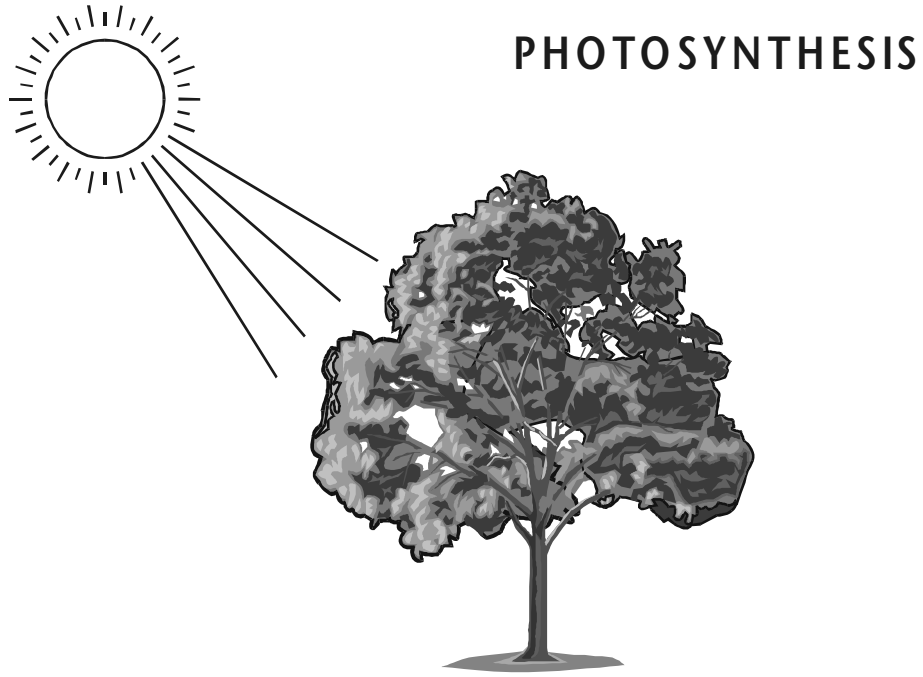
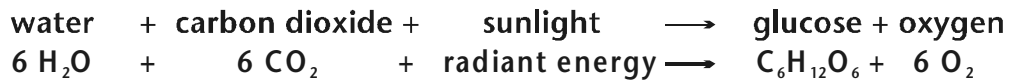


BIOMASS 1

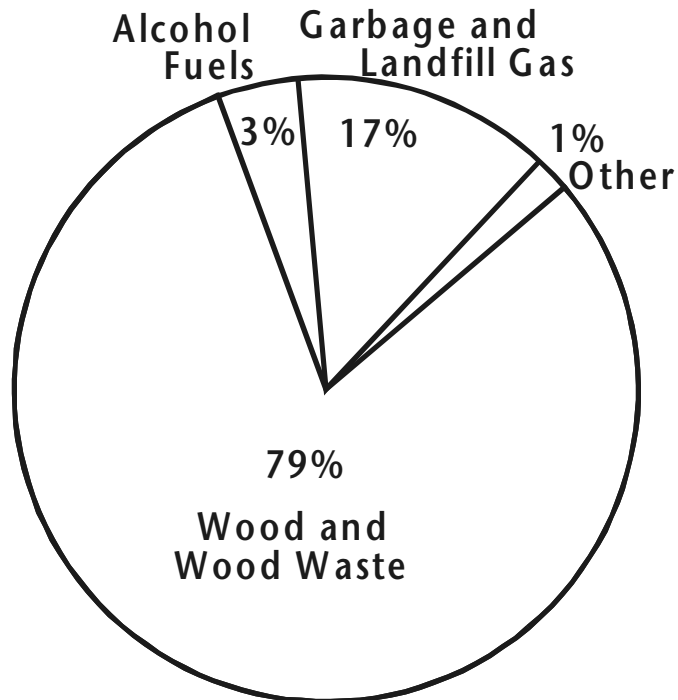


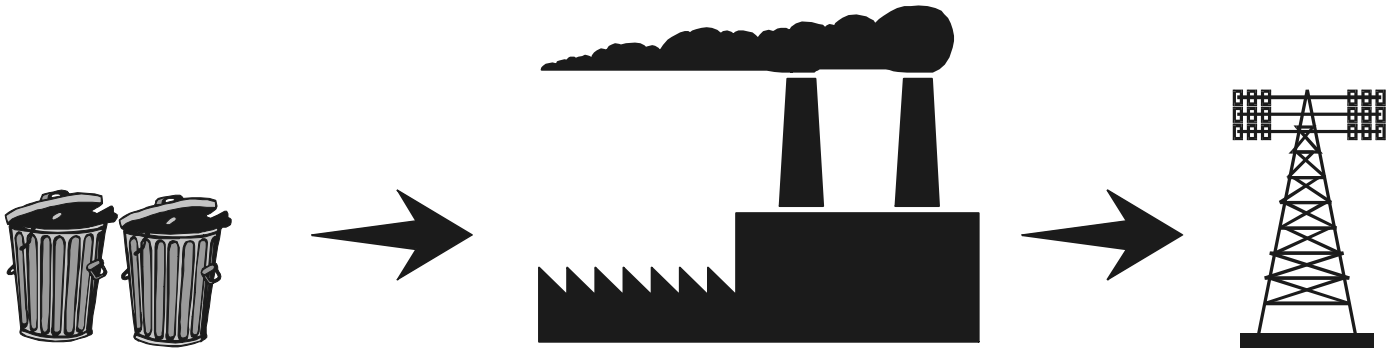
In the process of photosynthesis, plants convert radiant energy from the sun into chemical energy in the form of glucose - or sugar.



BIOMASS 2

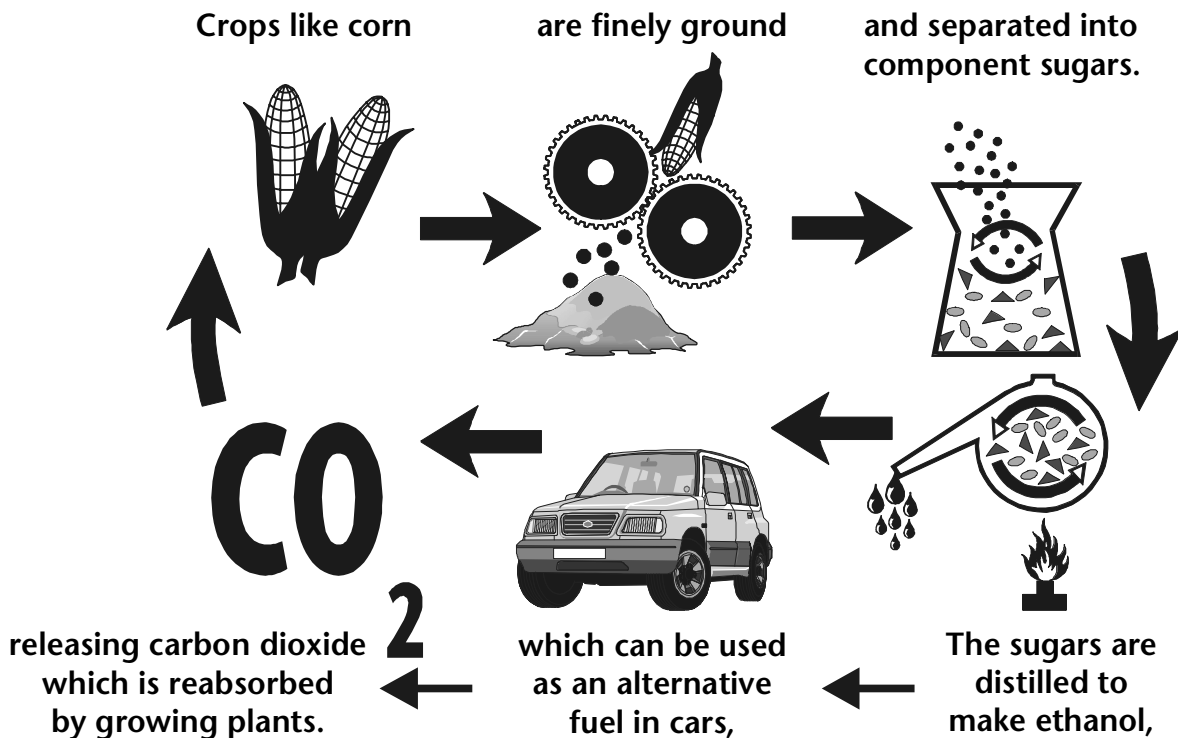
U.S. Consumption of Biomass





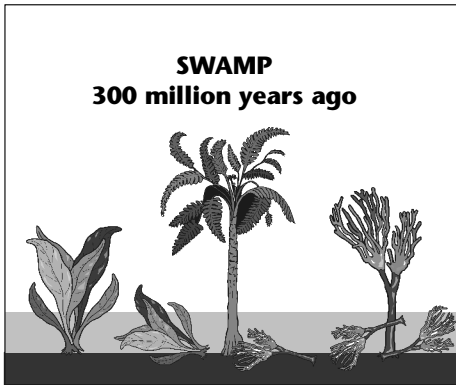
Waste-to-Energy plants convert garbage into steam and electricity.

THE CARBON CYCLE

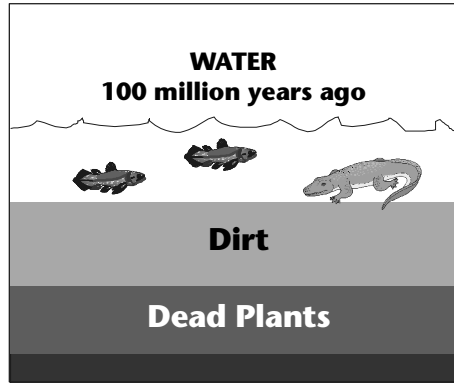


COAL 1

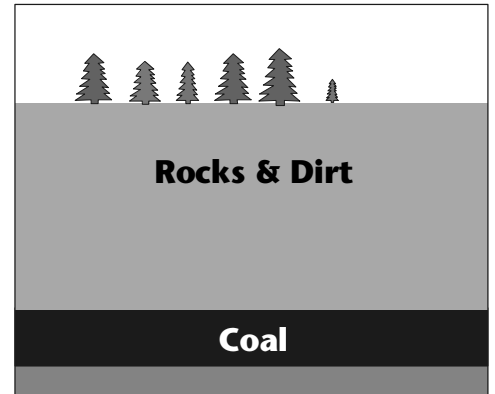
HOW COAL WAS FORMED



Before the dinosaurs, many giant plants died in swamps.



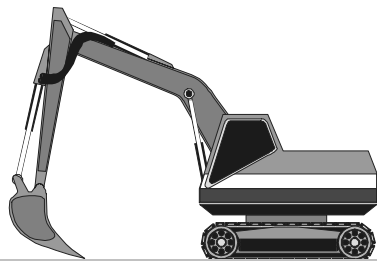
Over millions of years, the plants were buried under water and dirt.



