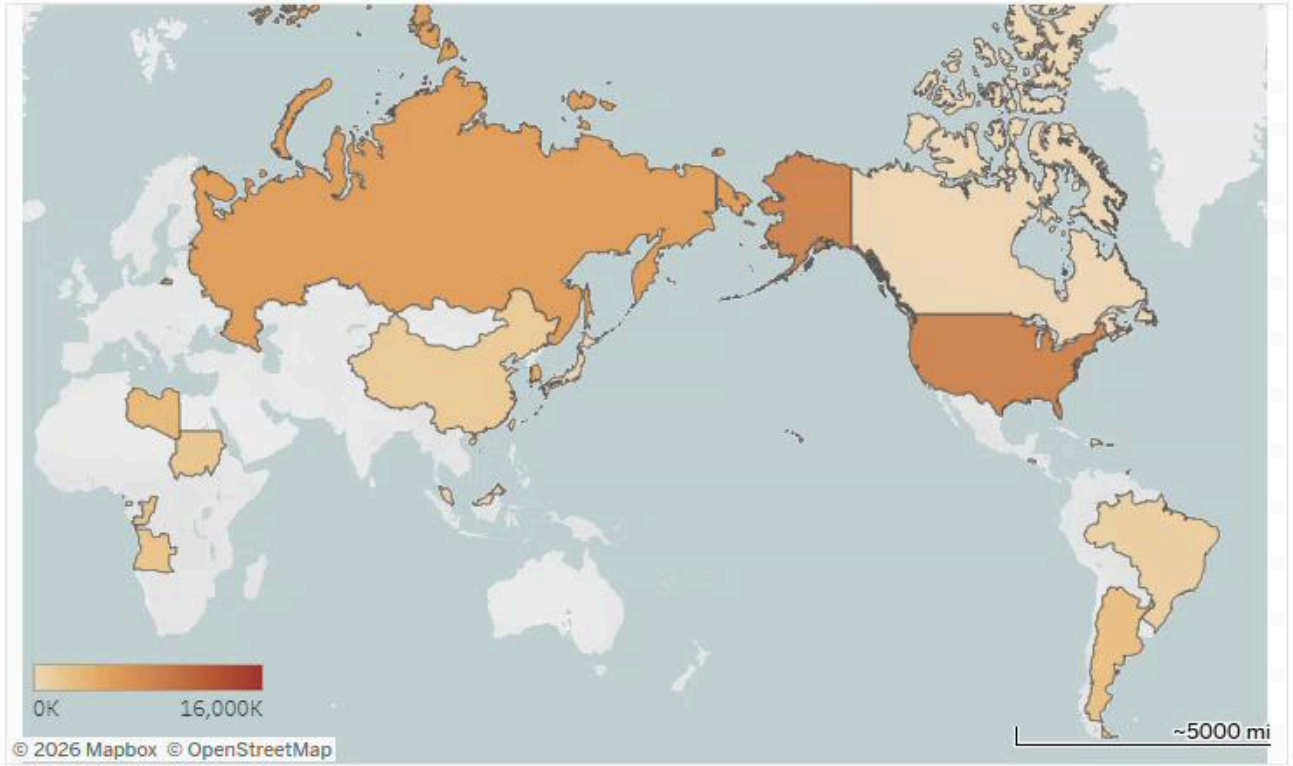
Hawai‘i Fuel Imports Dashboard



2020

Year

(2016 through 2025 Q3)

Product Group

All Fuels

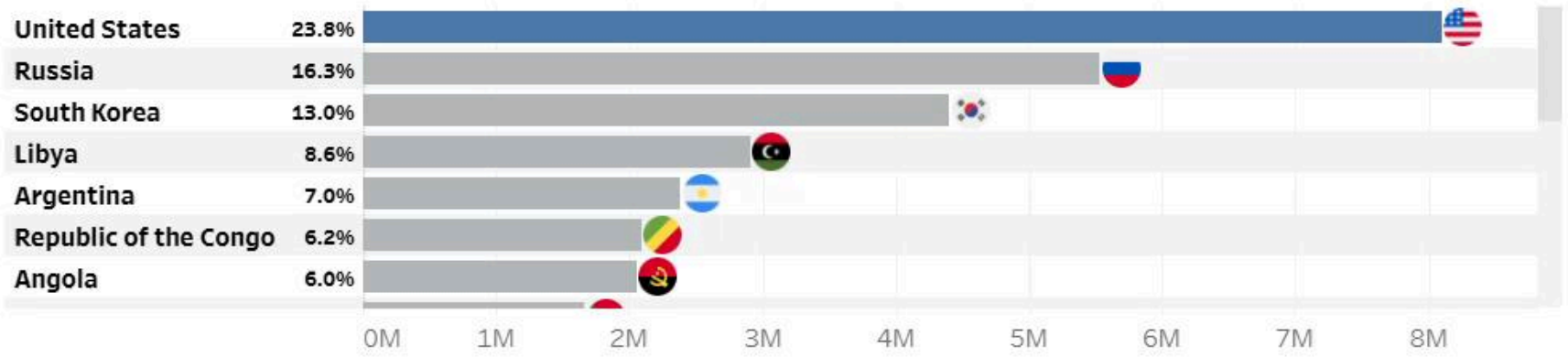
Product(s)

(All)

Source: Vortexa
Flag Icon Credit: Flaticon
Last Updated: October 1, 2025

United States
Other

Imports by Country - Barrels (volume)

