OIL SHOCK

In the time it takes most people to read this sentence, the world will have used up (forever) about 9,520 barrels of oil. At 40,000 gallons per second, it's going fast.

The United States plays a central role in the global energy system as the largest consumer, the largest importer and the third-largest producer of oil in the world. With use of this finite resource rising at breakneck speed, will the world have enough to meet its needs, and will it be able to afford it?

The world's total oil production is about 86 million barrels per day.

The world consumes about 85.5 million barrels per day.

Global Forces Converge To Drive Up Oil Prices

TOP OIL PRODUCERS

Where does the oil come from? Just three countries — Saudi Arabia, Russia and the United States — pump about 31 percent of the world's oil. More than 9 million barrels per day of crude oil (plus another 1 million barrels per day of liquids derived from natural gas) are being extracted from the reserves underneath Saudi Arabia, the world's single largest oil producer.

Percentage of the world's oil produced by the top 10 producing countries:

41.5%

Barrels of oil produced daily
(Includes oil from tar sands and natural gas liquids)

1. SAUDI ARABIA — 10.4 MILLION BARRELS
2. RUSSIA — 10.0 MILLION
3. UNITED STATES — 6.9 MILLION (5.1 million crude oil, 1.8 million natural gas liquids)
4. IRAN — 4.4 MILLION
5. CHINA — 3.7 MILLION
6. MEXICO — 3.5 MILLION
7. CANADA — 3.3 MILLION
8. UNITED ARAB EMIRATES — 2.9 MILLION
9. KUWAIT — 2.6 MILLION
10. VENEZUELA — 2.6 MILLION

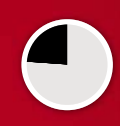
Graphics reported by Brenna Maloney, graphics by Todd Lindeman — The Washington Post

TOP OIL CONSUMERS

Every day, the U.S. consumes more than 20 million barrels — almost one-fourth of all the oil used in the world and more than two times as much as the second-biggest consumer, China. Consumption in most developed countries, including Britain, France, Germany and Italy, hovers around 2 million barrels a day — barely a tenth of that used by the U.S.

Percentage of the world's oil consumed by the United States in 2007:

24.4%

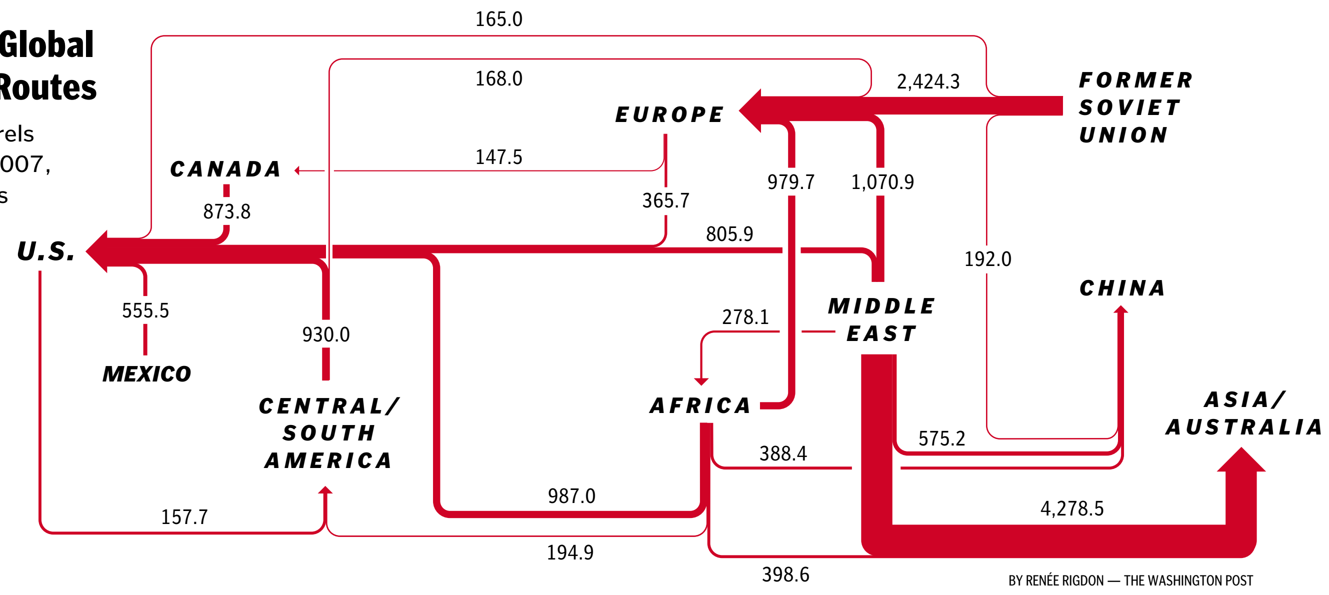


Barrels of oil consumed each day
(Includes consumption of ethanol and other biofuels)

