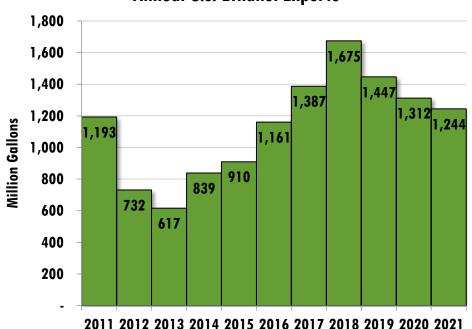
2021 U.S. ETHANOL EXPORTS & IMPORTS STATISTICAL SUMMARY





2021 U.S. ETHANOL EXPORTS

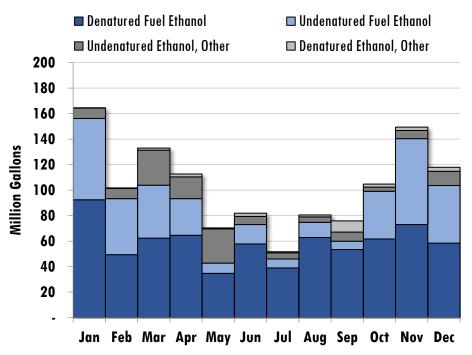
Annual U.S. Ethanol Exports



The U.S. exported 1.24
billion gallons of ethanol
in 2021—down 5% from
2020 but still the fifthhighest volume on
record. American-made
ethanol was exported to 88
countries on all six
inhabited continents around
the world

2021 Monthly Ethanol Exports, by Type

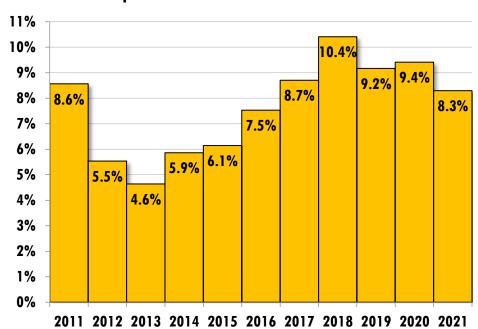
Denatured fuel ethanol accounted for 57% of exports. The share represented by undenatured fuel ethanol slipped to 30%, but exports of undenatured industrial ethanol doubled, largely as a result of China's return to the market. Denatured industrial ethanol contributed 2% of shipments.



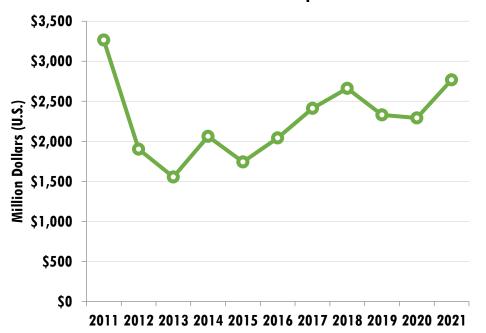
2021 U.S. ETHANOL EXPORTS

Export Share of U.S. Ethanol Production





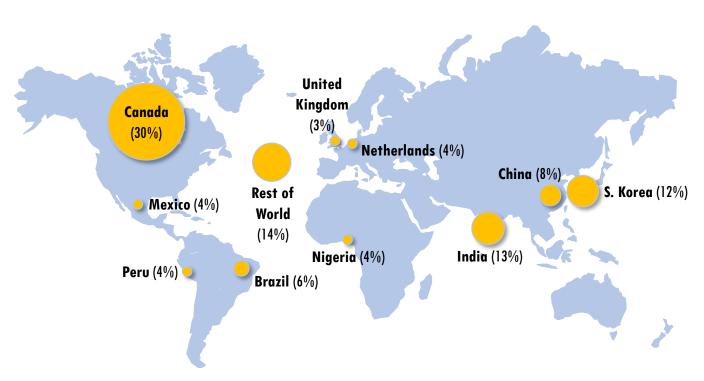
Value of U.S. Ethanol Exports



The value of U.S. ethanol exports rose to \$2.77 billion in 2021, the second-highest ever, as ethanol prices rebounded strongly from pandemic lows.

