waste Recycling Measures	Frequency / Percentage Rating	Waste Recycling Rating (Points)
Glass	100%	100.0 Points
Paper/card	100%	100.0 Points
Iron & steel (ferrous metals)	Not Relevant / Not Available	-
Other metals (non-ferrous)	Not Relevant / Not Available	-
Plastics	100%	100.0 Points
Rubber	Not Relevant / Not Available	-
Green waste	Not Relevant / Not Available	-
	Overall Rating:	100.0 Points

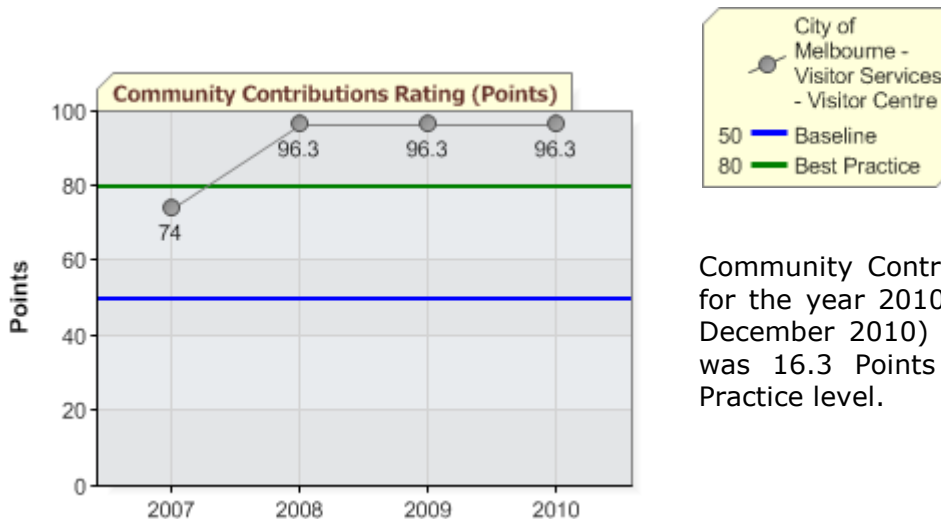
5. Community

Community Commitment (%) ✓



Community Commitment (%) for the year 2010 (1 January 2010 – 31 December 2010) was 76.9%, which was 16.9% better than the Baseline level.

Community Contributions Rating (Points) ★

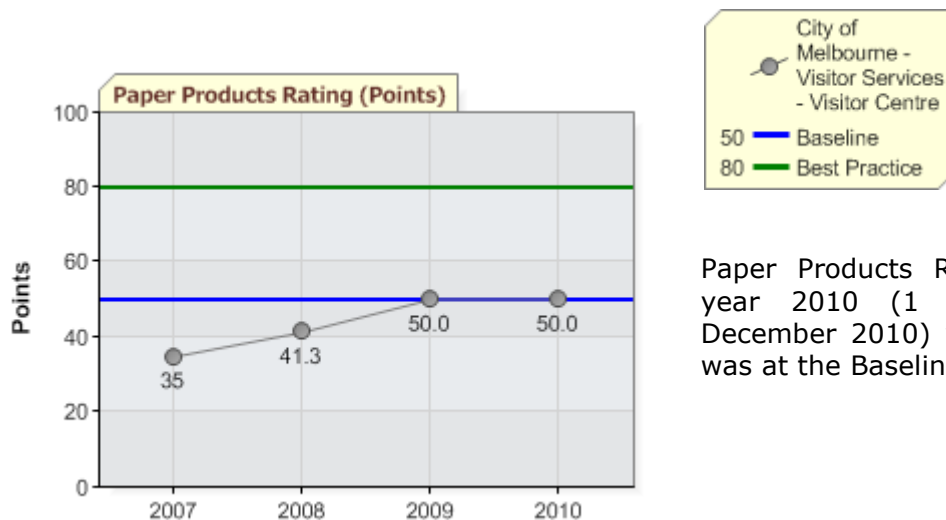


Community Contributions Rating (Points) for the year 2010 (1 January 2010 – 31 December 2010) was 96.3 Points, which was 16.3 Points better than the Best Practice level.

