

BENCHMARKING ASSESSMENT REPORT

ACCOMMODATION BENCHMARKING

Discovery Kartika Plaza Hotel South Kuta, Bali, Indonesia


Report Date: 26 June 2008

Benchmarking Data Collection Period: 1 January 2007 – 31 December 2007



OVERVIEW

This annual assessment of the **Discovery Kartika Plaza Hotel** was undertaken against Earthcheck benchmarking indicators and checklists developed for Green Globe 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 use the Green Globe Benchmarked Bronze logo.²

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

¹ 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.

² 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.

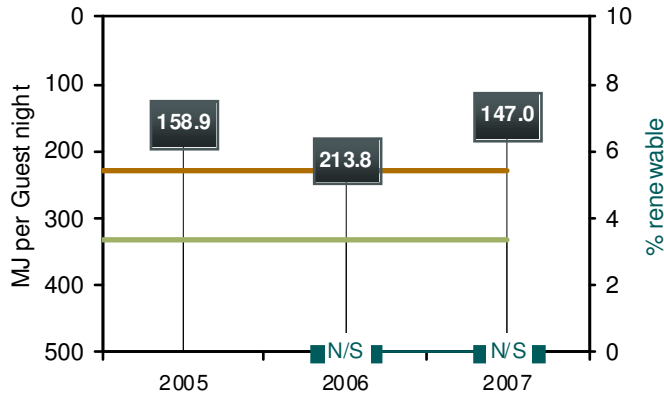
If an operation fails to meet the minimum requirements for up to two submitted Earthcheck indicators (Baseline performance or better), but achieves Baseline performance or better in all the other Earthcheck indicators, then the operation is allowed to use the Green Globe Benchmarked Bronze logo. It is, 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.

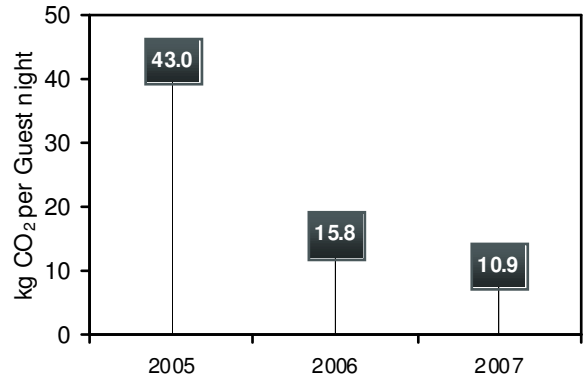
³ These indicators are for guidance only and do not affect the overall benchmarking evaluation.

1 Sustainability Policy ★
2 Energy Consumption

Energy consumed / Guest Night ★



Carbon dioxide (CO₂) produced / Guest Night



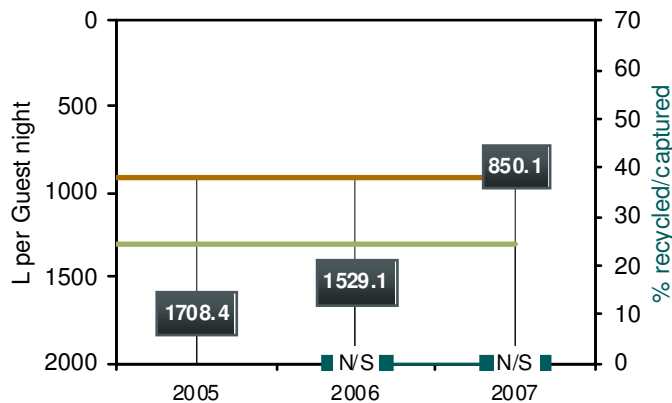
The **Discovery Kartika Plaza Hotel** consumed 147 MJ per Guest Night for the year 2007 (1/01/07 – 31/12/07), which was 36% better than the Best Practice level.

Reported Energy Consumption for the year 2007 (1/01/07 – 31/12/07) produced an estimated 10.9 kg of CO₂ per Guest Night.

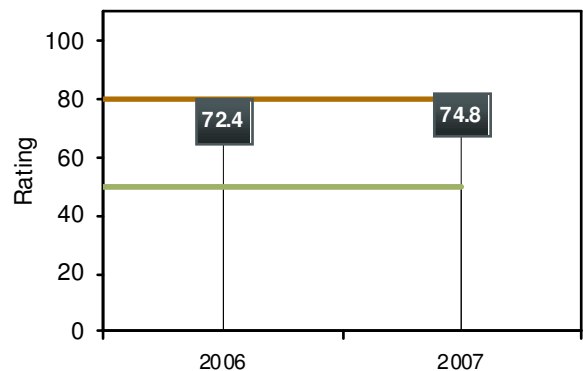
Energy type	Quantity used		Calculated Energy		Calculated CO ₂	
			MJ	% of total	kg	% of total
Diesel	6,458,640	kWh	23,251,100	67.1	1,800,669	70.1
LPG	43,614	kg	2,160,940	6.2	128,360	5.0
Diesel	229,806	L	8,870,512	25.6	618,275	24.1
Gasoline (Auto)	10,040	L	343,368	1.0	22,662	0.9
Totals:			34,625,920	100	2,569,966	100

3 Water Consumption

Water consumed / Guest Night ★



Water saving ✓



The **Discovery Kartika Plaza Hotel** consumed 850.1 L per Guest Night for the year 2007 (1/01/07 – 31/12/07), which was 7% better than the Best Practice level.

