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United States Oil Dependency and Foreign Policy

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**University of Tennessee
College Scholars Thesis
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TABLE OF CONTENTS

• Abstract	4
• Abbreviations	5
• Introduction	6
• The Importance of Oil	7
• United States Foreign Policy and Oil	13
- U.S. Oil Suppliers Outside the Middle East	21
- Foreign Policy Divergence from Oil Interests	25
• Case Studies	27
- Saudi Arabia	27
- 1973 Oil Crisis	32
- Iraq	37
• 2001 National Energy Policy Examination	43
• Conclusions and Recommendations	49
• Appendix (Graphs and Charts)	55
• Bibliography	62
• Notes	66

Abstract

United States oil dependence is a growing concern. Our country relies on imports from foreign resources to satisfy our increasing demand of petroleum. This paper attempts to show the role of foreign oil acquisition in formulating foreign policy. Throughout history, oil has been an important factor in international relations with oil exporting countries, especially in the Middle East. Now, our dependence leaves the United States vulnerable to oil producing countries. The time has come for the United States to energetically begin the transition away from a petroleum based society.

In order to gain an understanding of the oil industry, I first researched the basic scientific and geological aspects of petroleum. The bulk of my investigation related to the history of foreign oil policies. I examined research by leading political analyst and articles in respected policy journals. The scope of the paper is limited to the time period since World War II, when oil's importance in the United States has increased significantly. The focus of this paper is on foreign relations with the Middle Eastern exporting countries. I looked at three case studies in particular: Saudi Arabia, the 1973 Oil Crisis, and Iraq. I evaluated the role oil played in United States foreign policy in regard to these cases. Through this paper I demonstrate to Americans the dangers of oil dependence and the need to liberate our country's national and energy security.

My research suggested that oil has been an important factor in foreign policy formation with oil exporting countries since World War II. However, it has not necessarily been the dominant factor. In some cases, the United States chose other policy objectives over the pressures from the oil industry. Foreign policy making is a complex process of balancing competing ambitions. In this process, oil's role has increased and its importance grown. The United States cannot succumb to pressures by oil exporting countries to acquire necessary energy resources. The U.S. government must initiate and support a transition away from our heavy dependence on oil. This will free our foreign policy makers to develop policy based on other ideological, democratic, political goals.

Abbreviations

ANWR	Arctic National Wildlife Refuge
Aramco	Arabian American Oil Company
b/d or bpd	barrels per day
BP	British Petroleum
BTC	Baku-Tbilisi-Ceyhan Pipeline
CAFE	Corporate Average Fuel Economy
CEO	Chief Executive Officer
CIA	Central Intelligence Agency
DoC	Department of Commerce
DoD	Department of Defense
DoE	Department of Energy
DoJ	Department of Justice
DoS	Department of State
EIA	Energy Information Administration (Department of Energy)
EU	European Union
GDP	Gross Domestic Product
IEA	International Energy Agency
mbd	million barrels per day
NATO	North Atlantic Treaty Organization
NEP	National Energy Policy (2001)
NEPDG	National Energy Policy Development Group
NSC	National Security Council
OAPEC	Organization of Arab Petroleum Exporting Countries
OCS	Outer Continental Shelf
OPEC	Organization of Petroleum Exporting Countries
RDJTF	Rapid Deployment Joint Task Force
SPR	Strategic Petroleum Reserve
TCP	Trans-Caspian Pipeline
UAE	United Arab Emirates
UAR	United Arab Republic
UN	United Nations
USCENTCOM	United States Central Command
USSR	Union of Soviet Socialist Republics
WMD	Weapons of Mass Destruction
WTO	World Trade Organization

Introduction

Oil is an important component in the daily lives of most Americans. Oil fuels the American troops protecting our country, is an essential ingredient in growing the food we eat, helps to heat and light our homes, allows us to transport goods to market, facilitates commerce, and provides us with the high quality of life and mobility that we enjoy in the United States (Ebel, 2005). However, the United States is becoming increasingly reliant on foreign sources of oil to sustain our consumption. While domestic sources of oil are depleting, Americans are requiring more.

As the United States continues to increase the amount of oil it imports, it is important to recognize the sources of this energy and the situations surrounding the acquisition. In dealing with petroleum exporting countries, the first priority of our government is to maintain national security. Over the years, national security and energy security have become progressively more interconnected. “Energy security does not stand by itself but is lodged in the larger relations among nations and how they interact with one another” (Yergin, 2006). Thus, energy security impacts our foreign policies.

Hurricanes Katrina and Rita, in the fall of 2005, disrupted the flow of oil and gasoline to consumers across the United States. They “sent gas prices soaring and opened our eyes to America’s dangerous dependence on oil” (Collina, 2005: 2). As a result, the time has come to seriously evaluate our nation’s reliance on an imported commodity and to assess our vulnerabilities.

The aim of this paper is to investigate the connections between U.S. oil dependency and related foreign policies and to demonstrate that Americans are vulnerable due to their reliance on foreign sources. First, I will show the importance of oil to the United States. Next, I will explore how our country’s oil dependence has

influenced foreign policy, particularly since World War II. While I will briefly describe the impact globally, the focus of this paper will be on the countries of the Middle East, specifically through case studies. I then examine the 2001 National Energy Policy of the Bush administration. I conclude with thoughts and recommendations about our oil dependence and approaches to alleviate U.S. vulnerabilities. Although our society will continue to use petroleum in a variety of ways for decades to come, it is time to take steps to reduce our dependence and move towards new fuels and alternative sources of energy.

The Importance of Oil

“No nation which lacks a sure supply of liquid fuel can hope to maintain a position of leadership among the peoples of the world. It follows that if the United States is to hold the place it now occupies on the world stage as an effective leader, ... it must develop a national petroleum policy which will make certain that we shall not become dependent upon any other country for our supply of liquid fuel.” (Klebanoff, 1974: vi)

According to the United States Department of Energy (DoE), “Oil is the lifeblood of America’s economy.” Oil is a fundamental source of energy to the United States. It is necessary for economic growth and is essential for America’s prosperity and national security. “Oil is the basis and the moving power of modern industrial society and is therefore indispensable” (Klebanoff, 1974: vii).