Community Contributions Measures	Frequency / Percentage Rating	Community Contributions Rating (Points)
Net income spent on sustainability programs	10% or more	100.0 Points
Perishable purchased goods that are of local origin	Not Relevant / Not Available	-
Service contracts given to local contractors	80-99%	88.9 Points
Staff received training on sustainability issues	100%	100.0 Points
	Overall Rating:	96.3 Points

6. Paper

Paper Products Rating (Points) ✓

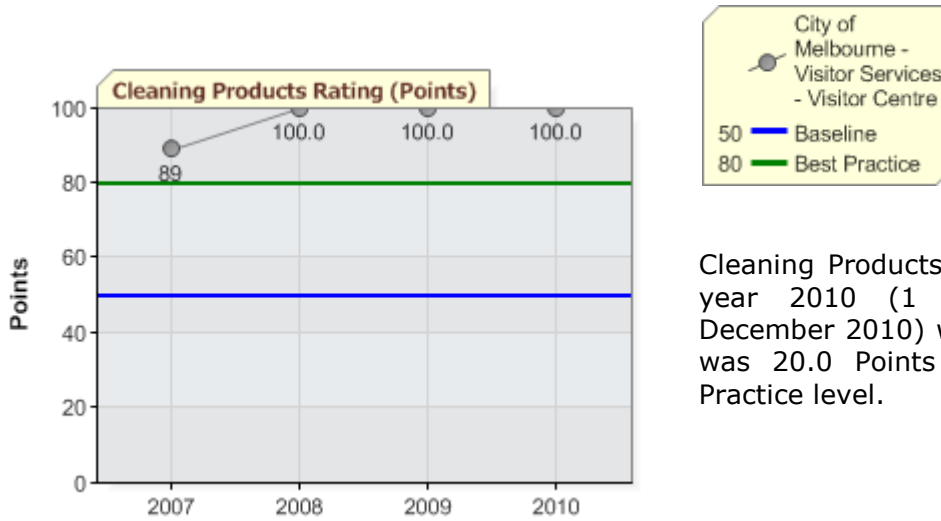


Paper Products Rating (Points) for the year 2010 (1 January 2010 – 31 December 2010) was 50.0 Points, which was at the Baseline level.

Paper Products Measures	Frequency / Percentage Rating	Paper Products Rating (Points)
Office paper	100%	100.0 Points
Serviettes	Not Relevant / Not Available	-
Tissues	0%	0.0 Points
Toilet tissue	0%	0.0 Points
Paper towels	100%	100.0 Points
	Overall Rating:	50.0 Points

7. Cleaning

Cleaning Products Rating (Points) ★

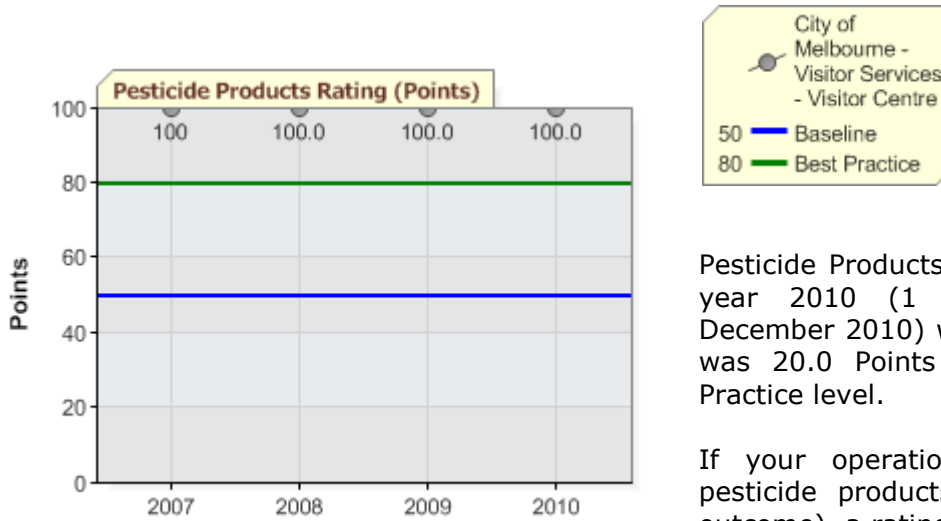


Cleaning Products Rating (Points) for the year 2010 (1 January 2010 – 31 December 2010) was 100.0 Points, which was 20.0 Points better than the Best Practice level.

