



EARTHCHECK

BENCHMARKING ASSESSMENT REPORT

COMMUNITY BENCHMARKING

HUATULCO

HUATULCO, MEXICO



REPORT DATE: 1 March 2011

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

The planet deserves more than half measures

OVERVIEW

This annual assessment of **Huatulco** 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 / Person Year) Greenhouse Gas Emissions (Scope 1 and Scope 2) (t CO ₂ -e / Person Year) Green Power (%) ³
3	Water Potable Water Consumption (kL / Person Year) Water Savings Rating (Points) Recycled / Captured Water (%) ³
4	Waste Waste Sent to Landfill (L / Person Year) Waste Recycling Rating (Points) Recycled / Reused / Composted Waste (%) ³
5	Paper Paper Products Rating (Points)
6	Cleaning Cleaning Products Rating (Points)
7	Pesticides Pesticide Products Rating (Points)
8	Sector Specific Total CO ₂ -e Produced (t CO ₂ -e / Person Year) Nitrous Oxides Produced (kg / Person Year) Sulphur Dioxide Produced (kg / Person Year) Particulate Matter Produced (kg / Person Year) Water Samples Passed (%) Habitat Conservation Area (%) Green Space (%) Accredited Operations (%)

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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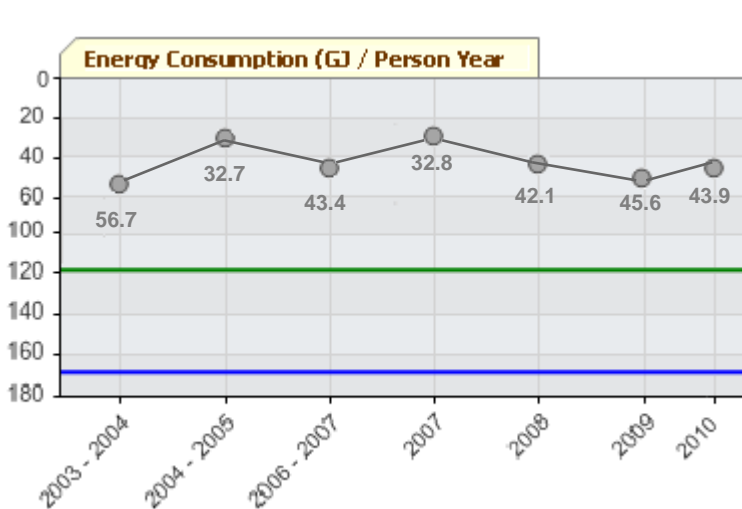
COMMUNITY PERFORMANCE BENCHMARKS

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

1. Policy ★

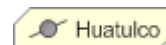
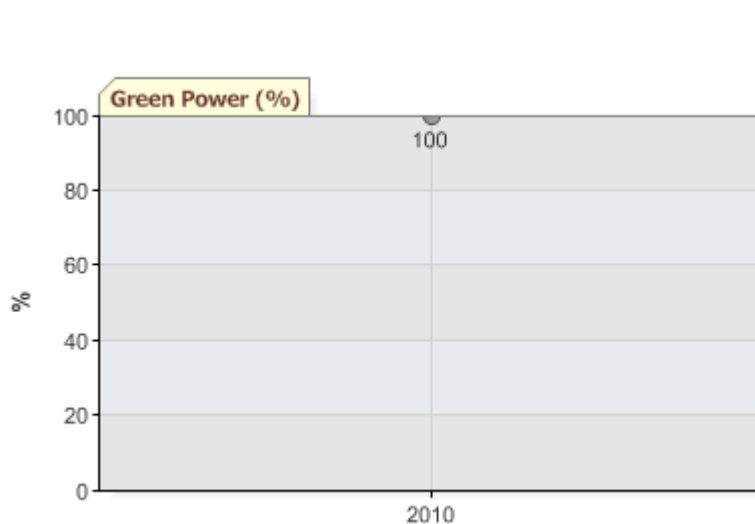
2. Energy

Energy Consumption (GJ / Person Year) ★



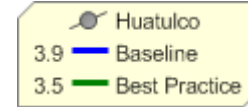
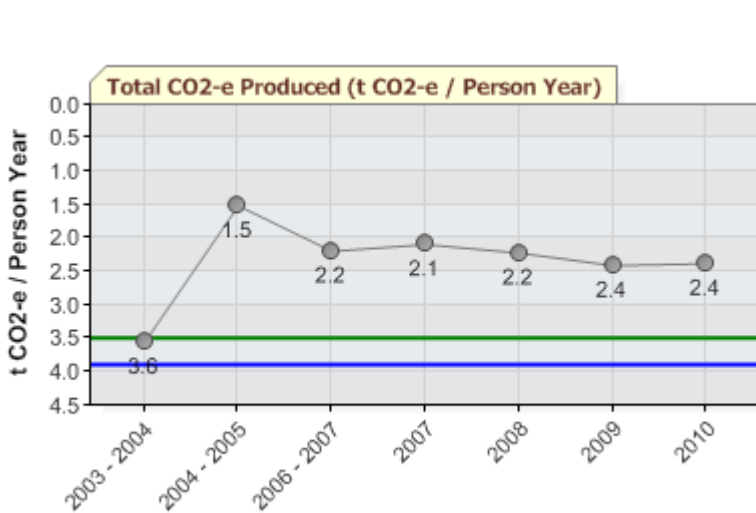
Energy Consumption (GJ / Person Year) for the year 2010 (1 January 2010– 31 December 2010) was 43.9 GJ / Person Year, which was 62.8% better than the Best Practice level.

