HISTORY AS A WAY OF LEARNING

- Importance of Studying the Past: Context for Understanding the Present
- Method of Analysis
- Continuity and Change over Time
- Sources: Evaluation of Sources
- Analytical Frame of Reference: Supply, Demand, and Security
- Oil as a Window into the History of the 20th Century
OVERVIEW

- Geography of Oil
- Economic and Military Importance of Oil
- Implications of Oil Geography
- Oil as Source of US Power and Influence
- Domestic Sources of US Foreign Oil Policy
- Change over Time
- Oil and Power in the 21st Century
- Oil and the Environment
GEOGRAPHY OF OIL

- Geology, Geography, and Technology
- United States: Pennsylvania; Texas and Southwest; California; Gulf of Mexico; Alaska
- Canada
- Russian Empire: Caucasus; Volga-Urals; Western Siberia; Arctic; Eastern Siberia
- Latin America: Mexico; Venezuela; Peru; Colombia; Ecuador; Bolivia; Brazil
- Persian Gulf: Iran; Iraq; Saudi Arabia; Kuwait
- Africa--North Africa; Gulf of Guinea
- Europe: Galicia; Romania; North Sea
- Asia: Indonesia; China
ECONOMIC AND MILITARY IMPORTANCE OF OIL

- Age of Illumination
- Age of Energy: Transportation; Agriculture; Petrochemicals
- World War I
- World War II
- Cold War
- Post-Cold War World
IMPLICATIONS

- Competition Among Great Powers
- Conflict Between Consumers and Producers
- Oil as Source of US Power and Influence
- Relations with Other Great Powers
- Relations with Latin America
- Relations with Middle East
- Compare with Russia/Soviet Union
EARLY YEARS TO WORLD WAR I

- Transition from Age of Illumination to Age of Energy
- Rise of US Automobile Industry
- Key Producers: US; Russia; Galicia; Mexico; Iran; Netherlands East Indies
- Key Companies: Standard Oil; Royal Dutch Shell (1907); Nobel
- Royal Navy Decision, 1912
- Oil and World War I
FROM WORLD WAR I TO WORLD WAR II

- Oil and the Automobile in the United States; Path Dependence; Motorizing the Cities
- Military Innovations
- Growing Importance of Latin America and Middle East; Netherlands East Indies
- Great Power Competition for Oil
- Oil and the Balance of Power
- Oil and the Origins and Outcome of World War II
OIL AND THE COLD WAR

- Oil and Containment; the Marshall Plan and the Long Boom (1950-1973)
- Oil and Dual Containment (Germany and Japan)
- Oil and US Policy Toward Latin America
- Anglo-American Relations and US Policy Toward the Middle East
- Guardian of the Gulf: From the Truman Doctrine to the Carter Doctrine
- Addicted to Oil: Path Dependence Continued
THE OIL CRISIS OF THE 1970S: CAUSES

- The Price of Oil and the Concentration of Production in the Middle East
- Peaking of US Oil Production and Reserves
- Demand Side: Hydrocarbon Society
- The Global Context: Vietnam War; Rise and Decline of Détente; Revolutions in the Third World
- The Regional Context: Arab-Israeli Conflict; British Withdrawal From East of Suez; Iranian Revolution
THE OIL CRISES OF THE 1970S: CONSEQUENCES

- Sharp Increase in Price of Oil
- Western Response: Use Oil More Efficiently; Use Other Energy Sources; Diversify Sources of Oil
- Impact—Cyclical or Structural Change?
- From the Nixon Doctrine to the Carter Doctrine and Beyond; The Rapid Deployment Force and CENTCOM
- The Third Oil Shock (1986) and the End of the Cold War
OIL AND POWER IN THE POST-COLD WAR WORLD

- Continuing Military and Economic Importance
- Limits to Strategy of Diversification
- Results of Reliance on Markets
- Tension Between Economic and Security Objectives
- Demand-Side Pressures: China; India; United States
- Changing Structure of World Oil Markets; Importance of National Oil Companies
PRIMARY ENERGY CONSUMPTION BY FUEL TYPE, 2006