Cleaning Products Measures	Frequency / Percentage Rating	Cleaning Products Rating (Points)
Hard floor cleaners	100%	100.0 Points
Carpet cleaners	100%	100.0 Points
Interior surface cleaners	100%	100.0 Points
External surface cleaners	100%	100.0 Points
Glass cleaners	100%	100.0 Points
Detergents	Not Relevant / Not Available	100.0 Points
Personal hygiene	100%	100.0 Points
	Overall Rating:	100.0 Points

8. Pesticides

Pesticide Products Rating (Points) ★



Pesticide Products Rating (Points) for the year 2010 (1 January 2010 – 31 December 2010) was 100.0 Points, which was 20.0 Points better than the Best Practice level.

If your operation does not use any pesticide products (which is a positive outcome), a rating of 100 will be reported for this indicator on the basis that no use represents a Best Practice achievement.

Pesticide Products Measures	Frequency / Percentage Rating	Pesticide Products Rating (Points)
Weed killers	Not Relevant / Not Available	100.0 Points
Fungal killers	Not Relevant / Not Available	100.0 Points
Rodent killers	Not Relevant / Not Available	100.0 Points
Insect killers	Not Relevant / Not Available	100.0 Points
	Overall Rating:	100.0 Points

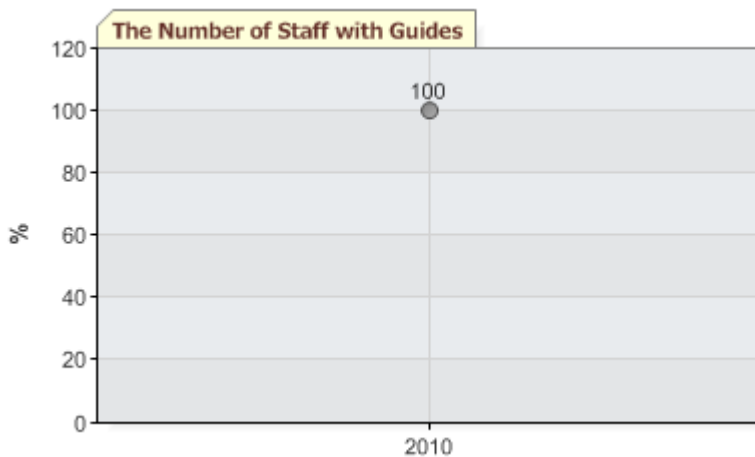
OPTIONAL BENCHMARKING INDICATORS

The **City of Melbourne - Visitor Services - Visitor Centre** has also nominated optional Operation Specified Indicators that they consider relevant to their specific operation and locality. The Operation Specified Indicators do not form part of the formal annual benchmarking exercise.

1. Specified Indicators

Specified Indicators are devised by the operator for local and/or internal performance assessment.