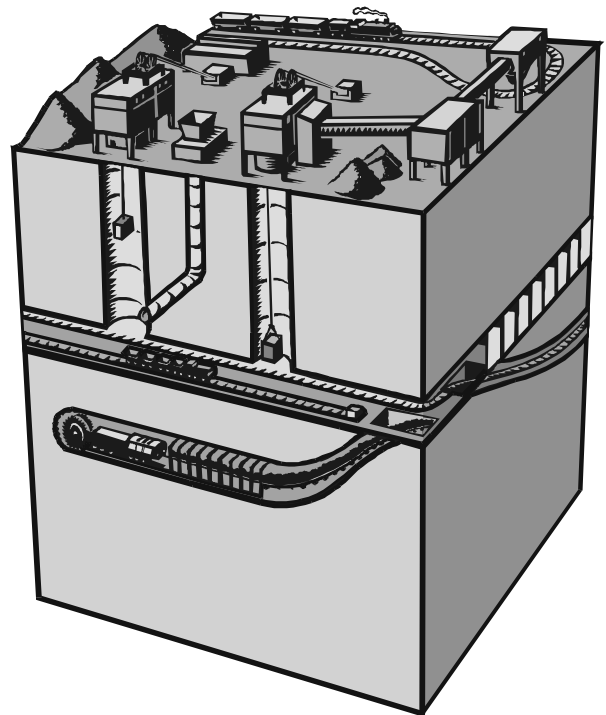
Heat and pressure turned the dead plants into coal.

