



ALILA VILLAS ULUWATU

Alila Villas Uluwatu was designed in 2009 under EarthCheck's Building Planning and Design (BPDS) standard. The resort was the first in Indonesia to receive this certification. It subsequently opened in 2010 and entered the EarthCheck benchmarking and certification program.

In 2014, Alila Villas Uluwatu received EarthCheck Gold certification. This means that the sustainable design and operations of the resort have been continuously certified for five years.

Alila Villas Uluwatu echoes the values of Alila Hotels and Resorts by presenting a blend of luxury and innovative style. The resort is designed in harmony with the surrounding environment.

Alila Villas Uluwatu uses a variety of measures to minimise its impact on the environment. These include water conservation with soak ways, rain gardens, a waste water management system, and the cultivation of local plants from the Bali savannah ecosystem.

Alila Villas Uluwatu also recognises the value of community and is a supporter of the Bali Life Foundation.

Key Results:

Total energy saved between August 2010-July 2013 is enough to power **104** four person households over 12 months.

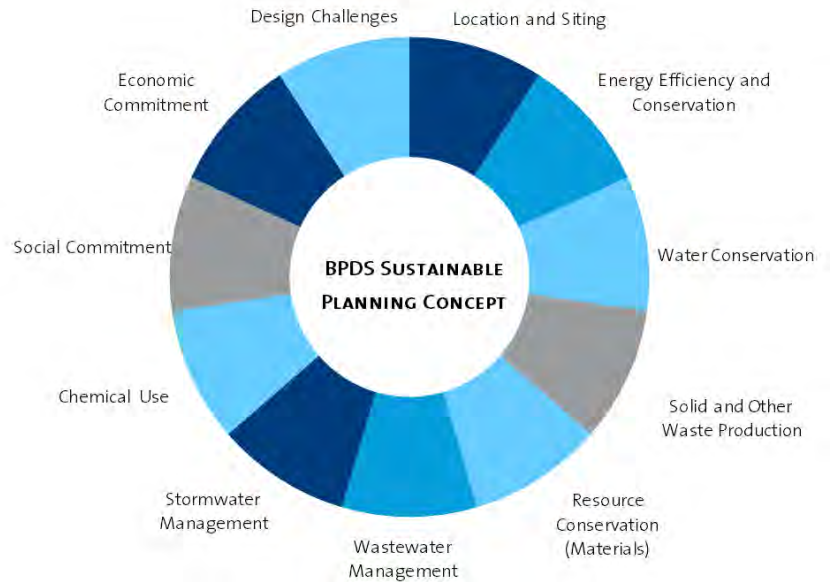
Total GHG emissions CO₂-e avoided between August 2010-July 2013 is the equivalent of taking **655 cars off the road for a year.**

The total potable water saved between August 2010 and July 2013 is enough to fill around **48 standard Olympic-sized swimming pools.**

Between August 2010 and July 2013, Alila Villas Uluwatu reduced their total waste to landfill by enough rubbish to fill **869 wheelie bins.**



BUILDING, PLANNING AND DESIGNING FOR YOUR FUTURE



Key Project facts:

- Developed to blend in with the dry Balinese Savannah landscape
- A key design attribute of Alila Villas Uluwatu is the flat roofs, topped with batu chandi (volcanic rock)
- Open-plan design for rooms to maximise natural ventilation and natural light.
- Included a network of soak ways, reverse osmosis, saltwater pool chlorination and wastewater treatment
- Incorporated recycled building materials such as old timber telegraph poles and wooden railway sleepers



Energy

Design

A key design attribute of Alila Villas Uluwatu is the flat roofs, topped with batu chandi (volcanic rock).

The batu chandi acts as a natural insulating material and is highly water absorbent, which supports local ferns and succulents.

A Vulcan-HP® heat pump was installed to capture heat from the ambient air used for water heating. This uses minimal electricity and Freon gas, along with a high performance fan and super-efficient processor.

Operations

The batu chandi filters rain water that is then drained and stored in several reservoirs. One underground reservoir has a capacity of 315m³.

