

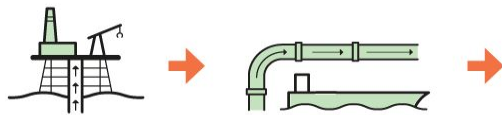


Uses of oil in personal consumption



Ioana Coci
Lidia González Valera
Ana Jiménez Toribio
Noemí Sánchez Grau

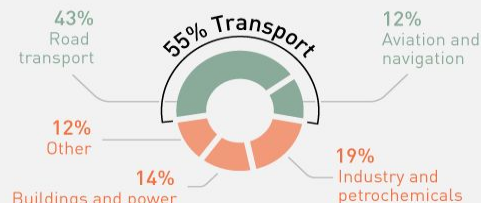
1. Production → 2. Transport →



CRUDE OIL

What is it used for?

After crude oil is produced at a field, it is sent to a refinery where the various hydrocarbons in the crude are separated, converted and treated to make useable petroleum products. Crude oil is heated and put into a distillation tower where different hydrocarbon components are boiled off and recovered as they condense at different temperatures. The molecules can further be converted by the use of catalysts, with application of heat/pressure. Most petroleum products are used as fuels. A growing share is used for non-energy purposes (petrochemical feedstock, lubricants, bitumen).



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3. Refining →

Small Molecules

- Hydrocarbon molecules with few carbon atoms and simple structures
- Low boiling point



Large Molecules

- Hydrocarbon molecules with many carbon atoms and complex structures
- High boiling point

4. Petroleum Product →

Refinery gas consists of different types of natural gas liquids (NGL). Propane and butanes (LPG) are used for cooking, heating and production of plastics.

Gasoline is a fuel used in personal vehicles and other light transport. Gasoline is a blend of various light oil products. Naphtha can be used to make gasoline.

Naphtha can be transformed into gasoline, and is also an important feedstock for the petrochemical industry which makes various plastics, textiles, chemicals, medicines etc.

Kerosene is mainly used as jet fuel. Kerosene is also used for heating.

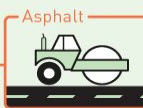
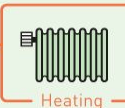
Diesel is used as fuel in diesel motors, mainly in heavy duty vehicles like trucks, buses and tractors, but also as fuel in boats and in heating.

Lubricants are used to reduce friction between bearing surfaces. E.g. motor oil, greases, waxes etc.

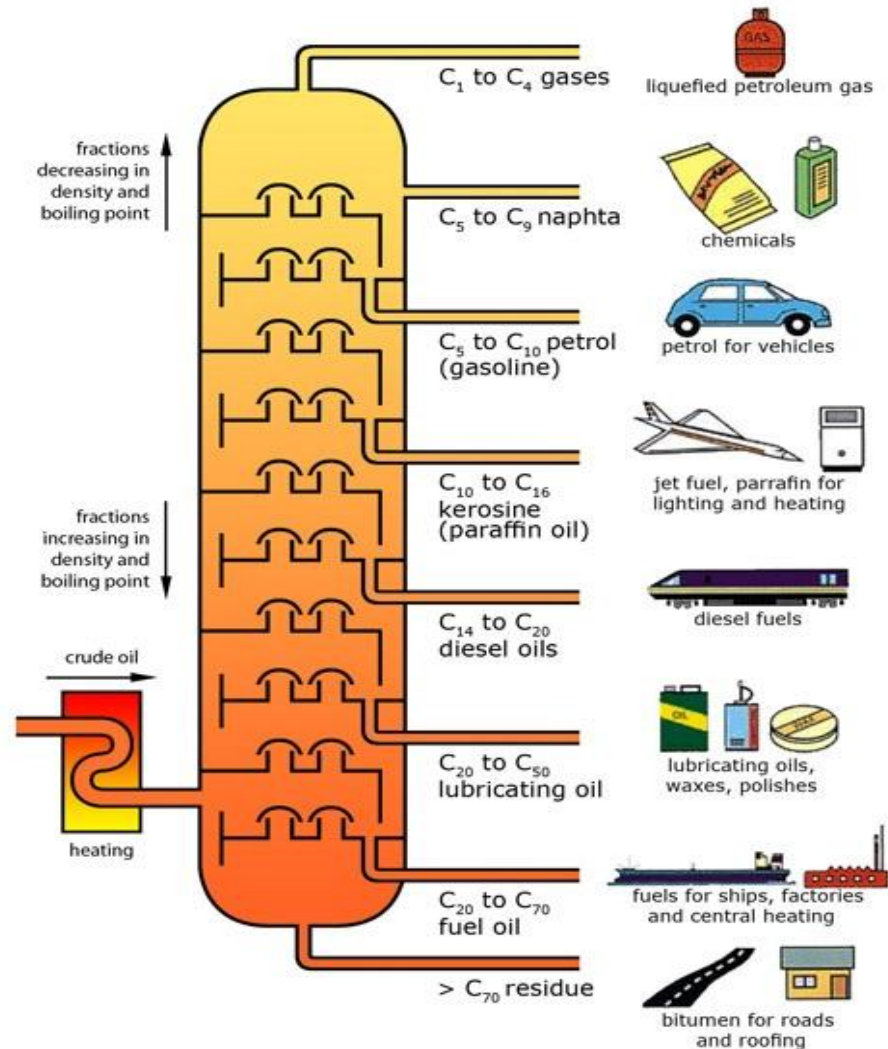
Fuel and bunker oils are primarily used for heating, in industrial plants and as shipping fuel.