COAL 2

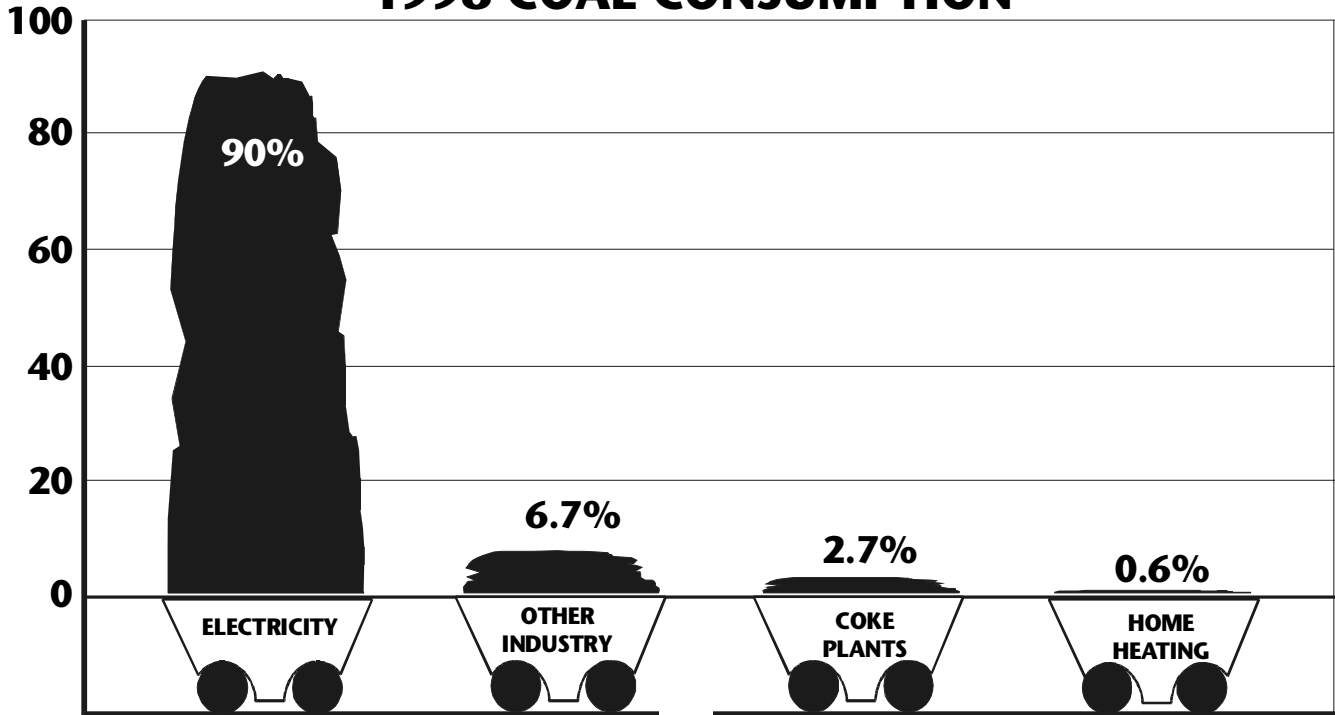
SURFACE MINING



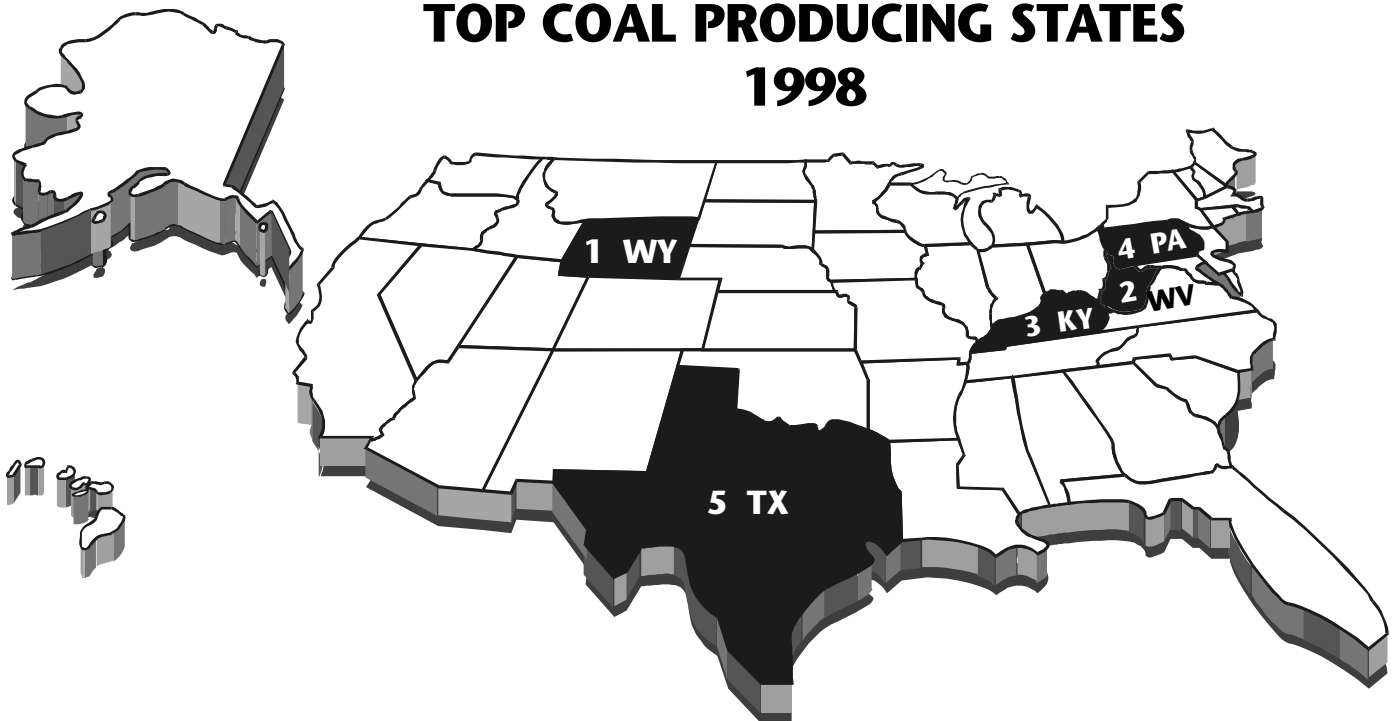
UNDERGROUND MINING



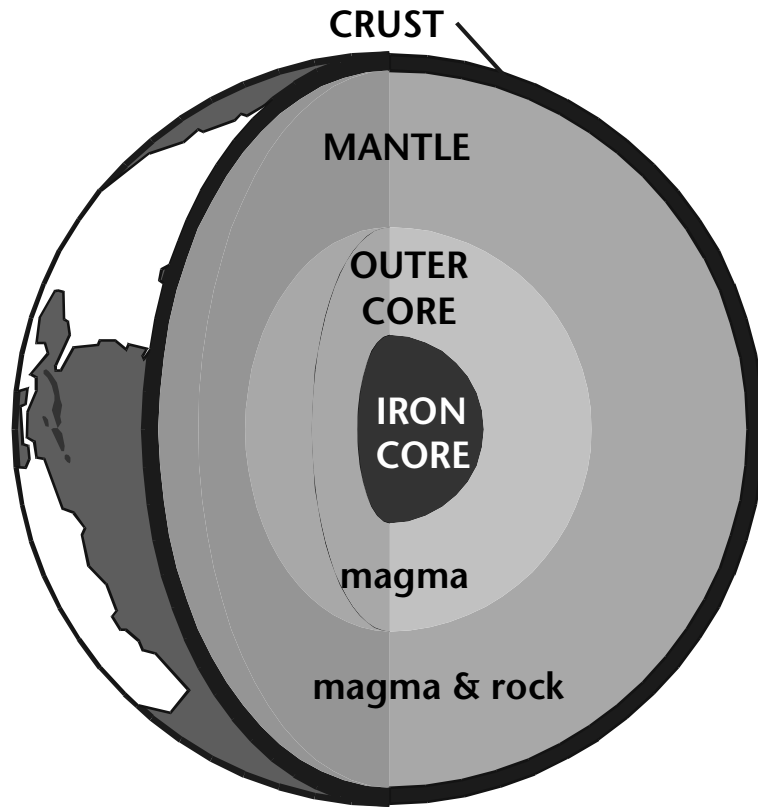
1998 COAL CONSUMPTION



TOP COAL PRODUCING STATES 1998



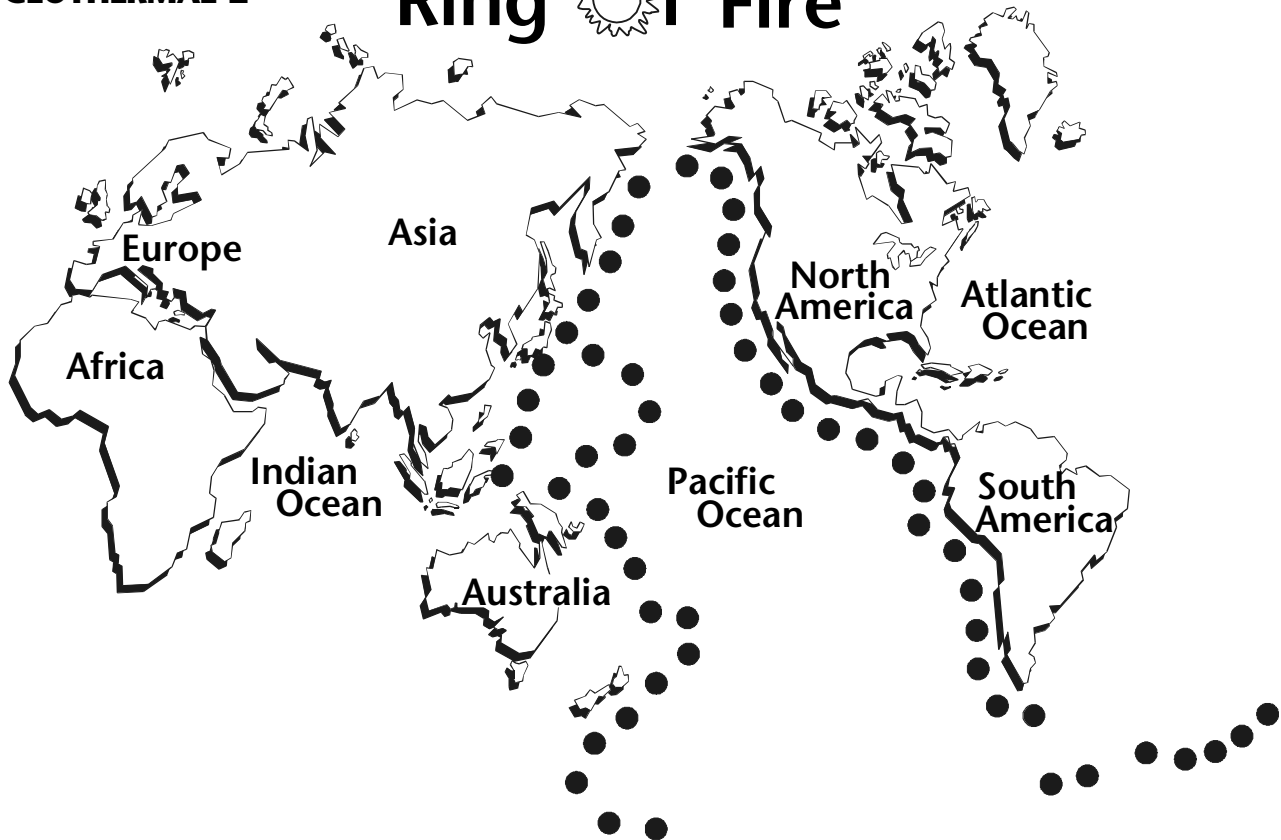
GEOHERMAL 1

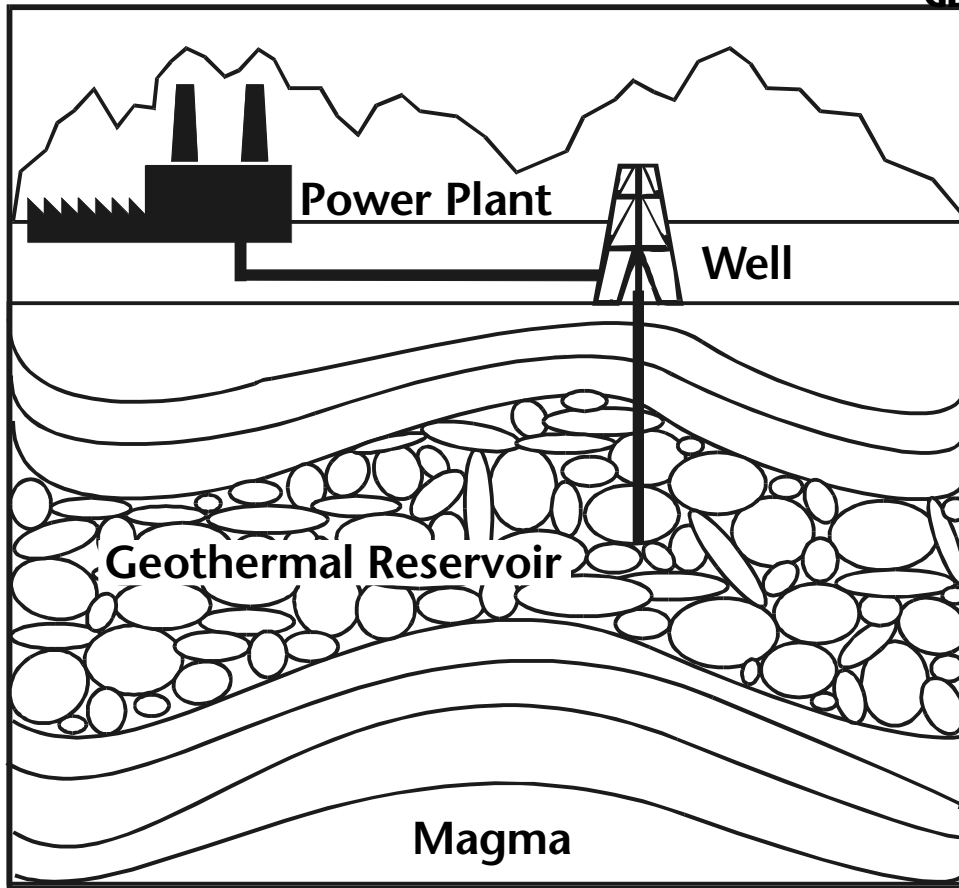


THE EARTH IS MADE OF LAYERS

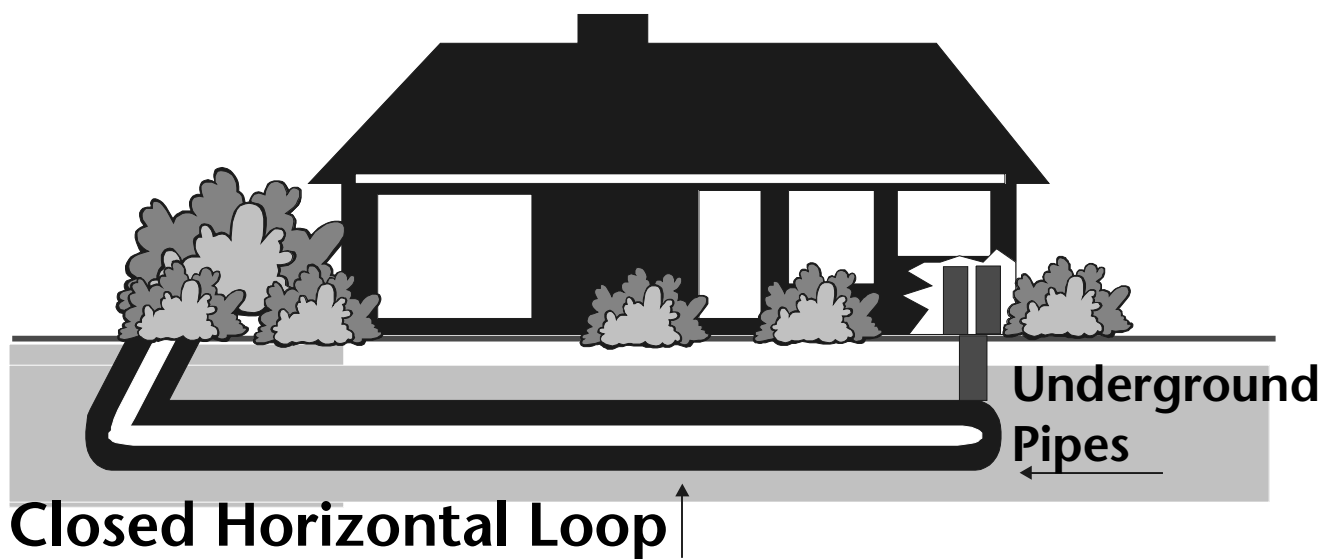
GEOHERMAL 2

Ring of Fire

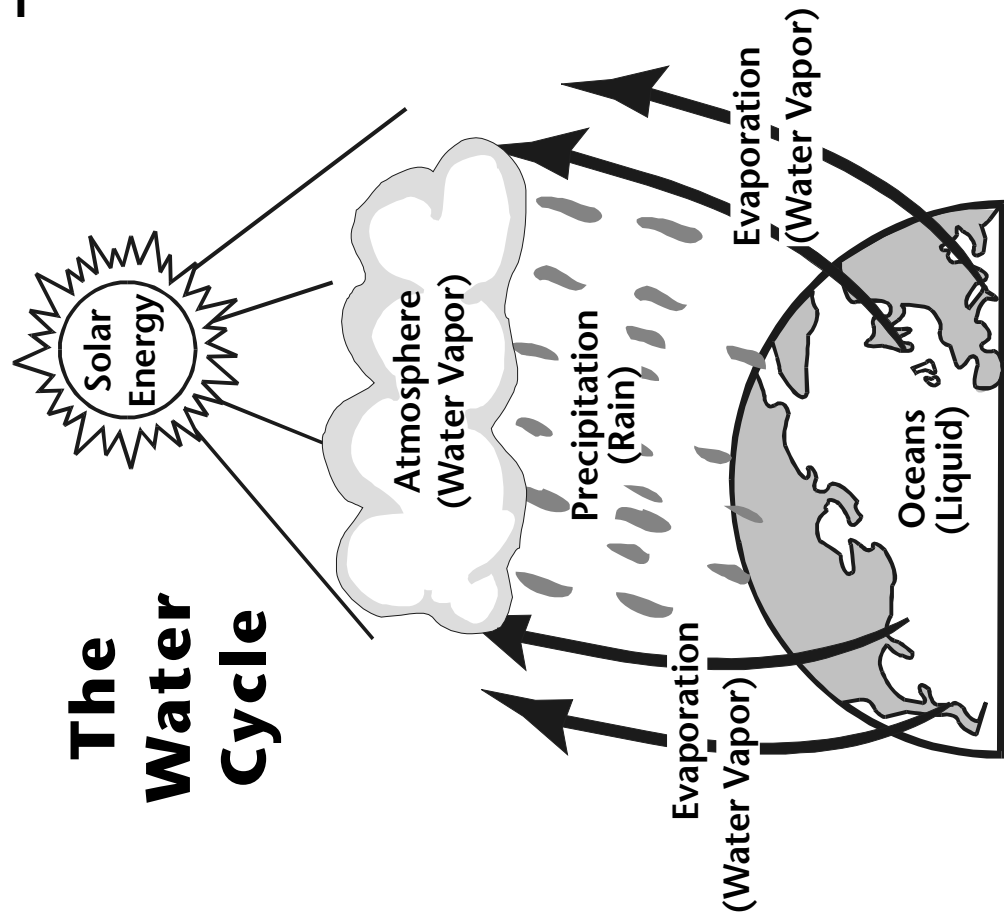




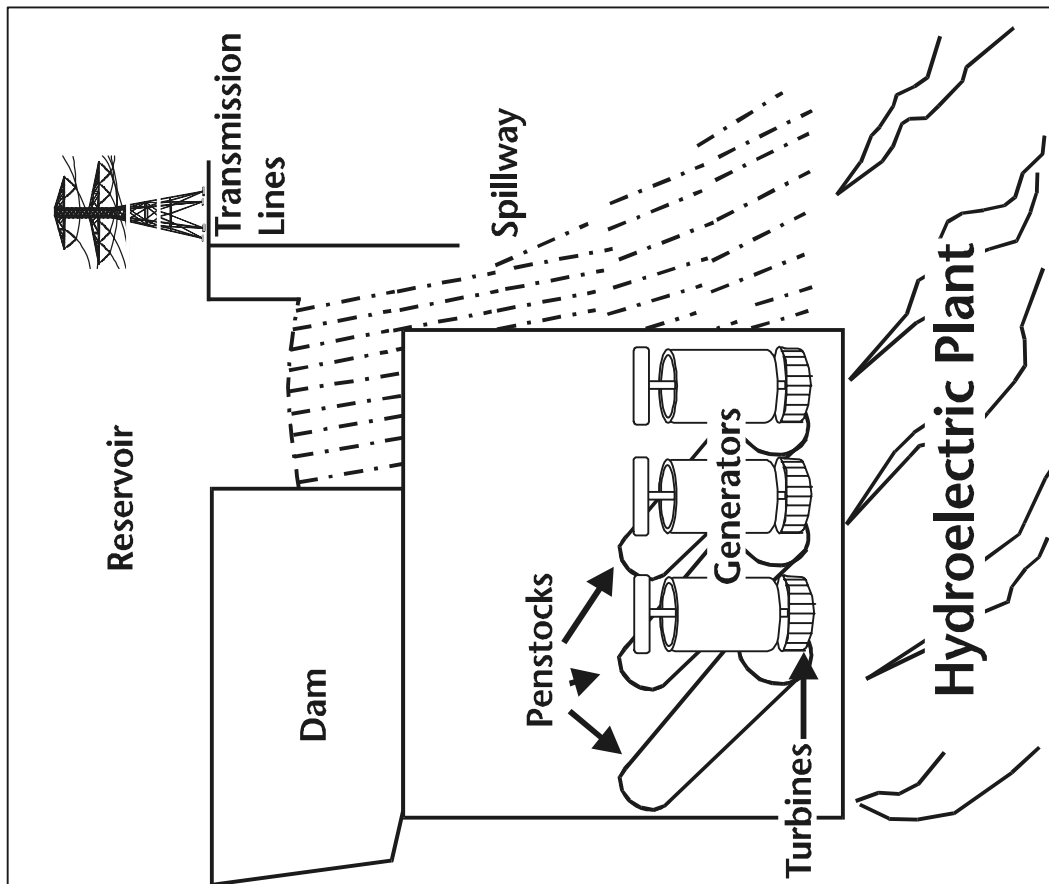
Residential GeoExchange Unit



HYDROPOWER 1

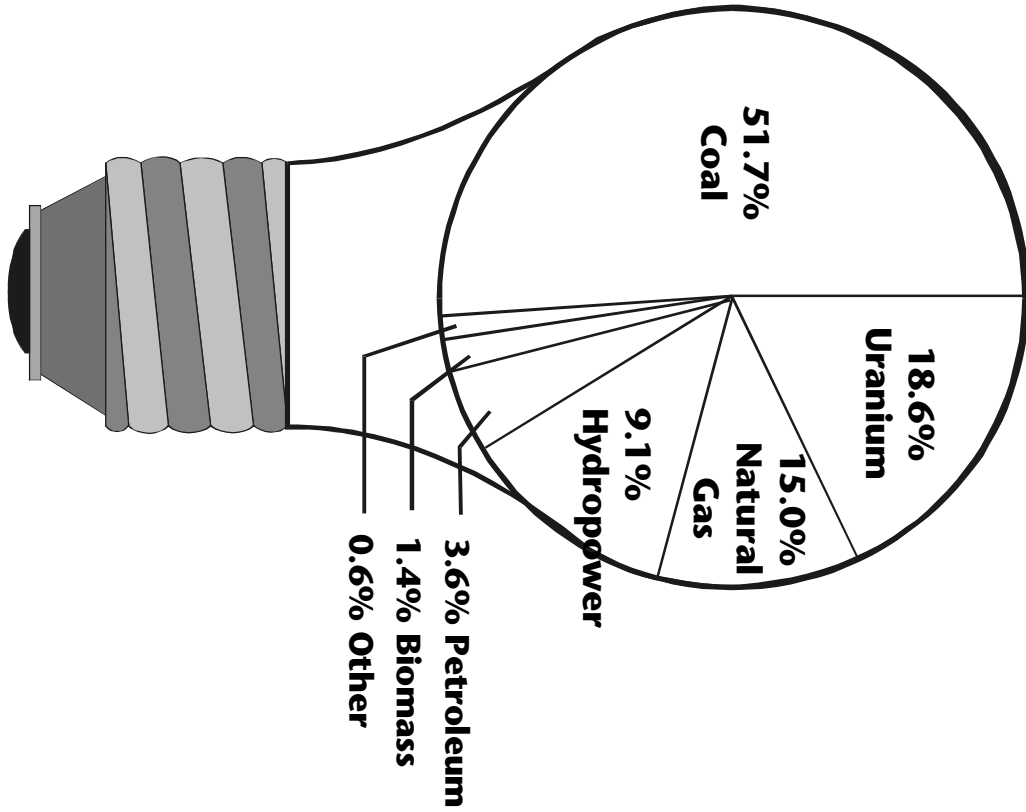