Oil is a non-renewable resource that began forming when plant and animal remains were covered with layers of rock millions of years ago. Over time, the plants and animals decayed to make the black sticky substance we call oil (Pickerill, 2003). As

important as oil is to our society, one would hope that discovering it would be fairly easy. However, there are restrictions to finding oil. First, geologists must begin looking at the correct depth underground. “The rule of thumb says that temperatures 7,500 feet down are hot enough to “crack” organic-rich sediments into oil molecules. However, beyond 15,000 feet the rocks are so hot that the oil molecules are further cracked into natural gas. The range from 7,000 to 15,000 feet is called the “oil window”” (Deffeyes, 2001: 8). Outside the oil window, there will rarely be oil. Next, geologists must search in specific layers of organic rich rocks called source rocks (Deffeyes, 2001: 16). Oil will not be found outside of these source rocks. In addition to source rocks, “a reservoir rock with both porosity and permeability is a necessary ingredient for a successful oil field” (Deffeyes, 2001: 64). Finally, a geologist must find a cap rock which is a sealing layer above the oil reservoir. The cap rock keeps the oil from drifting up to the surface (Deffeyes, 2001: 64). “If these ingredients are not present, no amount of drilling is going to find oil... This paragraph wipes out 60 percent of the Earth’s surface as a potential source for oil” (Deffeyes, 2001: 22). Although geologists have gained considerable knowledge about each of these necessary components for finding oil, 9 out of 10 exploration wells are dry (Deffeyes, 2001: 67)! Once an oil field is discovered, the cost of drilling the well is only half of the expense. The well must be prepared for production, which is equally expensive (Deffeyes, 2001: 102).

One of the most renowned geologists, M. King Hubbert predicted in the 1960s that the world is about to run out of a plentiful and inexpensive supply of oil (Morgan, 2005). Hubbert also described the detection of oil on a bell curve. The peak of this bell curve is called “Hubbert’s Peak” (Morgan, 2005). Oil fields are generally good for about 30 years. The first 15 years are easier for production than the last 15 years, having to dig

deeper. It is also less expensive to produce the initial oil. Once you hit the midway point, production gets more expensive at both the micro and the macro levels. As current oil fields are depleted, geologists are beginning to look at much more difficult and expensive locations around the world in search of oil (Morgan, 2005). This includes barren and remote locations in extreme weather conditions and further out in the ocean. It is becoming not only more difficult to find the oil, but also more expensive to produce the oil once discovered.

Hubbert predicted that U.S. oil production would peak in 1970 and that world oil production would peak in the year 2000 (Morgan, 2005). He was correct about domestic production, and there is reason to believe he is close in his world prediction. First, the rate of discovery is decreasing. For every four barrels of oil produced, only one barrel is discovered. Discovery is not keeping pace with demand or production. Second, the oil companies have decreasing proven reserves.¹ Finally, world production, although fluctuations exist, has remained relatively flat since 1998 (Morgan, 2005).

Many of the world's oil fields have already reached their halfway exploitation points. This leads to a substantial increase in production costs (Woolsey, 2004). Also, as exploration is pushed further out to sea, the expense increases drastically. "The most powerful stimulant for finding more oil would be a reduction in drilling costs" (Deffeyes, 2001: 88). In addition to the cost of production, the capacity to refine crude oil constrains supply (Yergin, 2006).

Although the world may be reaching a peak in production, the world is not running out of oil, yet. In the last twenty-five years, there has been a 70 percent increase in known oil reserves. This is due in large part to increased technology in discovering fields, the capability to remove more oil from a field, and the incentive of higher prices

for discovery. “The amount of oil available is not simply a function of geology, but also of economics, technology and politics” (Kretzman, 2003). It is a fact that our supplies of oil will run out, eventually. However, more important is deciding how much the world is willing to pay to retrieve the remaining oil. The United States has mature oil fields, thus production costs are often higher than in foreign countries, particularly those in the Middle East. “The major obstacle to the development of new supplies is not geology but what happens above ground: namely, international affairs, politics, decision-making by governments, and energy investment and new technological development” (Yergin, 2006). Essentially, society should move away from energy dependence long before depletion of global oil resources becomes a reality.

Oil is responsible for supplying more than 40% of our total energy demands and almost 100% of transportation fuels (United States DoE, 2006). Of the approximately 20 million barrels per day (mbd) of oil the United States consumes, only 40 percent is domestically produced.² Over the past ten years, Americans have increased imports to meet its greater energy demands (United States National Energy Policy, 2001: 1-1). The U.S. has been a net importer of petroleum since the 1950s, and our import dependence has drastically increased in the last twenty years due to both higher demand and relatively low prices for much of this period. “42.2 percent of these imports come from Organization of Petroleum Exporting Countries (OPEC) and 57.8 percent from non-OPEC countries” (“Where We Stand,” 2005). 2.1 million barrels per day and approximately 770 million barrels per year of petroleum are delivered to the United States by 477 foreign tankers and 64 U.S. flag tankers (United States National Energy Policy, 2001: 7-15). The United States consumes a quarter of global oil supply, yet it possesses only three percent of world oil reserves (Luft, 2005: 1). It is projected that by

the year 2020 domestic oil production will decline from 5.8 to 5.1 mbd, yet domestic consumption is projected to rise from 20 to 25.8 mbd (United States National Energy Policy, 2001: 1-13).

The economics of oil has a significant impact on the United States. Since 1997, the price of energy as a share of GDP has tripled (Bergsten, 2004). “Every economic recession in the past 40 years has been preceded by a significant increase in oil prices” (Wirth, Gray, and Podesta, 2003). Federal and state taxes constitute about 30 percent of the price of gasoline, refining costs and profits account for 16 percent of the cost and 13 percent goes to distribution and marketing expenses (United States Embassy, 2002). According to President Bush, U.S. dependence on foreign oil is a “foreign tax on the American people” (Luft, 2005: 2). Imported oil accounts for a quarter of America’s trade deficit (Luft, 2005: 2). It is estimated that our oil dependence costs the United States about \$300 billion per year (Collina, 2005: 5). These funds must be sent abroad instead of using the money to invest in our own country. Although, as globalization augments, the extent of this condition is uncertain. Petroleum exporting countries often use petrodollars to purchase goods from United States companies or invest in United States banks. Despite the high costs, Americans continue to demand more.