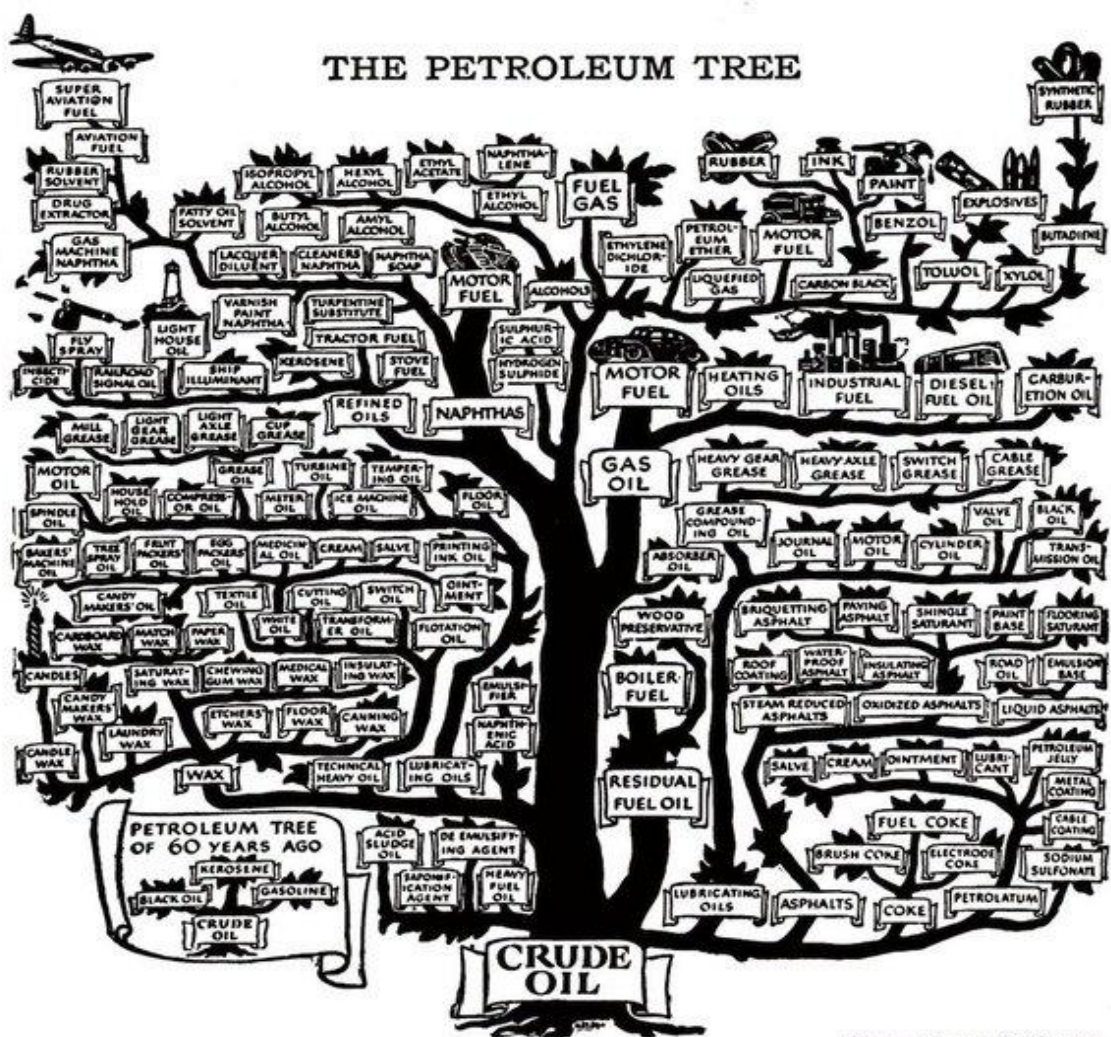
Bitumen is used as asphalt for roads, for roofing and has previously been used for waterproofing boats.
Petroleum Coke is mainly used for industrial purposes.