HYDROPOWER 2



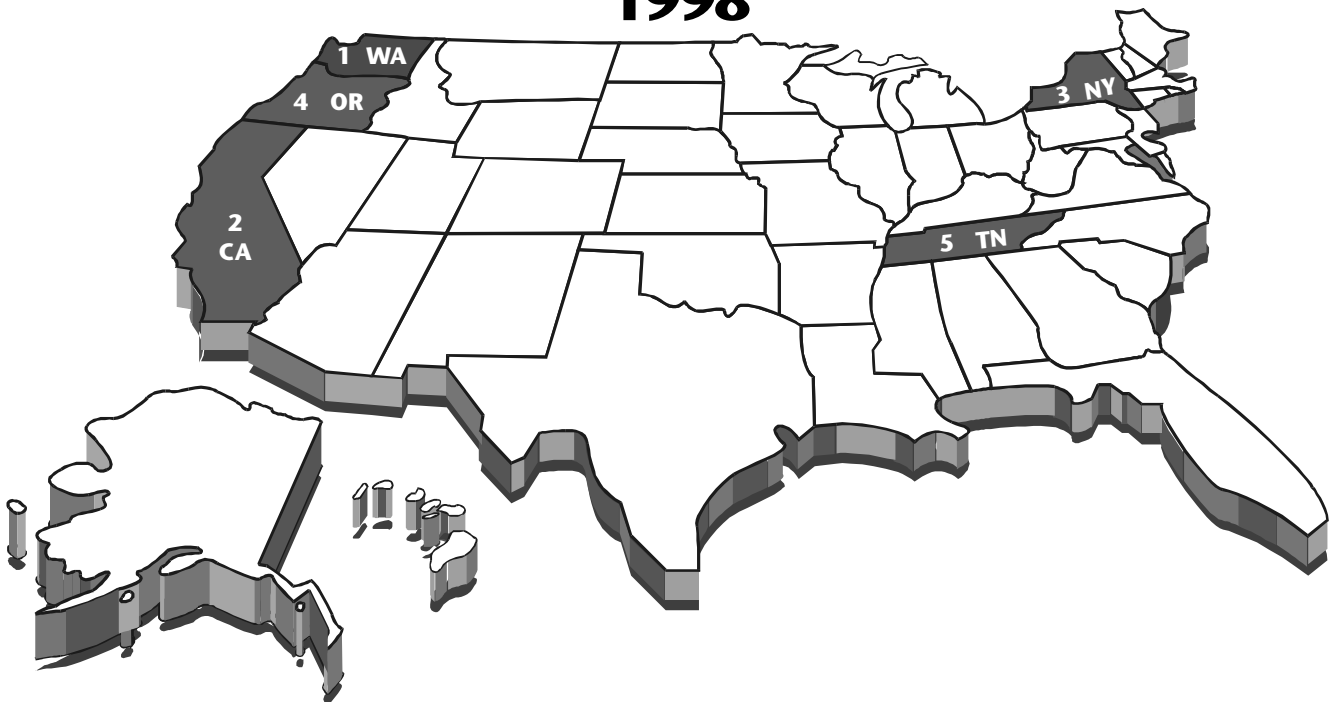
U.S. ELECTRICITY PRODUCTION

1998



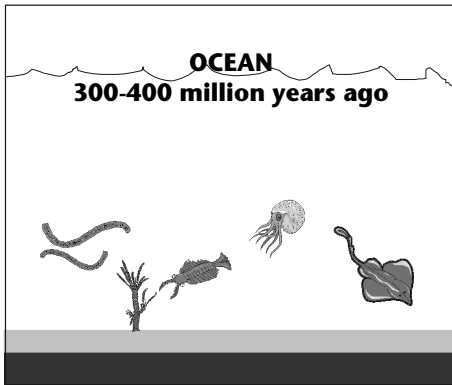
TOP HYDROPOWER PRODUCING STATES

1998

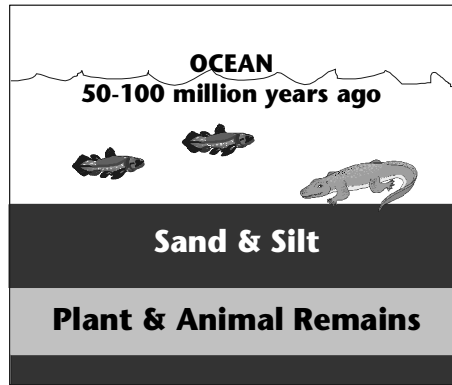


NATURAL GAS 1

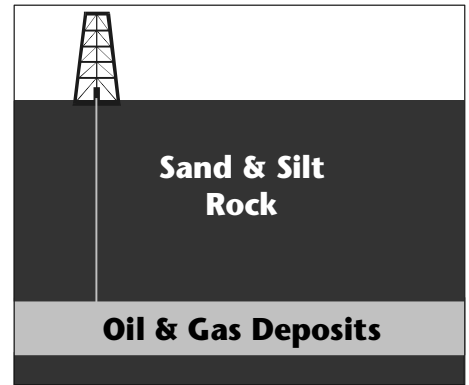
NATURAL GAS FORMATION



Tiny sea plants and animals died and were buried on the ocean floor. Over time, they were covered by layers of silt and sand.



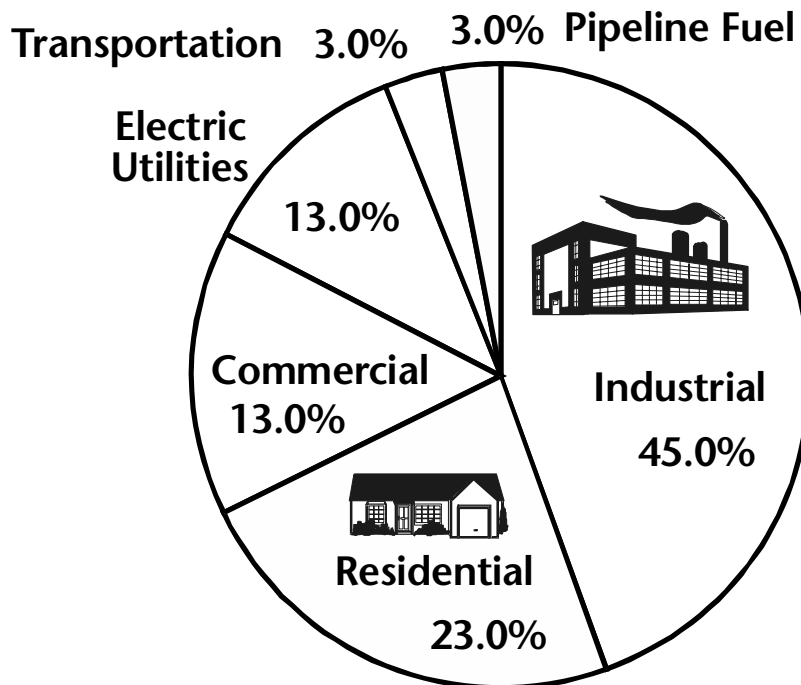
Over millions of years, the remains were buried deeper and deeper. The enormous heat and pressure turned them into oil and gas.



