

## Coal, Oil and Natural Gas



Intro to Environmental Science

DartmouthX

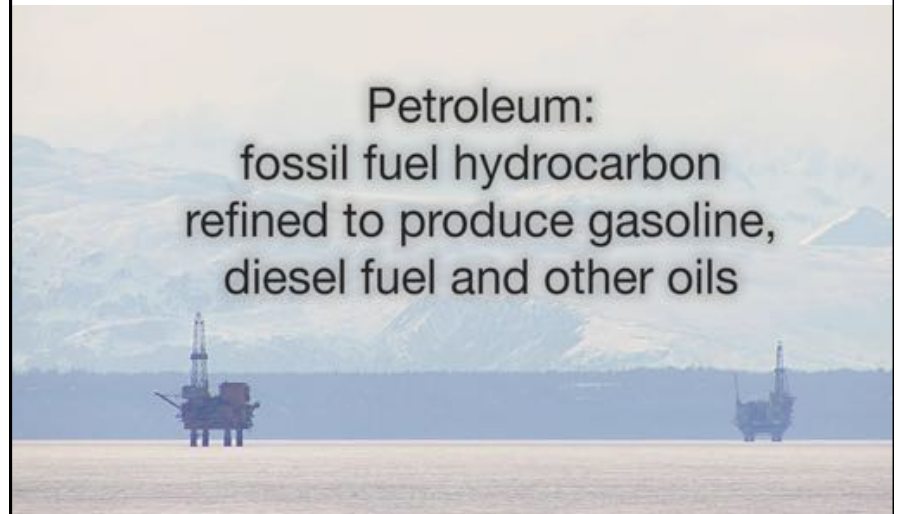
## Emissions from burning coal:

- sulfur dioxide ( $\text{SO}_2$ )
- carbon dioxide ( $\text{CO}_2$ )
- particulates
- trace metals

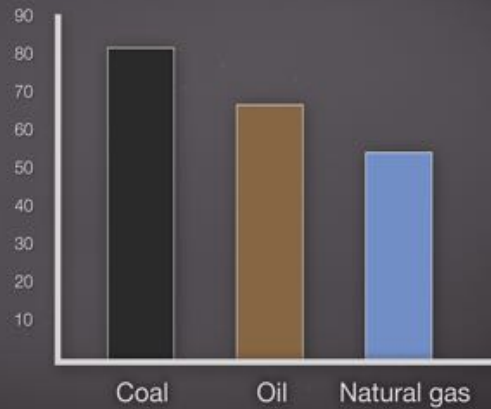
## Disadvantages of coal as fuel:

- mining harms people and environment
- large amounts of emissions from burning coal

Petroleum:  
fossil fuel hydrocarbon  
refined to produce gasoline,  
diesel fuel and other oils



CO<sub>2</sub>  
emission  
(grams / joule)



## Advantages of natural gas:


- burns efficiently
- releases 50% less CO<sub>2</sub> than coal



Global Warming  
Potential (GWP):  
CO<sub>2</sub> = 1  
CH<sub>4</sub> = 25

## Disadvantages of natural gas:

- extraction can be harmful to environment
- requires pipeline
- methane leaks contribute to global warming

A close-up photograph showing a person's hand holding a compact fluorescent light bulb (CFL) above a lamp socket. The bulb is white with a spiral design and a label that includes the letters 'FC'. The lamp socket is metallic and has a black switch. The background is a plain, light-colored wall.

Conservation and  
increased efficiency  
are always the  
first choices