1. UNITED STATES — 20.7 MILLION BARRELS
2. CHINA — 7.9 MILLION
3. JAPAN — 5.1 MILLION
4. INDIA — 2.7 MILLION
5. RUSSIA — 2.7 MILLION
6. GERMANY — 2.4 MILLION
7. SOUTH KOREA — 2.4 MILLION
8. CANADA — 2.3 MILLION
9. BRAZIL — 2.2 MILLION
10. SAUDI ARABIA — 2.2 MILLION

Major Global Trade Routes

Total barrels of oil in 2007, in millions



BY RENÉE RIGDON — THE WASHINGTON POST

OIL, *From A1*

start of last year, racing past the $4-a-gallon mark, and has begun cutting into other household spending.

"What can you do? You need gas," said Barry Modeste, a construction worker who stopped his van at a Shell station in Takoma Park one recent morning to add $15 worth. It was enough, he said, to get him to a cheaper station in Rockville. "If you don't have gas, you can't get to work. And if you can't get to work, you don't get paid. And if you don't get paid, you can't buy food. We're at their mercy."

Last month, 51 percent of the respondents in a Washington Post poll said rising gas prices were causing a serious financial hardship for them or others in their household. It was the first time a majority had said that since the poll began posing that question eight years ago.

The rising prices are also adding to inflation, aggravating the U.S. trade deficit — oil now accounts for about half of it — and taking a toll on businesses already struggling with the economic slowdown caused by the housing and financial crises.

"I'm a very small businessman. If I get any smaller, I'll be out of business," said independent trucker Lee Klass, who was driving through the Texas Panhandle this month with a 33,000-pound load of plastic containers bound for Colorado. Klass had just paid $636 for fuel, enough for the trip but no more. Filling the tank would cost nearly twice that much.

Abroad, riots shook India after the government trimmed fuel subsidies. Truckers in Britain, France, Spain and South Korea have clogged the roads to protest rising fuel prices. In the Philippines, soaring prices for oil and petroleum-based fertilizer have derailed the economy and ignited calls for a cut in the tax on oil imports. With her popularity at a record low, President Gloria Macapagal Arroyo is expected to confront the issue in a nationally televised speech scheduled for tomorrow.

Even after oil prices have tumbled more than $24 in the past two weeks, largely as the result of easing tensions in the Middle East and slowing U.S. economic activity, crude is still trading near historic highs.

In a series of articles starting today, The Washington Post examines the economic forces that have unhinged oil prices from their longtime cyclical patterns, propelling fuel costs to once unimaginable levels that are now both fraying the lifestyles of our recent past and speeding the search for an energy source of the future.

Earlier oil shocks have had obvious causes. In October 1973, OPEC raised prices and declared an oil embargo against the United States and other countries that had supported Israel in its war earlier that month against its Arab neighbors. The embargo ended in March 1974, but pricing power had shifted from the oil companies to the producing countries. In 1979, prices soared again after the Iranian Revolution curtailed output and consumers and oil companies went on a spree of panic buying.

Now, however, there is no one culprit and no single international crisis to blame. Instead, world demand has been increasing faster than supply, steadily squeezing oil markets.

This in turn has signaled to investors that prices are inevitably heading higher. Financial players, such as Wall Street banks and hedge funds, have bet just that, investing tens of billions of dollars in oil futures. Critics on Capitol Hill and elsewhere say this speculation has turbo-charged the market, helping lift prices even more.

The tightening of the oil market reflects decisions made a decade ago, when conditions looked radically different. Regular unleaded gas was less than a dollar a gallon. Oil was little more than $10 a barrel. And the Economist magazine, predicting prices could soon be half that, ran a cover story with the headline: "Drowning in Oil."