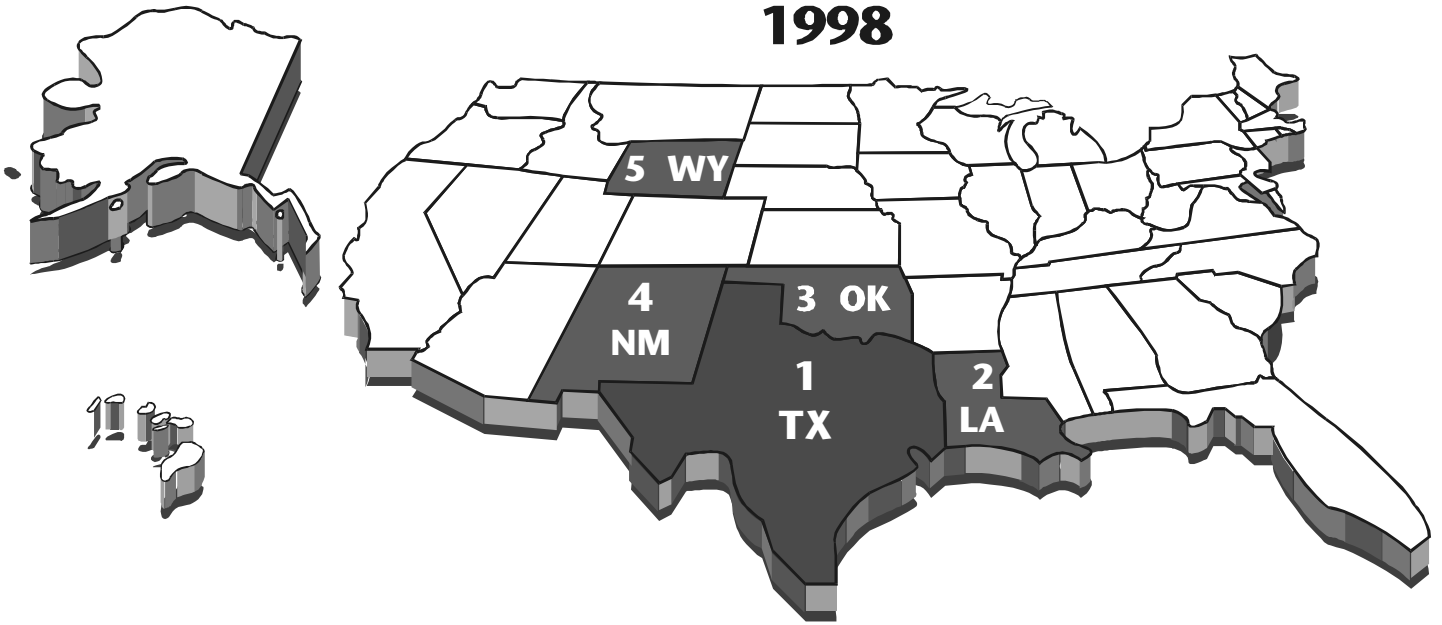
Today, we drill down through layers of sand, silt, and rock to reach the rock formations that contain oil and gas deposits.

NATURAL GAS 2

NATURAL GAS USE 1998

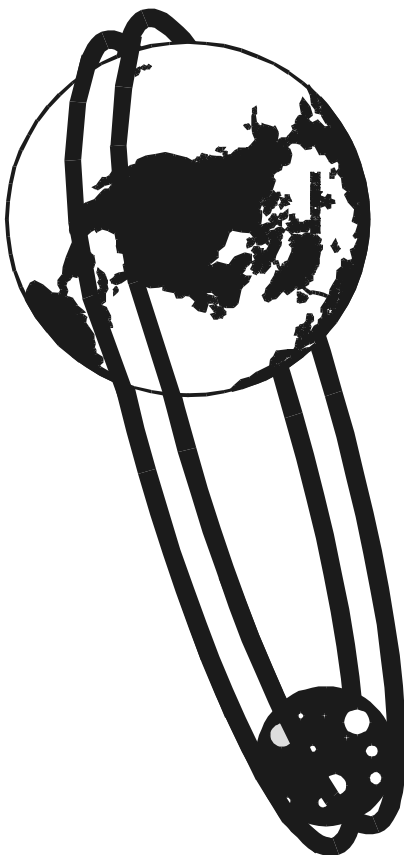
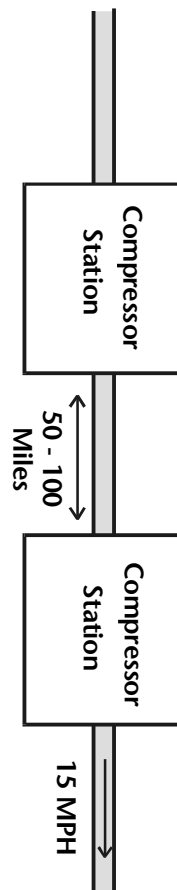


TOP NATURAL GAS PRODUCING STATES 1998



Natural Gas Distribution System

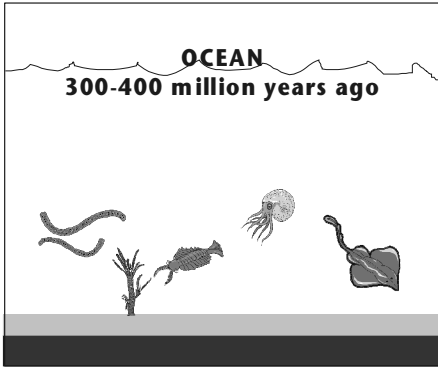
1.2 Million Miles of Pipeline



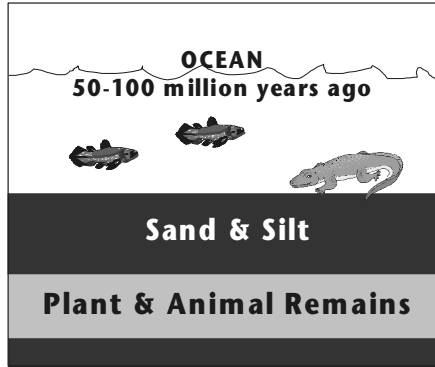
Natural gas pipelines, if connected end-to-end, would reach to the moon and back twice.

PETROLEUM 1

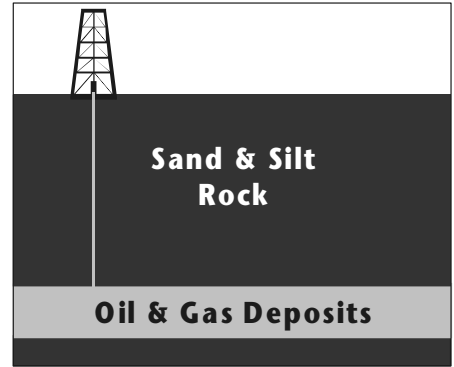
PETROLEUM FORMATION



Tiny sea plants and animals died and were buried on the ocean floor. Over time, they were covered by layers of silt and sand.

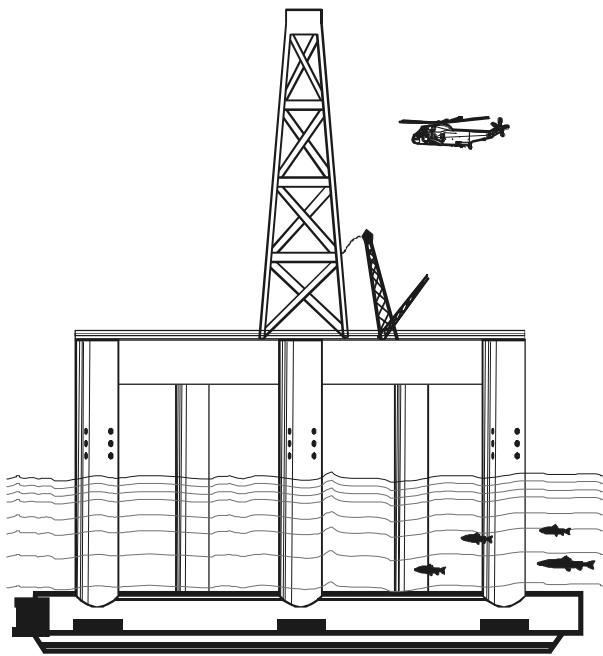


Over millions of years, the remains were buried deeper and deeper. The enormous heat and pressure turned them into oil and gas.

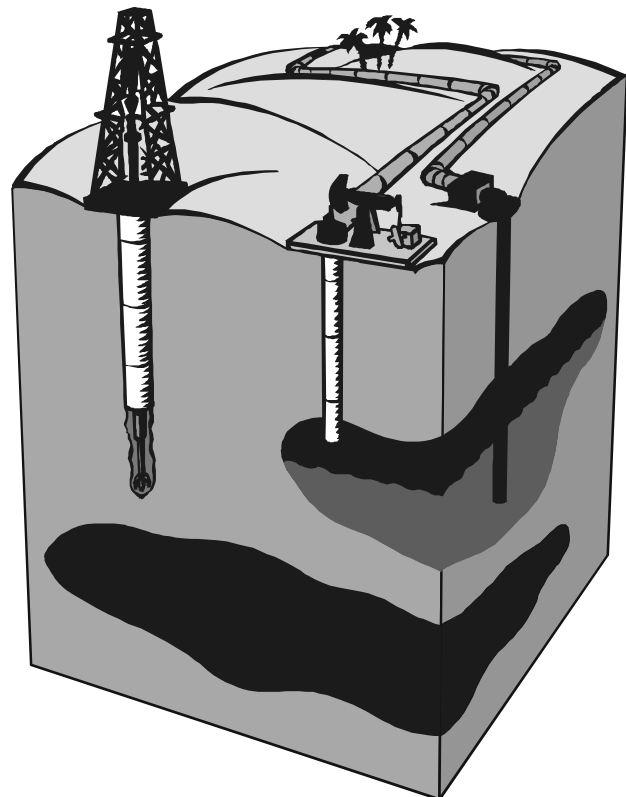


Today, we drill down through layers of sand, silt, and rock to reach the rock formations that contain oil and gas deposits.

