



Primer on Gasoline Sources and Markets

Where does gasoline come from?

Gasoline is made from crude oil. Refineries take crude oil and break down its hydrocarbons into different products, called “refined products,” including gasoline, diesel fuel, heating oil, jet fuel, liquefied petroleum gases, and residual fuel oil. The characteristics of the gasoline depend on the type of crude oil that is used and the setup of the refinery at which it is produced. Gasoline characteristics are also impacted by other ingredients that may be blended into it, such as ethanol. The performance of the gasoline must meet industry standards and environmental regulations that may depend on location.

In 2005, United States refineries produced over 90 percent of the gasoline used in the United States. Less than 40 percent of the crude oil used by U.S. refineries was produced in the United States. About 45 percent of gasoline produced in the United States comes from refineries in the U.S. Gulf Coast (including Texas and Louisiana).

Can I tell which country or State the gasoline at my local station comes from?

For several reasons, the Energy Information Administration (EIA) cannot definitively say where gasoline at a given station originated:

1. EIA does not collect data on the source of the gasoline sold at retail outlets.
2. The name on the service station sign does not tell the whole story. The fact that you purchase gasoline from a given company does not necessarily mean that the gasoline was actually produced by that particular company's refineries. While gasoline is sold at about 169,000 retail outlets across the nation¹, about one-third of these stations are “unbranded” dealers that may sell gasoline of any brand². The remainder of the outlets are “branded” stations, but may not necessarily be selling gasoline produced at that company's refineries. This is because gasoline from different refineries is often combined for shipment by pipeline, and companies owning service stations in the same area may be purchasing gasoline at the same bulk terminal. In that case, the only difference between the gasoline at station X versus the gasoline at station Y may be the small amount of additives that those companies add to the gasoline before it gets to the pump.
3. Even if we knew at which company's refinery the gasoline was produced, the source of the crude oil used at that refinery may vary on a day-to-day basis. Most refiners use a mix of crude oils from various domestic and foreign sources. The mix of crude oils can change based on the relative cost and availability of crude oil from different sources.

Can I tell which companies purchase imported crude oil or gasoline?

While EIA cannot identify which companies are selling imported gasoline, EIA does collect data on which companies import crude oil and refined products. However, the fact that a given company imported crude oil or gasoline does not mean that those particular imports will end-up being sold to motorists as that company's brand of gasoline. The origin of the crude oil that a refinery processes is determined by market economics at a given time and may change from month-to-month or even day-to-day. Company-level import data can be found at:

http://www.eia.doe.gov/oil_gas/petroleum/data_publications/company_level_imports/cli.html

What does it mean that oil is part of a “global” market?

The United States and many other countries in the world consume more refined products (i.e., gasoline, diesel, heating oil, and jet fuel) than can be produced without using crude oil that is imported from other countries. At the same time, certain countries export more crude oil than they consume. When crude oil supplies from one country/source drop off, world oil demand is still met but with a different mix of crude oil supplies. When the overall supply of crude oil decreases, the world market “tightens” and prices usually rise.

Can consumers reduce the revenues flowing to a certain country or countries by boycotting companies that have a history of importing from those countries?

Due to the global nature of the oil market, boycotts by individual consumers or even individual countries cannot reduce the oil revenues of a given oil producing country/countries. At best, consumer boycotts of a company known to import crude oil would result in a temporary reduction in the market share of that particular company. Because the overall consumer demand for products made from oil (like gasoline and diesel fuel) would be unchanged, the oil would simply be purchased by some other company.

Similar market shifts would occur if an entire country or countries refused to buy oil from a certain country/region, or were legally prevented from doing so. The boycotting countries would take additional imports from different countries, and those countries would purchase additional supplies from the boycotted country/region. Due to the nature of the world oil market, it is impossible to impact the oil revenues flowing to a given country or region with anything short of a sanctions regime, wherein all countries pledge to avoid buying from a particular country.

Do consumers impact gasoline prices?

Consumers have very little power as individuals but, if enough consumers give the same “market signal,” they can impact prices. First, when consumers buy gasoline at service stations in their areas with the lowest price, they take market share away from higher-priced stations; these stations may then eventually reduce their prices to be more competitive. The second way consumers impact the market is by reducing gasoline consumption. If enough people reduce driving or switch to more energy-efficient vehicles, gasoline demand would decline and prices would be dampened.

