The February 2022 Russian invasion of Ukraine made energy security a "front burner" issue again and exacerbated inflation pressures that were already percolating. Crude oil and gasoline prices spiked, and by June retail gasoline prices hit a record $5 per gallon. The United States quickly moved to ban the import of Russian crude oil and certain petroleum products, which had amounted to nearly 250 million barrels in 2021, accounting for 8 percent of total U.S. imports. Sanctions and bans on Russian crude oil by the European Union and United Kingdom also squeezed the global oil market, while flows of natural gas to Europe also were disrupted. As a result, U.S. shipments of crude oil and liquefied natural gas to Europe increased sharply.

Overall, in an environment of tight global supplies and high prices, U.S. petroleum exports rose significantly—as did shipments of ethanol. Still, the United States imported nearly 200 million barrels of crude oil per month, an increase over 2021. More than one-third of U.S. crude supplies came from foreign sources, and 40 percent of the oil processed by refineries was imported.

Given the increase in crude oil prices, the value of oil imported into the U.S. rose sharply in 2022. Americans transferred over $30 billion specifically to OPEC nations for oil, with approximately half that amount going to Saudi Arabia. The experience of 2022 served as a sharp reminder that the U.S. remains part of an interconnected global petroleum market rather than an island unto itself.

Against this backdrop, ethanol contributed significantly to U.S. energy security. The use of ethanol—almost all of which is produced domestically—displaced the equivalent of more than 600 million barrels of crude oil on an energy-equivalent basis. Given this and the fact that only roughly half the volume of crude oil that is refined ends up as gasoline, U.S. imports of crude oil and products would have been substantially higher without the presence of ethanol.

Additionally, ethanol saved consumers money at the pump. Ethanol was priced at a significant discount to gasoline blendstock in the wholesale market almost all year, and the differential stood at more than $1 per gallon for much of May and June, helping to hold down gasoline prices at the time when upward pressure was at its most intense.
SOURCES OF U.S. CRUDE OIL SUPPLY

- Imports
- Domestic Production

65% Domestic Production
35% Imports

Source: RFA based on U.S. Dept. of Energy data and forecasts

HISTORICAL OIL IMPORT DISPLACEMENT BY ETHANOL

Source: RFA based on U.S. Dept. of Energy data

E15 Waivers Save Money

An RFA analysis showed that a series of emergency waivers by the Biden administration allowing E15 to be sold during the summer driving season saved drivers that chose E15 an average of $0.30 per gallon, which in aggregate totaled $57 million for American consumers.