PETROLEUM 2



OFFSHORE PLATFORM

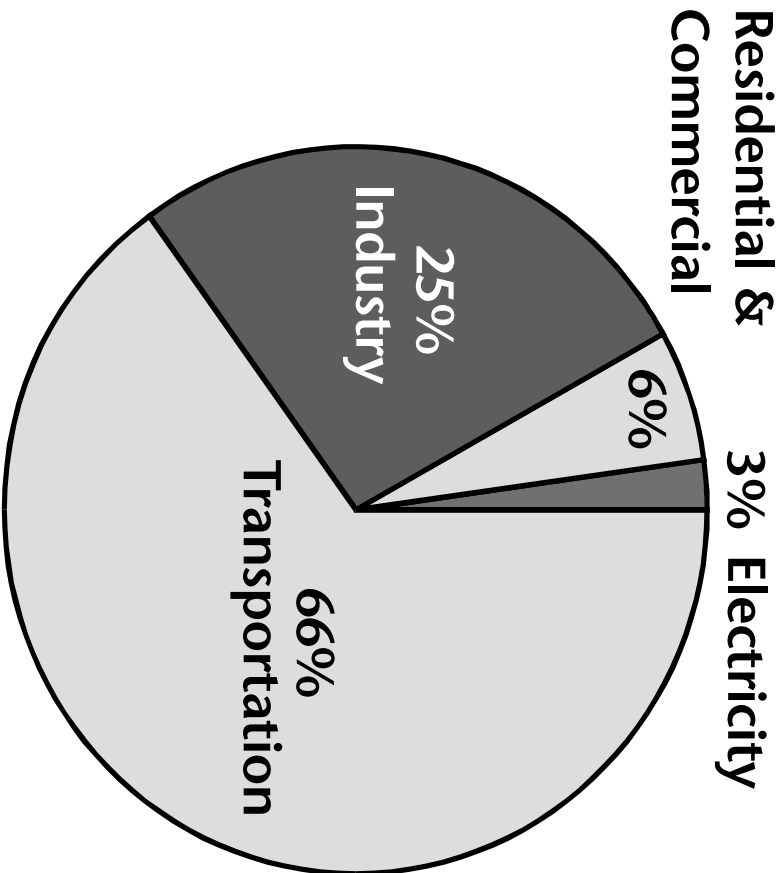


LAND-BASED WELL

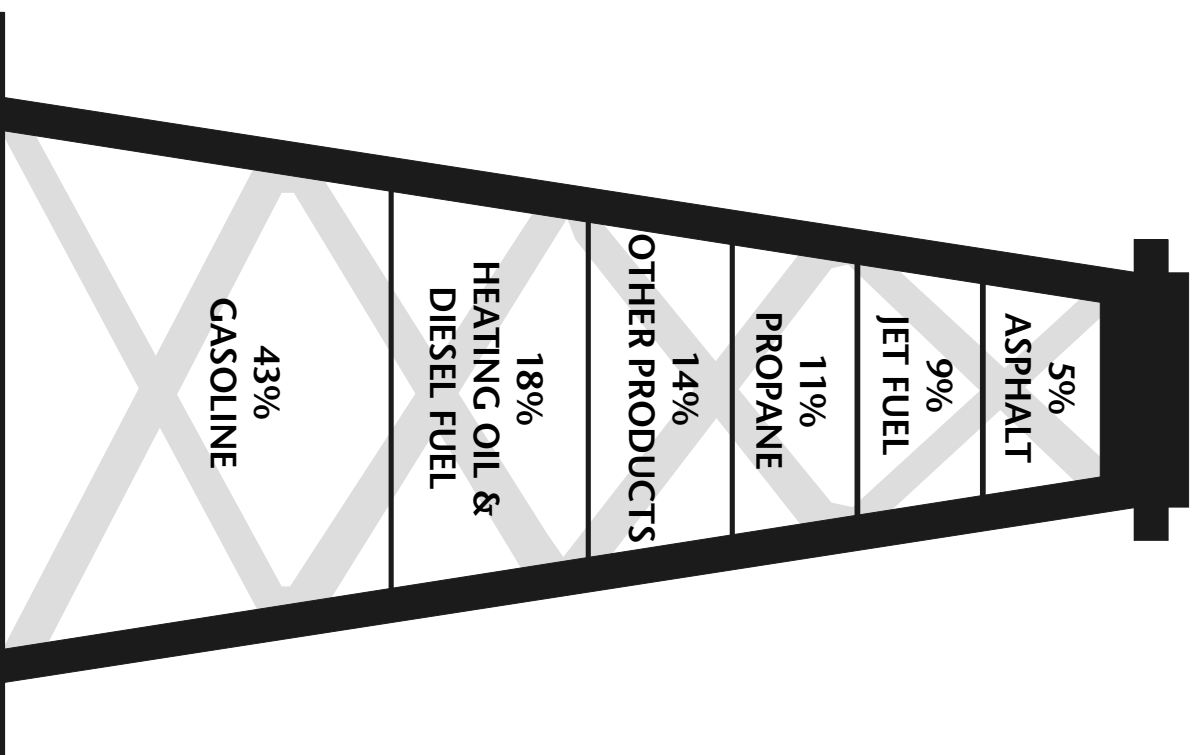
PETROLEUM 3

PETROLEUM USE

1998



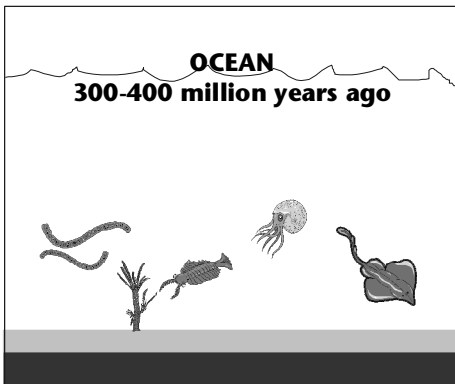
PETROLEUM 4



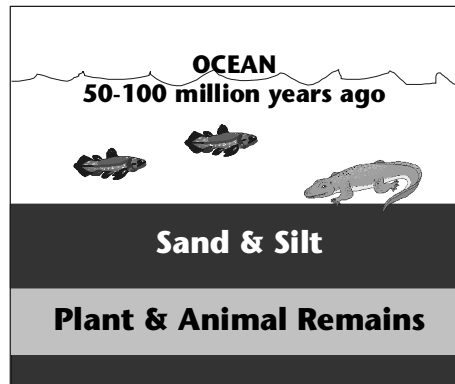
PETROLEUM PRODUCTS

PROPANE 1

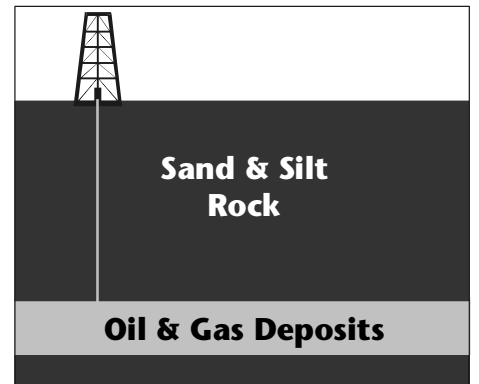
PROPANE IS FOUND IN PETROLEUM AND NATURAL GAS DEPOSITS



Tiny sea plants and animals died and were buried on the ocean floor. Over time, they were covered by layers of silt and sand.

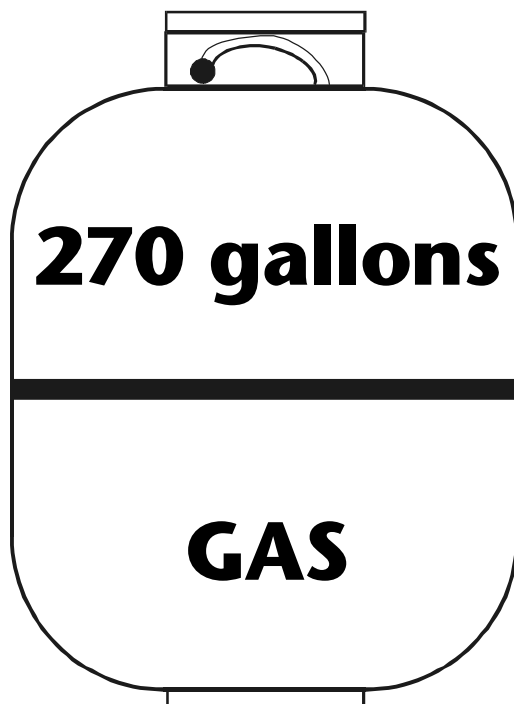


Over millions of years, the remains were buried deeper and deeper. The enormous heat and pressure turned them into oil and gas.



Today, we drill down through layers of sand, silt, and rock to reach the rock formations that contain oil and gas deposits.

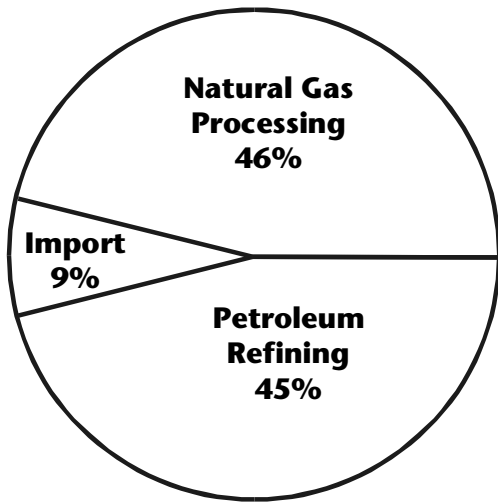
PROPANE 2



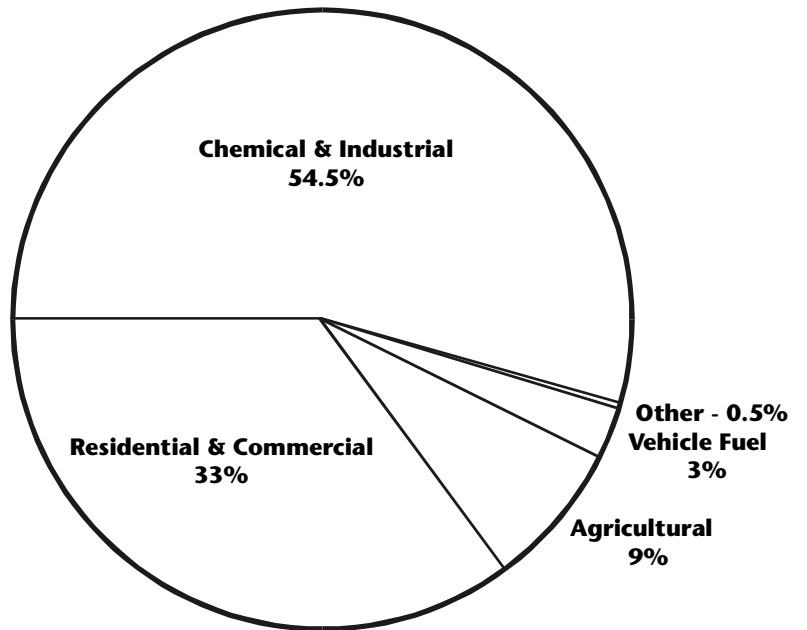
Pressure →



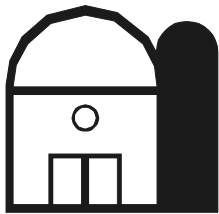
Sources of U.S. Propane



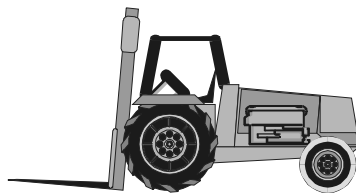
1998 PROPANE CONSUMPTION



How Propane is Used



To heat barns and operate farm equipment



To fuel machinery that is used indoors



To fuel hot air balloons



To fuel backyard grills



To heat homes



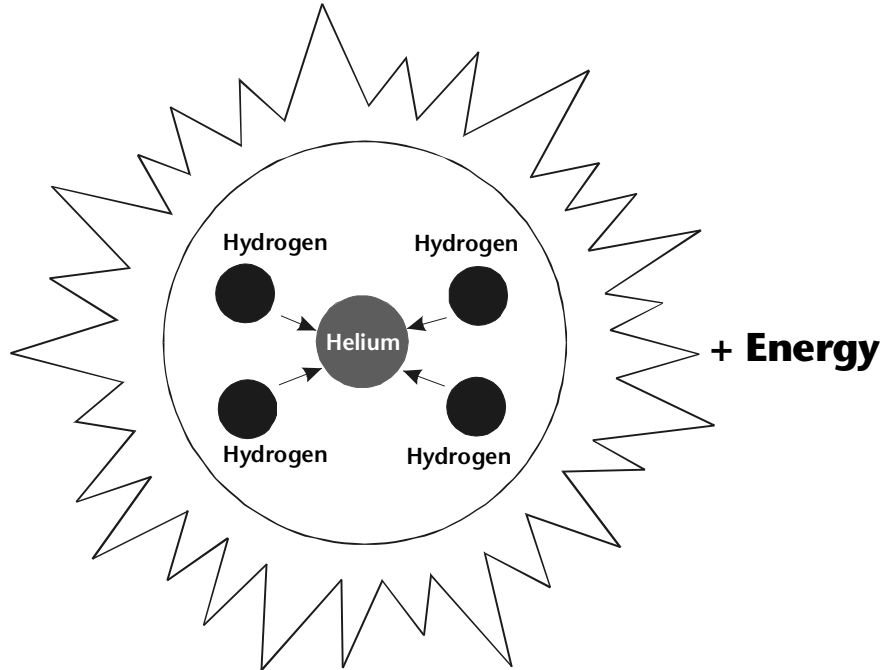
To fuel fleet vehicles



To fuel appliances

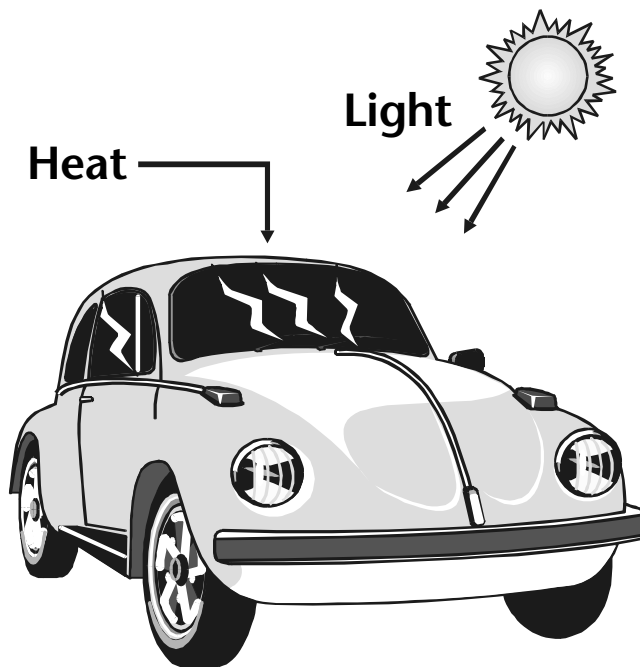
SOLAR 1

FUSION



During a process called fusion, four hydrogen atoms combine to form one helium atom, with a loss of matter. This matter is emitted as radiant energy.