The batu chandi is integrated onto the roofs with vegetation. This improves the insulation of the roof and lowers indoor temperature, which reduces the need for air conditioning.

Variable speed is available to existing equipment for energy efficiency. Roof and wall insulation is installed for heated and cooled rooms, including the cold room.

Results

Energy consumption has been above Best Practice level since all facilities and equipment have been fully operational.

An average of 548.5MJ per Guest Night has been maintained between 2011-2014, which is 12.1% above the Best Practice level.

Total energy saved between August 2010-July 2013 is enough to power 104 typical four person households over 12 months.



The energy saved was enough to power **104 four person households** for 12 months.

Insulation innovation

As seen below, Batu chandi is a porous rock that was the product of volcanic eruptions on Mt Merapi.



The total GHG emissions CO₂-e avoided was the same as taking **655 cars off the road for 12 months**.

A breath of fresh air

In the image below the jigsaw-like walls of the Alila Uluwatu's pavilions allow breezes to circulate while maintaining privacy.

Emissions

Design

In line with the BPDS from EarthCheck, Alila Villas Uluwatu used an open-plan design for rooms to maximise natural ventilation and natural light.

Flat lava rock roofs and bamboo ceilings allow the gentle sea breeze to circulate throughout all rooms in the villas.

Light colour limestone is used for external areas to reduce heat absorption from the sun.

Water features are integrated into villa rooms and in public areas, which lowers the surrounding ambient temperature.

Operations

Natural lighting has been used where possible in corridors, balconies and guest rooms. Guest rooms are also equipped with LED lighting and individual dimmer control settings.

Villas use a low capacity air conditioning system that is made possible by the passive solar building design and open-plan rooms. As the open-plan rooms maximise cross ventilation and daylight penetration, the design also reduces use of lighting.

Results

Greenhouse gas (GHG) emissions CO₂-e have been above the Baseline level since all facilities and equipment became fully operational.

Since 2010, an average of 110.9kg CO₂-e has been produced per guest night, which is 12.1% above the Best Practice level.

The total GHG emissions CO₂-e avoided between August 2010-July 2013 is the equivalent of taking 655 cars off the road for a year.



Water

Design

The design of Alila Villas Uluwatu incorporated a network of soakways, reverse osmosis, saltwater pool chlorination and wastewater treatment.

The sewage treatment plant treats all grey and black water through a bio system.

Treated water is used in a range of ways, these include: irrigation, fish ponds, water features and cleaning external areas. Sludge of the plant is used as fertiliser.

Operations

Regular leak checks are conducted every Monday at Alila Uluwatu. Dual flush toilets are available for public and staff restrooms.

183 of 458 units have installed low flow shower heads, while 21 out of 129 units have installed toilets with low/dual flush.

Flushing sensors have been installed in public restrooms.

Low flow tap fittings have been applied to all points of Alila Uluwatu.

Results

The total potable (drinkable) water saved between August 2010 and July 2013 is enough to fill around 48 standard Olympic-sized swimming pools.



The water saved was enough to fill **48 Olympic-sized swimming pools.**

Drip by drip

Rain gardens take advantage of excess stormwater through design and plant selection (such as the tree below).



Recycling in Bali

Alila Uluwatu has been involved in Bali Recycling and Eco Bali.

Below, the outdoor cabana is made from recycled wood.

Waste

Design

Alila Villas Uluwatu has been designed to incorporate recycled building materials such as old timber telegraph poles and wooden railway sleepers.

These materials are often sourced locally.

Operations

The staff at Alila Villas Uluwatu partnered with Eco Bali to recycled tetra pack—a program to maximize the recycling of post-consumer beverage cartons, and to increase awareness about waste disposal, recycling and renewable resources.

