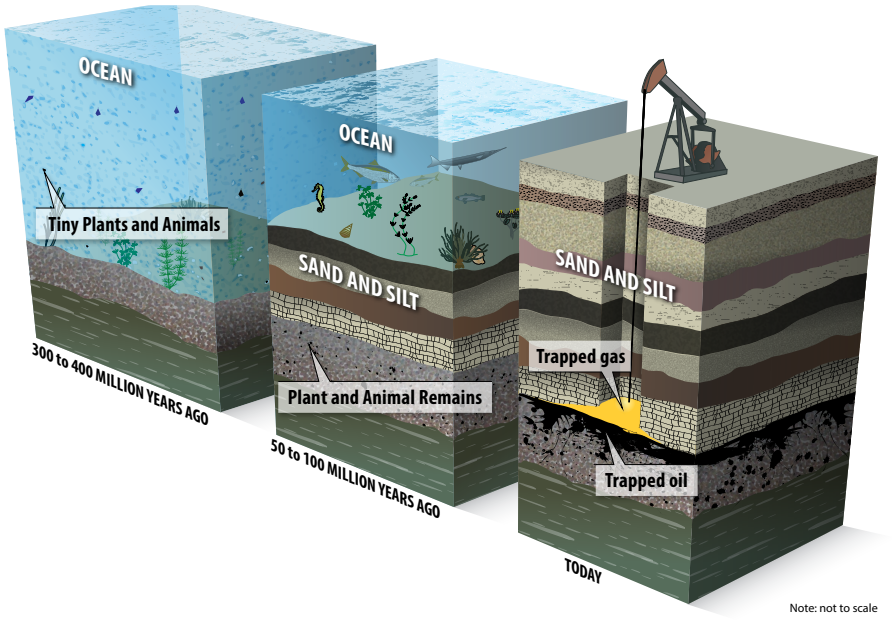
Petroleum

Petroleum is a liquid that is found underground. Sometimes we call it **oil**. Oil can be as thick and black as tar or as thin as water. Petroleum has a lot of energy. We can turn it into different fuels—like **gasoline**, **kerosene**, and heating oil. Petroleum is used to make a lot of products, like plastic, ink, and tar for asphalt.

People have burned oil for a long time. Long ago, they didn't dig for it. They gathered oil that seeped from under the ground into ponds and floated on top of the water.

Petroleum Is a Fossil Fuel

Long before the dinosaurs, oceans covered most of the Earth. They were filled with tiny sea animals and plants. As the plants and animals died, they sank to the ocean floor. Sand and sediment covered them and turned into sedimentary rock. Hundreds of millions of years passed. The pressure of the rocks above and the heat from the Earth turned them into petroleum and natural gas.



Petroleum is called a fossil fuel because it was made from the fossilized remains of tiny sea plants and animals. The energy in petroleum came from the energy in the plants and animals. That energy came from the sun.

Petroleum Is Nonrenewable

The petroleum we use today was made hundreds of millions of years ago. We can't make more in a short time. That's why we call petroleum nonrenewable. The United States doesn't produce enough oil to meet our needs. We import 39 percent of the oil we use from other countries.

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We Drill Oil Wells

Petroleum is buried underground in tiny pockets in rocks. We drill oil **wells** into the rocks to pump out the oil. The typical well is about one mile deep. Texas is the state that produces the most oil.

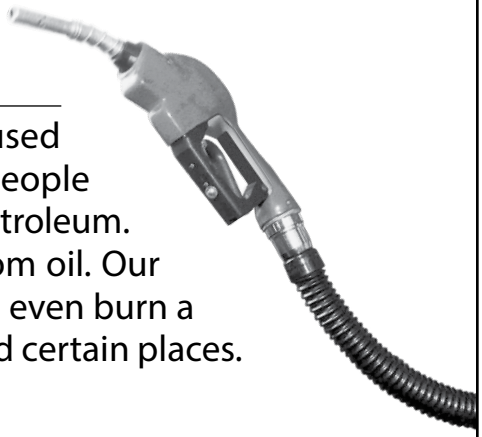
A lot of oil is also under the oceans along our shores. Floating oil rigs are used to reach this oil. Most of these wells are in the Gulf of Mexico.

After the oil is pumped to the surface, it is sent to **refineries**. At the refineries, it is separated into different types of products and made into fuels. Most of the oil is made into gasoline. The oil is moved from one place to another through **pipelines** and by ships and trucks.



Image coutesy of Milan/Adobe Stock
An oil rig pumps oil from a well.

We Use Petroleum Every Day



What would we do without petroleum? Petroleum is our most-used energy source, making up 37 percent of our energy use. Many people would have to make big changes in their lives if they couldn't use petroleum. Most of our cars, trucks, and planes are powered by fuel made from oil. Our factories use oil to make plastics, paints, medicines, and soaps. We even burn a small amount of oil to make electricity in special circumstances and certain places.

Petroleum Can Pollute

Petroleum keeps us going, but it can damage our environment. Burning fuels made from oil can pollute the air. **Pollution** from cars is a big problem in many parts of the country. Oil companies work to make cleaner gasoline and diesel fuel every year.

Oil can pollute soil and water, harming the animals that live in the area. Oil companies work hard to drill and ship oil as safely as possible. They must clean up any oil that spills.

Burning petroleum creates carbon dioxide. Carbon dioxide contributes to changes in the climate.



Image courtesy of Adobe Stock
Petroleum fuels can contribute to air pollution.