

**Energy: Fossil Fuels - Oil & Natural Gas**  
**Study Guide**  
**EVPP 111 Lecture - Spring 2004**  
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**Energy - fossil fuels - oil and natural gas**

- What is oil composed of?
- How is oil formed?
- What is natural gas composed of?
- How is natural gas formed?
- What is a "source rock"?
- What is a "reservoir rock"?
- What is "liquefied petroleum gas"?
- What types of products are the various compounds of petroleum separated into during the refining process and on what physical property is this separation based?
- What are petrochemicals and what are some examples of them?
- What is a "trap"?
- What is a "cap rock"?
- Why are a trap and cap rock necessary in the formation of oil and gas deposits?
- What are the characteristics of a rock that makes a good cap rock?
- In what form does trapped oil usually exist?
- Generally, how are oil reserves distributed around the world?
- What percentage of the world's oil reserves are located in the US?
- Which region of the world contains the majority of the world's oil reserves?
- At current and projected use rates, approximately how long will the known world oil reserves last?
- How abundant is oil relative to the other fossil fuels?
- What is the general distribution of known US oil reserves?
- At current and projected use rates, approximately how long will the known US oil reserves last?
- What are the two methods by which production wells in an oil field recover oil?
- How did the percent of the world's energy needs that are met by oil change during the 20<sup>th</sup> century?
- Approximately what percent of oil can be recovered by primary production methods?
- Approximately, what percent of oil can be recovered by enhanced recovery methods?
- What types of environmental problems can be caused by the combustion of oil?
- Approximately how much carbon dioxide is released for every gallon of gasoline burned in an automobile?
- What is acid deposition and how does the combustion of oil contribute to it?

- What types of environmental problems can be caused by the production and transport and oil?
- What is conventional natural gas?
- What is unconventional natural gas?
- Generally, how are natural gas reserves distributed around the world?
- What percentage of the world's natural gas reserves are located in the US?
- At current and projected use rates, approximately how long will the known world natural gas reserves last?
- How abundant is natural gas relative to the other fossil fuels?
- What is the general distribution of known US natural gas reserves?
- At current and projected use rates, approximately how long will the known US natural gas reserves last?
- What is natural gas used for?
- Approximately what percent of the world's energy needs are met by natural gas?
- How did the percent of the world's energy needs that are met by natural gas change during the 20<sup>th</sup> century?
- What is cogeneration?
- What is liquefied petroleum gas?
- What is liquefied natural gas?
- What environmental problems are associated with the use of natural gas?
- How do the emissions that result from the combustion of natural gas compare to those resulting from the combustion of coal or oil?
- What environmental problems are associated with the extraction and transport of natural gas?