



EARTHCHECK

ASSESSMENT REPORT

ACCOMMODATION - VILLAS BENCHMARKING

KING FISHER ECOLODGE

PATHOUMPHONE DISTRICT, LAO PEOPLE'S DEMOCRATIC REPUBLIC



REPORT DATE: 24 March 2010

Benchmarking Data Collection Period: 1 January 2009 – 31 December 2009

The planet deserves more than half measures

OVERVIEW

This annual assessment of **King Fisher Ecolodge** was undertaken against EarthCheck Assessed Health Check and EarthCheck benchmarking indicators listed below. 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 initial benchmarking requirements.

Indicator Measure (Benchmark)		
1	Sustainability Policy	Policy is produced and in place
2	Health Check	Health Check completed
3	Energy	Energy Consumption (MJ / Guest Night) Total CO ₂ -e Produced (t CO ₂ -e / Guest Night)
4	Water	Potable Water Consumption (kL / Guest Night)
5	Waste	Waste Sent to Landfill (m ³ / Guest Night)

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ACCOMMODATION - VILLAS PERFORMANCE BENCHMARKS

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

1. Sustainability Policy ★

Policy is produced and in place.

2. Health Check ★

Sustainability

Do you have a staff member who can lead the sustainability process?	Yes
Does your operation carry out an annual environmental risk assessment?	No
Are your staff and customers made aware of your sustainability goals and actions?	Yes
Are your suppliers and contractors made aware of your sustainability goals and actions?	No
Do you provide environmental training and awareness programs for your staff?	No
Do you seek to use local contractors where possible?	Yes
Do you seek to purchase from local suppliers where possible?	Yes
Do you employ local staff where possible?	Yes
Do you have a legal compliance register?	No
Have you operated without any environmental complaints or non-compliance issues in the past year?	Yes
Do you promote public/shared transport to your staff and customers?	Yes

Energy

Do you have an energy management program in place to ensure energy efficiency as far as practical?	No
Do you have a list of all energy sources used within the operation?	Yes
Can you quantify the amount of each energy source used?	Yes
Can you divide these sources and quantities into the scopes (1,2 and 3) used for calculating emissions?	Yes
Can you allocate energy source use to individual departments or key areas of your operation?	Yes
Does your on-site energy come from renewable sources where possible? (e.g., solar; hydroelectric; wind; certain biofuels)	Yes
Where available, is "green" electricity purchased from grid suppliers?	Yes
Are Energy efficient appliances in use?(e.g., refrigerators; freezers; heaters; A/C)	Yes
Do you use energy efficient lighting? (many new types are now available)?	Yes
Do you avoid over lighting areas and only provide lighting where it is	Yes

necessary?

Do you use natural lighting wherever possible?	Yes
Do you use photo sensory detectors of outdoor security lighting or movement detectors for infrequently used areas?	Yes
Do you use passive solar design and in hot climates natural ventilation?	Yes
Do you use energy efficient heating and cooling systems and operate the systems efficiently e.g. only heat/cool areas as required (not walkways, open areas, seldom used areas) and use smart control so unoccupied rooms are not heated/cooled and temperatures are set with appropriate bands?	Yes
In areas that are heated or cooled, have you installed adequate insulation within the roof, wall and possibly floor and on windows such curtains, blinds, or tinting, and in extremely cold areas double glazing?	Yes
Do you use energy efficient vehicles and vessels, considering group sizes, the terrain and road conditions, select vehicle style and engine type for maximum efficiency (as a guide select ethanol based fuels (e10), bio diesel, natural gas or LPG before diesel or petrol powered vehicles (and consider the fuel/electric hybrid drive vehicles)?	No
Do you use energy efficient plant and machinery?	No

CO₂

Does your operation have a commitment to the reduction of greenhouse gas emissions?	Yes
Can you calculate your operation's CO ₂ emissions?	Yes
Do you calculate your operation's CO ₂ emissions?	Yes
Does your operation offset CO ₂ emissions?	No