2021 ETHANOL EXPORTS: TOP MARKETS

Top Markets for U.S. Ethanol Exports in 2021



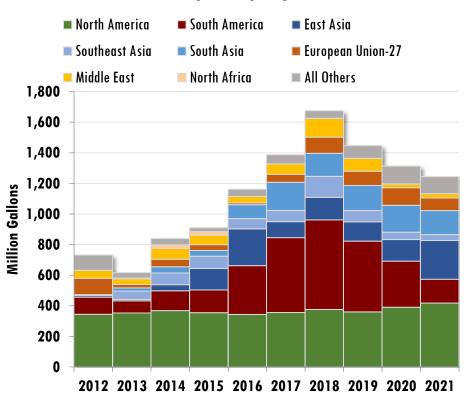
2021 ethanol export volumes to the Top 10 markets are shown in the table below, along with a comparison to 2020 volumes. All figures are shown in millions of gallons, unless otherwise noted.

Country	Den. Fuel	Und. Fuel	Den. Other	Und. Other	2021 Total	2020 Total	Change
Canada	337.0	3.5	12.9	16.9	370.2	326.3	+13%
India	57.1	99.3	0.0	0.0	156.4	175.6	-11%
South Korea	91.9	43.2	5.3	11.3	151.7	104.1	+46%
China	22.7	29.5	0.0	48.0	100.2	31.7	+216%
Brazil	22.1	53.8	0.0	0.0	75.9	185.8	-59%
Mexico	2.6	41.8	0.9	2.1	47.4	64.4	-26%
Nigeria	15.0	9.5	0.0	19.7	44.2	37.2	+19%
Netherlands	36.9	6.9	0.0	0.0	43.9	85.0	-48%
Peru	28.3	10.7	4.7	0.0	43.7	44.5	-2%
United Kingdom	28.3	13.1	0.0	0.1	41.5	24.2	+72%

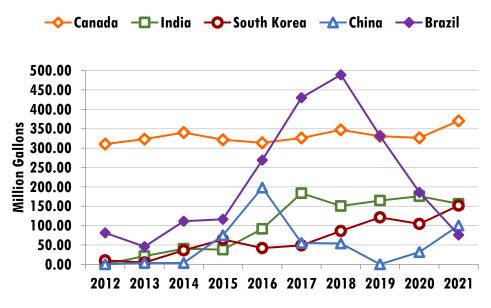
2021 U.S. ETHANOL EXPORT DESTINATIONS

U.S. Exports by Region

North America remained
the largest regional
destination for U.S. exports
in 2021, while East Asia rose
to second place. The share of
exports shipped to South
Asia was stable. However,
volumes destined for South
America fell further.



Volatility in Major U.S. Ethanol Export Markets



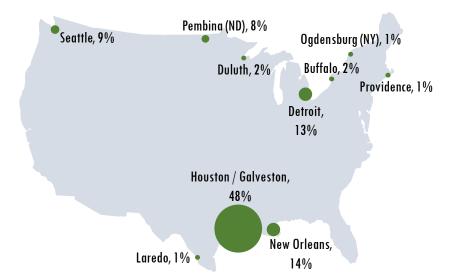
Canada remained the largest and most consistent destination for U.S. ethanol. Exports to South Korea rose, and shipments nearly matched those to India. A notable development was China's return as a large-scale buyer. However, for the second-straight year, the main cause of the decline in U.S. exports was a drop in shipments to Brazil.





2021 EXPORT HUBS AND NET EXPORTS

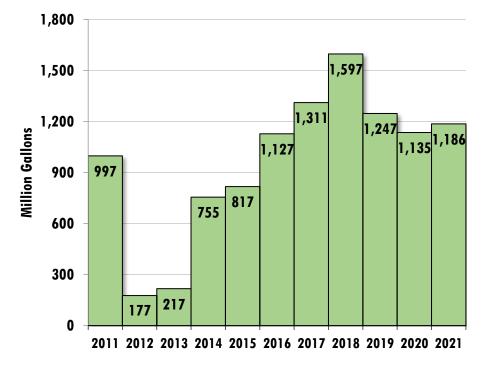
Top Ports/Districts of Exit for 2021 U.S. Ethanol Exports



Nearly two-thirds of U.S.
ethanol exports departed via
the Gulf of Mexico in 2021.
The Great Lakes and
Northern Tier were
collectively the secondlargest region. Significant
volumes also were shipped
from the Pacific Northwest.

