

5. ENERGY INDEPENDENCE

KEY TERMS

Carter Doctrine: foreign policy doctrine established by President Jimmy Carter in 1980 that committed U.S. military to protect oil supplies in the Persian Gulf. The policy has been the backbone of U.S. actions in the Middle East since then.

energy security: a nation-state's availability of reliable and affordable fuel and power; it is comprised of all sources of energy including coal, hydroelectric, natural gas, nuclear, petroleum and other alternative energies

energy transitions: changes to an initial source of energy to do work. For instance, the first energy transition in human history occurred when humans substituted human and animal muscle power with biomass such as wood.

international oil companies (IOC): a multinational publicly owned corporation that produces oil and gas; examples include British Petroleum and Chevron Corporation

international regime: an organization of multiple nation-states governed by formal and informal norms

national oil companies (NOC): an oil company fully or majority owned by a national government. NOCs account for a majority of the world's oil production and reserves.

oil shock: drastic price increases for oil due to a change in the petroleum supply chain. The two oil shocks in United States history, the first during the 1973–75 oil embargo and a second during the Iranian Revolution and Iran-Iraq War in the late 1970s and early 1980s, led to economic slow downs in the United States.

optimum price range: oil price that promotes sufficient domestic petroleum production while, at the same time, not harming consumers

Organization of Petroleum Exporting Countries (OPEC): group of 14 petroleum-producing nations that coordinate their oil exports to influence world oil prices. The group is responsible for 70% of the world's petroleum reserves.

petroleum investment cycle: series of events where the price of oil increases to the point that encourages further investment in oil production creating higher production that leads to lower prices. The lower prices discourage investment

creating an insufficient supply of oil that in turn creates higher prices, which brings back high investment, completing the cycle.

petroleum supply chain: term referring to the tightly knit, highly interdependent system beginning with oil exploration and production to the products delivery to the consumer

Seven Sisters: a group of several major oil companies that colluded to raise oil prices beginning in the 1920s. The group slowly lost influence in the oil market as nation-states began to nationalize the oil industry.

Strategic Petroleum Reserve (SPR): oil stored in various places in the United States, maintained by the United States Department of Energy. The SPR was created in 1975 to mitigate future disruptions to the petroleum supply chain following the 1973–74 oil embargo.

petroleum vulnerability: gauge determining how much a group is impacted by changes in the petroleum supply chain that are out of its control. For instance, a nation entirely reliant on imported petroleum would be considered having high petroleum vulnerability.

LESSON ONE

Student Objectives

Upon completion, students will be able to:

- Identify the influences on the petroleum supply chain
- Explain factors that have decreased U.S. petroleum vulnerability in recent history
- Explain how changes in the petroleum investment cycle have impacted world history

Materials

- Classroom set of Handout #5-A
- *Great Decisions* article “Energy independence”

Time

60 minutes: pre-reading discussion (15 minutes), independent reading and guided reading activity (30 minutes), post-reading discussion (15 minutes)

Lesson Development

Pre-reading activity

1. Prior to assigning the reading, the teacher will introduce the terms “petroleum supply chain” and “petroleum vulnerability.” During the introduction, the teacher should incorporate the United States’ reliance on petroleum and how this influences the nation’s foreign policy and domestic economy.
2. After handing out the *Great Decisions* article “Energy independence: Inflated expectations or new opportunities?” and the Handout #5-A, the teacher should lead a previewing activity with the students. Particular attention should be given to the title of the article and each subsection. Students should be encouraged to brainstorm possible topics the article may examine.

Reading Activity

1. While students are independently reading, they should be highlighting or annotating evidence supporting the opposing arguments concerning the benefits of possible United States energy independence.

Review Reading Activity

2. After students have read the *Great Decisions* article, they should complete the chart found on Handout #5-A
3. Afterward, the class should brainstorm the challenges and opportunities currently facing the United States and the world concerning energy production. Teachers should be encouraged to use the discussion questions at the end of the article to lead the class conversation.

Assessment

1. Assess student understanding during the concluding discussion. If desired, give credit for completion of handouts.

Additional Suggestions

Consider extending this lesson by having students learn more about past and current U.S. policy toward oil-producing nations. Break students into groups and assign them each to research and report on events and U.S. policy with oil-producing nations such as Iraq, Iran, Saudi Arabia, Venezuela and Mexico.

LESSON TWO

Student Objectives

Upon completion, students will be able to:

- Identify U.S. domestic energy goals
- Identify the causes and consequences of increased United States domestic energy production

Materials

- Classroom set of Handout #5-B
- *Great Decisions* article “Energy independence”
- Relevant news articles or computers with Internet access

Time

Approximately 60 minutes

Lesson Development

Activity

1. After students have read the *Great Decisions* article, brainstorm with them about some of the challenges and opportunities emerging with the United States’ increased energy independence
2. Give each student a copy of Handout #5-B.
3. Instruct students to research the domestic impact of increasing domestic energy production in the United States. The teacher may decide to break students into groups and assign each group a specific topic to research and report back to the class with. The students’ research should focus on various energy sources, such as natural gas, petroleum, solar and nuclear power. The teacher should encourage students to view recent news articles for information.
4. Following their research, students will share with the class what concerned or surprised them about the impact of domestic energy production.

Assessment

1. Assess student understanding during the conclusion discussion. If desired, give credit for completion of handouts.

Additional Suggestion

Extend the lesson by asking students to write a policy paper advising the United States national government on the formation of a new energy policy. Along with recent developments, students should include examples of historical events as lessons for the present.

HANDOUT #5-A

ENERGY INDEPENDENCE: INFLATED EXPECTATIONS OR NEW OPPORTUNITIES?

NAME: _____

	INFLATED EXPECTATIONS Increased energy production in the United States is creating negative effects	NEW OPPORTUNITIES Increased energy production in the United States is creating positive effects
Energy Security and Petroleum		
Prices and the Petroleum Investment Cycle		

HANDOUT #5-B

DOMESTIC IMPACT OF INCREASED UNITED STATES ENERGY PRODUCTION

NAME: _____

	POSITIVE IMPACTS	NEGATIVE IMPACTS
Natural Gas		
Petroleum		
Solar		
Nuclear		
Other		