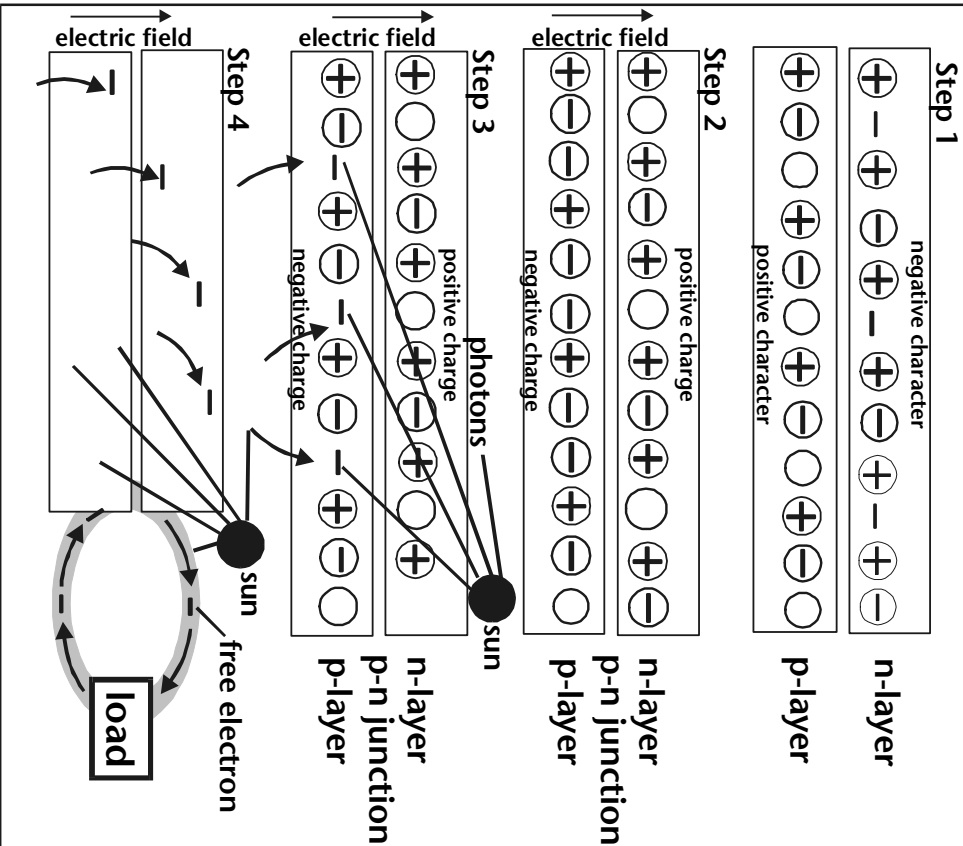
SOLAR 2



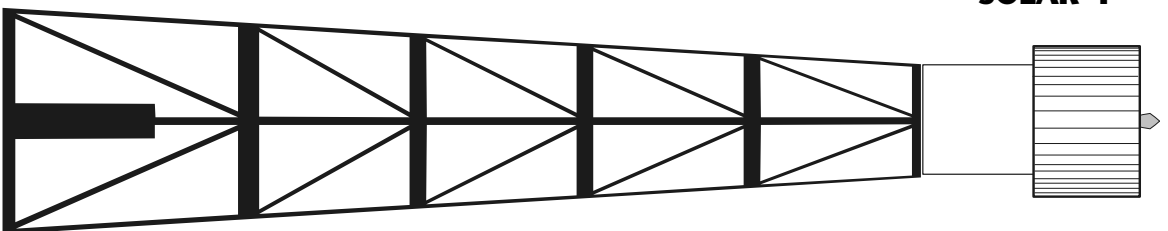
On a sunny day, a closed car works as a solar collector. Light rays pass through the glass, are absorbed, and changed into heat. The heat then gets trapped inside.

PHOTOVOLTAIC CELL

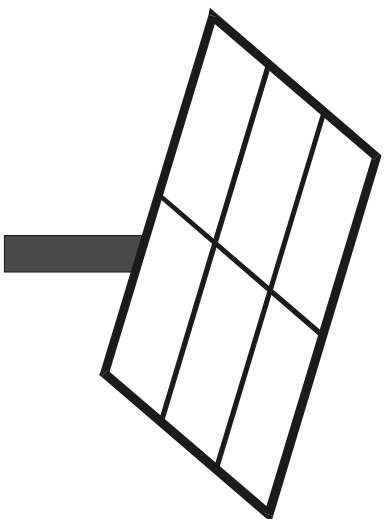
- A Location that can accept an electron
- Free electron
- Proton
- Tightly-held electron



RECEIVER PANEL
with fluid inside
to collect heat.

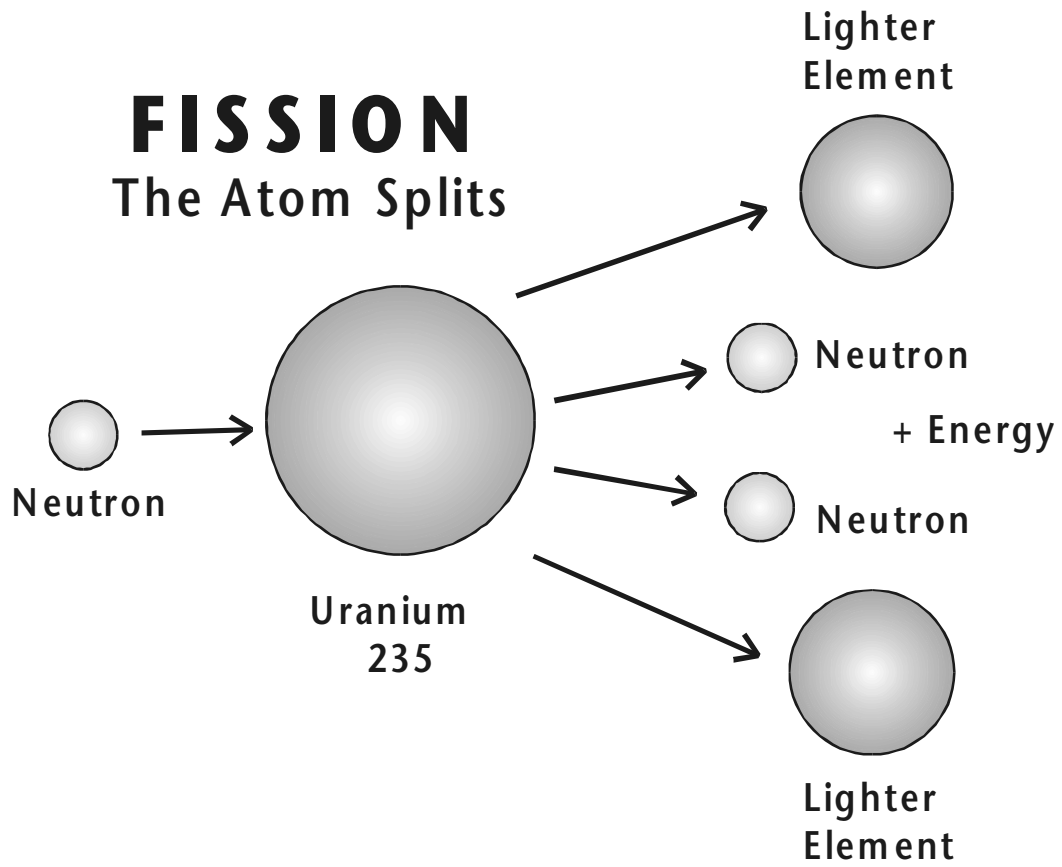


ROTATING MIRRORS
focus sunlight
onto receiver panel.