Green Power (%)



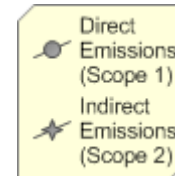
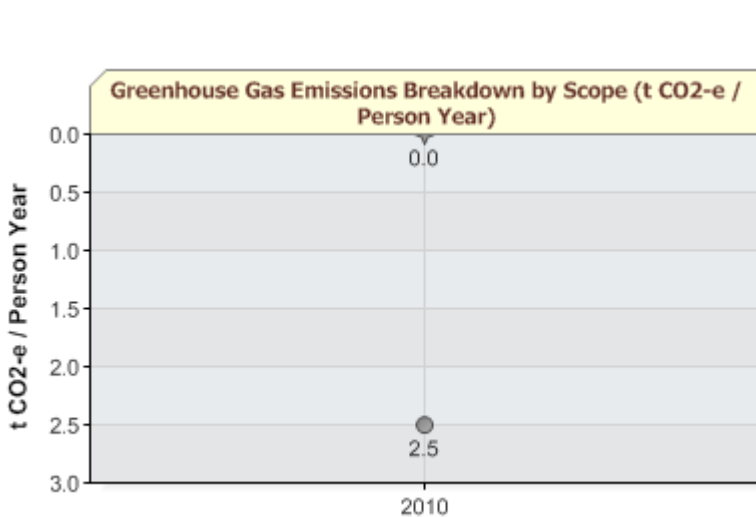
Green Power (%) for the year 2010 (1 January 2010– 31 December 2010) was 100%.

Greenhouse Gas Emissions (Scope 1 and Scope 2) (t CO₂-e / Person Year) ★



Greenhouse Gas Emissions (Scope 1 and Scope 2) (t CO₂-e / Person Year) for the year 2010 (1 January 2010– 31 December 2010) was 2.5 t CO₂-e / Person Year, which was 31.8% better than the Best Practice level.

Greenhouse Gas Emissions Breakdown by Scope (t CO₂-e / Person Year)



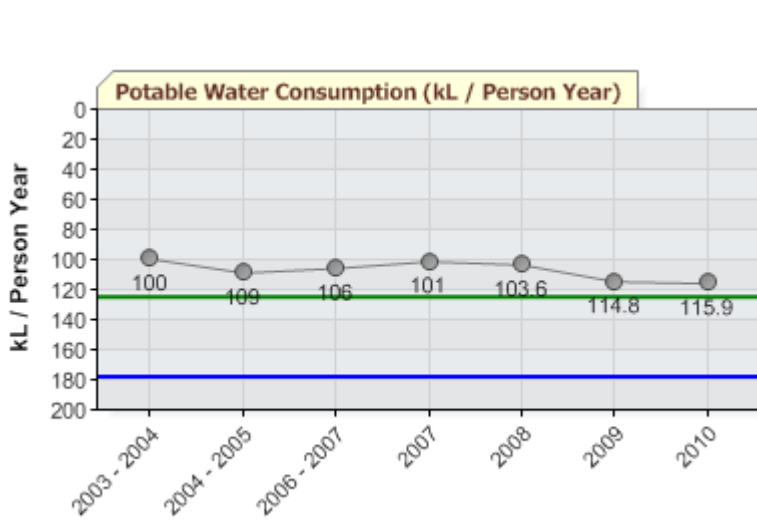
Direct Emissions (Scope 1) (t CO₂-e / Person Year) for the year 2010 (1 January 2010– 31 December 2010) was 2.5 t CO₂-e / Person Year.

Indirect Emissions (Scope 2) (kg CO₂-e / Person Year) for the year 2010 (1 January 2010– 31 December 2010) was 0.0 kg CO₂-e / Person Year.

Direct Emissions (Scope 1)								
Stationary Fuel Combustion								
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)	
LPG	3913920	litres (L)	96026109.4	6059.2	10.1	3.0	6072.3	
subtotal			96026109.4	6059.2	10.1	3.0	6072.3	
Mobile Fuel Combustion (road)								
Motor gasoline	16280735	litres (L)	530325242.9	36751.5	278.4	1315.2	38345.2	
Diesel	4964378	litres (L)	180594142.9	13382.0	14.8	218.3	13615.2	
subtotal			710919385.8	50133.6	293.2	1533.5	51960.3	
Onsite Wastewater Treatment								
Type	Average BOD (mg/L)	Wastewater Volume (kL/day)	Number of days in use	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)	
Aerobic (BOD Known)	18	7933	365	-	197.0	-	197.0	
subtotal					197.0		197.0	
TOTAL				806945495.2	56192.8	500.3	1536.5	58229.6
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)
63019637	Kilowatt hour (kWh)	100	Mexico	226870693.2	0.0	0.0	0.0	0.0
subtotal				226870693.2	0.0	0.0	0.0	0.0
TOTAL				226870693.2	0.0	0.0	0.0	0.0
Greenhouse Gas Emissions (Scope 1 and Scope 2)								
GRAND TOTAL				1033816188.4	56192.8	500.3	1536.5	58229.6

3. Water

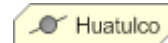
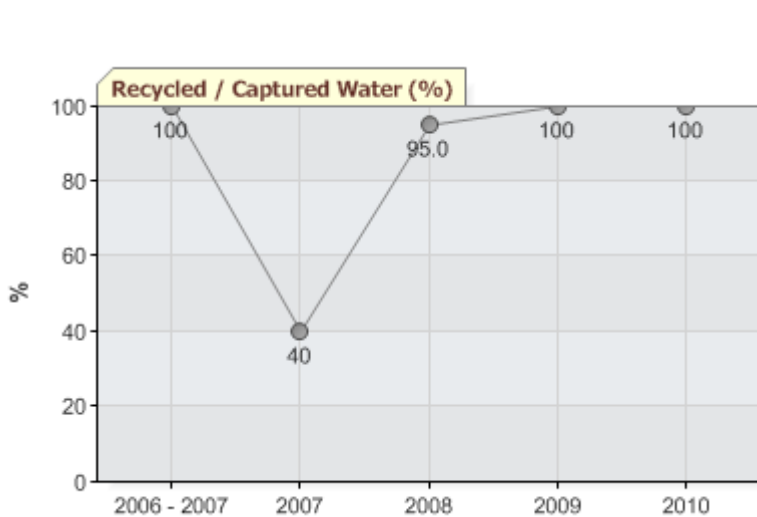
Potable Water Consumption (kL / Person Year) ★



Potable Water Consumption (kL / Person Year) for the year 2010 (1 January 2010– 31 December 2010) was 115.9 kL / Person Year, which was 7.3% better than the Best Practice level.

