Today’s Outline

Nonrenewable & Renewable resources
Petroleum and Natural Gas Formation
  Generation and Migration
  Oil Traps
Effects of Burning Fossil Fuels
Alternative Energy Resources

Nonrenewable resources –

Renewable resources –

Why is the need for energy resources becoming greater?

5 widely used energy resources

1.
2.
3.
4.
5.

Petroleum and Natural Gas

1.
2.

Formation of Petroleum and Natural Gas
Oil Traps

A geologic environment that allows for economically significant amounts of oil to accumulate. All oil traps consist of a reservoir rock and a cap rock.

Reservoir rock –

Cap rock –

Types of oil traps

Anticline

Fault

Salt dome

Stratigraphic

Rollover Anticline (common in the Gulf of Mexico, South Texas)
Environmental Effects of Burning Fossil Fuels

1. Urban Air Pollution -
2. Acid Rain -
3. Global Warming -

Carbon Dioxide and Global Warming

Alternate Energy Resources

1.
2.
3.
4.
5.
6.

Nuclear Energy – radioactive materials, like Uranium, release energy by a process called nuclear fission.
**Geothermal Energy** – Energy harnessed by trapping underground reservoirs of steam and hot water.

**Tidal Power** -