



Aulani Resort Environmental Fact Sheet

Overview: Inspired by the Hawaiians' deep relationship with nature, which is embodied in the term, "mālama 'āina," or "care of the land," Aulani Resort designers implemented a broad array of green technologies and elements that promote sustainability, energy efficiency and eco-consciousness.

In 2013, Aulani Resort obtained LEED Silver certification through the U.S. Green Building Council (USGBC) for implementing environmentally friendly construction practices and building systems. Aulani Resort was the first resort in Hawai'i to obtain this prestigious environmental certification.

Key Features:

Construction Conservation

- Disney architects used a "cool roof" technology, which reflects the infrared spectrum back into the atmosphere, reducing the roof temperature and helping to keep buildings cool. Also, Aulani Resort features organic "green roofs" above the spa fitness center and the kitchen at 'AMA'AMA. The green roofs increase energy efficiency by deflecting the infrared spectrum and providing natural shade.
- Imagineers selected "certified wood" for use through much of the resort. For the wood to earn certification, forest managers address a range of environmental aspects, including sustainable harvest levels and prompt forest regeneration.
- Elevators are energy efficient, using nearly one-third less energy than traditional elevators. They also don't require petroleum-based lubricants, based on fossil fuels. Emergency stairwells have energy-saving lighting technology, with a bi-level emergency lighting that keeps stairwells illuminated with minimum code lighting at all times. When a person enters the stairwell, sensors activate and the lighting level increases.
- In spaces such as ballrooms and meeting rooms, air quality is monitored using "demand ventilation," a technique that measures the carbon dioxide being emitted from spaces when large numbers of guests gather. Air can be customized for the number of people in the room.
- Heat pump technology is used to capture waste heat from air-conditioning chillers, and to repurpose it for hot water, which is then used throughout the resort. When guests turn on a hot-water faucet, part of the energy being used to heat that water is derived from the air conditioning chillers. This reduces the resort's total water usage.
- Heat pipes are embedded within the air-conditioning system on top of most buildings at Aulani Resort. The pipes serve as a "superconductor," or heat transfer mechanism, which allow fresh air to de-humidify before coming into the buildings. Sealed copper tubes span the incoming and outgoing air paths, with high conductivity that lets them transfer heat by single-phase convection. Since they don't have mechanical moving parts, heat pipes require minimum maintenance and they help Aulani Resort exceed the resort's mandatory energy performance standards.
- A technology known as "Variable Frequency Drive" (VFD) reduces the amount of energy that gets consumed by Aulani Resort air-conditioning systems. VFDs are motors that respond to changing energy

demands. For example, if hotel rooms are not occupied, the VFD motors automatically respond and decrease the energy demand.

- Aulani Resort uses only low-volatile organic compounds (VOC) or VOC-free paints and coatings, as well as only low-VOC or VOC-free adhesives and sealants. All carpets and carpet pads throughout the resort are Green Label Plus, certified by the Carpet and Rug Institute, which means they meet the stringent low-VOC or VOC-free requirements and are among the lowest emitting carpets and carpet pads.
- Indoor air quality standards have been established for the resort by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE).
- Low-flow faucets and fixtures reduce water usage.
- The Aulani Resort construction team successfully recycled more than half of the construction waste materials that were generated on site. Materials that were recycled included concrete, concrete masonry units, wood, metal, steel, aluminum, cardboard and glass, as well as green waste from planting materials.

Guests Can Participate In Conservation

- Aulani Resort has a resort-wide recycling program, including cardboard, aluminum, paper and plastic, as well as food waste. Electronics, batteries, and light bulbs also are recycled.
- Rainbow Reef snorkel lagoon shares nature up close with guests which is home to brilliantly colored Hawaiian reef fish. “By creating these experiences for our guests we hope to enlighten and entertain, and also raise awareness about the importance of supporting conservation here, at home and globally where the Disney Worldwide Conservation Fund is supporting projects,” Rohde said.
- A “lo’i kalo,” or taro field, at the entry of Aulani Resort has four varieties of kalo.
- Aulani Resort guests can control the lighting as well as regulate the temperature of their rooms. In addition, lānai door interlocks automatically shut off the central air-conditioning when a lānai door is opened.
- Aulani Resort guest rooms feature compact fluorescent lights, which are four times more efficient and can last up to 10 times longer than incandescent bulbs.
- The parking garage also offers 34 electric car-charging stations.