

2050 Main Street, Suite 3B Wailuku, HI 96793 (808) 877-3144 www.biodiesel.com

FACT SHEET

January 16, 2024

About Pacific Biodiesel

- Founded on Maui in 1995, Pacific Biodiesel is the nation's longest operating biodiesel producer and
 established the first retail biodiesel pump in America. The company was created to alleviate the
 environmentally hazardous disposal of waste cooking oils at the Central Maui Landfill.
- Today, Pacific Biodiesel is Hawaii's only commercial producer of liquid biofuels. The company annually
 produces 6 million gallons of biodiesel, equal to more than 220 MWh PER DAY of 100% renewable energy
 for Hawaii. The company's refinery on Hawaii Island utilizes advanced distillation technology to produce
 premium distilled biodiesel that's sold entirely in Hawaii.
- Biodiesel is helping the state achieve its 100% renewable energy mandate by 2045.
- Locally made biodiesel supports Hawaii's energy security by reducing reliance on imported fossil fuel.
- Pacific Biodiesel produces its 100% renewable fuel by recycling used cooking oil (UCO) from restaurants statewide. In Pacific Biodiesel's production process:
 - o For each gallon of UCO recycled, nearly one gallon of biodiesel is produced.
 - Recycling UCO keeps this waste out of Hawaii's landfills (extending the life of landfills and reducing ground water contamination)
- Local biodiesel is also produced from locally grown oilseed cover crops like sunflowers, which the company utilizes to produce culinary oils and meal for animal feed supporting diversified agriculture, clean energy and food security in Hawaii. Pacific Biodiesel's founders are sustainably farming sunflowers and other "high oil yield" biofuel cover crops with the aim for 100% local feedstock production as demand for local biodiesel continues to increase.
- Pacific Biodiesel has always focused on recycling with a zero-waste philosophy that incorporates development of value-added coproducts.
- The company has 100 employees statewide.

About Biodiesel

- Biodiesel is a 100% renewable, non-toxic, biodegradable fuel. It is less toxic than table salt and biodegrades at the same rate as sugar.
- Biodiesel reduces harmful greenhouse gas emissions by at least 86% compared to petroleum diesel
- Biodiesel can be used in any diesel engine without modification, including cars, trucks, boats, buses, generators and heavy equipment for construction and farming.
- Biodiesel is a direct replacement to petroleum diesel every gallon displaces a gallon of fossil fuel.
- Biodiesel contains no petroleum. However, it can be blended at any level with petroleum diesel. Even a blend of 10% biodiesel and 90% petroleum diesel will reduce harmful emissions.
- Fossil fuels are extracted from the earth, releasing CO2 that has been damaging the environment for over a century. In contrast, Pacific Biodiesel's fuel is sustainably produced using renewable sources like plant oils, rendered animal fats and recycled cooking oil collected from restaurants and foodservice operations.
- Biodiesel is designated an advanced biofuel by the U.S. Environmental Protection Agency.
- Biodiesel quality is governed by ASTM International Standards. Pacific Biodiesel's renewable fuel exceeds the ASTM premium 1-B standards.
- Biodiesel is safer to store and handle compared to petroleum diesel fuel. It eliminates risk from environmentally hazardous fossil fuel spills.

PACIFIC BIODIESEL

Fact Sheet – Page 2 of 2 January 16, 2024

Community-Based Biodiesel – Benefits for Hawaii's Circular Economy

- Pacific Biodiesel's community-based biodiesel model creates local jobs, helps diversify the state's economy, and reduces reliance on imported fuel thereby enhancing Hawaii's energy security.
- The company is a local business, producing and selling its fuel in Hawaii to keep economic and environmental benefits in the state's economy.
- In the past, Hawaii restaurants were paying up to \$2 per gallon for proper removal and disposal of their used cooking oil; since 2010 Pacific Biodiesel has performed this service at no charge.

Regenerative Agriculture - Farming for Fuel, Food & Feed

- The founders of Pacific Biodiesel, Bob and Kelly King, are currently farming sunflowers and other crops in Hawaii, showcasing a community-based model of sustainable agriculture, renewable fuel and food that is helping Hawaii achieve a clean energy future.
 - The Kings' farm is located on 115 acres in Maui's Central Valley.
 - o In January 2024, Pacific Biodiesel began farming operations on Kauai as part of a multi-year agreement with the U.S. Army Corps of Engineers (USACE) Engineer Research and Development Center's Construction Engineering Research Laboratory for a project that will demonstrate renewable biofuel produced in Hawaii from multiple oilseed cover crops. The effort will strengthen Hawaii's food security, energy security and supply chain resiliency.
- The company's farming program includes:
 - Sunflowers and other "high oil yield" crops: 100-110 days planting to harvest.
 - Demonstrating regenerative agriculture:
 - all farm equipment runs on locally made 100% biodiesel
 - the farm utilizes only natural farming practices; no GMO crops; no pesticides/herbicides
 - rotation of different cover crops helps improve soil health (cover crops sequester CO2 from the atmosphere and store carbon in soil)
 - o Efficient biodiesel-powered pivot irrigation system provides accurate and variable water irrigation.
 - Hawaiian Moon Calendar farming practices are incorporated to plan planting and harvesting dates.
- Maiden Hawaiian Naturals, LLC, a company created by Pacific Biodiesel, is producing culinary oils and cosmetic oils from the sunflowers and other locally grown ingredients.
 - Maiden Hawaii Naturals premium culinary oils are sold to Hawaii's chefs and the used cooking oil is later recycled to produce a 100% renewable fuel for a cleaner, greener Hawaii.
 - Kuleana® natural cosmetic ingredients and beauty products includes Hawaiian Macadamia oil,
 Maui Sunflower oil and Full-Spectrum Hemp Extract (CBD beauty oils and massage oils).
 - The company utilizes a zero-waste production operation meal remaining after the oil is crushed from nuts seeds is sold as a high-protein ingredient for livestock feed.

www.biodiesel.com www.maidenhawaiinaturals.com www.kuleanacbd.com

@pacificbiodiesel
@maidenhawaiinaturals
@kuleanabeauty
#MauiSunflowers