

Making a Global Mark

As U.S. ethanol production recovered in 2021, our nation's share of global output rebounded to a pre-pandemic level of 55 percent. On the other hand, Brazilian ethanol production declined further and was roughly half of U.S. volume, as a result of adverse sugarcane-growing conditions, industry economics, and the lingering effects of the pandemic. The European Union accounted for 5 percent of global output, on par with 2020. No other country had more than a 3-percent share, even though India registered a notable increase in production.

Still, U.S. exports remained subdued, with volumes falling to their lowest level in five years. Canada remained the top destination, taking nearly one-third of U.S. ethanol shipments, an increase from 2020. Meanwhile, export sales to South Korea grew substantially, beating out India as our second-largest destination. Another bright spot was the return of China as a customer, with the country making sizable purchases of U.S. ethanol for the first time since 2018, although volumes tapered off in the second half of the year.

While India and Mexico remained key markets, shipments to both fell in 2021 after growing significantly in 2020, when industrial alcohol was in high demand. However, the main cause of lower total exports was a further sharp drop in shipments to Brazil, which occurred after a 20-percent tariff was applied to all imports from the U.S. Brazil purchased moderate amounts of U.S. ethanol during its sugarcane inter-harvest period, but otherwise volumes were negligible.

U.S. ethanol imports declined in 2021 as well, due to lower production and higher prices of Brazilian ethanol, declining prices of California Low Carbon Fuel Standard credits, and volatile RFS credit (RIN) price dynamics.

U.S. ETHANOL EXPORTS AND IMPORTS

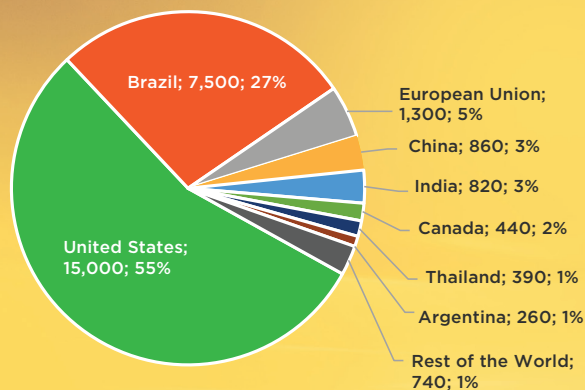


Sources: U.S. Dept. of Commerce, U.S. Census Bureau, Foreign Trade Statistics
*Estimated based on Jan.-Nov. 2021 data



2021 GLOBAL FUEL ETHANOL PRODUCTION

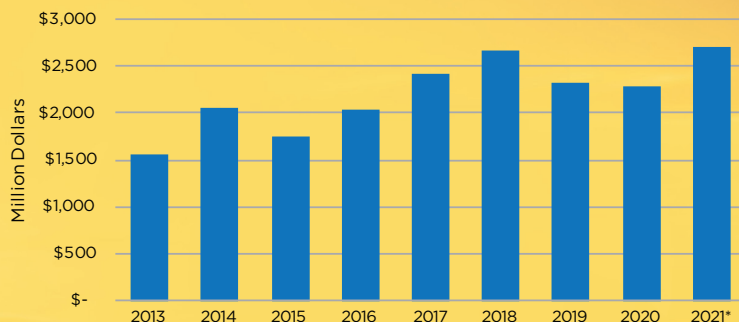
Region; million gallons; share of global production



Global fuel ethanol production rebounded to 27 billion gallons in 2021. The United States remained the largest producer, accounting for over half of global output.