Water

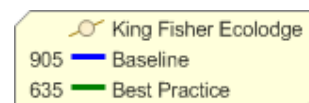
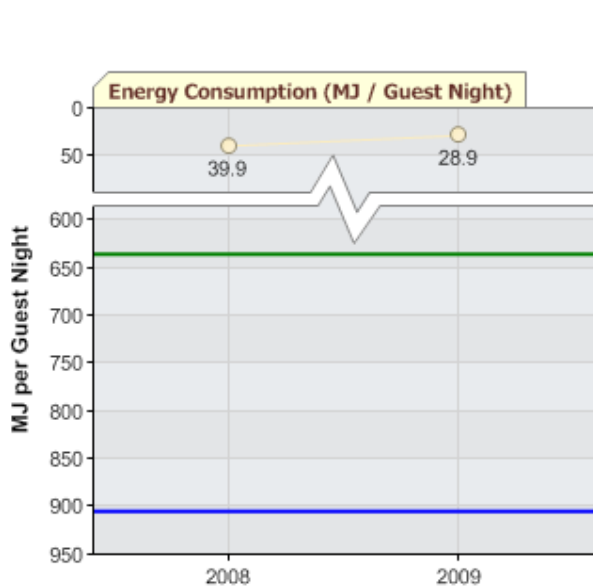
Do you have a water management plan in place?	No
Have you implemented a regular maintenance schedule?	Yes
Do you read and record your water meter readings regularly to better understand normal consumption patterns?	Yes
Are your organisation's water savings recorded?	Yes
Are water efficient appliances in use? e.g. washing machines, dishwashers	No
Have you installed low/dual flush toilets?	Yes
Have you installed low flow tap/faucet flow restrictors or fittings?	Yes
Have you implemented low flow shower fittings?	Yes
Do you sweep outside areas instead of washing them down?	Yes
Have you installed water less urinals or low flow urinals with time delay or movement sensors?	No
Do you collect, store and or use rainwater?	No
Do you recycle grey water or treated wastewater?	No
Does your operation have minimal irrigation landscaping?	Yes
Do staff, and in particular kitchen and cleaning staff, practice water efficient practices such as not defrosting or preparing food under running water and using the dishwasher only when fully loaded?	Yes

Waste

Are waste minimisation strategies in place e.g. purchasing products with minimal and recyclable packaging or packaging that can be reused?	Yes
Are recycling strategies in place e.g. waste segregated at collection points?	Yes
Do you record the amount of waste you send to landfill?	Yes
Is your organisation's waste recycling recorded?	Yes
Do you compost your organic waste?	Yes

3. Energy

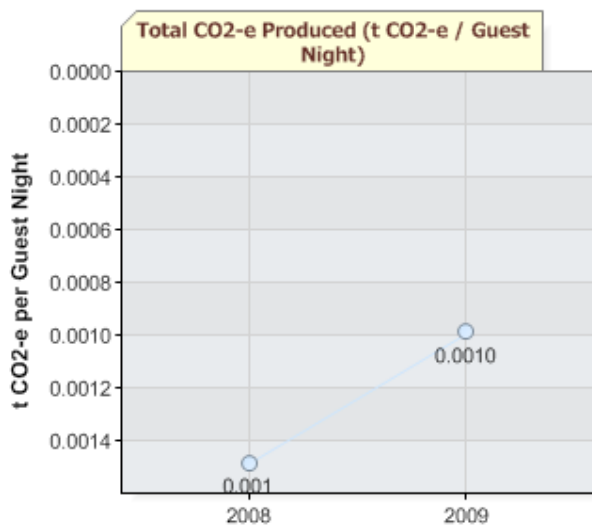
Energy Consumption (MJ / Guest Night) ★



Energy Consumption (MJ / Guest Night) for the year 2009 (1 January 2009– 31 December 2009) was 28.9 MJ / Guest Night, which was 95.4% better than the Best Practice level.

Total CO₂-e Produced (t CO₂-e / Guest Night)

King Fisher Ecolodge

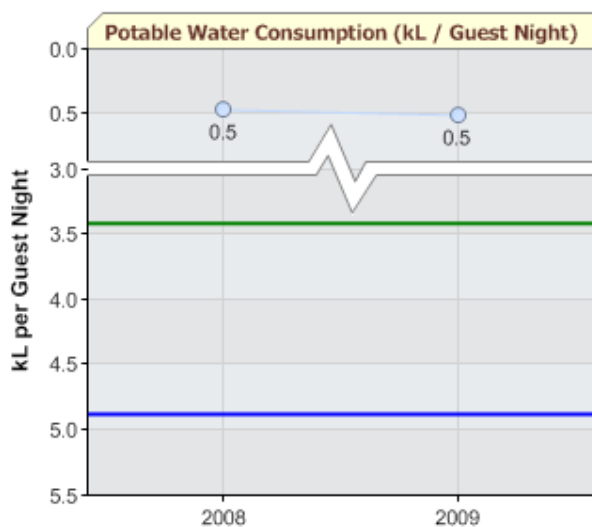


Total CO₂-e Produced (t CO₂-e / Guest Night) for the year 2009 (1 January 2009– 31 December 2009) was 0.0010 t CO₂-e / Guest Night.

