

# **BENCHMARKING ASSESSMENT REPORT**

## **SPA BENCHMARKING**

### **The Spa by Six Senses at Hotel Arts Barcelona Barcelona, Spain**


**Report Date: 26 October 2007**  
**Benchmarked Certificate Expiry: 26 October 2008**

Benchmarking Data Collection Period: 1 July 2006 – 30 June 2007



## OVERVIEW

This annual assessment of **The Spa by Six Senses at Hotel Arts Barcelona** was undertaken against Earthcheck benchmarking indicators and checklists developed for Green Globe and listed below.<sup>1</sup> 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 use the Green Globe Benchmarked Bronze logo.<sup>2</sup>

		Indicator Measure (Benchmark)
1	Sustainability Policy	Policy is produced and in place
2	Energy Consumption	Energy used (MJ / Treatment Hour)
		Renewable energy used (%) <sup>3</sup>
3	Water Consumption	Water used (L / Treatment Hour)
		% of total water used is that is recycled/captured (%) <sup>3</sup>
		Water saving (Checklist rating)
		Water source (Checklist rating)
4	Waste Sent to Landfill	Waste landfilled (L / Treatment Hour)
		% of total waste that is recycled/reused (%) <sup>3</sup>
5	Community Commitment	Waste recycling (Checklist rating)
		Local employment (Employees living within 20 km of operation / Total employees)
6	Paper Products	Community contributions (Checklist Rating)
		Paper product types used (Checklist Rating)
7	Treatment & Cleaning Products	Treatment & Cleaning product types used (Checklist rating)
		Pesticide product types used (Checklist Rating)
8	Pesticide Products	Staff Wellness (Checklist Rating)
9	Wellness	

<sup>1</sup> Please refer to the relevant Green Globe Sector Benchmarking Indicator (SBI) document for more details. For frequently asked questions (FAQs) about benchmarking or specific help, please log on to 'My EC3 Home' and visit your Earthcheck Benchmarking software.

<sup>2</sup> To meet the requirements that allow the right to use the Green Globe Benchmarked Bronze logo, the benchmarks for all the submitted Earthcheck indicators should be at, or better than, the Baseline level. Baseline and Best Practice performance levels are set with reference to the type of activity and appropriate national and international data which take into account social, geographical and climatic impacts.

If an operation fails to meet the minimum requirements for up to two submitted Earthcheck indicators (Baseline performance or better), but achieves Baseline performance or better in all the other Earthcheck indicators, then the operation is allowed to use the Green Globe Benchmarked Bronze logo. It 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 that operation (e.g., occurrence of a natural disaster), then the right to use the Green Globe Benchmarked Bronze logo will be withdrawn.

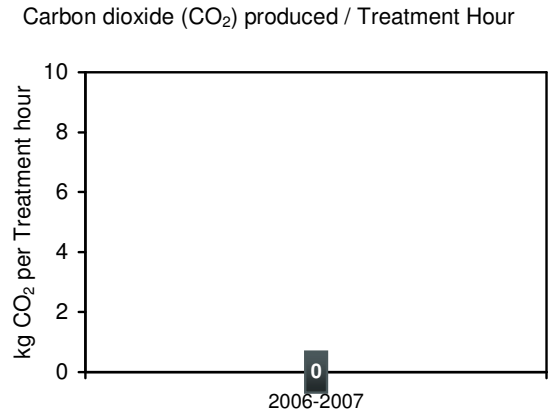
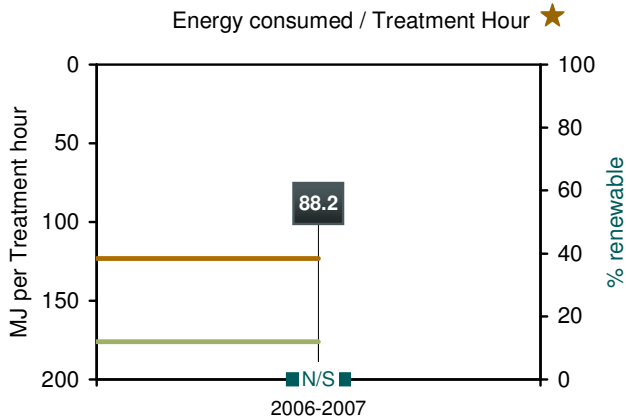
As a standard policy, all Earthcheck indicators are continuously reviewed, along with the performance levels which operators have to achieve in order to use the Green Globe Benchmarked Bronze logo. This review takes into account "business-as-usual" changes in practices and equipment, and is used to update where appropriate Baseline and Best Practice levels. Advanced warning will be given of changes in any benchmarking related requirements and data.