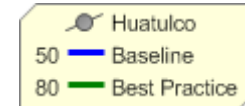
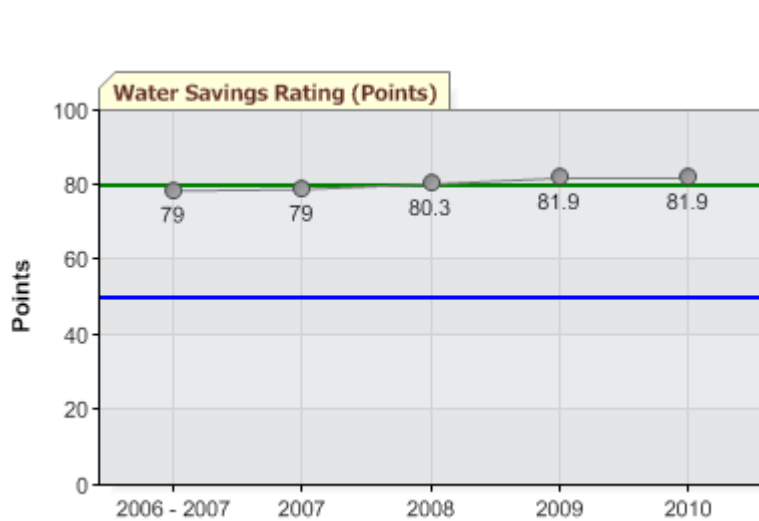
Quantity	Unit	Potable Water Consumption (kL)
2728988	cubic metres	2728988.0 kL
Totals:		2728988.0 kL

Recycled / Captured Water (%)



Recycled / Captured Water (%) for the year 2010 (1 January 2010– 31 December 2010) was 100%.

Water Savings Rating (Points) ★

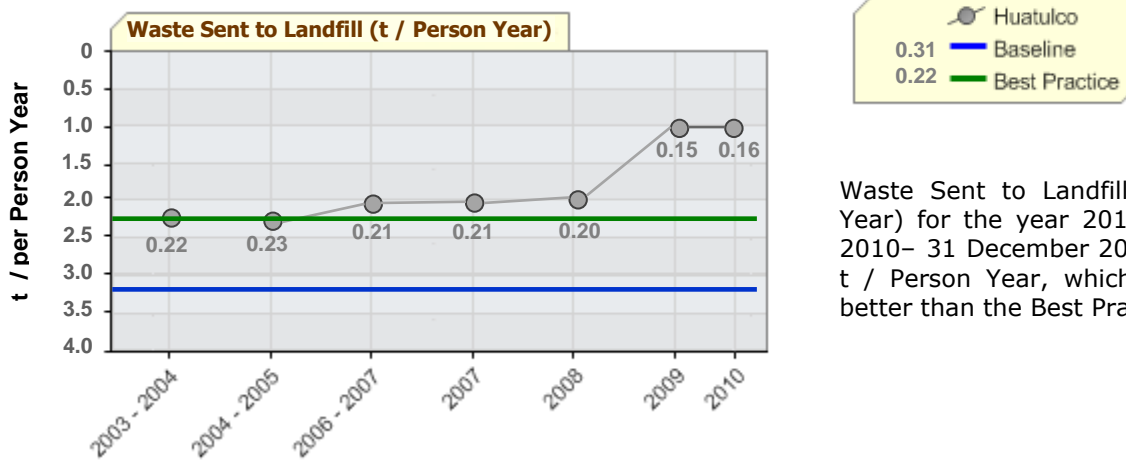


Water Savings Rating (Points) for the year 2010 (1 January 2010– 31 December 2010) was 81.9 Points, which was 1.9 Points better than the Best Practice level.

Water Savings Measures	Frequency / Percentage Rating	Water Savings Rating (Points)
Check for leaks	Every week	100.0 Points
Low/dual flush toilets	60-79%	73.9 Points
Low flow tap fittings	60-79%	73.9 Points
Low flow shower fittings	60-79%	73.9 Points
Water sprinklers used after dark	60-79%	73.9 Points
Minimal irrigation landscaping	80-99%	88.9 Points
Use of recycle/grey/rain water	80-99%	88.9 Points
	Overall Rating:	81.9 Points

4. Waste

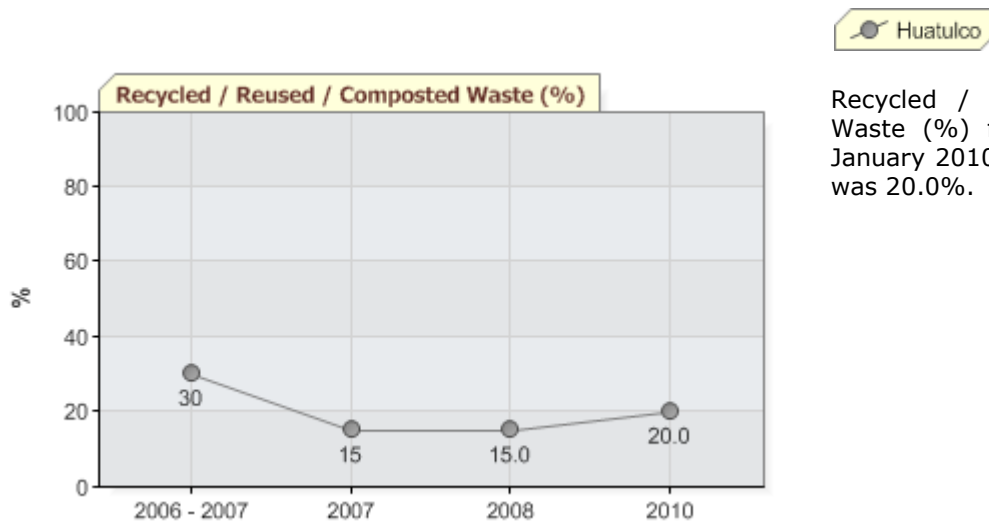
Waste Sent to Landfill (t / Person Year) ★



Waste Sent to Landfill (t / Person Year) for the year 2010 (1 January 2010– 31 December 2010) was 0.16 t / Person Year, which was 27.3% better than the Best Practice level.