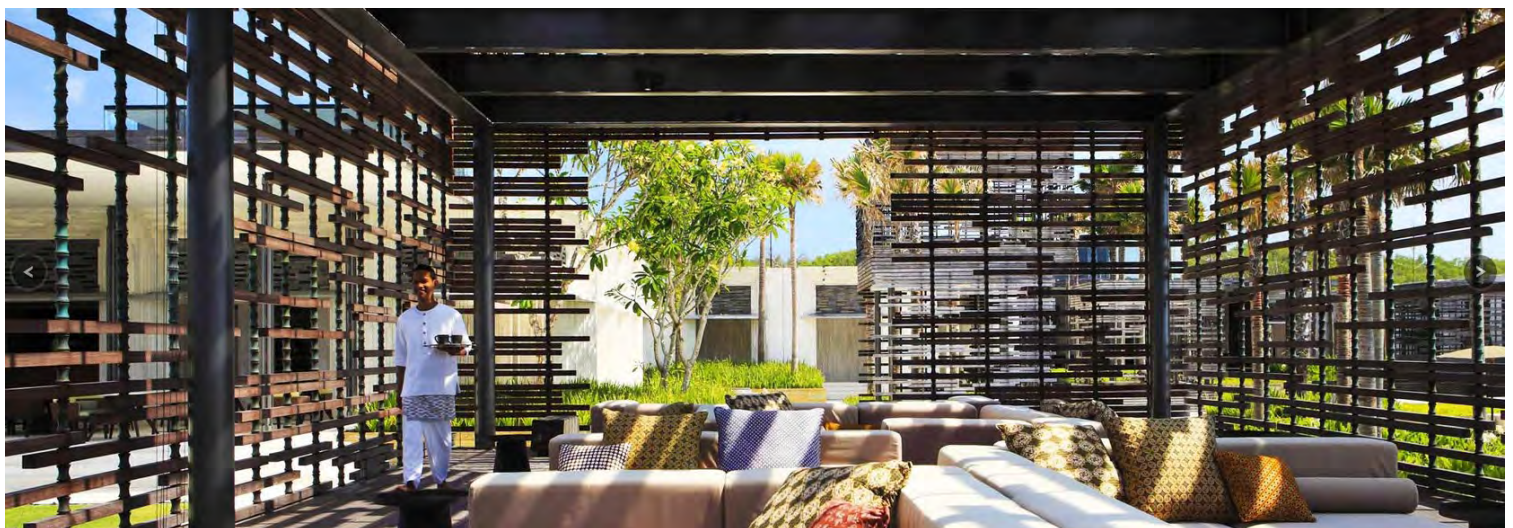
Alila Villas Uluwatu also does green waste composting onsite.

Results

Between August 2010 and July 2013, Alila Villas Uluwatu reduced their total waste to landfill by enough rubbish to fill 869 wheelie bins.



Waste to landfill was **reduced** by enough rubbish to fill **869 wheelie bins.**



Community

Design

Alila Uluwatu knows that conservation is important for the local ecosystem and culture.

In an effort to conserve local flora and fauna, Alila Villas Uluwatu was developed to blend in with the dry Balinese Savannah landscape.

The design also respects the culture of the local community, which is important given the proximity of the local temple.



Top image: the design of Alila Uluwatu blends into the coastline.
Bottom image: the native vegetation supports the local ecosystem

Operations

Several programs were conducted following development, this included replanting native trees.

Since this time, a native species of monkey has been sighted around the villas.

Protected species have never been a part of Alila Uluwatu's products or menu.



Results

Throughout all benchmarking periods, Alila Uluwatu has consistently achieved above baseline indicators for Community Commitment and Community Contribution.

Bali Life Foundation

Alila Uluwatu supports the Bali Life Foundation, a home that provides housing, education, and health care to orphans between the ages of five and 15 in Bali. The resort provides food for the home each month as well as providing training opportunities in the hotel (<http://tinyurl.com/nzzoshz>).

The Bali Life Foundation is also one of the nominated charities Alila Villas Uluwatu recognises under its Gift to Share programme that pledges donations to selected local causes for every Gift to Share package booked by its guests. Donations currently equate to approximately USD\$1,250 every month.





EARTHCHECK

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ATTRIBUTION

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