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Par Hawaii to invest \$90 million in renewable-fuel transformation

By [Victoria Budiono](#)

Today

A petroleum refinery in the James Campbell Industrial Park officially began its transition into the clean-energy sector with a blessing ceremony Thursday, marking the start of its efforts to adopt more sustainable energy practices and work toward Gov. Josh Green's goal of achieving 100% renewable energy by 2045.

Par Hawaii's refinery in Kapolei, which has been operating since 1972, is leading this shift by reconfiguring one of its newest processing units to produce renewable fuels starting in 2025. The revamped unit, known as a renewable hydrotreater, will use locally grown oil-producing crops along with imported plant and waste oils to create renewable fuels, aligning with Hawaii's clean-energy goals.

Par Hawaii is one of four refineries across the country under Par Pacific Holdings.

Will Monteleone, president and CEO of Par Pacific Holdings, said the company has invested more than \$200 million in the facility over the past decade, with this project alone representing an additional \$90 million investment aimed at bringing lower-carbon fuels to the community.

In 2019, Par Hawaii completed construction of a \$27 million distillate hydrotreater at its Kapolei refinery to boost production of jet fuel and ultralow-sulfur diesel. The unit is being converted into a renewable hydrotreater.

The renewable hydrotreater will complement two new 2.4 million-gallon storage tanks at the refinery, dedicated to holding feedstock for renewable fuel production. The bright, green-coated tanks are located near the flight paths into Daniel K. Inouye International Airport.

Once completed, the refinery will become the largest renewable fuels manufacturing facility in the state.

Par Hawaii will produce “drop-in” renewable fuels, compatible with existing infrastructure for aviation, diesel and naphtha.

The \$90 million upgrade will enable the facility to produce over 60 million gallons annually of renewable diesel for power generation, marine, and ground transport, sustainable aviation fuel for airlines, and renewable naphtha for power generation and synthetic natural gas.

Once operational in the second half of 2025, the unit will replace fuels currently derived from imported crude oil, advancing the state’s push for energy independence and sustainability.

Par Hawaii President Eric Wright told the Honolulu Star-Advertiser that the company partnered with Hawaiian Airlines in 2022 to work on bringing sustainable aviation fuel to Hawaii. About a year ago the company committed \$90 million to convert part of its Kapolei refinery to produce renewable fuels.

Alanna James, managing director of sustainability initiatives at Hawaiian Airlines, said the partnership with Par Hawaii has been “exciting” as they work to develop a sustainable market in the state, highlighting that sustainable aviation fuel is the most promising technology to address aviation carbon emissions.

“Sustainable aviation fuel is broadly viewed across our industry as the most promising technology to address emissions, and so airlines are working

hard to find solutions to advance the supply of SAF, and really scaling SAF is going to be critical to decarbonizing,” James said.

The U.S. airline industry has set a goal to reach 3 billion gallons of cost-competitive SAF in the country, and most major carriers are actively working to advance SAF.

James said there are no downsides to using SAF, noting that it’s a proven technology. As a “drop-in” fuel, SAF works with existing airplane engines and fuel infrastructure, as long as it is blended up to 50% with conventional jet fuel.

At that point it is certified to the same specifications as conventional jet fuel, meaning no changes are needed to airplanes or engines, making it safe.

Under the Hawaiian Airlines and Alaska Airlines merger, Alaska Airlines Senior Vice President of Public Affairs and Sustainability Diana Rakow said both airlines have set ambitious sustainability goals and are focused on reducing their climate impact through operational efficiency, innovation and investment to support the future of aviation.

“At Alaska we had set a five-part path to a very ambitious target of net-zero carbon emissions by 2040, and we’re excited to be working together now with Hawaiian and developing a shared set of objectives and a road map for the future,” Rakow said during a news conference. “But a huge part of that path to reach net-zero carbon emissions is dependent on sustainable aviation fuel. It is the biggest possible contributor to a step-level change in carbon emissions for aviation, and it’s possible to do here in the next couple of decades, because it’s a safe fuel.”

The \$90 million is for construction, covering upfront costs to build the facility. There will be ongoing operations, including personnel and energy expenses, and Wright said he hopes the project will last indefinitely.

“We have a unit right now that actually processes fossil fuel. It makes diesel fuel, and we’re going to add some equipment to that; and that will make it capable of taking plant-based oils, like vegetable oil, used cooking oil or waste oil, and turn that into a usable fuel,” Wright said.

The fuels also reduce greenhouse gas emissions by 40% to 80% compared with conventional fuels and are energy-dense, holding more than 20 times the energy of a lithium-ion battery.

“The state has really aggressive decarbonization goals,” Wright said. “So you really need these fuels in order for the state to achieve its decarbonization goals. As the needs of Hawaii evolve, our company will evolve to meet those needs.”

The fuel will be produced from fats, oils and grease, including plant-based and waste oils.

The production of renewable fuels creates a positive economic ripple effect across various industries, including agriculture. Locally grown oil-producing crops, which can be rotated with food crops, diversify what is cultivated in Hawaii, enhancing both energy and food security.

Pono Pacific Land Management — Hawaii’s largest private natural resource conservation company — is developing local sources of plant-based oils, such as camelina, to produce renewable diesel and sustainable aviation fuel.

“As a cover crop, camelina protects soil from erosion and absorbs nutrients, significantly reducing nitrogen and phosphorus contamination of groundwater,” Jonathan Marstaller, Pono Pacific president, said in a statement. “It is drought- and pest-tolerant and can be grown in all seasons, from seed to harvest, in four to five weeks. This offers savings for local farmers and benefits the local economy.”

Marstaller also noted that oil from camelina seeds can be used to produce sustainable aviation fuel, while the seed cake can be repurposed as approved animal feed for cattle and chickens.