Although the population is increasing its use of oil (particularly in the transportation sector), 90% of Americans feel our energy dependence is a critical issue that “needs to be addressed with urgency” (Luft, 2005: 7). In the United States, citizens have become more concerned that the price of oil will be affected by problems abroad. Americans believe the U.S. government should be addressing oil dependency more effectively and consider government intervention necessary to alleviate the problem (Yankelovich, 2006).

Global supply of oil is concentrated geographically. According to the National Energy Policy of 2001, two-thirds of proven oil reserves are in the Middle East! Elsewhere, Central and South America account for 9 percent; Africa, 7 percent; North America, 5 percent; Eastern Europe and the former Soviet Union, 5 percent; the rest of Asia, 4 percent; and Western Europe, 2 percent” (United States National Energy Policy, 2001: 1-12). This leaves the future for global energy in the hands of a few producers. Many of these countries, the leaders in world oil production, are either ruled by unstable governments or do not have good relationships with the United States (Luft, 2005: 4). U.S. dependency on these countries for oil is dangerous for our national security. We are vulnerable to oil exporting countries that do not have the well being of the United States in mind for our energy supplies. “U.S. dependence on oil leaves the country’s economic, security, and environmental destiny to forces beyond America’s control” (Wirth, Gray, and Podesta, 2003). In 1976, President Carter’s secretary of defense, Harold Brown, stated that “there is no more serious threat to the long-term security of the United States and to its allies than that which stems from the growing deficiency of secure and assured energy resources” (Kretzman, 2003). Twenty years later, this threat has only intensified. It is therefore important that the U.S. government keep energy security a priority in our national security agenda.

Since two-thirds of oil reserves are located in the Middle East, this gives considerable power to the Arab countries in the region. However, wealth in a natural resource such as oil has proven to facilitate underdevelopment in many resource-rich countries. Many of the oil rich countries of the Middle East are plagued with authoritarian governments who keep the oil profits concentrated in the hands of an elite few. Oil has been “interpreted as a key instrument of modernization and political

emancipation for Arab nationalists, or a long-term financial rent by Muslim traditionalists – not to mention a ‘weapon’ against Israel” (Le Billon and El Khatib, 2004: 111). For the population, resource wealth is not a blessing, but a curse (Le Billon and El Khatib, 2004: 112).

Governments in the United States and Western Europe first began to realize the importance of oil in the 1910s, when their navies converted from coal to oil for their energy supply. Other components of the military quickly followed, and oil was shortly thereafter integrated into industrial society. In the early twentieth century, “private American corporations accumulated commercial interests in the Middle East, especially in the emerging petroleum industry” (Hahn, 2005: 2). Since this time, oil has become an increasingly important part of the American way of life. The United States became a net importer of oil in the 1950s, and subsequently our nation has depended on foreign countries, particularly the Middle East, to supply our energy needs. As long as we remain dependent for oil, we will be dependent on the Persian Gulf (Kretzman, 2003). Consequently, our international relations and foreign policy towards this region is particularly significant.

United States Foreign Policy and Oil

“Over dependence on any one source of energy, especially a foreign source leaves us vulnerable to price shocks, supply interruptions, and in the worst case, blackmail.” – President Bush, 2001 (Klare (a), 2004)

Over the years, many factors have contributed to the evolution of U.S. oil policy formation: a series of crises in Iran, culminating in the Iranian revolution during the

Carter administration; two wars against Iraq; America's intervention in Afghanistan; the ongoing Arab-Israeli conflict; political instability in important exporting countries such as Saudi Arabia and Venezuela; the trend in Latin America toward trade and investment liberalization during the 1990s; and the threats of terrorism since September 11, 2001 (Randall, 2005: vii). Upon realizing the importance of oil, the United States has formulated policies aimed at obtaining oil, maintaining stable prices, and pursuing investment by U.S. oil companies abroad. "In terms of long range goals, United States international oil policy shows a remarkable continuity. When it comes to the means through which the United States attempted to achieve these aims, however, incoherence evidently is a more fitting characteristic" (Bull-Berg, 1987: 7). In order to effectively interact with foreign exporting countries, the United States integrated its energy policy with its foreign policy. There is a long and complex history of United States foreign policy, and this paper will only try to assess portions of foreign policy since World War II where there is a correlation with U.S. oil interests. "One of the major dilemmas in attempting to assess and trace the evolution of foreign oil policy is to determine the relationship of oil to other factors in foreign policy" (Randall, 2005: 2).

Making foreign policy involves weighing various aspirations: human rights standards, trade policies, oil procurement, etc. Foreign policy decision making is rarely a consistent, rational process. Formulating oil policy attempts to balance "conflicting or competing economic, environmental, and foreign policy objectives" (Ebel, 2005). In evaluating the complex process of policy formation, it is difficult to determine which factor, if any, is most important. Thus, this assessment of oil's role in United States foreign policy hypothesizes that oil is an important factor but not prove that oil is the definitive factor in developing foreign policy.

By the early Cold War, the basic characteristics of U.S. foreign oil policy were well established (Randall, 2005: 0). As oil became critical for the militaries of the world, the State Department realized the strategic value as the Cold War intensified (Klebanoff, 1974: 96). Defense alliances were established, and by “linking foreign trade with the U.S. military posture, the petroleum industry was singled out in view of its great commercial and industrial as well as military possibilities” (Klebanoff, 1974: 96). The government also believed that establishing trade relationships with countries would be beneficial in bolstering alliances, especially in regions where Soviet expansion was a concern. The tactical importance of the Middle East increased as the West attempted to contain Soviet influence in Europe and Asia (Hahn, 2005: 7).