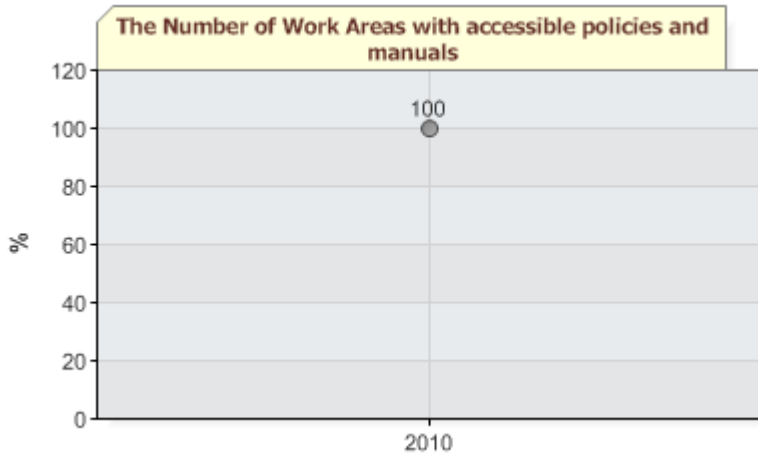
The Number of Staff with Guides



Two staff members are Green Guardians. Green Guardians are part of CoM Green which aligns with future Melbourne vision of an eco-city - "a city where people and organisations adapt to a changing climate and gladly act to build a sustainable future." These staff members are involved in various sustainable projects as well as working towards raising awareness amongst other employees.



The Number of Work Areas with accessible policies and manuals

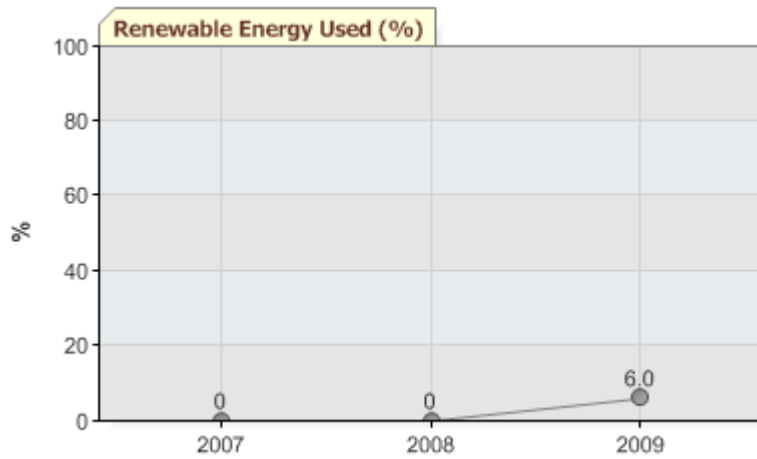


HISTORIC BENCHMARKING INDICATORS

1. Renewable Energy

Renewable Energy % is no longer a supplementary indicator; it is included here for historical reference.

Renewable Energy Used (%)



*The supplied data has been compiled by **City of Melbourne - Visitor Services - Visitor Centre** in the prescribed manner, authorised by a senior executive of the company and submitted for an annual assessment.*

CONCLUSION AND RECOMMENDATIONS

Congratulations, **City of Melbourne - Visitor Services - Visitor Centre** has passed the requirements to be recognised as an EarthCheck Benchmarked Visitor Centre.

In addition to having a Sustainability Policy in place, eleven of the assessed EarthCheck indicators are at or above the Baseline level. From the benchmarking data provided, nine indicators, *Energy Consumption, Greenhouse Gas Emissions (Scope 1 and Scope 2), Potable Water Consumption, Water Savings Rating, Waste Sent to Landfill, Waste Recycling Rating, Community Contributions Rating, Cleaning Products Rating* and *Pesticide Products Rating*, are at or above the Best Practice level, which is an excellent achievement to be very highly commended.

Improvements in all the EarthCheck indicators will not only help the environment, but can also help reduce operational costs. Due to the positive commitment that **City of Melbourne - Visitor Services - Visitor Centre** has demonstrated to the environment, the assessors are confident that they can maintain their very high standards and remain a leader in environmental performance. In line with EarthCheck Policy this would enable the **City of Melbourne - Visitor Services - Visitor Centre** to continue to meet the benchmarking requirements of the EarthCheck program.

APPENDIX

BENCHMARKING POLICY

A member benchmarking for the 4th time (and subsequent assessments) is not permitted to fail any EarthCheck™ indicators (excluding supplementary EarthCheck™ indicators).