The Water Saving checklist rating for the year 2007 (1/01/07 – 31/12/07), was 24.8 points better than the Baseline level.

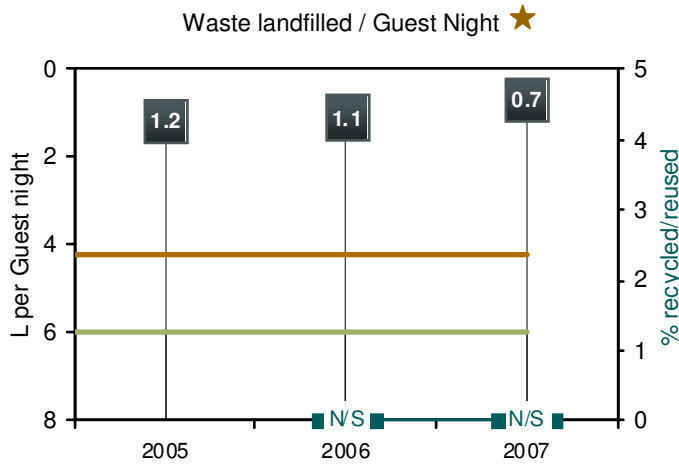
Performance level:

Baseline — Best Practice —

Current result:

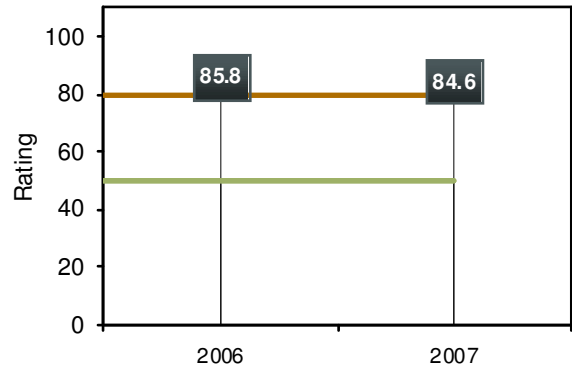
Below Baseline ✘ At or above Baseline ✔ At or above Best Practice ★

4 Waste Sent to Landfill



The **Discovery Kartika Plaza Hotel** produced 0.7 L per Guest Night for the year 2007 (1/01/07 – 31/12/07), which was 83% better than the Best Practice level.

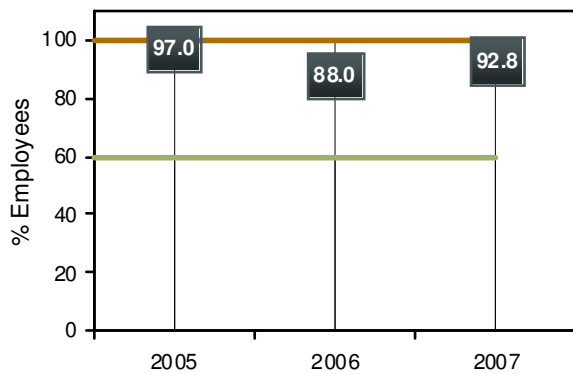
Waste recycling ★



The Waste Recycling checklist rating for the year 2007 (1/01/07 – 31/12/07) was 4.6 points better than the Best Practice level.

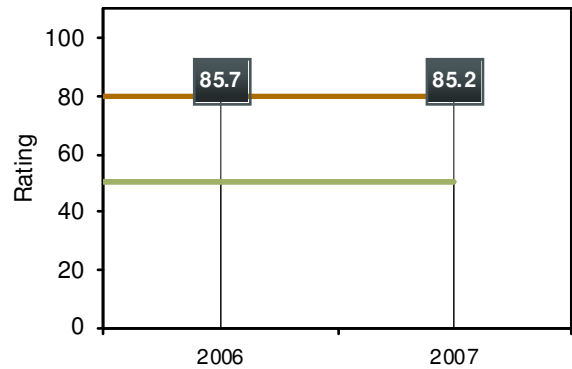
5 Community Commitment

Employees living within 20 km of operation / Total employees ✓



Community Commitment for the year 2007 (1/01/07 – 31/12/07) was 32.8% better than the Baseline level.