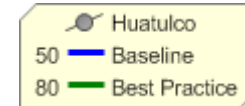
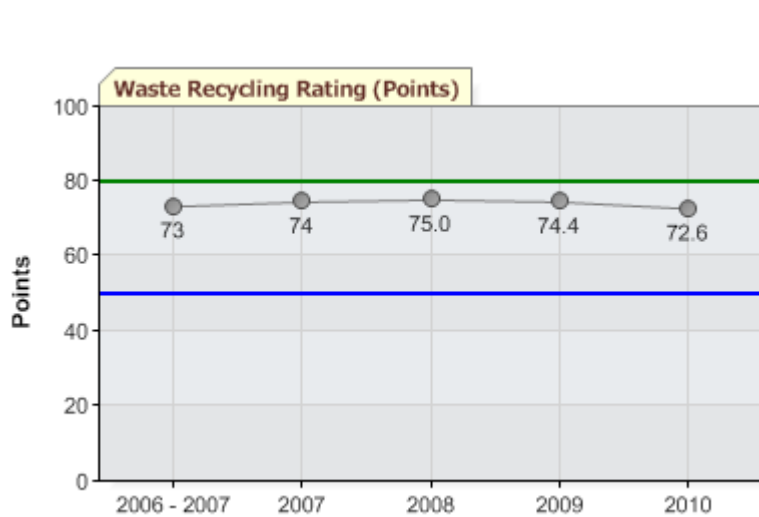
Quantity	Unit	Waste Sent to Landfill (m ³)
3 677 678	kilograms (compacted)	3 677.7 t
	Totals:	3 677.7 t

Recycled / Reused / Composted Waste (%)



Recycled / Reused / Composted Waste (%) for the year 2010 (1 January 2010– 31 December 2010) was 20.0%.

Waste Recycling Rating (Points) ✓

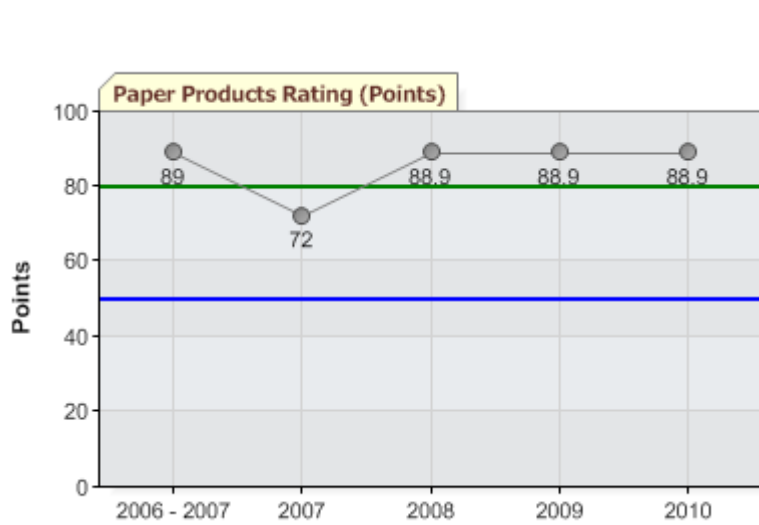


Waste Recycling Rating (Points) for the year 2010 (1 January 2010– 31 December 2010) was 72.6 Points, which was 22.6 Points better than the Baseline level.

Waste Recycling Measures	Frequency / Percentage Rating	Waste Recycling Rating (Points)
Glass	60-79%	73.9 Points
Paper/card	80-99%	88.9 Points
Iron & steel (ferrous metals)	60-79%	73.9 Points
Other metals (non-ferrous)	80-99%	88.9 Points
Plastics	60-79%	73.9 Points
Rubber	Relevant / Not Available	50.0 Points
Green waste	20-39%	58.8 Points
	Overall Rating:	72.6 Points

5. Paper

Paper Products Rating (Points) ★

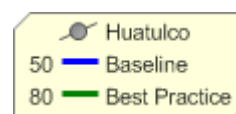


Paper Products Rating (Points) for the year 2010 (1 January 2010– 31 December 2010) was 88.9 Points, which was 8.9 Points better than the Best Practice level.

Paper Products Measures	Frequency / Percentage Rating	Paper Products Rating (Points)
Office paper	80-99%	88.9 Points
Serviettes	80-99%	88.9 Points
Tissues	80-99%	88.9 Points
Toilet tissue	80-99%	88.9 Points
Paper towels	80-99%	88.9 Points
	Overall Rating:	88.9 Points