¹ Energy Information Administration, A Primer on Gasoline Prices, DOE/EIA-X040, September 2005.

http://www.eia.doe.gov/bookshelf/brochures/gasolinepricesprimer/eia1_2005primerM.html

² Permanent Subcommittee on Investigations, Gas Prices: How Are They Really Set, Section III, page 45, May 2002.

http://www.senate.gov/~gov_affairs/042902gasreport.htm

Where do we import Crude Oil From?

Top 15 Countries by Volume:

CANADA, SAUDI ARABIA, MEXICO, NIGERIA, VENEZUELA, IRAQ, ANGOLA, ALGERIA, BRAZIL, KUWAIT, ECUADOR, COLOMBIA, CHAD, RUSSIA, LIBYA

Others:

Argentina, Australia, Tunisia, Trinidad & Tobago, Vietnam, UK, Azerbaijan, Bolivia, Cameroon, China (PR), Guinea, Gabon, Guatemala, Kazakhstan, Norway, Oman, Peru, Thailand,

Companies that import Crude Oil in 2008

ARON J & CO
BP PRODUCTS NORTH AMERICA INC

BP WEST COAST PRODUCTS LLC
CANNAT ENERGY INC
CHALMETTE REFINING LLC
CHEVRON USA INC
CHS INC
CITGO PETROLEUM CORP --Hugo Chavez
CONOCOPHILLIPS CO
EQUISTAR CHEMICALS LP
ERGON OIL PURCHASING INC
EXXONMOBIL OIL CORP
FLINT HILLS RESOURCES LP
FLYING J PETROLEUM INC
FRONTIER OIL & REFINING CO
HOUSTON REFINING LP
HOVENSA LLC
HUNT CRUDE OIL SUPPLY CO
HUSKY MARKETING & SUPPLY CO
KOCH SUPPLY & TRADING CO
LION OIL CO
MARATHON PETROLEUM CO LLC
MONTANA REFINING CO
MOTIVA ENTERPRISES LLC
MURPHY OIL USA INC
NCRA
NEXEN MARKETING USA INC
NUSTAR ASPHALT LLC
PARAMOUNT PETROLEUM CORP
PDV MIDWEST REFINING LLC
PLAINS MARKETING LP
PRSI TRADING LP
SHELL CHEMICAL LP
SHELL CHEMICAL YABUCOA INC
SHELL OIL CO
SHELL OIL CO DEER PARK
SHELL OIL PRODUCTS US
SHELL US TRADING CO
SINCLAIR OIL CORP
STATOIL MKTG & TRDG US INC
SUNCOR ENERGY USA INC
SUNOCO INC
TESORO HAWAII CORP
TESORO PETROLEUM CORP
TIDAL ENERGY MARKETING INC
TOTAL PETROCHEMICALS USA INC
UNITED REFINING CO
US OIL & REFINING
VALERO MARKETING & SUPPLY CO
VITOL SA INC
WESTERN REFINING YORKTOWN INC
WRB REFINING LLC

Companies that did not Import from OPEC last year:

SUNOCO INC,

SHELL OIL CO DEER PARK
HOUSTON REFINING LP
PDV MIDWEST REFINING LLC
CITGO ASPHALT REFINING CO
PRSI TRADING LP
GIANT YORKTOWN INC
UNITED REFINING CO
SHELL CHEMICAL LP
VITOL SA INC
CHS INC
SINCLAIR OIL CORP
FRONTIER OIL & REFINING CO
SHELL OIL CO
SHELL OIL PRODUCTS US PUGET SOUND
SUNCOR ENERGY USA INC
ERGON OIL PURCHASING INC
PARAMOUNT PETROLEUM CORP
TRIGEANT LTD
MONTANA REFINING CO
NCRA
ARON J & CO
CANNAT ENERGY INC
TIDAL ENERGY MARKETING INC
STATOIL MKTG & TRDG US INC
EQUISTAR CHEMICALS LP
FLYING J PETROLEUM INC
PACIFIC MARKETING & TRANSP
GARY-WILLIAMS ENERGY CORP
MERCURIA ENERGY CANADA INC
UBS AG LONDON BRANCH

The US is the largest Oil user in the world, appx 25% of world production.

This year we are averaging importing appx 47% of our total Oil from OPEC.

Our Refineries are operating at 85%+ capacity