Community contributions ★



The Community Contributions checklist rating for the year 2007 (1/01/07 – 31/12/07) was 5.2 points better than the Best Practice level.

Performance level:

Baseline —

Best Practice —

Current result:

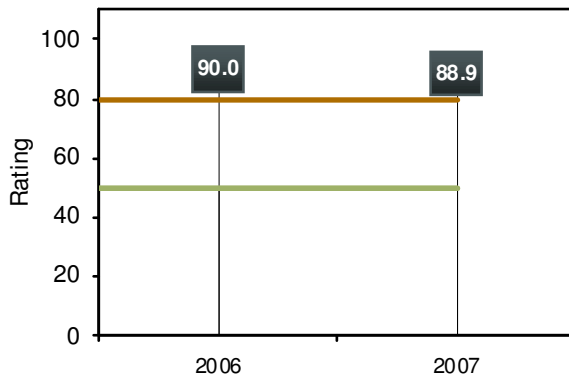
Below Baseline ✖

At or above Baseline ✓

At or above Best Practice ★

6 Paper Products

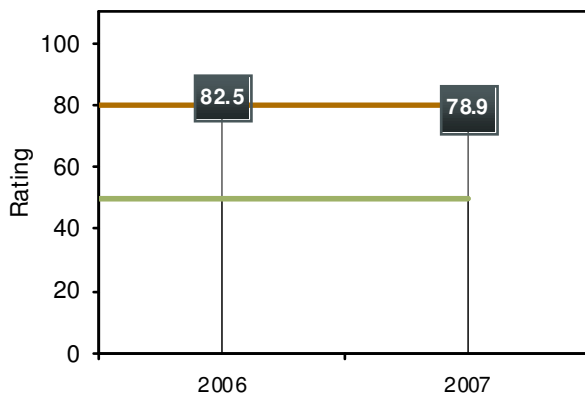
Product types used ★



The Paper Products checklist rating for the year 2007 (1/01/07 – 31/12/07) was 8.9 points better than the Best Practice level.

**7 Chemical Products
Cleaning Products**

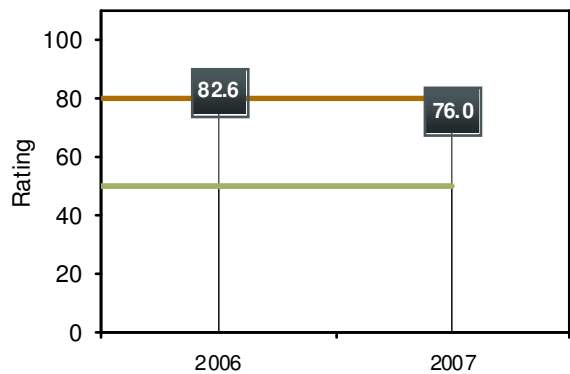
Product types used ✓



The Cleaning Products checklist for the year 2007 (1/01/07 – 31/12/07) was 28.9 points better than the Baseline level.

8 Pesticide Products

Product types used ✓



The Pesticide Products checklist rating for the year 2007 (1/01/07 – 31/12/07) was 26 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 **Discovery Kartika Plaza Hotel** in the prescribed manner, authorised by a senior executive of the company and submitted for an annual assessment.

CONCLUSION AND RECOMMENDATIONS

Congratulations, the **Discovery Kartika Plaza Hotel** has passed the requirements to continue to be recognised as a Green Globe Benchmarked Accommodation 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, all ten assessed Earthcheck indicators are above the Baseline level.⁴ From the benchmarking data provided, six indicators, Energy Consumption, Water Consumption, *Waste Sent to Landfill*, *Waste Recycling*, *Community Contributions*, and Paper Products, are above the Best Practice level, which is an 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 the **Discovery Kartika Plaza Hotel** has demonstrated to the environment, the assessors are confident that they can maintain or improve performance, where appropriate and practical, in all indicators. In line with Green Globe Policy this would enable Benchmarked status to be retained.

APPENDIX

BENCHMARK REVIEW

As a standard policy, all Earthcheck indicators are reviewed annually, 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.

A Benchmark Review was undertaken in April 2008. The following benchmarks were revised as part of the review:

Indonesian Vacation Hotels:

Water Saving:

- Previous Baseline Level: 50 points
- Previous Best Practice Level: 75 points
- **Revised Baseline Level: 50 points**
- **Revised Best Practice Level: 80 points**

Water Recycling:

- Previous Baseline Level: 50 points
- Previous Best Practice Level: 75 points
- **Revised Baseline Level: 50 points**
- **Revised Best Practice Level: 80 points**

Community Contributions:

- Previous Baseline Level: 50 points
- Previous Best Practice Level: 75 points

⁴ The **Discovery Kartika Plaza Hotel** is registered to be Certified by Green Globe and, therefore, does not need to submit verification documents as these should be checked as part of the certification process.