6. Cleaning

Cleaning Products Rating (Points) ★

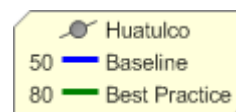
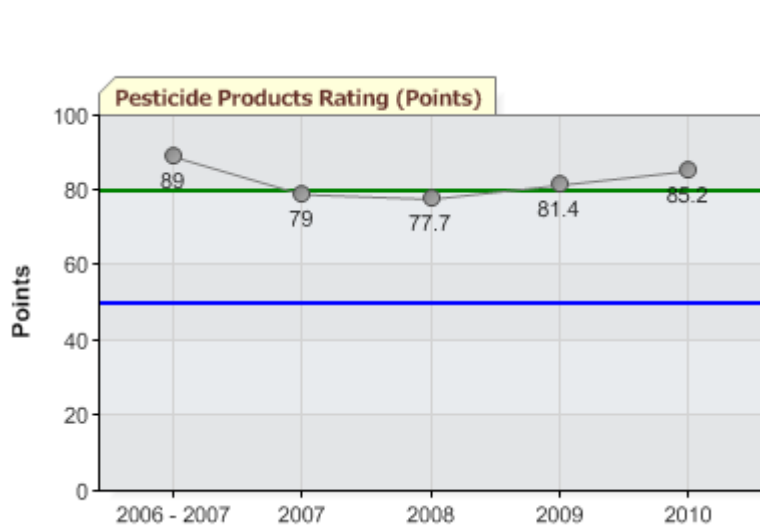


Cleaning Products Rating (Points) for the year 2010 (1 January 2010–31 December 2010) was 88.3 Points, which was 8.3 Points better than the Best Practice level.

Cleaning Products Measures	Frequency / Percentage Rating	Cleaning Products Rating (Points)
Hard floor cleaners	80-99%	88.9 Points
Carpet cleaners	Not Relevant / Not Available	100.0 Points
Interior surface cleaners	80-99%	88.9 Points
External surface cleaners	60-79%	73.9 Points
Glass cleaners	80-99%	88.9 Points
Detergents	80-99%	88.9 Points
Personal hygiene	80-99%	88.9 Points
	Overall Rating:	88.3 Points

7. Pesticides

Pesticide Products Rating (Points) ★

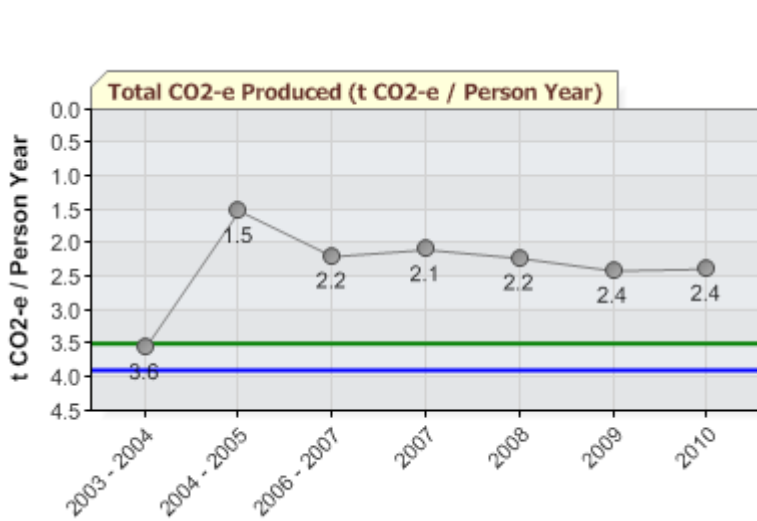


Pesticide Products Rating (Points) for the year 2010 (1 January 2010–31 December 2010) was 85.2 Points, which was 5.2 Points better than the Best Practice level.

Pesticide Products Measures	Frequency / Percentage Rating	Pesticide Products Rating (Points)
Weed killers	80-99%	88.9 Points
Fungal killers	80-99%	88.9 Points
Rodent killers	80-99%	88.9 Points
Insect killers	60-79%	73.9 Points
	Overall Rating:	85.2 Points

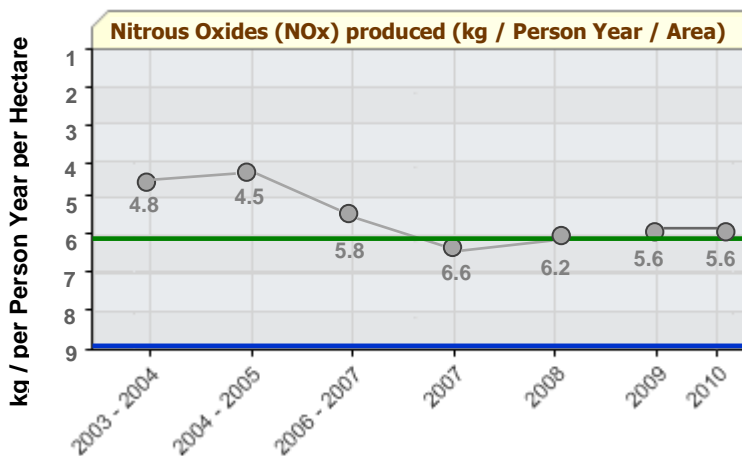
8. Sector Specific

Total CO₂-e Produced (t CO₂-e / Person Year) ★



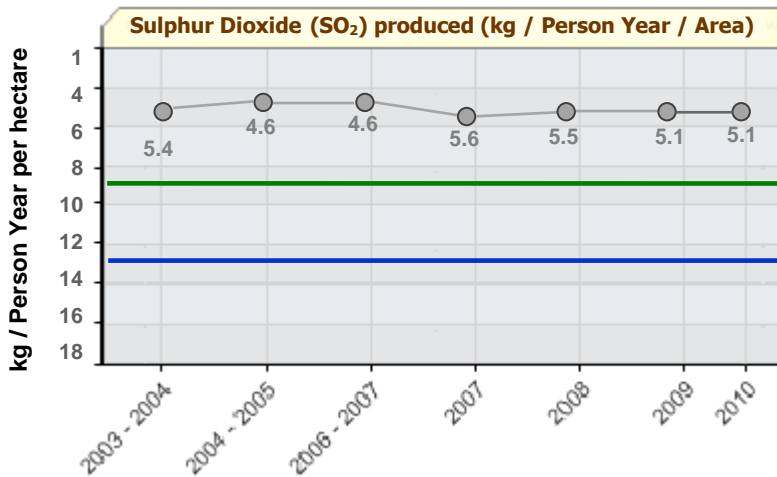
Total CO₂-e Produced (t CO₂-e / Person Year) for the year 2010 (1 January 2010– 31 December 2010) was 2.4 t CO₂-e / Person Year, which was 31.8% better than the Best Practice level.