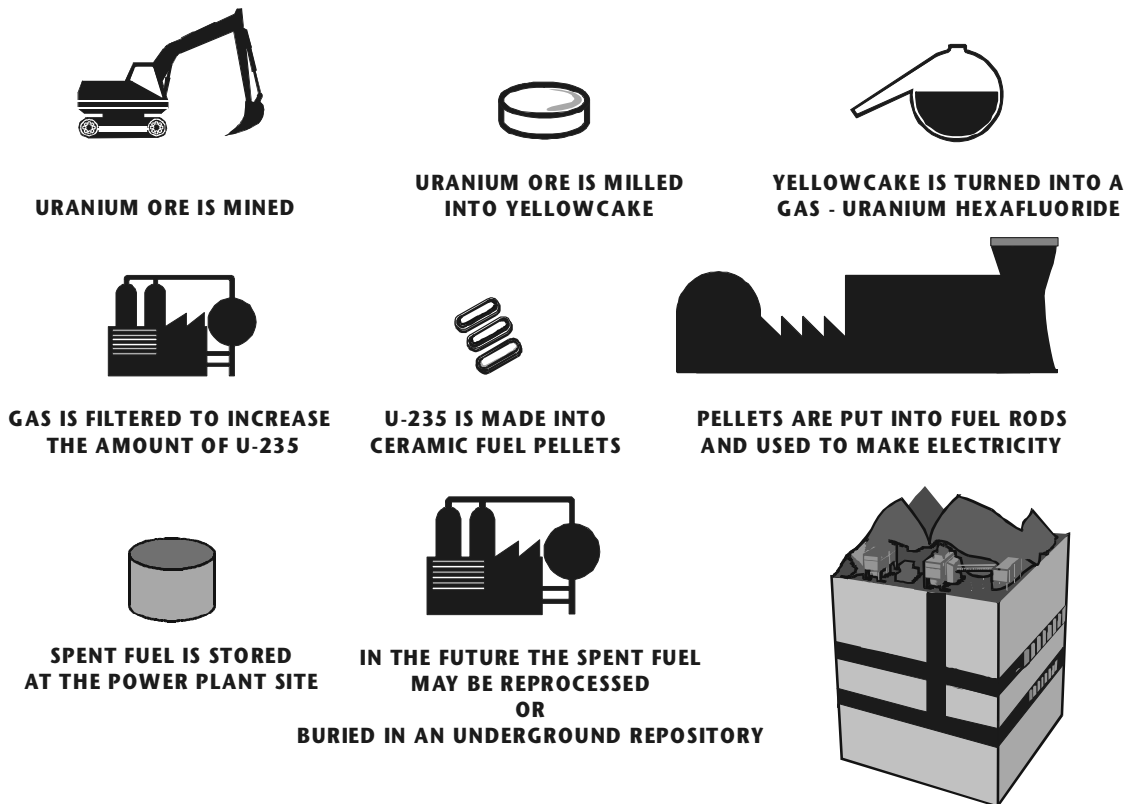
SOLAR POWER TOWER

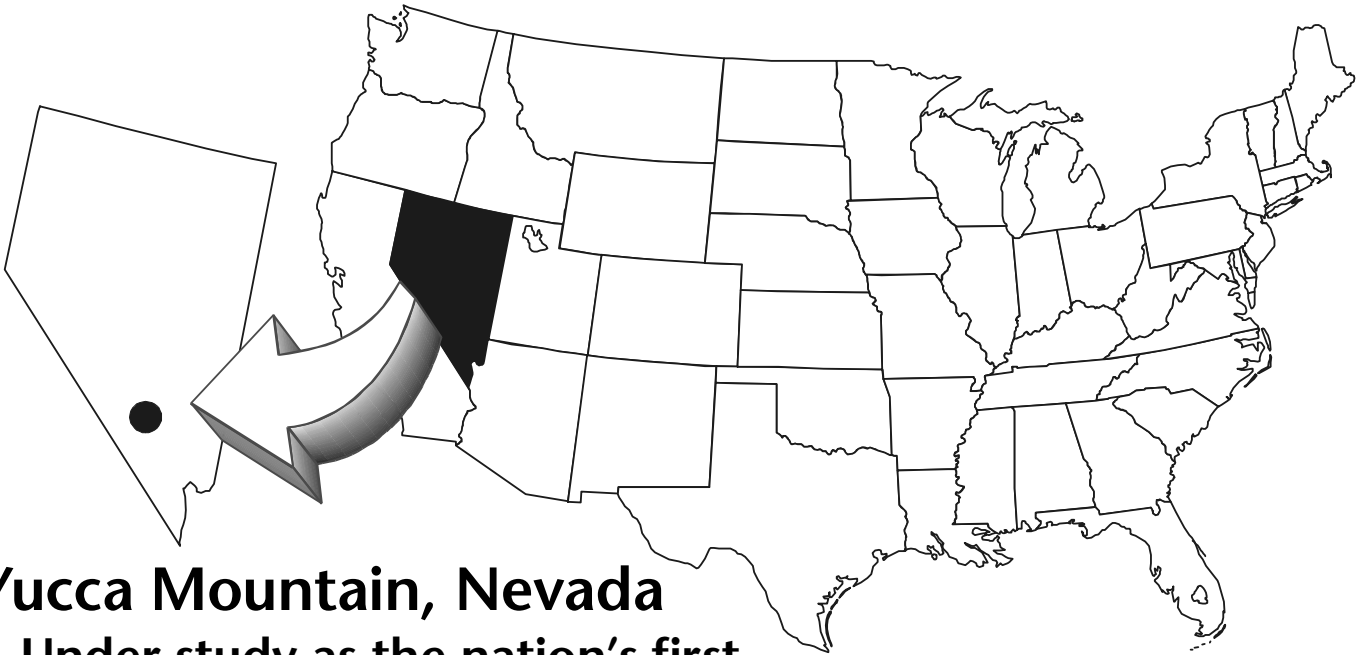
URANIUM 1



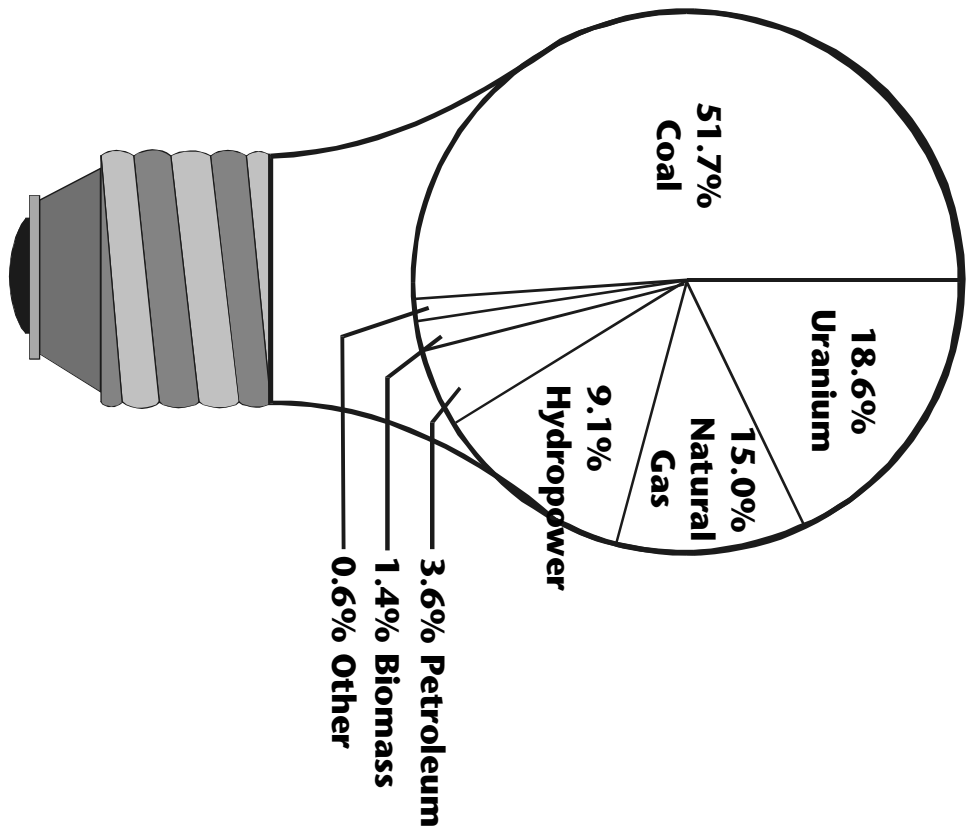
URANIUM 2

URANIUM FUEL CYCLE



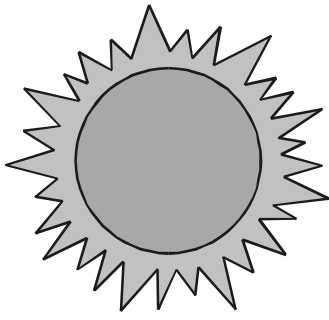


Yucca Mountain, Nevada
Under study as the nation's first repository for nuclear waste.



**U.S. ELECTRICITY PRODUCTION
1998**

WIND 1



Warm air over the land rises

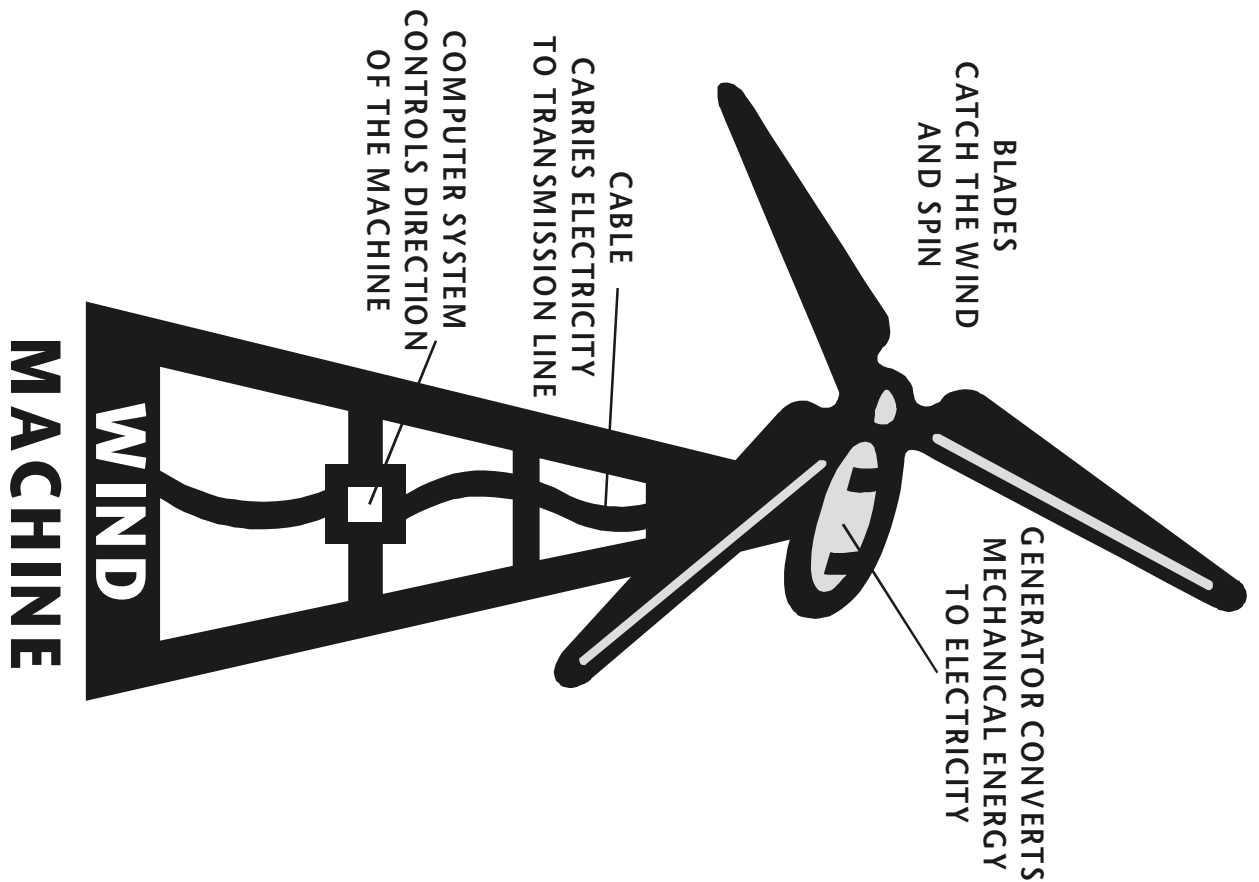


Land heats up faster than water

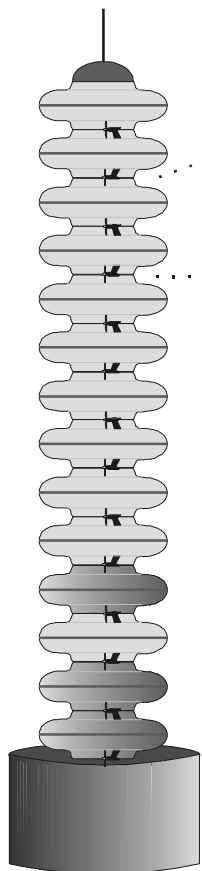


Cool air over the water moves in

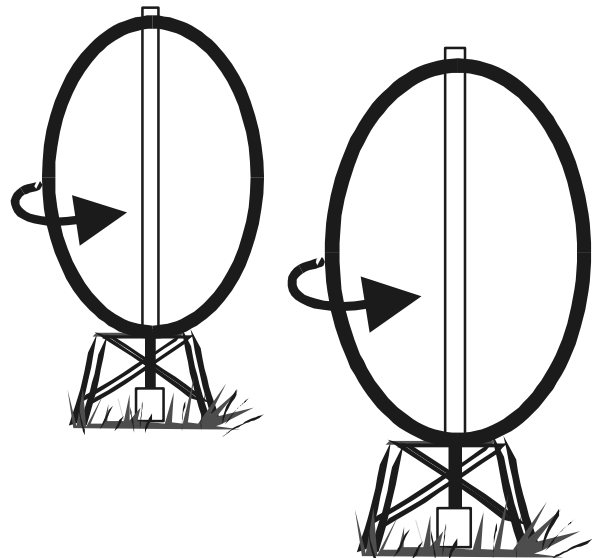
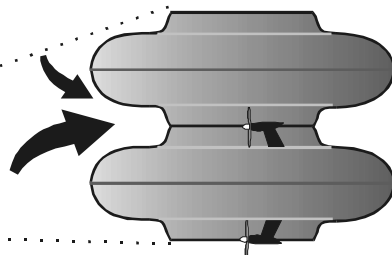
WIND 2



PRODUCTION CAPABILITY OF WIND PLANTS



WARP SYSTEM



VERTICAL AXIS WIND MACHINES