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

**earthcheck**

**SPA PERFORMANCE BENCHMARKS**

- 1 Sustainability Policy ★**
- 2 Energy Consumption**

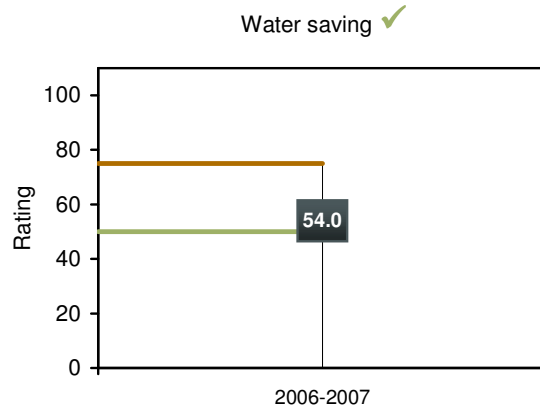
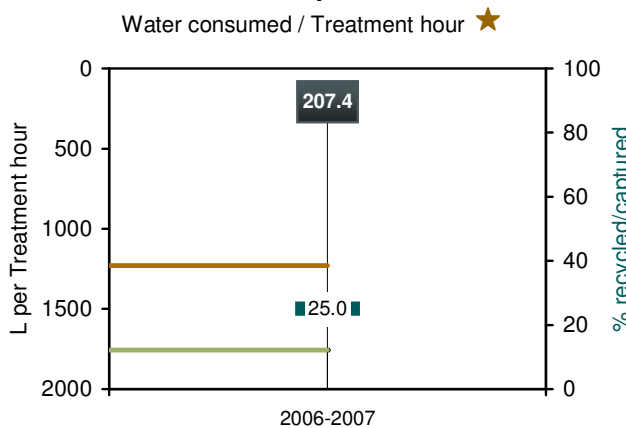


The Spa by Six Senses at Hotel Arts Barcelona consumed 88.2 MJ per Treatment Hour for the year 2006 - 2007 (01/07/2006 – 30/06/07), which is 28% better than the Best Practice level.

Reported Energy Consumption for the year 2006 - 2007 (01/07/2006 – 30/06/07) produced an estimated 0 kg of CO<sub>2</sub> per Treatment Hour.

Energy type	Quantity used		Calculated Energy		Calculated CO <sub>2</sub>	
			MJ	% of total	kg	% of total
Nuclear	344,246	kWh	1,239,286	100.0	0	100.0
Totals:			1,239,286	100	0	100

- 3 Water Consumption**



The Spa by Six Senses at Hotel Arts Barcelona consumed 207.4 L per Treatment Hour for the year 2006 - 2007 (01/07/2006 – 30/06/07), which was 83% better than the Best Practice level.

The Water Saving checklist rating for the year 2006 - 2007 (01/07/2006 – 30/06/07), was 4 points better than the Baseline level.

**Performance level:** Baseline — Best Practice —

**Current result:** Below Baseline ✘ At or above Baseline ✓ At or above Best Practice ★

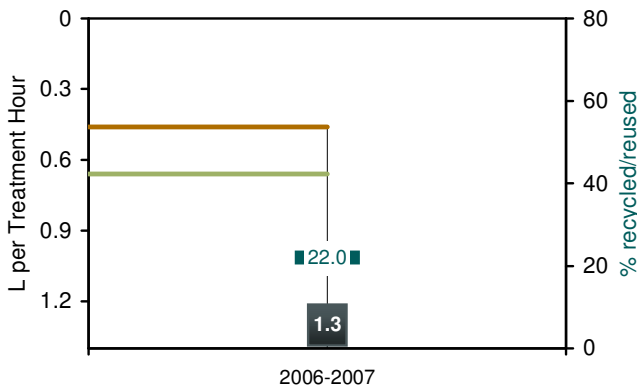
**Water Source ✘**



The Water Source checklist rating for the year 2006 - 2007 (01/07/2006 – 30/06/07) was 50 points below the Baseline level.

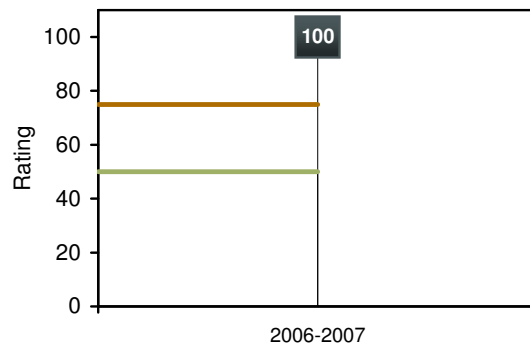
**4 Waste Sent to Landfill**

**Waste landfilled / Treatment hour ✘**



The Spa by Six Senses at Hotel Arts Barcelona produced 1.3 L per Treatment Hour for the year 2006 - 2007 (01/07/2006 – 30/06/07), which was 1.9 times greater than the Baseline level.