Nitrous Oxides Produced (NOx) (kg / Person Year / Area) ★



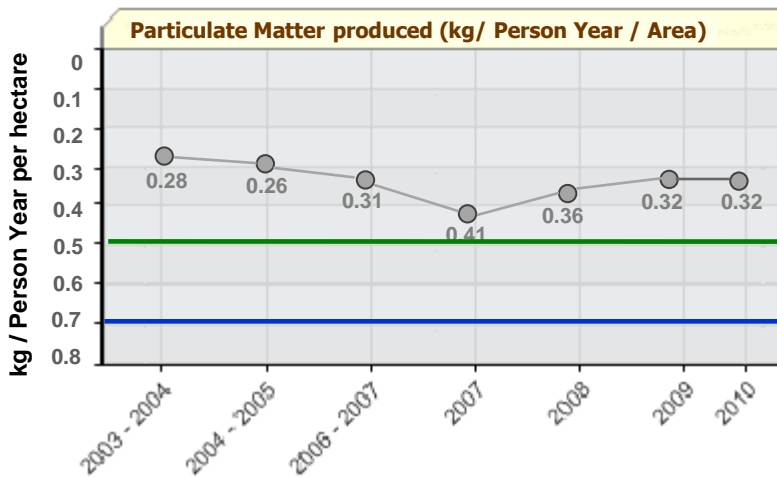
Total Nitrous Oxides Produced (kg / Person Year / Hectare) for the year 2010 (1 January 2010– 31 December 2010) was 5.6 kg / Person Year per Hectare which was 11.1 % better and Best Practice Level.

Sulphur Dioxide Produced (SO₂) (kg / Person Year/ Area) ★



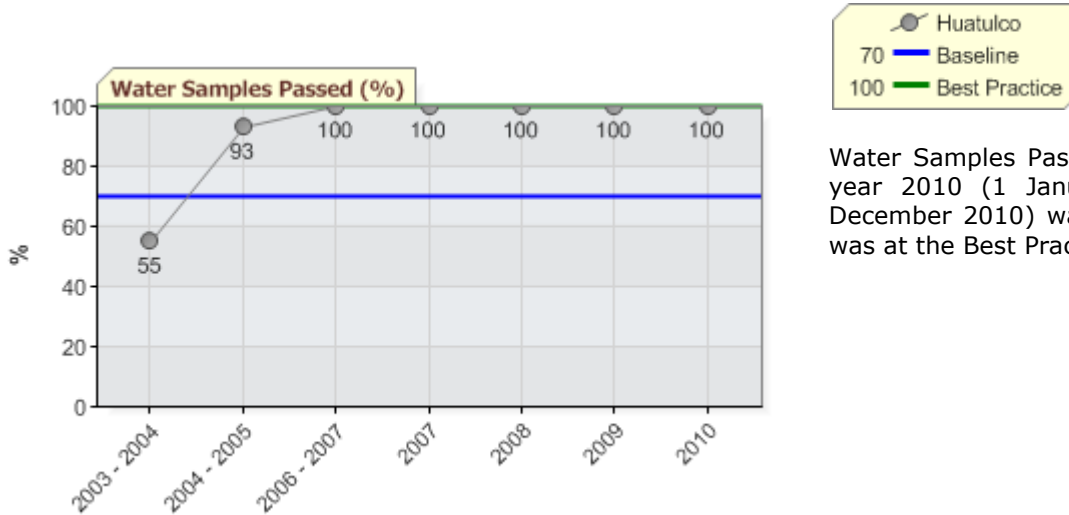
Sulphur Dioxide Produced (kg / Person Year/ Hectare) for the year 2010 (1 January 2010– 31 December 2010) was 5.1 kg / Person Year per Hectare, which was 43.3% better than Best Practice Level

Particulate Matter Produced (PM10) (kg / Person Year/ Area) ★



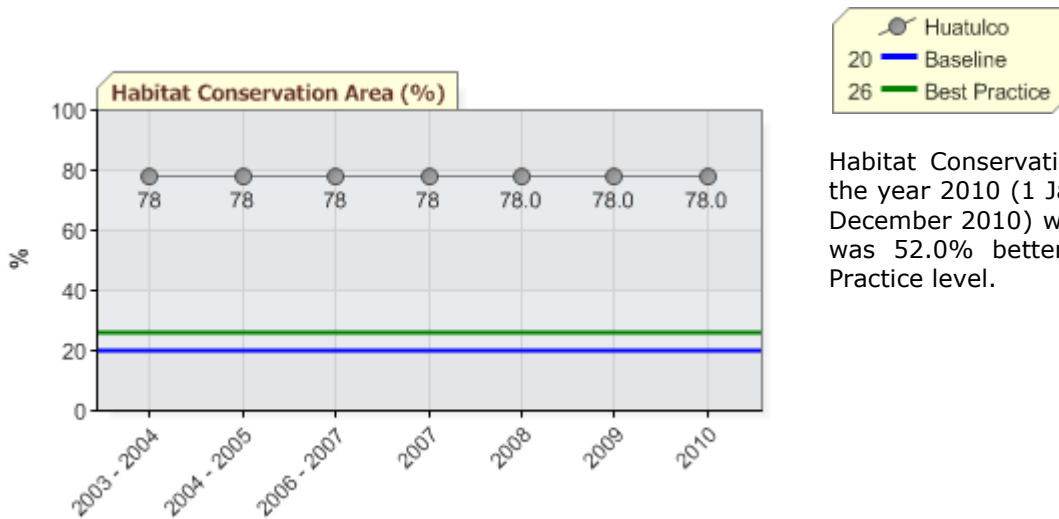
Particulate Matter Produced (kg / Person Year) for the year 2010 (1 January 2010– 31 December 2010) was 0.32 kg / Person Year per Hectare, which was 34.7% better than Best Practice Level