4. Water

Potable Water Consumption (kL / Guest Night) ★

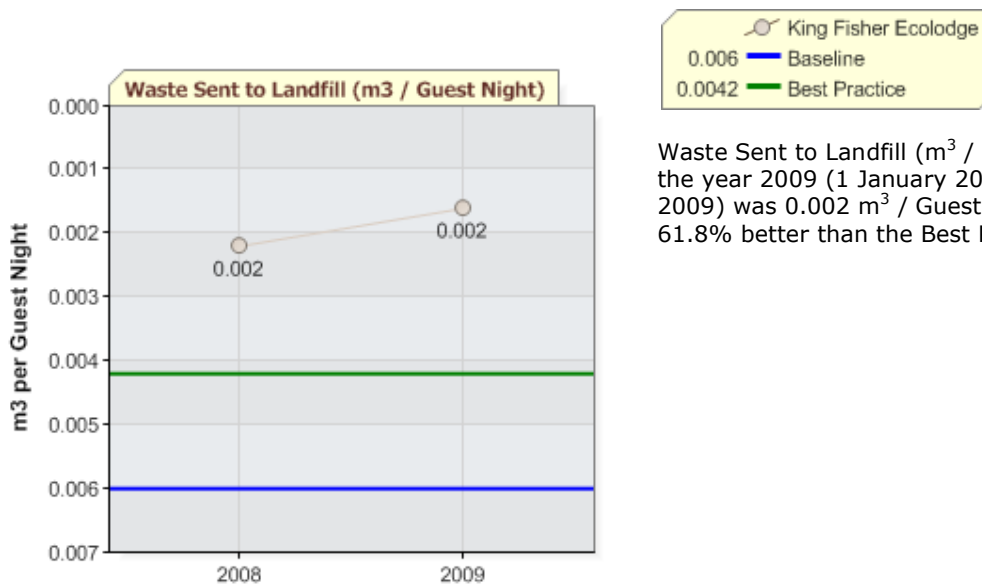
King Fisher Ecolodge
4.875 Baseline
3.413 Best Practice



Potable Water Consumption (kL / Guest Night) for the year 2009 (1 January 2009– 31 December 2009) was 0.5 kL / Guest Night, which was 85.1% better than the Best Practice level.

5. Waste

Waste Sent to Landfill (m³ / Guest Night) ★



Waste Sent to Landfill (m³ / Guest Night) for the year 2009 (1 January 2009– 31 December 2009) was 0.002 m³ / Guest Night, which was 61.8% better than the Best Practice level.

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

CONCLUSION AND RECOMMENDATIONS

Congratulations, **King Fisher Ecolodge** has passed the requirements to be recognised as a EarthCheck Assessed Operator.

In addition to having a Sustainability Policy in place, three assessed EarthCheck indicator(s), *Energy Consumption, Potable Water Consumption, Waste Sent to Landfill*, are at or above the Baseline level.

From the benchmarking data provided, three indicator(s), *Energy Consumption, Potable Water Consumption, Waste Sent to Landfill*, are at or above the Best Practice level, which is an achievement to be 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 **King Fisher Ecolodge** has demonstrated to the environment, the assessors are confident that they can maintain or improve performance, where appropriate and practical, in all indicators.



EARTHCHECK

Benchmarks Assessed by EarthCheck

SUMMARY OF SUPPLIED BENCHMARKING DATA

Activity Measures

Guest Nights

2658

Supplied Benchmarking Data

Energy

Energy Consumption (MJ / Guest Night)

Supplied	76803.6 MJ
Calculated	28.9 MJ / Guest Night
Baseline	905 MJ / Guest Night
Best Practice	635 MJ / Guest Night
Difference	95.4% better than the Best Practice level

Total CO₂-e Produced (t CO₂-e / Guest Night)

Supplied	2.6 t CO ₂ -e
Calculated	0.0010 t CO ₂ -e / Guest Night

Water

Potable Water Consumption (kL / Guest Night)

Supplied	1354.0 kL
Calculated	0.5 kL / Guest Night
Baseline	4.875 kL / Guest Night
Best Practice	3.413 kL / Guest Night
Difference	85.1% better than the Best Practice level

Waste

Waste Sent to Landfill (m³ / Guest Night)

Supplied	4.3 m ³
Calculated	0.002 m ³ / Guest Night
Baseline	0.006 m ³ / Guest Night
Best Practice	0.0042 m ³ / Guest Night
Difference	61.8% 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 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).