- **Revised Baseline Level:** 50 points
- **Revised Best Practice Level:** 80 points

Paper Products:

- Previous Baseline Level: 50 points
- Previous Best Practice Level: 75 points
- **Revised Baseline Level:** 50 points
- **Revised Best Practice Level:** 80 points

Cleaning Products:

- Previous Baseline Level: 50 points
- Previous Best Practice Level: 75 points
- **Revised Baseline Level:** 50 points
- **Revised Best Practice Level:** 80 points

Pesticide Products:

- Previous Baseline Level: 50 points
- Previous Best Practice Level: 75 points
- **Revised Baseline Level:** 50 points
- **Revised Best Practice Level:** 80 points

The **Discovery Kartika Plaza Hotel** is encouraged to ensure that these benchmarks are met within the next 12 months in order to maintain Benchmarked status.

ENERGY CONSUMPTION

Total *Energy Consumption* was derived from the following energy sources:

- Diesel: 6 458 640 kWh
- LPG: 10 040 kg
- Diesel: 229 806 L

These sources produce a total of 32 619 063 MJ which equates to 138.5 MJ per Guest Night.

During clarification, it was identified that the energy source of Gasoline (Auto) had been omitted and the quantity for LPG was incorrect. Therefore the benchmarking assessors have revised total *Energy Consumption* based on the following:

- Diesel: 6 458 640 kWh
- LPG: 43 614 kg
- Diesel: 229 806 L
- Gasoline (Auto): 10 040 L

These sources produce a total of 34 625 920 MJ which equates to 147 MJ per Guest Night.

WASTE SENT TO LANDFILL

The submitted value of 51 858 kg of waste (specified by the operator as uncompacted waste) has been converted into a volume by using the standard conversion of 300 kg/m³ for uncompacted waste (i.e. 51 858 kg / 300 kg/m³ = 172.86 m³ or 172860 L). (If the waste is compacted, then the standard conversion is 650 kg/m³).

This equates to 0.7 L per Guest Night.



Benchmarks assessed by Earthcheck



Report endorsed by Green Globe



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.

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

SUMMARY OF SUPPLIED BENCHMARKING DATA

Activity Measure(s)						
Guest Nights	235,484	gn				
Area Under Roof	11,580	m ²				
Energy Consumption			Community Commitment			
	Indicator			Indicator		
Supplied	34,625,920	MJ		Supplied	92.8	%
Calculated	147.0	MJ per gn		<i>Baseline</i>	60	%
<i>Baseline</i>	330	<i>MJ per gn</i>		<i>Best Practice</i>	100	%
<i>Best Practice</i>	230	<i>MJ per gn</i>		<i>% difference</i>	32.8	<i>better than BL</i>
<i>% difference</i>	36	<i>better than BP</i>				
				Checklist		
Renewable	N/S	%		Rating	85.2	
				<i>Baseline</i>	50	
Total CO ₂	2,569,966	kg		<i>Best Practice</i>	80	
	10.9	kg per gn		<i>points difference</i>	5.2	<i>better than BP</i>
Water Consumption			Paper Products			
	Indicator			Checklist		
Supplied	200,186	m ³		Supplied Rating	88.9	
Calculated	850.1	L per gn		<i>Baseline</i>	50	
<i>Baseline</i>	1300	<i>L per gn</i>		<i>Best Practice</i>	80	
<i>Best Practice</i>	910	<i>L per gn</i>		<i>points difference</i>	8.9	<i>better than BP</i>
<i>% difference</i>	7	<i>better than BP</i>				
				Cleaning Products		
Recycled/captured	N/S	%		Checklist		
				Supplied Rating	78.9	
	Checklist			<i>Baseline</i>	50	
Supplied Rating	74.8			<i>Best Practice</i>	80	
<i>Baseline</i>	50			<i>points difference</i>	28.9	<i>better than BL</i>
<i>Best Practice</i>	80					
<i>points difference</i>	24.8	<i>better than BL</i>		Pesticide Products		
				Checklist		
Waste Sent to Landfill				Supplied Rating	76.0	
	Indicator			<i>Baseline</i>	50	
Supplied	51,858	kg (uncompacted)		<i>Best Practice</i>	80	
Converted	172,860	L		<i>points difference</i>	26.0	<i>better than BL</i>
Calculated	0.7	L per gn				
<i>Baseline</i>	6	<i>L per gn</i>				
<i>Best Practice</i>	4.2	<i>L per gn</i>				
<i>% difference</i>	83	<i>better than BP</i>				
Recycled/reused	N/S	%				
				Checklist		
Supplied Rating	84.6					
<i>Baseline</i>	50					
<i>Best Practice</i>	80					
<i>points difference</i>	4.6	<i>better than BP</i>				

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/m³ for uncompacted waste or 650 kg/m³ 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).