Water Samples Passed (%) ★



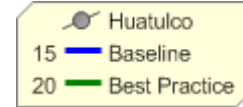
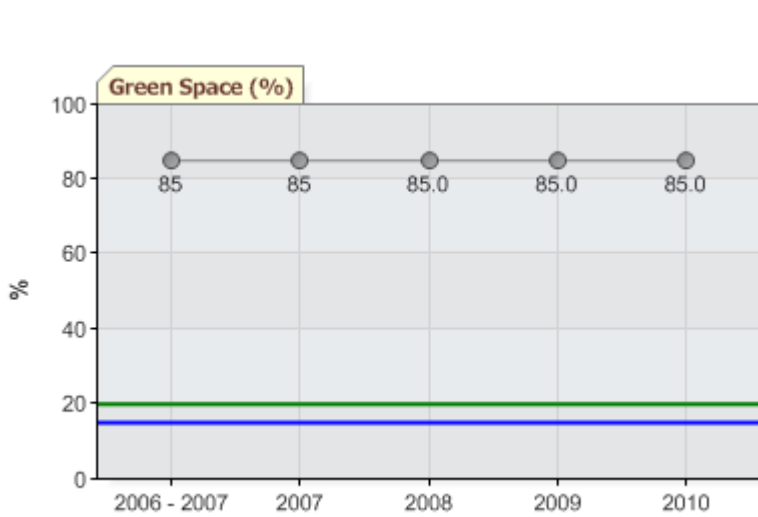
Water Samples Passed (%) for the year 2010 (1 January 2010– 31 December 2010) was 100%, which was at the Best Practice level.

Habitat Conservation Area (%) ★



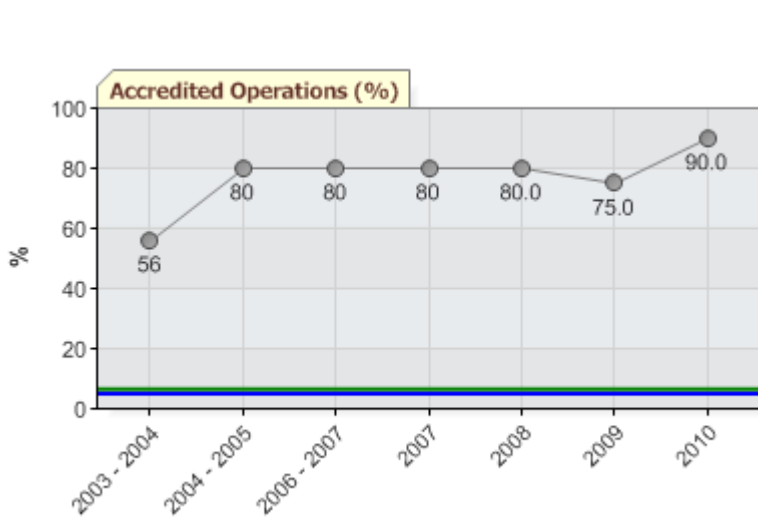
Habitat Conservation Area (%) for the year 2010 (1 January 2010– 31 December 2010) was 78.0%, which was 52.0% better than the Best Practice level.

Green Space (%) ★



Green Space (%) for the year 2010 (1 January 2010– 31 December 2010) was 85.0%, which was 65.0% better than the Best Practice level.

Accredited Operations (%) ★



Accredited Operations (%) for the year 2010 (1 January 2010– 31 December 2010) was 90.0%, which was 83.5% better than the Best Practice level.

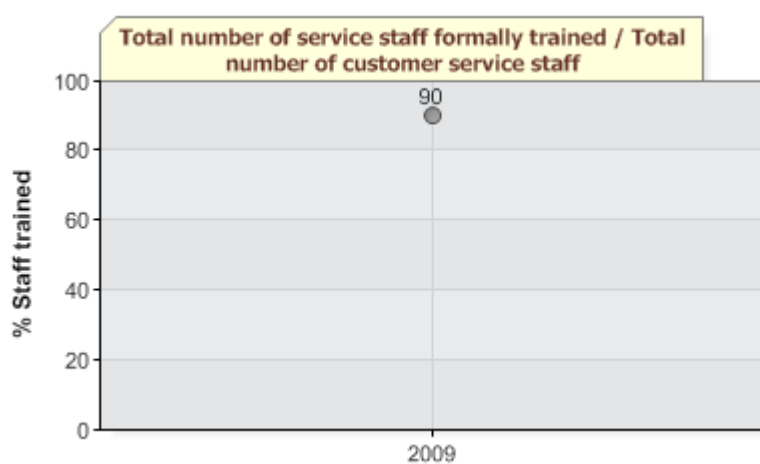
OPTIONAL BENCHMARKING INDICATORS

Huatulco have also nominated an optional Operation Selected Indicator that they consider relevant to their specific operation and locality. The Operation Selected Indicator does not form part of the formal annual benchmarking exercise.

1. Selected Indicators

Selected Indicators are from a supplied list of EarthCheck indicators.

Total number of service staff formally trained / Total number of customer service staff



*The supplied data has been compiled by **Huatulco** in the prescribed manner, authorised by a senior executive of the company and submitted for an annual assessment.*

CONCLUSION AND RECOMMENDATIONS

Congratulations, **Huatulco** has passed the requirements to be recognised as an EarthCheck Benchmarked Community.