**Waste recycling ★**



The Waste Recycling checklist rating for the year 2006 - 2007 (01/07/2006 – 30/06/07), was 25 points better than the Best Practice level.

**Performance level:**

Baseline

Best Practice

**Current result:**

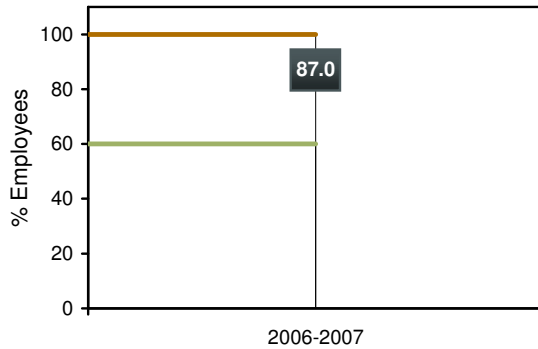
Below Baseline ✘

At or above Baseline ✓

At or above Best Practice ★

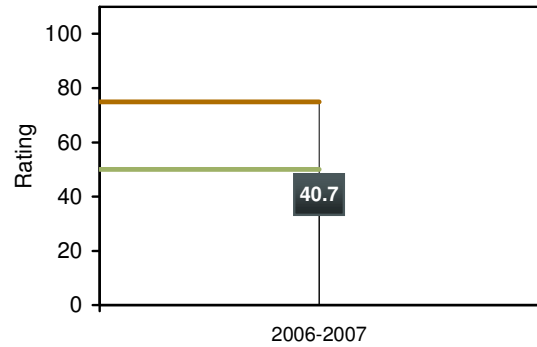
**5 Community Commitment**

Employees living within 20 km of operation /  
Total employees ✓



Community Commitment for the year 2006 - 2007 (01/07/2006 – 30/06/07) was 27% better than the Baseline level.

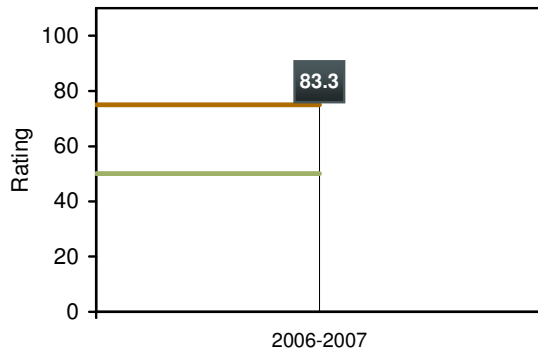
Community contributions ✗



The Community Contributions checklist rating for the year 2006 - 2007 (01/07/2006 – 30/06/07) was 9.3 points below the Baseline level.

**6 Paper Products**

Product types used ★



The Paper Products checklist rating for the year 2006 - 2007 (01/07/2006 – 30/06/07) was 8.3 points better than the Best Practice level.

**Performance level:**

Baseline —

Best Practice —

**Current result:**

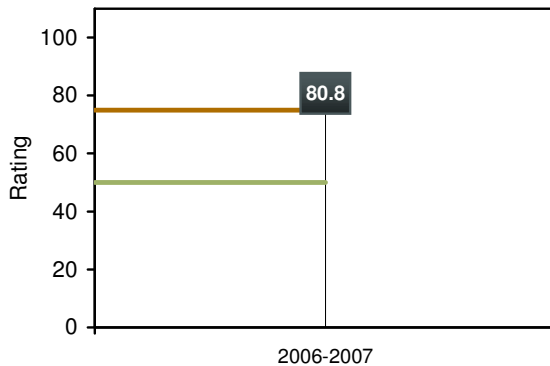
Below Baseline ✗

At or above Baseline ✓

At or above Best Practice ★

**7 Treatment & Cleaning Products**

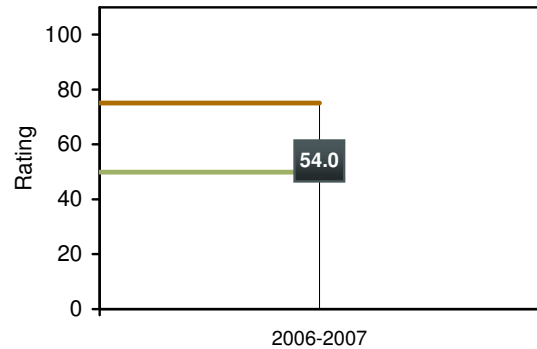
Product types used ★



The Treatment & Cleaning Products checklist for the year 2006 - 2007 (01/07/2006 – 30/06/07) was 5.8 points better than the Best Practice level.

