

SELECT A SITE

COUNTRY

Iceland

▼

LOCATION

Capital city - Reykjavik

▼

PLANT SIZE

3 t/day — reference unit (\$4.5M)

▼

ENERGY SOURCE

Grid / contract (basis below)

▼

ELECTRICITY BASIS

▼

UNITS

US gallons

▼

SITE PROFILE

Country

Iceland

Site

Capital city - Reykjavik

Mean wind at 50 m

6.0 m/s (13.4 mph)

Consumer retail

Business retail proxy

Negotiated PPA

Tariff used

Local pump price

\$8.90/gal

Plant size

3 t/day reference unit (1,000 gal/day · capex \$4,500,000)

Wind contractor price

Solar contractor price

PRODUCTION COST BY PLANT SIZE

Plant size	Capex	Diesel	Gasoline	Kerosene
1/10 t/day demonstrator	\$425,000	\$5.52/gal	\$5.26/gal	\$5.40/gal
1 t/day	\$2,000,000	\$3.41/gal	\$3.16/gal	\$3.30/gal
3 t/day reference unit	\$4,500,000	\$2.91/gal	\$2.66/gal	\$2.80/gal
5 t/day (pro-rata modules)	\$7,500,000	\$2.91/gal	\$2.66/gal	\$2.80/gal
10 t/day (pro-rata modules)	\$15,000,000	\$2.91/gal	\$2.66/gal	\$2.80/gal
100 t/day (pro-rata modules)	\$150,000,000	\$2.91/gal	\$2.66/gal	\$2.80/gal

Production cost per unit of fuel at the tariff above. The highlighted row is the plant size selected.

DIESEL
PRIORITY — fund first

Cost \$2.91/gal
Market \$10.50/gal · margin 72%
EBITDA \$1,522,167/yr · payback 3.0 yr

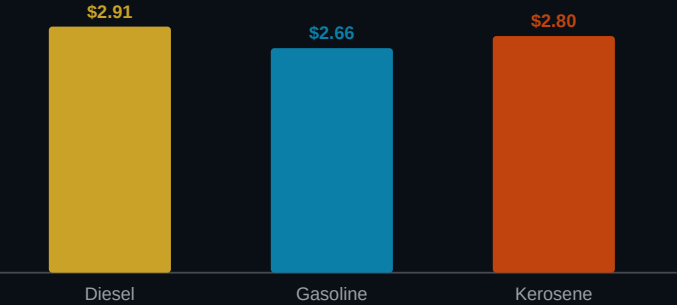
GASOLINE
PRIORITY — fund first

Cost \$2.66/gal
Market \$8.90/gal · margin 70%
EBITDA \$1,251,930/yr · payback 3.6 yr

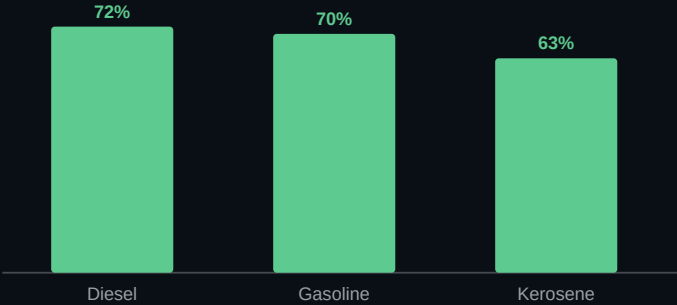
KEROSENE
PRIORITY — fund first

Cost \$2.80/gal
Market \$7.56/gal · margin 63%
EBITDA \$955,283/yr · payback 4.7 yr

PRODUCTION COST BY FUEL



MARGIN AGAINST THE LOCAL MARKET



FULL ANALYSIS – ALL THREE FUELS

Fuel	Cost	Market	Margin	EBITDA/yr	Payback
Diesel	\$2.91/gal	\$10.50/gal	72%	\$1,522,167	3.0 yr
Gasoline	\$2.66/gal	\$8.90/gal	70%	\$1,251,930	3.6 yr
Kerosene	\$2.80/gal	\$7.56/gal	63%	\$955,283	4.7 yr

