

# ETHANOL EXPORTS AND IMPORTS

## OCTANE DRIVES EXPORT GROWTH

The export market continued to serve as a crucial source of demand for U.S. ethanol in 2015, with approximately 850 million gallons shipped to more than 50 countries. In 2015, both total exports and net exports were on par with 2014 levels.

A number of new trading partners entered the fray in 2015, and China's rapid emergence as a Top 10 destination for U.S. ethanol was a major development. Canada remained as the U.S. ethanol industry's top export customer, receiving approximately 30% of all shipments. Brazil, the Philippines, South Korea, and India were other familiar top destinations.

While U.S. ethanol exports continued to surge, ethanol imports continued to sag. Fuel ethanol imports registered less than 100 million gallons for the second straight year, despite the demand pull from California's Low Carbon Fuel Standard and the RFS advanced biofuel standard.

With much lower crude oil prices in 2015, many predicted that demand for U.S. ethanol exports would falter. However, robust export volumes in 2015 demonstrate that gasoline blenders in foreign markets are increasingly valuing ethanol for its unique octane and oxygenate properties. Just as U.S. refiners and blenders have optimized their operations to take advantage of ethanol as a low-cost octane source, so too are international gasoline producers.

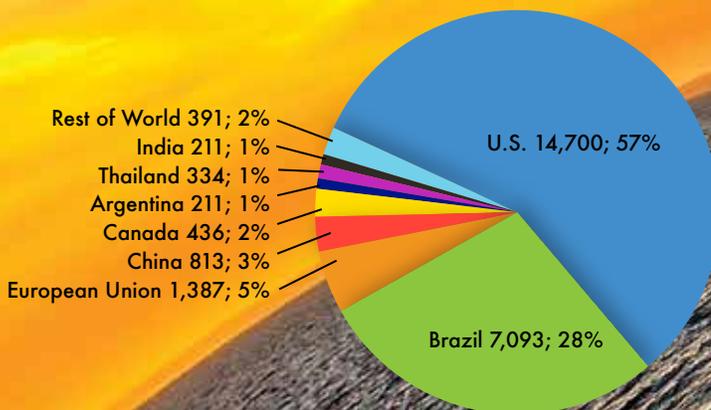


*"The main concern of the Chinese government and the Chinese people is pollution...China [has] started to import a significant amount of ethanol from the U.S. This could be the start of a trend of ever-increasing imports of U.S. ethanol."*

– Chen Lin, Energy Expert and Investment Advisor

### 2015 Global Fuel Ethanol Production, By Country

(Country, million gallons; share of global production)



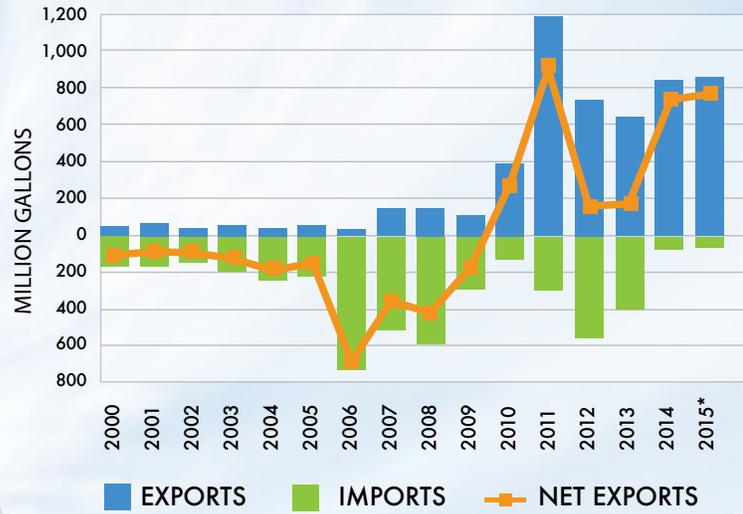
Source: RFA analysis of public & private estimates