“The Gulf’s significance increased greatly during the cold war due to the prevalence of oil in the region. A broad U.S. policy of maintaining stability in the Gulf emerged so as to ensure the easy access to and safe transport of oil from the region while keeping the Soviets at bay” (Lesch, 2003: 311). It was vital Cold War policy to deny the petroleum resources of the Middle East to the Soviet Union. The United States intended to use these resources to stimulate the economic restoration and renewal of Japan and Europe post WWII. The government also planned to use Middle East petroleum as oil reserves in case of international emergency (Hahn, 2005: 7). The region’s balance was maintained through Iran’s strength and the wealth of Saudi Arabia (Lesch, 2003: 311).

According to Robert Ebel, Chairman of the Center for Strategic and International Studies Energy Program, the United States energy security policy has four features: 1) promoting development of diverse energy supplies; 2) at times encouraging efficiency, conservation, and alternative sources of energy; 3) the establishment of the strategic petroleum reserve and sharing information through the International Energy Agency; and

4) depending on Saudi Arabia to moderate price and supply instability. Additionally, we have at times “been moved to call on America’s military to defend facilities, protect transit routes and secure inhospitable areas” (Ebel, 2005). Two of the strategic interests the United States has in relation to the Persian Gulf are preventing countries unfriendly to the United States from controlling petroleum resources and the Strait of Hormuz and guaranteeing access to the energy reserves in the Gulf by the United States and our allies (Lesch, 2003: 406-407).

One of the problems of foreign policy in relation to our oil dependence is that many of the energy sources in the Middle East are unreliable or unstable. “The vast oil wealth of the Persian Gulf is a key dimension of geopolitics in the Middle East and an emblematic prize of so called ‘resource wars’” (Le Billon and El Khatib, 2004: 109). If the petroleum resources of the Middle East were controlled by aggressive powers, our foreign policy must reflect not only our desire for oil, but also our political position against the hostile control.

Many analysts argue that since Franklin Roosevelt met with Saudi King Abdul Aziz ibn Saud in 1945, United States foreign policy has acquiesced to our oil dependence. They feel that American values were compromised in exchange for indulging foreign leaders controlling vast hydrocarbon resources, even if the leaders were oppressive tyrannical rulers (Luft, 2005: 1). “The flow of funds to certain oil-producing states has financed widespread corruption, perpetuated repressive regimes, funded radical anti-American fundamentalism, and fed hatreds that derive from rigid rule and stark contrasts between rich and poor” (Wirth, Gray, and Podesta, 2003). The United States oil vulnerability keeps our foreign policy indebted to a handful of exporting countries and in

order to meet increasing demand, we will at times be forced to militarily intervene in the region (Bergsten, 2004).

The profits oil exporting countries receive for selling their petroleum resources are called petrodollars. As oil prices rise, these profits find their way to “the jihadists committed to America’s destruction as [they] trickle their way through charities and government handouts to madrassas and mosques, as well as outright support of terrorist groups” (Luft, 2005: 2). This undermines the strategic relationship the United States has with the oil producers in the Persian Gulf. In the war on terrorism, the United States can peculiarly be seen as funding both sides. The government first sponsors countries in the Free World defending against terrorism through tax dollars. Then it indirectly funds terrorist groups and hostile regimes through the profits they receive from selling the United States petroleum (Luft, 2005: 2). Some of the Middle East nations are accused of sponsoring or being allied with radical Islamists who conspire against the U.S. “Petrodollars... have been used to sponsor terrorism, produce weapons of mass destruction and build schools preaching hatred of America and its values” (Luft, 2003).

Yet another problem of oil dependence is protecting United States interests and investments abroad. Foreign policy must reflect our intentions to maintain foreign assets and our willingness to defend pipelines, tanker fleets, and U.S. companies operating abroad. A robust foreign policy would “strive to deny a potential enemy access to the foreign oil, and it will do everything in its power to assure access to friends” (Klebanoff, 1974: vii). However, the presence of U.S. military in the Persian Gulf is not generally welcomed. It creates resentment by the population and invites more terrorist attacks (Collina, 2005: 4). One method of involvement has included providing friendly countries with arms in order to defend themselves. “Providing the regimes in question with

sophisticated weapons may be good for the oil importers' balance of payments, but it does not necessarily do much for security, especially as the weapons may fall into the wrong hands" or a regime change empowers a hostile government (Houthakker, 1981: 320). Many Americans are concerned about the price they must pay to secure oil supplies from these foreign countries. They worry not only about the monetary cost, but also the lives and U.S. credibility that is sacrificed (Barnes, Jaffe, and Morse, 2003). It costs about \$60 billion per year to sustain the United States military presence in the Persian Gulf alone, and "outside the United States the view is growing that assuring the flow of oil does not require a significant military strategy" (Telhami, 2002). Additionally, the United States puts itself at greater risk of involvement in local conflicts by intruding in the affairs of petroleum exporting countries (Klare (a), 2004).

President Jimmy Carter announced in 1980 "that the secure flow of oil from the Persian Gulf was in "the vital interests of the United States of America" and that America would use "any means necessary, including military force" to protect those interests from outside forces" (Collina, 2005: 3). This Carter Doctrine has been the basis for military involvement in oil foreign policy ever since. As a result, the U.S. has attempted to use the military to address oil vulnerability through measures to support or install friendly governments. Soon after the declaration of the Carter Doctrine, the United States Rapid Deployment Joint Task Force (RDJTF) was formed. The RDJTF later became U.S. Central Command (USCENTCOM). Through the establishment of CENTCOM, the government indicates that it will assert the use of force on the basis of the Carter Doctrine. The deployment of U.S. military forces in the Middle East, an area not covered by NATO, correlates closely to the presence of oil in the region (Kretzman, 2003). "U.S. policy with regard to the protection of Persian Gulf energy supplies is unambiguous:

When a threat arises, the United States will use whatever means are necessary to ensure the continued flow of oil” (Klare (a), 2004).

One criticism of current oil foreign policies is the close relationship between the administration and the private oil industry. The Bush family has been in the oil business since 1950. George Bush Sr. even visited Saudi Arabia while he was Vice President to plead for oil price stability. Vice President Dick Cheney was CEO of the world’s largest oil services company, Halliburton. Donald Evans, the Secretary of Commerce, was the CEO of a natural gas company; and Secretary of State (former National Security Advisor) Condoleezza Rice had an oil tanker named after her due to her position on the board of Chevron. There is no denying the administration’s knowledge and connection with the energy sector. Yet these relationships “don’t prove that the industry decides our every foreign policy move” (Cave, 2001). One argument is that given the oil’s importance to U.S. national security and economy, it is beneficial to have an administration with extensive experience with oil. Only time and objective analysis will determine if the current Bush administration’s oil ties have benefited our foreign policy or put the United States in further harm of oil dependency.