- Oil 35.7%
- Natural Gas 23.6%
- Nuclear 5.8%
- Hydroelectricity 6.3%
- Coal 28.4%

## DISTRIBUTION OF PROVED RESERVES BY AREA

<table>
<thead>
<tr>
<th>Year</th>
<th>1986</th>
<th>1996</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>11.6%</td>
<td>8.5%</td>
<td>5.0%</td>
</tr>
<tr>
<td>S. &amp; C. America</td>
<td>7.4%</td>
<td>8.7%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Europe &amp; Eurasia</td>
<td>8.8%</td>
<td>7.9%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Middle East</td>
<td>61.2%</td>
<td>64.1%</td>
<td>61.6%</td>
</tr>
<tr>
<td>Africa</td>
<td>6.6%</td>
<td>7.1%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Asia/Pacific</td>
<td>4.5%</td>
<td>3.7%</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

*Source: BP Statistical Review of World Energy, 2007*
# World Oil Production and Consumption by Area, 2006

<table>
<thead>
<tr>
<th>Area</th>
<th>Production</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>16.8%</td>
<td>29.6%</td>
</tr>
<tr>
<td>South &amp; Central America</td>
<td>8.4%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Europe &amp; Eurasia</td>
<td>21.5%</td>
<td>24.4%</td>
</tr>
<tr>
<td>Middle East</td>
<td>31.3%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Africa</td>
<td>12.2%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Asia/Pacific</td>
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</tr>
</tbody>
</table>

OIL AND IRAQ

- US Military Power and Access to Oil
- 1991 Gulf War and the Strategy of Dual Containment (Iran and Iraq)
- Cheney Energy Report: Access to Oil
- 9/11 as Crisis and Opportunity
- US National Security Strategy: US Dominance; Unilateralism; Pre-Emptive and Preventive War
- Oil and Iraq--Anticipated Benefits and Real Costs
ENVIRONMENTAL IMPACT

- Intergovernmental Panel on Climate Change: Continued Increases in Levels of Atmospheric Carbon Dioxide; Convincing Evidence of Climate Change; Human Role in Climate Change
- Other Environment Impacts of Oil Use
- Current Hydrocarbon-Based Energy Regime is Unsustainable
- No Supply-Side Solution; No Technological Fix
- Delay Will Only Increase the Problems
EVIDENCE OF CLIMATE CHANGE

Direct observations of recent climate change

- Global average temperature
- Global average sea level
- Northern hemisphere snow cover

Changes in temperature, sea level and northern hemisphere snow cover

Graph showing the changes in temperature, sea level, and northern hemisphere snow cover over time from 1850 to 2000.
Carter Doctrine: Key Phrase
Statement of Problem (3 Parts)
Context(s): General and Specific
Proposed Solutions: Military; Economic; Political
Analysis and Evaluation
Contemporary Relevance: Continuity and Change
CONCLUDING THOUGHTS

- Supply, Demand, and Security
- World Supply: End of Easy Oil: Geologically; Politically
- World Demand: US Path Dependence; China: India; Developing Countries
- Control of Oil and American Power—Shift in the Global Balance of Power?
- US Military Policy; US Financial Problems; and US Oil Use; US Oil Imports = Over 50% of US BOP Deficit
- Environment Impact: Need to Rethink Concept of Development and Progress: Focus on Quality of Life Rather than Economic Growth (GDP)
- Decrease in Oil Use = Decrease in International Tensions; Economic Gains; Environmental Gains
SOURCES ON OIL AND US FOREIGN POLICY

- Encyclopedia Article
- Yergin, The Prize
- Michael Klare; Paul Roberts; John Duffield
- Complete Idiot’s Guide to the Politics of Oil; Smil, Beginner’s Guide
- BP Statistical Review of World Energy; EIA