5. Main uses



What is crude oil used for?





What is crude oil used for?



Important Uses For Crude Oil

- transportation fuels such as **gasoline**, **diesel**, and **jet fuel**.
- Fuel oils used for **heating** and **electricity generation**. In 2017, the United States consumed 7.3 billion barrels of crude oil:
 - 47% went to motor gasoline, 20% heating oil and diesel fuel, and 8% to jet fuel. They also release carbon dioxide.
- Petroleum products. Oil is the base for over **6,000 items**, e.g. **tar**, **asphalt**, **paraffin wax**, and **lubricating oils**, **fertilizer**, **perfume**, **insecticides**, **soap**, and **vitamin capsules**.
- **Oil is the base for plastics used in everything from heart valves to plastic bags**. It's used in carbon fiber in **aircraft**, **PVC pipes**, and **cosmetics**.
- Around 40% of textiles contain some petroleum byproduct



Important Uses For Crude Oil And Why It Matters in U.S

According to the Energy Information Administration, here is the breakdown of U.S. Petroleum Consumption:


- Gasoline (Used to fuel cars) – 44%
- Heating Oil (Used to heat buildings), and Diesel Fuel – 19%
- Other Products – 15%
- Jet Fuel – 8%
- Propane – 6%
- Residual Fuel Oil (powering factories, fueling large ships, and making electricity) – 5%
- Asphalt 3%

What is crude oil used for?





IMPACT OF OIL IN PERSONAL CONSUMPTION

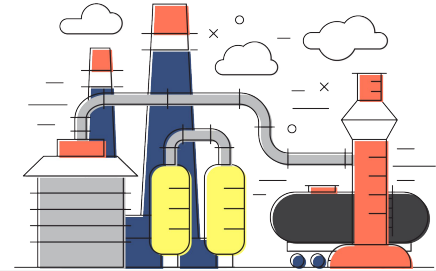
 **Higher oil prices** increase prices of other fuels, such as **gasoline**, **home heating oil**, and **natural gas**.

- **55%** responsible of the **price of gasoline**.
- **45%** distribution and **taxes** influence the remaining - **electric power generation** and **manufacturing**.

Oil prices affect:

- **96%** of **transportation**. That creates **higher food prices**.
- **43%** percent of **industrial products**
- **21%** of **residential** and **commercial use**
- **3%** of **electric power**
- higher oil prices increase the cost of everything you buy, creating **inflation**.

What can we use instead of oil?



Transport	Electric cars
Industries	Wind power, solar energy...
Heating and lighting	Solar panel





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