A unique relationship exists between three parties involved in the “oil triangle”: the United States, the international oil companies, and the oil exporting government. At various times through history each has had supremacy over the others. It is a dynamic relationship with each party pressuring the other two to submit to its desires. The United States wants to ensure access to plentiful oil at a reasonable and stable price in addition to foreign policy objectives such as human rights and strategic political issues. The oil companies want to increase their shares in foreign oil investments. They want to increase their profits. They want to be protected by the U.S. government, and they want the U.S.

government to create foreign policy in compliance with their host oil exporting countries. The oil exporting nations want to control their natural resource and maximize profits from the sell of oil. They want to use their energy power to pressure importing countries to adopt foreign policies which would benefit them, and they want to utilize the abilities of oil companies without granting them additional authority. This unique relationship is constantly evolving, and determining who wields the most control is often a matter of perception. One observation is that “foreign oil policy could be, and indeed generally was, remarkably successful as long as the strategic objectives of state planners and the profit motives of the companies coincided” (Randall, 2005: 1).

Former Department of Energy Secretary Spencer Abraham proclaimed that “the Bush administration is committed to ensuring that U.S. energy needs are not held hostage by politically unstable foreign suppliers” (United States Embassy, 2002). Accordingly, the United States refuses to submit to oil exporting countries. Even some of the most conservative administrations (who are seen as favoring oil interests) have chosen foreign policies at the expense of the oil industry – such as containment of the Soviet Union as opposed to oil industry investment in the USSR. “Aspects of Bush’s energy plan suggest that even this administration will not break the give-and-take pattern” (Cave, 2001). One indication that the oil industry has lost some power over time is the problems that American antitrust laws gave oil companies. These laws prevent the companies from establishing monopolies abroad and prevent the U.S. government from providing political advice to private corporations (Randall, 2005: 272).

Unlike some other oil importing countries, the United States prohibits oil companies from doing business with some of the world’s worst human rights violators, such as Iran. “In the global contest for oil the U.S. loses ground as a result of its pressure

for government reform” (Luft, 2005: 4). However, as oil demand increases and domestic oil expires, petroleum interests in the United States may take precedence over other foreign political objectives in the policies with oil exporting countries.

United States Oil Suppliers Outside the Middle East

Although the focus of this paper is on United States foreign oil policy in relation to the Middle East, the United States relies on a variety of sources for our petroleum supply. Accordingly, before evaluating the specific Persian Gulf cases, I would be remiss not to mention some of the important suppliers of United States oil outside the Middle East:

The Persian Gulf is important to the United States because of the immense proven reserves it holds. However, Canada is actually the leading supplier of oil to the United States! In 2000, 15 percent of oil imports came from our northern neighbor (United States National Energy Policy, 2001: 8-4). The United States has placed greater importance on regional sources and strengthening relationships with oil exporters within the western hemisphere. Canada has considerable heavy oil sands reserves, and the country is critical in providing oil for the New England states. “The Bush administration is moving in a new direction by building a stronger partnership with Canada and Mexico. A major undertaking in this area, the North American Energy Initiative, aims at developing policies to enhance energy security, trade and interconnections between the three countries” (United States Embassy, 2002).

Mexico accounted for 12% of U.S. oil imports in 2000. It also holds approximately 25% more proven reserves than the United States (United States National Energy Policy, 2001: 8-9). Major increases in Latin American oil output are blocked by

regulatory, political and environmental barriers. “Foreign oil interests were expropriated in favor of the national oil company, Pemex” in Mexico during 1938 (Houthakker, 1981: 32). Mexico and Venezuela “have placed their energy reserves under state control, establishing strong legal barriers to foreign involvement in domestic oil production” (Klare (b), 2004). However, the United States is encouraging Mexico to open investments to America’s private sector where possible.

Venezuela provided 14% of United States oil imports in 2000. It is America’s third largest oil supplier, and it is the fifth largest global oil exporter (United States National Energy Policy, 2001: 8-10). The United States continues to pursue investments in Venezuela’s oil sector and encourage bilateral trade arrangements. It has the benefit (as do Mexico and Canada) of being geographically close to the United States, and the country has significant oil reserves.

In the 1970s, the United States modified its oil import program under the Nixon administration so as not to discriminate against Venezuela in its foreign oil policy. “The modification of policy was intended in part to strengthen U.S. petroleum trade with Venezuela and the other Latin American countries” (Randall, 2005: 285). Venezuela notably refrained from participating in the 1973 oil embargo against the United States. One problem with Venezuela’s energy sector is that its oil company is state owned, making it susceptible to corruption and manipulation. In late 2002 and early 2003, a general strike in Venezuela “severely constricted the flow of oil and gasoline for several months” and kept around 200 million barrels of petroleum from global oil markets (Billig, 2004). This crisis was a hurdle in the U.S. attempt to diversify sources away from the Middle East. Venezuela is an essential component to Washington’s goals of diversification and hemispheric oil cooperation. The United States aggravated the

relationship with Caracas in 2002 when the U.S. government hastily supported an interim government in Venezuela when President Hugo Chavez was briefly removed from office. Upon his return, tensions escalated with the United States. Despite unfriendly relationships between the U.S. and Venezuela, America attempts to maintain a strong trading partnership.

Colombia is the seventh largest importer to the United States (United States National Energy Policy, 2001: 8-4). The country is continuing to develop its oil production capabilities. The Bush administration apportioned \$98 million in 2002 for the deployment of Special Forces troops to Colombia. These troops were to “train a “Critical Infrastructure Brigade” of Colombians for the explicit purpose of protecting an Occidental Petroleum pipeline” (Kretzman, 2003). It is also speculated that U.S. involvement in the civil war in Colombia was motivated by the country’s oil resources.