**8 Pesticide Products**

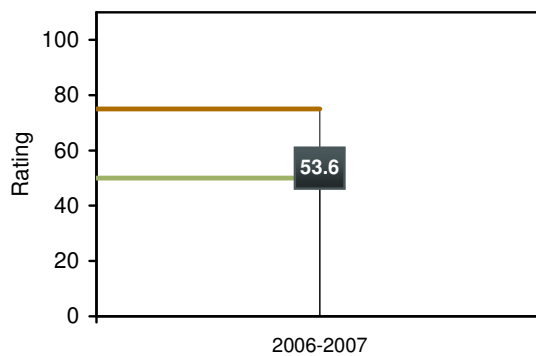
Product types used ★



As **The Spa by Six Senses at Hotel Arts Barcelona** does not use any pesticide products (which is a positive outcome), a rating of 100 has been reported for this indicator on the basis that no use represents a Best Practice achievement. The Pesticide Products checklist rating for the year 2006 - 2007 (01/07/2006 – 30/06/07) was, therefore, 25 points better than the Best Practice level.

**9 Wellness**

Staff Wellness ✓



The Wellness checklist rating for the year 2006 - 2007 (01/07/2006 – 30/06/07) was 3.6 points better than the Baseline level.

**Performance level:**

Baseline —

Best Practice —

**Current result:**

Below Baseline ✖

At or above Baseline ✓

At or above Best Practice ★

The supplied data has been compiled by **The Spa by Six Senses at Hotel Arts Barcelona** in the prescribed manner, authorised by a senior executive of the company and submitted for an annual assessment.

## CONCLUSION AND RECOMMENDATIONS

Congratulations, **The Spa by Six Senses at Hotel Arts Barcelona** has passed the requirements of a first-time benchmarking organisation to become recognised as a Green Globe Benchmarked Spa Operation and retains the right to display the Green Globe Benchmarked Bronze logo until the certificate expiry date.



In addition to having a Sustainability Policy in place, nine of the twelve assessed Earthcheck indicators are above the Baseline level. From the benchmarking data provided, six indicators, *Energy Consumption*, *Water Consumption*, *Waste Recycling*, *Paper Products*, *Treatment & Cleaning Products* and *Pesticide Products* are above the Best Practice level, which is an achievement to be commended.

The three indicators that fell below the Baseline level were *Waste Sent to Landfill*, *Community Contributions*, and *Water Source*:

### *Waste Sent to Landfill*

The value for *Waste Sent to Landfill* was 1.9 times greater than the Baseline performance level. A high level for this indicator may be a reflection of assessing the volume of disposal bins and/or garbage trucks as full when they are not. In addition, disposal of large quantities of low-density, uncompacted waste (e.g., paper and packaging, or green waste such as branches and/or large leaves) can also have an adverse impact on the overall volume.

Furthermore, if the situation is that **The Spa by Six Senses at Hotel Arts Barcelona** does not have ready access to appropriate external recycling facilities (for paper, cardboard, metals, plastics etc.), then the difficulties operations may face in disposing of waste off-site in an environmentally friendly manner is recognised. However, if this is the case, **The Spa by Six Senses at Hotel Arts Barcelona** should indicate this in their submission and is encouraged to review existing practices and procedures in order to not only more accurately assess, but also reduce, the amount of material that has to be sent to landfill. The latter can include increasing on-site recycling and reuse (e.g., green wastes), donating recyclable materials to local crafts and trades people, and avoiding purchases with excessive disposable packaging.

### *Community Contributions*

The value for *Community Contributions* was 9.3 points below the Baseline performance level. **The Spa by Six Senses at Hotel Arts Barcelona** is therefore encouraged to investigate the feasibility of further monetary investment and/or in-kind contributions to (e.g. supply of labour or physical resources) to local conservation projects.

### *Water Source*

The value for *Water Source* was 50 points below the Baseline performance level. **The Spa by Six Senses at Hotel Arts Barcelona** is encouraged, therefore, to consider using non-hazardous rain water and/or grey water for watering plants and washing exterior surfaces.

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 **The Spa by Six Senses at Hotel Arts Barcelona** has demonstrated to the environment, the assessors are confident that they can maintain or improve performance, where appropriate and practical, in all indicators.