SUBMISSION COMMENTS

The following comments were provided at the time of submission:

"As recommended by Kristy Forche - Baird, Benchmarking Manager EarthCheck, I made two separate entries as per below under purchased electricity;

*Quantity
Green Power %*

*MVC
Coal Energy
167,200 (kWh)
0%*

*MVB
Coal Energy
18,959 (kWh)
40.70%*

By following this process our result for green power usage will be lower than the previous year. We are in the process of purchasing green power for the MVC."

WASTE SENT TO LANDFILL

The Benchmarking Assessors sought clarification in regards to *Waste Sent to Landfill*, as the initial figure was significantly less than expected. **City of Melbourne - Visitor Services - Visitor Centre** advised the following:

Bin Collection		
Bin Type	Frequency of Collection	Comments
General Waste	120 Litres per day (Half a bin)	120kg/240L *includes general waste from dual waste bins in Tea Room & Supervisor Office & 2 x waste bins on MVC floor

"Last year figures for the waste were miscalculated. Calculations were based on full bins (240L per day) we only use ½ bins per day."

Based on this information the Benchmarking Assessors have calculated *Waste Sent to Landfill* below:

Waste Sent to Landfill
120 Litres x 365 days
= 43 800 Litres

The Benchmarking Assessors have updated this figure accordingly. The figure for *Waste Sent to Landfill* in the 2009 Benchmarking Assessment has also been updated to 43 800 litres.

This equates to 0.0 L per Visitor.

OPTIONAL INDICATORS

The Benchmarking Assessors have updated the *Optional Indicators* to represent a single numeric figure. **City of Melbourne - Visitor Services - Visitor Centre** are advised to submit single numeric figures for *Optional Indicators* in future assessments.



EARTHCHECK

Benchmarks Assessed by EarthCheck

SUMMARY OF SUPPLIED BENCHMARKING DATA

Activity Measures

Total Visitors 1 845 252

Supplied Benchmarking Data

Energy

Energy Consumption (MJ / Visitor)

Supplied 1408050.0 MJ
 Calculated 0.8 MJ / Visitor
 Baseline 25 MJ / Visitor
 Best Practice 18 MJ / Visitor
 Difference 95.8% better than the Best Practice level

Green Power (%)

Supplied 4.1%
 Calculated 4.1%

Greenhouse Gas Emissions (Scope 1 and Scope 2) (kg CO₂-e / Visitor)

Supplied 269277.7 kg CO₂-e
 Calculated 0.1 kg CO₂-e / Visitor
 Baseline 1.7 kg CO₂-e / Visitor
 Best Practice 1.2 kg CO₂-e / Visitor
 Difference 91.7% better than the Best Practice level

Direct Emissions (Scope 1) (kg CO₂-e / Visitor)

Supplied 51.6 kg CO₂-e
 Calculated 0.03 kg CO₂-e / Visitor

Indirect Emissions (Scope 2) (kg CO₂-e / Visitor)

Supplied 217.7 kg CO₂-e
 Calculated 0.1 kg CO₂-e / Visitor

Water

Potable Water Consumption (L / Visitor)

Supplied 177905.0 L
 Calculated 0.1 L / Visitor
 Baseline 50 L / Visitor
 Best Practice 35 L / Visitor
 Difference 99.7% better than the Best Practice level

Water Savings Rating (Points)

Supplied 81.0 Points

Calculated 81.0 Points
 Baseline 50 Points
 Best Practice 80 Points
 Difference 1.0 Points better than the Best Practice level

Recycled / Captured Water (%)

Supplied 0%
 Calculated 0%

Waste

Waste Sent to Landfill (L / Visitor)

Supplied 43800.0 L
 Calculated 0.0 L / Visitor
 Baseline 1.5 L / Visitor
 Best Practice 1.1 L / Visitor
 Difference 100% better than the Best Practice level

Waste Recycling Rating (Points)

Supplied 100.0 Points
 Calculated 100.0 Points
 Baseline 50 Points
 Best Practice 80 Points
 Difference 20.0 Points better than the Best Practice level

Recycled / Reused / Composted Waste (%)

Supplied 71.0%
 Calculated 71.0%

Community

Community Commitment (%)

Supplied 76.9%
 Calculated 76.9%
 Baseline 60 %
 Best Practice 100 %
 Difference 16.9% better than the Baseline level