Africa is also important to the United States in its efforts to diversify petroleum sources. Sub-Saharan Africa holds 7% of proven world oil reserves, and Nigeria is the fifth largest exporter to the United States (United States National Energy Policy, 2001: 8-4). West Africa is expected to be a growing source of oil to the United States. The United States is encouraging investment in Africa to develop production capacities. The problem of political instability is a problem in many African countries rich with oil resources.

Outside of OPEC, Russia is the world’s largest oil exporter. It is second in total global exports to Saudi Arabia (Barnes, Jaffe, and Morse, 2003). Russia holds 5% of the world’s oil reserves and is the world’s third largest oil producer (United States National Energy Policy, 2001: 8-13). “U.S. – Russian cooperation on energy in general and oil in particular has been high on the agenda of Bush-Putin summits that began in the summer of 2001 and culminated in the creation of a U.S.-Russian Energy Dialogue” (Barnes,

Jaffe, and Morse, 2003). Russia has opened the energy sector to foreign investment, and production is predicted to continue increasing.

The U.S. has encouraged reform in Russia over “the state oil pipeline monopoly Transneft and its pipeline sector, but reform is slow in coming” (Barnes, Jaffe, and Morse, 2003). Russian concerns include supply stability, especially considering the Yukos case. Russia has increasingly become an important exporter to our European allies, and an increase in Russian oil production would benefit all importing countries by reducing the share of OPEC oil in the market. Continued discussions and stronger partnerships are expected between Washington and Moscow concerning Russia’s petroleum resources and development of production capabilities.

The United States has become increasingly interested in the Caspian region as an alternative source of energy. The U.S. has worked closely with the region to develop commercially viable export routes for its oil supply. The United States was “reluctant to see Caspian oil flow through Russia on its way to Western Europe, since that would allow Moscow a degree of control over Western energy supplies. Transport through Iran was prohibited by U.S. law” (Klare (b), 2004). The result was a plan to develop a pipeline from Baku in Azerbaijan to Ceyhan in Turkey through Tbilisi in the former Soviet republic of Georgia. The United States “has a strategic interest” in the construction of the Baku-Tbilisi-Ceyhan (BTC) oil pipeline “because diversification of both energy supplies and export routes will benefit both” the Caspian countries and “the energy security of the Western world” (Gvosdev, 2003).

“The major problem facing the United States is that the Caspian basin is no more stable than the Persian Gulf” (Klare (b), 2004). The Caspian region has a history of political instability. The countries are susceptible to corruption and government

manipulation in the oil sector. They do not have an adequate legal or economic framework for the oil industry. The countries of the Caspian Sea region must address serious internal structural issues before these nations can substantially increase oil production.

“The [Clinton] administration initiated a number of military assistance programs aimed at strengthening their internal security capabilities. This entailed providing arms and training along with conducting joint exercises” (Klare (b), 2004). Subsequently, the United States has provided Caspian countries support for the War on Terror and military assistance to increase their security since September 11, 2001. The U.S. government has been working actively to secure possible pipeline routes to export petroleum from the region. In 2001, Washington promised over \$4 million to Azerbaijan in military aid for the fight against terrorism. The Azerbaijani president stated “Guaranteeing the security of the Baku-Tblisi-Ceyhan and the Baku-Tblisi-Erzurum oil and gas pipelines is an integral part of our struggle against terrorism” (Kretzman, 2003). The U.S. also promised \$64 million to Georgia in 2001 for military support. In addition, the United States pledged to dispatch 180 Special Forces “advisers” to train up to 2,000 Georgians in anti-terrorism techniques;” this training might include protection and security for the BTC pipeline (Kretzman, 2003).

Foreign Policy Divergence from Oil Interests

The US oil objectives have “frequently conflicted with other US foreign policy interests. The greater need for oil in the future is at odds with some of the US-driven policies towards ‘rogue’ petro-states” (Le Billon and El Khatib, 2004: 126). There are distinct cases where the United States foreign policy goes directly against what would

benefit U.S. oil companies and the United States relating to oil acquisition. “Sanctions – imposed notably by the US on Iran, Libya, or Sudan – ... reflect the fact that energy policy and business interests are not the only factors in determining foreign policy towards oil-producing states” (Le Billon and El Khatib, 2004: 113). Sanctions throughout history have resulted in significant profit losses for oil companies and have considerably cut the amount of oil available for import to the United States.

United States foreign policy towards Israel is the most definitive case of political policy factors taking precedence over oil dependence. Washington has continuously supported Israel in its defense against Arab countries (many of which are major oil exporting nations). As a result, the United States has at times suffered extreme economic losses and been subject to embargoes. The pro-Israeli position has been an area of contention with Arab producing nations. U.S. oil companies have even lobbied on behalf of the Arab position in disputes with Israel in order to improve their standing with these petroleum producers. Yet the United States has remained steadfast in support of Israel. If this condition changes, one factor in the transformation might be that “the stability of the oil area is acquiring greater importance for U.S. strategic interests as Israel’s strategic value as an anti-Soviet bulwark in the Middle East becomes less relevant” (Lesch, 2003: 279). Washington is compelled to energetically pursue a resolution to the Arab-Israeli conflict that will satisfy both sides. A resolution to the Arab-Israeli problem will alleviate pressures from the Middle Eastern oil exporters and will improve Washington’s reputation in the region.

Case Studies

The Middle East contains approximately two-thirds of the world's proven oil reserves. Consequently, the petroleum resources of the Persian Gulf region are, and will continue to be, important for the United States. The following are three case studies related to oil and foreign policy in the Middle East. Through these I hope to illustrate the relationship between Washington and Middle Eastern petroleum exporting countries. These case studies are noteworthy, but they are limited, and they do not intend to disregard other Middle Eastern countries with significant oil resources – Iran, Kuwait, the UAE, etc.

Saudi Arabia

“Persian Oil... is yours. We share the oil of Iraq and Kuwait. As for Saudi Arabian oil, it's ours.” – President Roosevelt to British Ambassador, 1944

(Yergin, 1991: 401).