In particular over the next 12 months, **The Spa by Six Senses at Hotel Arts Barcelona** is encouraged to ensure that *Waste Sent to Landfill*, *Community Contributions*, and *Water Source* are at Baseline performance or better. In line with Green Globe Policy this would enable Benchmarked status to be retained.

## APPENDIX

### BENCHMARKING POLICY

Under normal circumstances, operations benchmarking for the 1<sup>st</sup> time must not fail more than two indicators (with a 3<sup>rd</sup> indicator permitted to be within 10% of the Baseline level). However, Green Globe policy offers flexibility provided that **The Spa by Six Senses at Hotel Arts Barcelona** can improve performance in the stated indicators before the next benchmarking exercise. This would enable benchmarked status to be retained. **Operations benchmarking for the 2<sup>nd</sup> time must not fail more than one indicator (with a 2<sup>nd</sup> indicator permitted to be within 10% of the Baseline level).**

### WASTE SENT TO LANDFILL

Originally the amount of waste sent to landfill was stated to be 23 cubic metres. This was later revised to be 18 cubic metres.

The final submitted value of 18 cubic metres of waste sent to landfill (specified by the operator as compacted waste) equates to 18,000 L.

This then equates to 1.3 L per treatment hour.



**Benchmarks assessed by Earthcheck**

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**Report endorsed by Green Globe**

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This Report is recognised under the **PATA and Green Globe Co-operative Agreement** that provides PATA with a real impetus to advance the sustainability and goals of the Association.



Under an agreement with Green Globe Asia Pacific (GGAP), the Caribbean Alliance for Sustainable Tourism (CAST) supports the delivery and promotion of the Green Globe program in the Caribbean.

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Green Globe is managed by EC3 Global, a wholly owned subsidiary of the Sustainable Tourism Cooperative Research Centre (STCRC), which is the largest sustainable tourism research organisation in the world. The CRC is an Australian Government Initiative.



**An Australian Government Initiative**

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## SUMMARY OF SUPPLIED BENCHMARKING DATA

Activity Measure(s)					
Guest Treatment Hours	14,058	treatment hours			
Area Under Roof	920	m <sup>2</sup>			
<b>Energy Consumption</b>			<b>Community Commitment</b>		
	Indicator			Indicator	
Supplied	1,239,286	MJ		Supplied	87
Calculated	88.2	MJ per th		Baseline	60
Baseline	176	MJ per th		Best Practice	100
Best Practice	123	MJ per th		% difference	27.0
% difference	28	better than BP			better than BL
				Checklist	
Renewable	100	%		Rating	40.7
				Baseline	50
Total CO <sub>2</sub>	0	kg		Best Practice	75
	0	kg per th		points difference	9.3
					better than BL
<b>Water Consumption</b>			<b>Paper Products</b>		
	Indicator			Checklist	
Supplied	2,916	m <sup>3</sup>		Supplied Rating	83.3
Calculated	207.4	L per th		Baseline	50
Baseline	1757	L per th		Best Practice	75
Best Practice	1230	L per th		points difference	8.3
% difference	83	better than BP			better than BP
				<b>Treatment &amp; Cleaning Products</b>	
Recycled/captured	25.0	%		Checklist	
				Supplied Rating	80.8
	Water Saving Checklist			Baseline	50
Supplied Rating	54.0			Best Practice	75
Baseline	50			points difference	5.8
Best Practice	75				better than BP
points difference	4.0	better than BL		<b>Pesticide Products</b>	
				Checklist	
<b>Waste Sent to Landfill</b>				Supplied Rating	N.A.-100
	Indicator			Baseline	50
Supplied	18.00	m <sup>3</sup>		Best Practice	75
Converted	18,000	L		points difference	25.0
Calculated	1.3	L per th			better than BP
Baseline	0.66	L per th		<b>Water Source</b>	
Best Practice	0.46	L per th		Checklist	
	1.9	times greater than BL		Supplied Rating	0
				Baseline	50
Recycled/reused	22.0	%		Best Practice	80
				points difference	50.0
	Checklist				better than BL
Supplied Rating	100.0			<b>Wellness</b>	
Baseline	50			Checklist	
Best Practice	75			Supplied Rating	53.6
points difference	25.0	better than BP		Baseline	50
				Best Practice	75
				points difference	3.6
					better than BL

N/S - Not submitted.

## 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 solid waste production (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., litres (L)). These are 300 kg/m<sup>3</sup> for uncompacted waste or 650 kg/m<sup>3</sup> for lightly compacted waste.

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).