### The United States Continues to be the World's Low-Cost Ethanol Producer

	Brazilian Ethanol (FOB Sao Paulo)	U.S. Ethanol (FOB Chicago)	Difference
U.S. Dollar/Gallon			
2010	\$2.82	\$1.83	\$(0.99)
2011	\$3.37	\$2.56	\$(0.81)
2012	\$2.40	\$2.24	\$(0.16)
2013	\$2.34	\$2.23	\$(0.11)
2014	\$2.28	\$2.04	\$(0.24)
2015	\$1.81	\$1.52	\$(0.29)

Source: U.S. Dept. of Agriculture, Oil Price Information Service

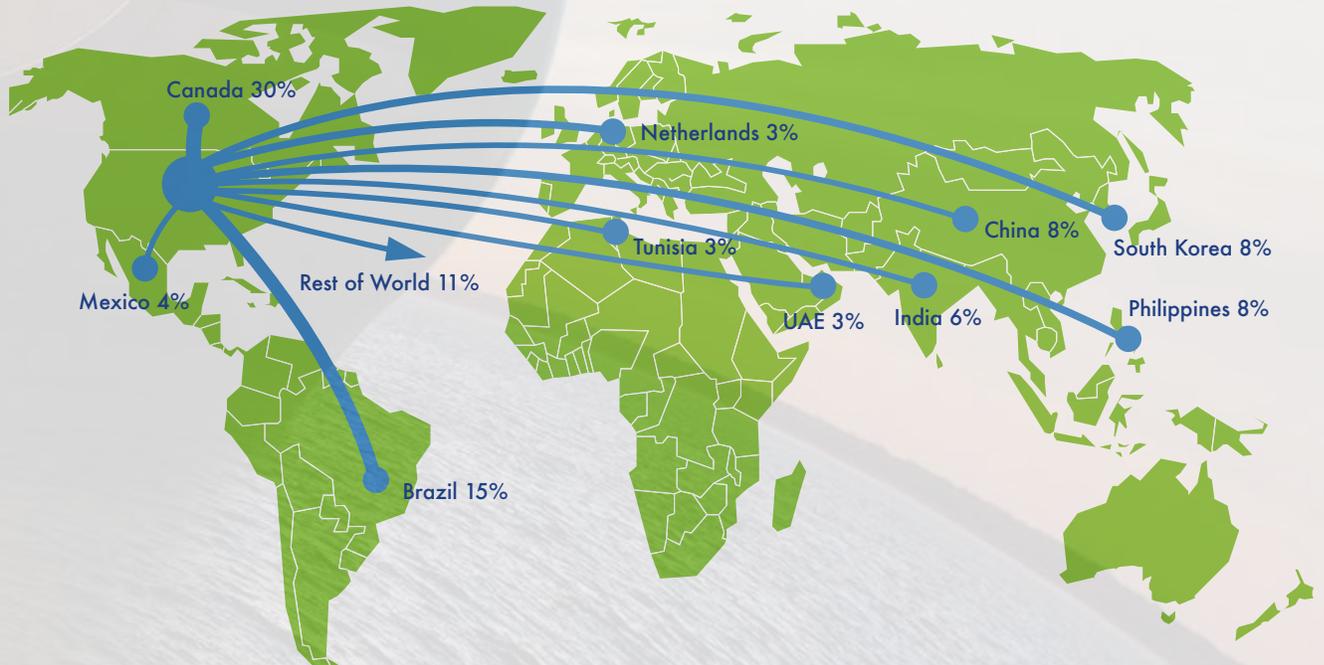
## U.S. Ethanol Exports and Imports



\* Estimated

Sources: U.S. Dept. of Commerce, U.S. Census Bureau, Foreign Trade Statistics

## Top Destinations for U.S. Ethanol Exports in 2015



Sources: U.S. Dept. of Commerce, U.S. Census Bureau, Foreign Trade Statistics  
Based on Jan.-Nov. 2015