Saudi Arabia currently supplies approximately 14% of U.S. oil imports and about 8% of total U.S. demand. It is the second largest importer to the United States. Saudi Arabia “holds just over one quarter of all the oil in the world. Saudi Arabia has proven reserves of 264 billion barrels of oil, and possible reserves that are estimated by the U.S. Energy Information Administration to be as high as one trillion barrels. The Saudis have the world's largest production capacity and the largest excess production capacity” (Kretzman, 2003). Daily, Saudi Arabia produces around 8 million barrels of crude oil. Not only is Saudi oil important to the United States and the global market, oil is an important factor within the kingdom. Profits account for 90-95 percent of Saudi Arabia's

total export earnings; oil revenues make up 35-40 percent of the kingdom's GDP; and they comprise 70 percent of state revenues (Le Billon and El Khatib, 2004: 119).

Despite its involvement in the 1973 oil embargo, Saudi Arabia has been one of the most reliable exporters by providing the world with oil when needed. Saudi Arabia is the most plentiful, dependable, and secure source of oil not only in the Middle East, but globally (Ebel, 2005). "For these reasons, the oil market revolves around Saudi Arabia. For U.S. geopolitical strategists, this dependence on Saudi Arabia is a major vulnerability which fundamentally shapes U.S. military policy" (Kretzman, 2003).

As oil gained importance in the U.S. economy, "Saudi Arabia became the dominant focus of American policymakers" (Yergin, 1991: 427). The relationship between Washington and Riyadh dates back to World War II when in 1943 President Franklin D. Roosevelt declared Saudi Arabia a vital interest to the United States, thus making it qualified for assistance through the Lend-Lease program (Hahn, 2005: 9-10). Then in 1945, the President "forged an agreement with Abdul-Aziz ibn Saud, the founder of the modern Saudi dynasty, to protect the royal family against its internal and external enemies in return for privileged access to Saudi oil" (Klare (b), 2004). This "special relationship" was defined by the oil for security exchange between the countries. After this arrangement, the United States was able to assert a principle position in the Middle East. Then in 1950 the United States agreed to the 50-50 deal with Saudi Arabia. This arrangement granted the Saudi king a greater share of the Arabian American Oil Company's (Aramco) revenues in order to secure the flow of oil (Hahn, 2005: 10). The State Department "was a strong proponent of meeting Saudi demands" (Yergin, 1991: 446). Roosevelt's promise still stands, and "the use of military power to protect the flow

of oil has been a central tenet of U.S. foreign policy since 1945” (Collina, 2005: 3). This agreement to a large degree governs our relations with Saudi Arabia to this day.

The 1973 oil embargo on the United States by the Organization of Arab Petroleum Exporting Countries (OAPEC) complicated the relationship with Saudi Arabia. For the United States, it was important that the largest oil producer not participate in embargoes against the U.S. The brief confrontation between the United States and Saudi Arabia ended quickly. By early 1974, before the embargo was formally lifted, the United States and Saudi Arabia negotiated a bilateral agreement to end the kingdom’s participation in the embargo (Bull-Berg, 1987: 58). As a result of the embargo, the increase in oil prices made Saudi Arabia even more critical to policymakers in Washington. The United States position in Saudi Arabia was bolstered because of its economic importance. The U.S. was not only a large consumer of Saudi oil, but it was an ideal location for Saudi oil revenues. “Saudi petrodollars were recycled through U.S.... banks, the Saudi government became a major purchaser of U.S. Treasury bonds, and Saudi private wealth found investment opportunities in the United States” (Lesch, 2003: 362-363).

“The new oil wealth deepened the Saudi linkages to the United States” (Lesch, 2003: 362). Militarily, Saudi Arabia bought the majority of its arms from the United States. The kingdom then used U.S. training missions to train Saudi troops in the new weaponry. Additionally, large building projects were completed by the U.S. Army Corps of Engineers throughout Saudi Arabia. As its oil wealth and proven reserves increased, the kingdom realized the importance of the United States as an outside guardian. Saudi Arabia requested that the United States exhibit its military commitment to the kingdom in 1979. The Iranian revolution was developing nearby, and Saudi royalty feared a similar

rebellion. The United States responded by sending a squadron of F-15s as a military display. A year later the Iran-Iraq war broke out, and in October 1980, “U.S. AWACS (airborne warning and control system) aircraft were dispatched to the kingdom to strengthen its air defenses” (Lesch, 2003: 362). During this war, Iran attacked both Saudi and Kuwaiti oil tankers and shipping vessels. The United States reacted by sending naval ships to the Gulf in 1987 to protect our allies (Lesch, 2003: 362). Finally, the U.S. urgently sent troops to protect the kingdom when Iraq invaded Kuwait in 1990.

The flow of money from American pockets to Saudi Arabia and U.S. military presence in the region are not always beneficial to the United States. “It is widely accepted that Saudi Arabia’s oil wealth has directly enabled the spread of Wahhabism” (Luft, 2005: 2). The kingdom uses petrodollars to sponsor its own brand of fundamentalist Islam throughout the Middle East. Osama Bin Laden justified the terrorist attacks by mostly Saudi terrorists on September 11 “by the oil-related presence of US troops on the ‘Holy Soil’ of the Arabian Peninsula and the moral corruption of the oil-rich Saudi regime” (Le Billon and El Khatib, 2004: 116). There is wide popular discontent within Saudi Arabia over the kingdom’s friendship with Washington. Many also feel the House of Saud is corrupt and condemn the family’s wealth and position, which is maintained by conceding to U.S. pressure. Saudi Arabians criticize the presence of U.S. military in their country. Bin Laden echoes these sentiments and recruits from the angry Saudi citizens. “The Saudis fear that if their citizens again perpetrate a terror attack in the U.S., there would be no alternative for the U.S. but to terminate its long-standing commitment to the monarchy – and perhaps even use military force against it” (Luft, 2005: 3). In order to preclude this outcome, the Saudis must search for new countries in need of oil that will be willing to protect the kingdom.

Clearly Saudi Arabia has no desire for the importance of oil to diminish. “Saudi Arabia’s goal is to assure that oil’s role in the international economy is maintained as long as possible. Hence Saudi policy has always denounced efforts by industrialized countries to wean themselves from oil dependence, whether through tax policy or regulation” (Morse and Richard, 2002). Consistently, the kingdom discourages oil importing countries from creating and maintaining large oil reserves, like the Strategic Petroleum Reserve in the United States. These reserves could weaken Saudi Arabia’s ability to affect prices and provides the importing country with some flexibility (Houthakker, 1981: 317).