Those low prices sent the wrong signals to consumers and oil companies alike.

Demand for oil jumped as U.S. sales of gas-guzzling cars soared and China's breakneck economic expansion picked up pace.

Daniel Yergin, a historian of the oil business and head of Cambridge Energy Research Associates, said that over the five years from 1998 to 2002, world oil demand grew 1.1 percent annually, raising daily consumption by 4.2 million barrels. But in the following five years from 2003 to 2007, world oil demand grew 2.1 percent annually, boosting consumption by about 8.2 million barrels per day.

The low prices of the late 1990s also dampened the impetus for finding new supplies. Oil companies delayed exploration for new fields. Capital spending dropped 15 percent at the biggest oil companies in late 1998 and plunged as much as 70 percent at the smaller ones. Too few drilling rigs were built. And refineries weren't expanded or upgraded, making it hard for them to use the lower-quality crude oils that have become a larger portion of supplies or to produce the right balance of products as gasoline use is stagnating and diesel fuel use growing.

Investment slackened just as finding new supplies was becoming more difficult and costly. Most of the world's big, easy-to-tap fields have already been discovered and largely drained.

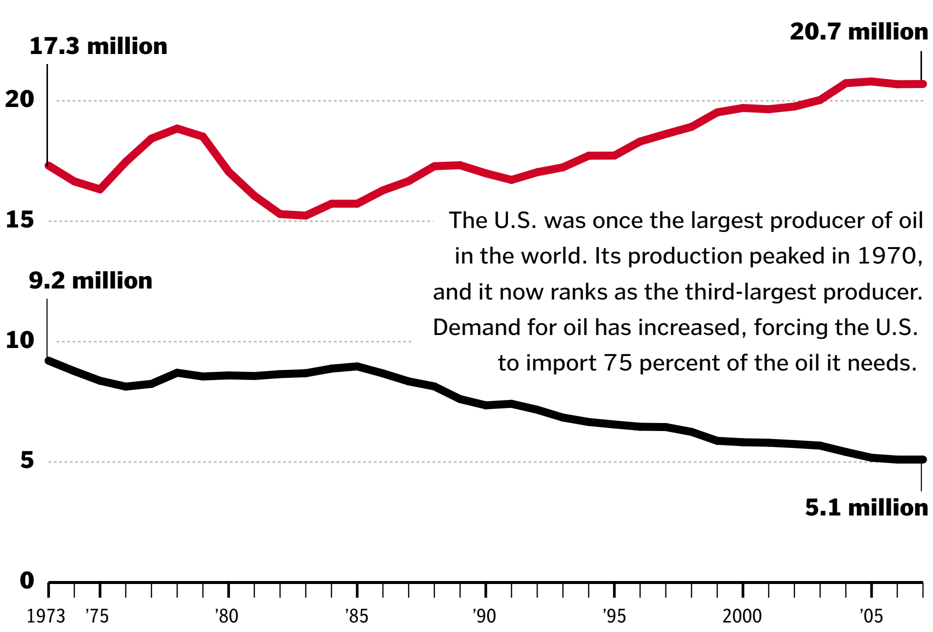
Some analysts argue that peak oil production has already been reached. Others say the peak remains a ways off but perhaps not very far. Though capital spending by big oil companies has again picked up pace in the past couple of years, spurred by higher prices, exploration is still falling short.

"It's not that we're going to run out of oil or hydrocarbons, but it's not going to become available as fast as uninhibited, unrestricted demand," said Sadad Husseini, a

See **OIL**, *A9, Col. 1*

U.S. Oil Production vs. Consumption

In millions of barrels of crude oil per day



The U.S. was once the largest producer of oil in the world. Its production peaked in 1970, and it now ranks as the third-largest producer. Demand for oil has increased, forcing the U.S. to import 75 percent of the oil it needs.

U.S. Oil Imports

The U.S. imported more than 4.91 billion barrels of oil in 2007. Canada is our chief supplier of foreign oil.

Thousand barrels per day (May 2008)

Canada	1,840
Saudi Arabia	1,579
Mexico	1,116
Venezuela	1,030
Nigeria	851
Iraq	583
Angola	464
Algeria	440
Brazil	318
Kuwait	263