TARIFF SENSITIVITY AT THIS SITE



CARBON BALANCE & PLANT REQUIRED

Diesel — CO ₂ removed	1,996 t/yr (2.626 kg/L · 9.94 kg/gal)
Gasoline — CO ₂ removed	1,745 t/yr (2.296 kg/L · 8.69 kg/gal)
Kerosene — CO ₂ removed	1,919 t/yr (2.525 kg/L · 9.56 kg/gal)
O ₂ returned (diesel basis)	2,146 t/yr
Output at 3 t/day reference unit	759,921 L (200,750 gal)
Capex at this size	\$4,500,000
Continuous power	1,800 kW

Carbon is circular: the CO₂ removed to make the fuel returns when it burns. The benefit is displacement of fossil carbon, not removal.

ABOUT THESE FIGURES

These figures are indicative planning estimates. They combine the fuel's energy content, the electricity price you choose, the scale of plant and a standard allowance for other operating costs. Technical background, assumptions and test reports are available on request from info@fuelfromair.com.

LOCAL FUEL PICTURE — USE, MARGIN AND CARBON

Every year **Iceland**, where **Capital city - Reykjavik** sits, burns about **255.6 million gallons** of diesel, gasoline and kerosene. Here is each fuel's share, the margin FFA would earn on it at this site, and the carbon dioxide taken from the air if FFA fuel replaced it.

DIESEL

Used per year

80.9 million gal

Profit margin at this site

72%

GASOLINE

Used per year

145.6 million gal

Profit margin at this site

70%

KEROSENE

Used per year

29.1 million gal

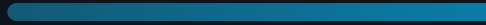
Profit margin at this site

63%

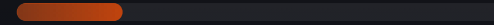
CO₂ taken from the air per year
804.1 thousand tonnes



CO₂ taken from the air per year
1.3 million tonnes



CO₂ taken from the air per year
278.3 thousand tonnes



All three fuels, per year
967.6 million L · 255.6 million gal

CO₂ taken from the air if all replaced
2.3 million tonnes

WHAT THAT CARBON IS EQUAL TO, EVERY YEAR

The fossil carbon that would no longer be added to the air if FFA fuel replaced these fuels at Iceland levels of use.

VEHICLES AND FOREST



10.1 thousand
long-haul lorries

Carbon avoided by replacing the diesel,
every year



275.1 thousand
passenger cars

Carbon avoided by replacing the
gasoline, every year



10
jet aircraft, flying all year

Carbon avoided by replacing the jet fuel,
every year



293.0 thousand
return flights London–New York

Kerosene — passengers, one return trip
each



335.4 thousand ha
of forest to absorb it

Planted forest needed to take up the
same CO₂

LOCAL EFFECTS



62%
of the country's fossil CO₂

Share of the national fossil CO₂
emissions



700.3 thousand gal
of fuel displaced every day

Fossil fuel no longer needed, every day
of the year



74
road tankers a day

Fewer fuel deliveries by road and sea



\$2.36 billion
a year spent on these fuels

At the local pump price, money that
could stay in the local economy



6.06 t
of fossil CO₂ avoided per person

Shared across the population

INDUSTRY SCALE



4.5%

a year of Toyota Group cars

Compared with one year of driving all the vehicles sold



7.1%

a year of Hyundai Motor Group cars

Compared with one year of driving all the vehicles sold



12%

a year of Ford cars

Compared with one year of driving all the vehicles sold



11%

a year of Airbus jets

Compared with one year of flying all the jets delivered



14%

a year of Boeing jets

Compared with one year of flying all the jets delivered

These are approximations to give a sense of scale. The figures, factors and assumptions behind them are available on request from info@fuelfromair.com. Carbon is circular: the CO₂ taken from the air returns when the fuel burns, so the benefit is displacement of fossil carbon, not removal.