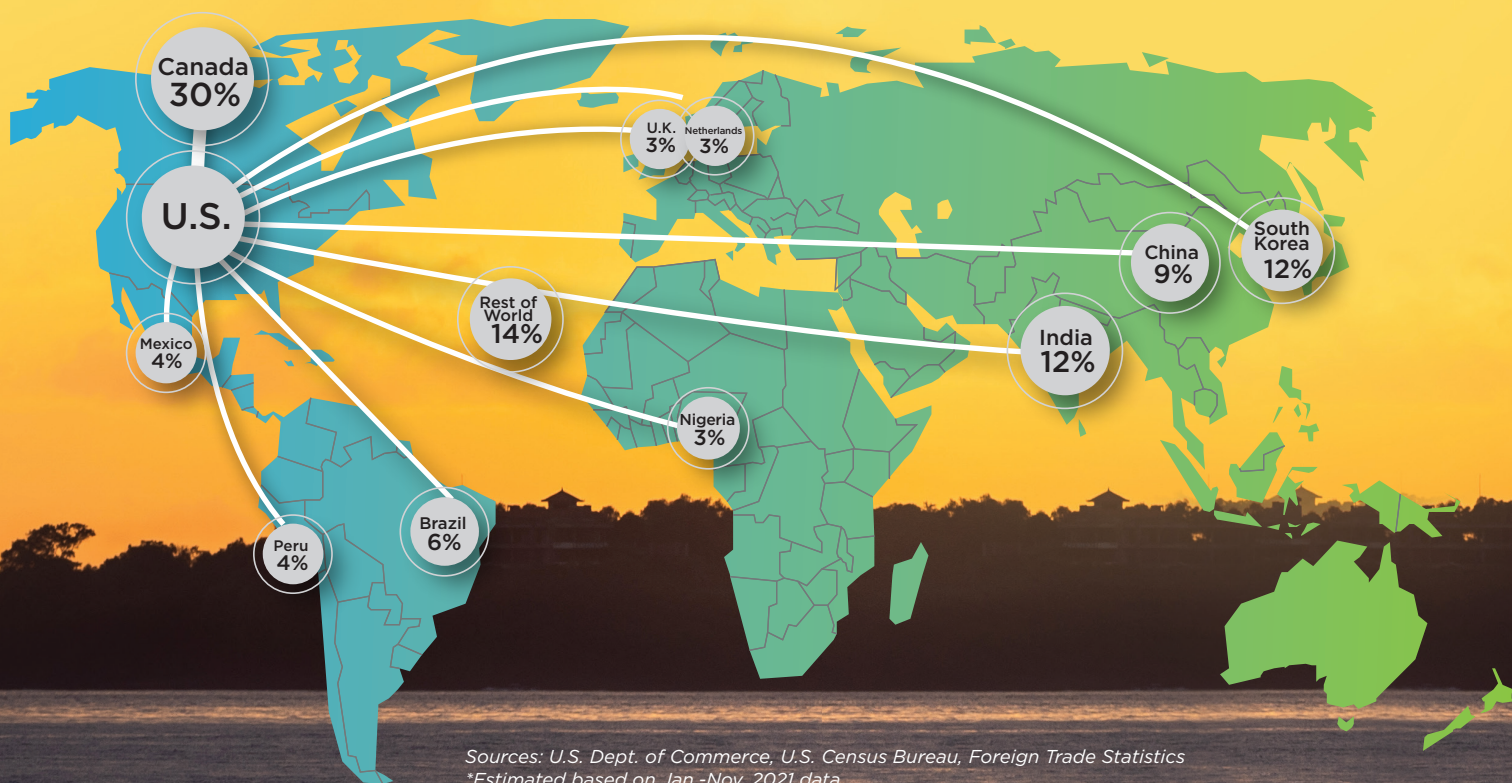
Sources: RFA analysis of public and private data sources

VALUE OF U.S. ETHANOL EXPORTS



Sources: U.S. Dept. of Commerce, U.S. Census Bureau, Foreign Trade Statistics
*Estimated based on Jan.-Nov. 2021 data

TOP DESTINATIONS FOR U.S. ETHANOL EXPORTS IN 2021



Sources: U.S. Dept. of Commerce, U.S. Census Bureau, Foreign Trade Statistics
*Estimated based on Jan.-Nov. 2021 data