

# Honua Ola's Renewable Bioenergy: Environmentally Friendly and Sustainable

<p>Is Honua Ola carbon neutral and sustainable?</p>	<p>Yes. The U.S. Environmental Protection Agency considers biomass plants that obtain their fuel from commercially managed forests, like Honua Ola, to be carbon neutral. Honua Ola has decided to go a significant step further and establish itself as carbon neutral or negative on a lifecycle emissions basis by committing to planting more trees than harvested and partnering with environmental nonprofits. These trees will absorb more carbon and greenhouse gas emissions than emitted during the project's lifecycle. In partnership with the National Forest Foundation and Friends of Volcano National Park, Honua Ola has committed to planting more than 3.1 million trees over the next five years.</p>
<p>How does Honua Ola help meet Hawai'i's 100% renewable energy goals?</p>	<p>The construction of Honua Ola's state-of-the-art facility is 99% complete. This year, it can begin providing clean renewable energy, 24 hours a day, seven days a week, year-round and can begin replacing fossil fuel plants and reducing greenhouse gases. The facility's always-on renewable power will increase grid stability, as well as complement and allow for more intermittent solar and wind renewable energy to be added to the grid.</p>
<p>Will power from Honua Ola be more expensive for consumers?</p>	<p>No, not when compared to some of the other projects approved by the Public Utilities Commission (PUC) to supply firm renewable power. Honua Ola was designed and approved twice by the PUC to replace fossil fuel plants, not variable renewable projects, like solar farms. And the price of Honua Ola's locally grown fuel is fixed and will stabilize the cost of electricity, unlike the cost of power from fossil fuel plants, tied to the volatile price of oil, which has already increased by more than 180% since June 1, 2020.</p>
<p>Is solar energy the cheapest renewable option?</p>	<p>Not really, if compared to Honua Ola on an apples-to-apples basis. While solar plus 4-hour batteries appears cheaper, these projects have limited capability and cannot fully replace a fossil fuel plant that delivers reliable power 24/7. Hawai'i Island needs always-on renewable energy plants capable of providing power whenever it's needed, otherwise there will likely be power outages.</p> <p>The cost of solar plus enough battery capacity to replace an always-on fossil fuel plant will cost about \$0.29 to \$0.32 cents/kWh and deliver power on demand for a single 24-hour period. In order to hold enough energy for a two-day rainstorm, more battery storage and solar panels would be needed, pushing up the cost to about \$0.50 to 0.54 cents/kWh, much more expensive than Honua Ola, at \$0.23 cents/kWh.</p>
<p>What fuel supply does Honua Ola use to generate power?</p>	<p>Honua Ola will be a sustainable operation because it will utilize commercially managed fast-growing eucalyptus trees, which will be replanted continually. The facility can also accept up to 10% invasive species, including albizia trees, an overgrown and dangerous invasive species, creating many problems on the island. Growing and harvesting on island will contribute to the island's energy resiliency during disaster or emergency situations when oil shipments may be interrupted.</p>
<p>Will Honua Ola meet all governmental environmental rules and requirements?</p>	<p>Absolutely. Honua Ola will comply with the strict governmental rules and regulations of the Hawai'i State Department of Health, Hawai'i State Department of Land and Natural Resources, the U.S. Environmental Protection Agency (EPA), Occupational Safety and Health Safety Administration, and the County of Hawai'i.</p>
<p>Will the water discharged by Honua Ola be harmful to the environment or people?</p>	<p>No. The discharged water will not affect the environment or people. More than 99.8% of the water will be taken from an underground salt water source and used to cool and condense the steam from the turbine before the water is returned to the saltwater reservoir through deep underground injection control wells. Less than 0.2% of non-potable water used will be treated with negligible amounts of non-harmful additives following approved best practices. These additives do not contain any active ingredients on the list of hazardous substances in the Clean Water Act regulated by the EPA. All of the water, 100%, will come from non-drinking water sources.</p>
<p>How will the facility impact traffic in the area?</p>	<p>Traffic impact will be minimal. An estimated 30 truck deliveries per day will be made to Honua Ola, which is only 0.003% of the average daily total of 11,250 vehicles on Hawai'i Belt Road. The log trucks are no bigger than the trucks carrying shipping containers and weigh well below the 40-ton rated load of the roadways. Honua Ola will comply with state and county transportation regulations and will continue to provide updates to the local community.</p>
<p>Do local residents support this facility?</p>	<p>Yes. Honua Ola has strong support from local residents, as shown in two scientific opinion surveys. Honua Ola's renewable energy facility will benefit 100% of Hawai'i Island residents with clean, reliable, and lower-cost power.</p>
<p>Why is Honua Ola important to Hawai'i Island?</p>	<p>The Honua Ola energy project will:</p> <ul style="list-style-type: none"><li>• Provide clean renewable energy 24/7 and support intermittent energy, such as wind and solar;</li><li>• Replace existing oil-fired fossil fuel power plants, resulting in improved air quality and a reduction in overall greenhouse gas emissions for a cleaner, healthier environment;</li><li>• Provide affordable energy at a stable fixed price;</li><li>• Create more than 220 new jobs;</li><li>• Create new industries, such as forestry, and infuse millions of dollars into the local economy; and</li><li>• Preserve land for forestry and agriculture.</li></ul> <p>The PUC has recognized the value of accelerating renewable energy projects, such as Honua Ola, to transition the state from fossil fuels to meet its 100% renewable energy goal.</p>