In addition to having a Sustainability Policy in place, seventeen of the assessed EarthCheck indicators are at or above the Baseline level. From the benchmarking data provided, sixteen indicators, *Energy Consumption, Greenhouse Gas Emissions (Scope 1 and Scope 2), Potable Water Consumption, Water Savings Rating, Waste Sent to Landfill, Paper Products Rating, Cleaning Products Rating, Pesticide Products Rating, Nitrous Oxides Produced, Sulphur Dioxide Produced, Particle Matter Produced, Water Samples Passed, Habitat Conservation Area, Green Space and Accredited Operations*, 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 **Huatulco** 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 **Huatulco** to continue to meet the benchmarking requirements of the EarthCheck program.

APPENDIX

BENCHMARKING POLICY

A member benchmarking for the 7th time (and subsequent assessments) is not permitted to fail any EarthCheck™ indicators (excluding supplementary EarthCheck™ indicators).

AIR QUALITY

The benchmarking assessors have revised the submitted figures for Air Quality as per below;

Initial figures;

Nitrous Oxides Produced : 65.3 kg per Person Year
Sulphur Dioxide Produced : 0.07 kg per Person Year
Particulate Matter Produce : 100.8 kg per Person Year

Revised figures;

Nitrous Oxides Produced : 5.6 kg per Person Year / Area
Sulphur Dioxide Produced : 5.1 kg per Person Year / Area
Particulate Matter Produce : 0.32 kg per Person Year / Area



EARTHCHECK

Benchmarks Assessed by EarthCheck

SUMMARY OF SUPPLIED BENCHMARKING DATA

Activity Measures

Person Years	23542
Total Community Area	21000

Supplied Benchmarking Data

Energy

Energy Consumption (GJ / Person Year)

Supplied	1033816.2 GJ
Calculated	43.9 GJ / Person Year
Baseline	168 GJ / Person Year
Best Practice	118 GJ / Person Year
Difference	62.8% better than the Best Practice level

Green Power (%)

Supplied	100%
Calculated	100%

Greenhouse Gas Emissions (Scope 1 and Scope 2) (t CO₂-e / Person Year)

Supplied	56192.8 t CO ₂ -e
Calculated	2.4 t CO ₂ -e / Person Year
Baseline	3.9 t CO ₂ -e / Person Year
Best Practice	3.5 t CO ₂ -e / Person Year
Difference	31.8% better than the Best Practice level

Direct Emissions (Scope 1) (t CO₂-e / Person Year)

Supplied	58229.6 t CO ₂ -e
Calculated	2.5 t CO ₂ -e / Person Year

Indirect Emissions (Scope 2) (kg CO₂-e / Person Year)

Supplied	0.0 kg CO ₂ -e
Calculated	0.0 kg CO ₂ -e / Person Year

Water

Potable Water Consumption (kL / Person Year)

Supplied	2728988.0 kL
Calculated	115.9 kL / Person Year
Baseline	178 kL / Person Year
Best Practice	125 kL / Person Year
Difference	7.3% better than the Best Practice level

Water Savings Rating (Points)

Supplied	81.9 Points
Calculated	81.9 Points
Baseline	50 Points
Best Practice	80 Points
Difference	1.9 Points better than the Best Practice level

Recycled / Captured Water (%)

Supplied	100%
Calculated	100%

Waste

Waste Sent to Landfill (t / Person Year)

Supplied	3677.7 t
Calculated	0.16 t / Person Year
Baseline	0.31 t / Person Year
Best Practice	0.22 t / Person Year
Difference	27.3% better than the Best Practice level

Waste Recycling Rating (Points)

Supplied	72.6 Points
Calculated	72.6 Points
Baseline	50 Points
Best Practice	80 Points
Difference	22.6 Points better than the Baseline level

Recycled / Reused / Composted Waste (%)

Supplied	20.0%
Calculated	20.0%

Paper

Paper Products Rating (Points)

Supplied	88.9 Points
Calculated	88.9 Points
Baseline	50 Points
Best Practice	80 Points
Difference	8.9 Points better than the Best Practice level

Cleaning

Cleaning Products Rating (Points)

Supplied	88.3 Points
Calculated	88.3 Points
Baseline	50 Points
Best Practice	80 Points
Difference	8.3 Points better than the Best Practice level

Pesticides

Pesticide Products Rating (Points)

Supplied	85.2 Points
Calculated	85.2 Points
Baseline	50 Points
Best Practice	80 Points
Difference	5.2 Points better than the Best Practice level

Sector Specific

Nitrous Oxides Produced (kg / Person Year / Hectare)

Supplied	342 188 kg
Calculated	5.6 / kg per PY per ha
Baseline	9 / kg per PY per ha
Best Practice	6.3 / kg per PY per ha
Difference	11.1 % better and Best Practice Level

Sulphur Dioxide Produced (kg / Person Year / Hectare)

Supplied	19 787 kg
Calculated	5.1 kg / kg per PY per ha
Baseline	12.8 / kg per PY per ha
Best Practice	9 / kg per PY per ha
Difference	43.3% better than Best Practice Level

Particulate Matter Produced (kg / Person Year / Hectare)

Supplied	2 287 968 kg
Calculated	0.32 kg / kg per PY per ha
Baseline	0.7 / kg per PY per ha
Best Practice	0.49 / kg per PY per ha
Difference	34.7% better than Best Practice Level

Water Samples Passed (%)

Supplied	100%
Calculated	100%
Baseline	70 %
Best Practice	100 %
Difference	at the Best Practice level

Habitat Conservation Area (%)

Supplied	78.0%
Calculated	78.0%
Baseline	20 %
Best Practice	26 %
Difference	52.0% better than the Best Practice level

Green Space (%)

Supplied	85.0%
Calculated	85.0%
Baseline	15 %
Best Practice	20 %
Difference	65.0% better than the Best Practice level

Accredited Operations (%)

Supplied	90.0%
Calculated	90.0%
Baseline	5 %
Best Practice	6.5 %
Difference	83.5% 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).