

Production, consumption and trade of crude oil.

The United Nations SITC (revision 2) defines crude oil as crude petroleum and oils obtained from bituminous minerals SITC 333. Crude oil supplies about 40% of the primary energy (petroleum, natural gas, coal and electric power – hydro, nuclear, geothermal, solar, wind, and wood) consumed by the world's population. It is formed by organic material deposited millions of years ago that has undergone a chemical transformation of its carbon and hydrogen molecules to form various more complex molecules. Crude oil has been used for centuries but only became the dominant fossil fuel in the 1920s, replacing coal.

Crude oil has many uses. The most common are the refined products used in transportation and heating (such as gasoline, kerosene, jet fuel and diesel fuel). Crude oil is also used to make naphtha (used for paving roads) and to make feedstock chemicals for petrochemical plants – for example, for pro-



duction of paints, plastics, synthetic fibres, fertilizers, drugs and explosives.

In financial terms, crude oil is the single most important good traded worldwide: in 2000–2001, sales totalled almost \$340 billion, or 5.7% of world trade.

Today the outlook for producers in the Organization of the Petroleum Exporting Countries (OPEC) is not rosy. In 1986, their real earnings were \$83 billion for a daily production of 18.5 million barrels. In 1998, earnings were only \$81 billion for a daily output of 28.8 million barrels.

Oil refinery.

Crude oil - a non-renewable fuel

To date, the world has produced some 650 billion barrels of oil, and there are only another trillion barrels of proved reserves. An additional 10 trillion barrels of oil resources can be developed if the price is right, from bitumen, shale oil and (using enhanced recovery methods) oil in existing fields. Since most of the world has already been explored for oil, world production levels are expected to taper off by 2010.

Does anyone fix oil prices?

Until the early 1970s, most crude oil transactions were on the basis of long-term contracts, with prices fixed by the seven largest western oil companies. Then OPEC broke these companies' hold on the market. During most of the decade, OPEC tried to set prices. But after the second oil crisis, in the late 1970s, it became clear that oil prices would henceforward be determined in an open and highly volatile market place. If prices are high, this is because of supply and demand factors, not because of an "oil carte!".

The world's largest oil producers, 2000 (includes share of world crude oil and natural gas liquids production	
Saudi Arabian Oil Co.	10.6%
National Iranian Oil Co.	4.9%
Petróleos Mexicanos	4.6%
Petróleos de Venezuela	4.4%
Iraq National Oil Co.	3.5%
ExxonMobil	3.4%
Royal Dutch/Shell	3.1%
PetroChina	2.8%
Nigerian National Petroleum Corp.	2.7%
ChevronTexaco	2.6%
Abu Dhabi National Oil Co.	2.6%
BP	2.5%

Production conditions vary widely

In the Middle East, oil is produced from vast, easily accessible fields. As a result, extraction costs are as low as \$1.5 per barrel. In North America, these costs are around \$5 per barrel, for the new producers around the Caspian Sea they are \$7 per barrel, and in Russia (which has poorly maintained extraction facilities) they can be as much as \$10 per barrel. The deep offshore, which accounts for much of West Africa's production, has even higher costs.

The development dimension

The importance of the oil sector for economic development is enormous. While the share of oil in world trade has fallen so that high oil prices no longer automatically cause a worldwide depression, the many developing countries that spend a large part of their export earnings on oil imports still suffer disproportionably when prices rise. The poorer population groups in these countries are often among the prime victims: the urban poor spend much of their money on transport services, while, for poor farmers, transport costs have a major impact on the prices they receive for their products and the costs of their purchases.

While being dependent on oil imports is no easy matter, finding oil is not a recipe for success either. Many new oil exporters have actually seen their poverty increase as a result of the "curse of oil". In practice, such newfound wealth is difficult to manage.



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Commodity Atlas

CRUDE OIL

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