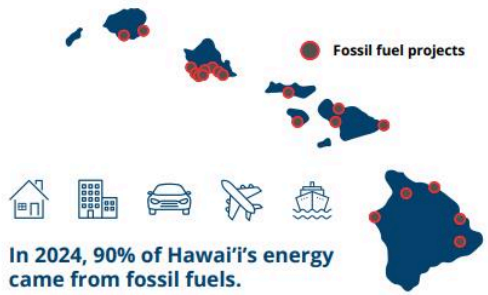


HAWAI‘I STATE ENERGY OFFICE

HAWAIʻI STATE ENERGY OFFICE

Where Hawai'i's Energy Comes From

HAWAI'I STATE ENERGY OFFICE



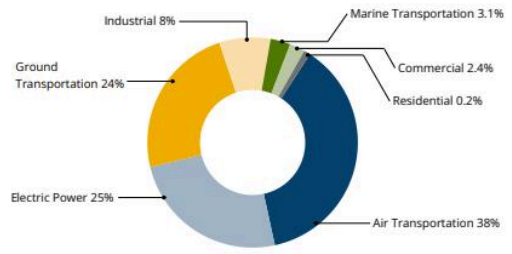
In 2024, 90% of Hawai'i's energy came from fossil fuels.

Hawai'i needs energy to power our homes, businesses, and transportation. Today, **most of that energy comes from petroleum**, or oil, a fossil fuel burned to generate electricity and fuel vehicles.

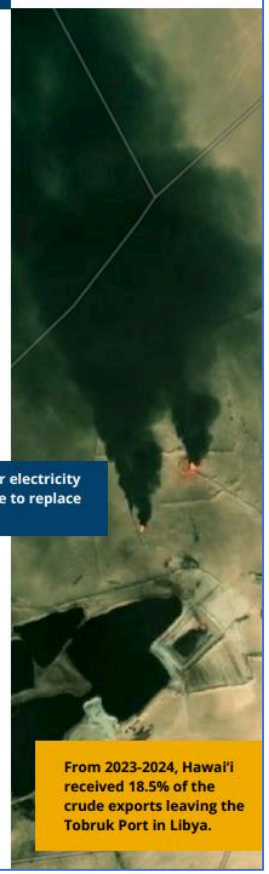
Transportation accounts for the majority of Hawai'i's petroleum use. The chart below shows how we use petroleum by sector across the state.

To achieve Hawai'i's goal of transitioning to 100% renewable energy for electricity by 2045 across the state, energy from renewable technologies will have to replace energy currently generated by petroleum.

Total (Billion BTU): 268,299



U.S. Energy Information Administration, 2022



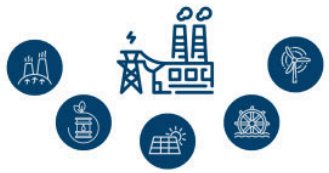
From 2023-2024, Hawai'i received 18.5% of the crude exports leaving the Tobruk Port in Libya.

HAWAI'I STATE ENERGY OFFICE

How Does the Electric Grid Work?

Electricity powers our homes, businesses, and public services, but how does it get there? Understanding how the electric grid works is an important part of understanding Hawai'i's energy system.

Step 1: Generation



Electricity is made at a generator by burning fossil fuels or using renewable energy resources such as wind, solar, hydropower, biomass, or geothermal.

Step 2: Transmission

Once electricity is generated, it has to get from the generator to the outlet or light bulb.

Step-up Transformer: Electricity goes to a substation where step-up transformers increase the voltage, allowing the electricity to travel long distances with less energy loss.

Transmission Lines: Electricity is sent to transmission lines to carry electricity over long distances.

Step-down Transformer: Electricity goes to a substation, where a step-down transformer lowers the voltage before sending the electricity to distribution lines.

Voltage is the amount of "pressure" behind electricity, like water pressure.

Step 3: Distribution

Wires and Poles: Electricity travels through distribution lines to a pole-mounted transformer, which lowers the voltage again for safe delivery.

Distribution: Electricity is distributed anywhere it is needed, such as homes and businesses.

In the continental U.S., multiple states use the same electric grid to share energy.

In Hawai'i, each island has a separate grid and can only share resources like fuel.

What's the Difference Between Firm & Intermittent Energy?

Every energy resource and technology works differently. Some energy resources can be used to make electricity any time we need it – "firm energy" – while other energy resources only work when conditions are right – "intermittent energy."

Hawai'i is working toward a goal of using 100% renewable energy. To get there, we need to make sure each island's power grid is safe and reliable, and that electricity is always available when people need it.

Firm Energy

Resources that can generate energy **24/7 and deliver on-demand** power to the grid.

We need firm energy to maintain a minimum power supply to each island.

- **Fossil Fuels**
- **Geothermal**
- **Biomass & Biofuel**
- **Waste-to-Energy**
- **Pumped Storage Hydropower**
- **Nuclear**

Currently, most of Hawai'i's firm power comes from fossil fuels, which will need to be replaced by both firm and intermittent dispatchable resources.

HAWAI'I STATE ENERGY OFFICE

Intermittent Energy

Resources that only generate energy under certain conditions. The amount of energy generated depends on factors we can't control, like weather or time of day.

Intermittent energy is sometimes called variable energy.

- **Solar**
- **Wind**
- **Ocean**
- **Run-of-River Hydropower**

Some electricity from intermittent energy resources can be stored in batteries and used on demand, making it "dispatchable."

Scan to learn more about Battery Energy Storage Systems

HAWAI'I STATE ENERGY OFFICE