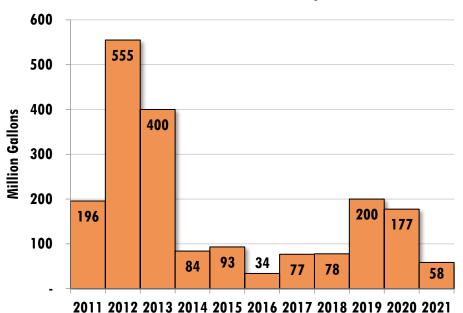
Annual U.S. Net Ethanol Exports

Net exports of ethanol rose in 2021, as imports declined more than exports. The U.S. remained a net exporter for the 12th straight year.



2021 U.S. ETHANOL IMPORTS

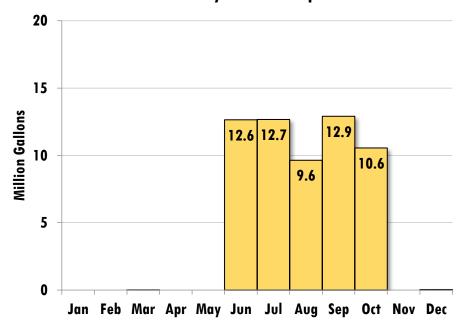
Annual U.S. Fuel Ethanol Imports



U.S. imports of fuel ethanol receded to 58 million gallons in 2021, after volumes had been elevated during the prior two years.

2021 Monthly Ethanol Imports

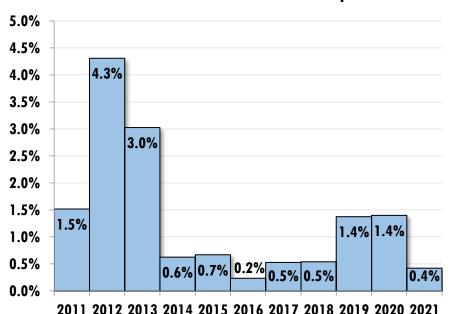
Virtually all fuel
ethanol imports
continued to come from
Brazil, due in large part
to favorable treatment
under the California Low
Carbon Fuel Standard.





2021 U.S. ETHANOL IMPORTS

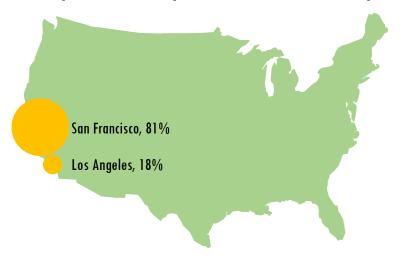
U.S. Ethanol Imports:
Share of Total U.S. Ethanol Consumption



Imports accounted for less than 1% of the ethanol consumed in the U.S. in 2021, a decline from the prior two years.

California ports received **99%** of the fuel ethanol **imported** into the U.S. in **2021**, driven by the state's Low Carbon Fuel Standard.

Top Ports of Entry for 2021 U.S. Ethanol Imports



ABOUT THE DATA IN THIS REPORT

U.S. Ethanol Export Data

- The export data in this report includes exports classified under the following Harmonized Tariff Schedule (HTS) codes:
 - 2207200010: Ethyl alcohol and other spirits, denatured, of any strength: For fuel use
 - 2207106010: Undenatured ethyl alcohol of an alcoholic strength by volume of 80 percent vol. or higher: For non-beverage purposes: For fuel use
 - 2207200090: Ethyl alcohol and other spirits, denatured, of any strength: Other
 - 2207106090: Undenatured ethyl alcohol of an alcoholic strength by volume of 80 percent vol. or higher: For non-beverage purposes: Other
- 2207200090 and 2207106090 are included in this report because there is anecdotal evidence that exports of ethanol
 intended for fuel use are sometimes classified under these codes. In any case, ethanol classified under these codes
 represented 13% of the 2021 U.S. exports discussed in this report.

U.S. Ethanol Import Data

- The import data in this report includes imports classified under the following Harmonized Tariff Schedule (HTS) codes:
 - 2207200010: Ethyl alcohol and other spirits, denatured, of any strength: For fuel use
 - 2207106010: Undenatured ethyl alcohol of an alcoholic strength by volume of 80 percent vol. or higher: For non-beverage purposes: For fuel use

Sources

All data in this report comes from the U.S. Census Bureau, U.S. Department of Commerce, U.S. Department of Agriculture,
 U.S. International Trade Commission, and U.S. Energy Information Administration

The Renewable Fuels Association publishes **monthly** summaries of export and import data for ethanol and distillers dried grains in its Trade Monitor.

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