Community Contributions Rating (Points)

Supplied 96.3 Points
 Calculated 96.3 Points
 Baseline 50 Points

Best Practice	80 Points
Difference	16.3 Points better than the Best Practice level

Paper

Paper Products Rating (Points)

Supplied	50.0 Points
Calculated	50.0 Points
Baseline	50 Points
Best Practice	80 Points
Difference	at the Baseline level

Cleaning

Cleaning Products Rating (Points)

Supplied	100.0 Points
Calculated	100.0 Points
Baseline	50 Points
Best Practice	80 Points
Difference	20.0 Points better than the Best Practice level

Pesticides

Pesticide Products Rating (Points)

Supplied	100.0 Points
Calculated	100.0 Points
Baseline	50 Points
Best Practice	80 Points
Difference	20.0 Points better than the Best Practice level

DETERMINATION OF BASELINE AND BEST PRACTICE LEVELS

General

The values for the Baseline and Best Practice levels for each indicator are derived from extensive worldwide research into available and appropriate case studies, industry surveys, engineering design handbooks, energy, water and waste audits, and climatic and geographic conditions.

National and regional data for per capita energy use, greenhouse gas and other emissions, wastes to landfill and water consumption, where available provide background data for normalisation of the expected performance values for per customer or employee, and/or overall performance of an enterprise being benchmarked. They are used to gauge the regional or national situation and environmental performances that an enterprise is based in, and hence what are reasonable levels to expect the enterprise to achieve.

A benchmarking result at, or above, the Baseline level demonstrates to all stakeholders that the enterprise is achieving above average performance. A result below the Baseline level indicates that an enterprise can and should carry out actions that will make beneficial improvements in performance.

Consideration of Climate

A major determinant of energy consumption in some sectors, primarily those centred on buildings such as accommodation, visitor centres and administration offices will be the dominant climatic conditions in which the enterprise is located. In general, to maintain the same level of indoor comfort, enterprises operating in hot or cold climates will consume more energy than those in temperate climates.

Similarly, it is recognised that in certain sectors a major determinant of potable water consumption will be the climate in which an enterprise is located, in particular those with large grounds and/or significant water-based facilities or activities. That is, enterprises located in hot climates are more likely to consume more potable water than equivalent ones located in cooler climates. Factors that are likely to lead to a higher level of potable water consumption, for example in the accommodation sector, include increased evaporation rates of swimming pools, personal bathing and irrigation demands of grounds. In consideration of this factor, Baseline and Best Practice levels can vary in relation to country location.

Waste Sent to Landfill

The benchmark indicator used for Waste Sent to Landfill is given in litres as waste bins are usually calibrated by volume, and it has been found that the majority of operations do not have access to the weight of material disposed of. However, if a weight is supplied, standard factors are used to convert from weight (e.g., kilograms (kg)) to volume (e.g., cubic metres (m³) or litres (L)). These are: 1 kg (uncompacted waste) = 0.00333333 m³ or 3.33333 L and 1 kg (compacted waste) = 0.00153846 m³ or 1.53846 L.

Operations should make note of the level of compaction when submitting data for assessment by EarthCheck.

Review of Performance Levels

The Baseline and Best Practice performance levels for EarthCheck indicators are continuously reviewed and are likely to change over time. This review by a team of international experts, takes into account "business-as-usual" changes in practices, equipment and facilities, as well as regulations and general improvement trends in performance and procedures. This review is used to update the levels of Baseline and Best Practice, and provides useful feedback to the user of the indicators.

The list below summarises the basic generic rules used to determine Baseline and Best Practice levels for EarthCheck indicators.

- If relevant enterprise sector specific case studies are not available for a type of activity in a designated region, then national averages will be used to ascertain the Baseline level. In this case, the Best Practice level will be set at a minimum of 30% better performance than the Baseline.
- If case study or national data are not available for a specific indicator, then the first enterprise that benchmarks will have its results set as 15% better than Baseline (i.e., half way between Baseline and Best Practice).