Saudi Arabia has close to 3 million b/d spare capacity (Morse and Richard, 2002). This is enough to replace the oil exports of another major petroleum exporting country in the global market. This spare capacity can benefit the United States by stabilizing the oil market in times of crisis, yet it can also be used against the United States. “Saudi spare capacity is the energy equivalent of nuclear weapons, a powerful deterrent against those who try to challenge Saudi leadership and Saudi goals. It is also the centerpiece of the U.S.-Saudi relationship” (Morse and Richard, 2002). Saudi Arabia’s spare capacity makes oil importing countries like the United States reliant on Riyadh for energy security.

President Roosevelt’s assurance of America’s protection of the House of Saud has extended since WWII and remains the foundation for Washington’s “special relationship” with Saudi Arabia today. Saudi Arabia will remain the most vital oil exporter not only in the Middle East but in the world due to its production capability, its spare capacity, and its immense proven reserves. As such, oil will continue to play a principal role in U.S. foreign policy making with Saudi Arabia. However, Washington must be careful not to

incense the Saudi population by its military presence and supporting the, often repressive, House of Saud. It is more likely for the United States to assist in stabilizing the country rather than endeavoring to create reforms or revolution (Le Billon and El Khatib, 2004: 131). Although a multitude of factors are considered when developing foreign policy, it is likely the United States will continue to push democratic and human rights issues behind our energy needs when dealing with Saudi Arabia. "It was an unlikely union – Bedouin Arabs and Texas oil men, a traditional Islamic autocracy allied with modern American capitalism. Yet it was one that was destined to endure" (Yergin, 1991: 428).

Our extensive relationship with Saudi Arabia will surely continue. If current petroleum trends continue in the United States, the kingdom's importance to U.S. energy demands will only increase. The U.S. must keep Saudi Arabia's security at the top of our national security agenda. However, it is important that the United States begin moving away from oil dependence. Doing so would allow Washington greater freedom in designing policies based on other objectives above and beyond oil procurement toward Saudi Arabia. Until a time when the United States is less reliant on Saudi Arabia for current and future energy needs, Washington must stress the importance of maintaining a strong relationship with Riyadh, protecting our interests, stabilizing the kingdom, and carefully diminishing criticism and resentment by the Saudi population.

1973 Oil Crisis

British Petroleum and Standard Oil, two major international oil corporations, decided to reduce oil prices in 1959 to the shock of their host oil exporting countries. The effect was enormous. A year later, in response, the major oil producing countries collaborated to establish the Organization of Petroleum Exporting Countries (OPEC).

OPEC claimed its intent was to stabilize prices by controlling production. The creation of OPEC is significant because it meant that these countries would be working together to create oil policies. At the time of conception, the OPEC countries accounted for 80 percent of world oil exports (Randall, 2005: 264)!³

The reaction of the United States was to adopt “a policy of neutrality and non-commitment toward OPEC from its inception” (Randall, 2005: 270). U.S. policymakers and analysts believed that the organization would not survive long due to the “unholy alliance’ among Venezuela, Indonesia, and Iraq” who each had very different governments and ideologies (Randall, 2005: 272). Over the next couple of years as OPEC endured, the U.S. reassessed its stance toward OPEC and decided to initiate a functional relationship in hopes to improve the U.S. position with global oil exporters. Washington realized that oil companies could benefit from certain OPEC policies. OPEC began to gain control in global energy markets in the early 1970s (Houthakker, 1981: 314). The oil cartel demonstrated cohesion in deciding production levels and prices.

In addition to OPEC, there is a separate organization for Arab petroleum exporting countries (OAPEC). The two groups were similar, but OAPEC consisted of only the Arab countries of OPEC. It was OAPEC that declared the oil embargo on the United States and the Netherlands in October of 1973. These Arab states were punishing the United States for its support of Israel in the Yom Kippur War. The oil ministers “agreed to use oil as a weapon in the war, thus mandating a cut in exports and ... in production” (Randall, 2005: 288). The embargo had the effect of quadrupling global crude oil prices (Houthakker, 1981: 314). It also resulted in making “the Arab-Israeli conflict over the nationhood of Israel, the sovereignty of Palestine, and the status of

Jerusalem stand out as the set of regional enmities that most seriously affected the oil system” (Bull-Berg, 1987: 103).

The American oil companies with interests in the Middle East were worried about Washington’s position toward the Arab-Israeli conflict. These companies urged the administration “to adopt a less pro-Israeli position” (Randall, 2005: 287). Richard Nixon, who was President at the time, was not affected by their pleadings, despite the fact that he had received campaign support from the oil industry (Randall, 2005: 287). Even the Petroleum Minister of Saudi Arabia had warned Aramco that “if the U.S. does not stay out of this conflict, the U.S. is finished in the Middle East” (Randall, 2005: 276). However, before the embargo, the administration felt that their access to foreign oil was guaranteed since most of the Arab producing countries relied on profits from exports to the United States (Randall, 2005: 269-70).

“At the rhetorical level, the United States acted quickly and forcefully to counter the exasperation created by the 1973-4 oil embargo” (Bull-Berg, 1987: 3):

Let us unite in committing the resources of this nation to a major new endeavor, an endeavor that in this bicentennial era we can appropriately call ‘Project Independence,’ ... Let us set as our national goal, in the spirit of Apollo, with the determination of the Manhattan Project, that by the end of this decade we will have developed the potential to meet our own energy needs without depending on any foreign energy sources ... We have an energy crisis, but there is no crisis of the American spirit.

-President Richard Nixon, November 7, 1973

Washington initially responded by developing short-term and long-term measures to affect market behavior and the politics of oil (Bull-Berg, 1987: 7). The Nixon administration made considerable domestic policies in response to the 1973 embargo: Americans were asked to turn down their thermostats, conserve electricity, and reduce driving speeds (Randall, 2005: 288). Canada and the U.S. began protecting the domestic oil market by setting price controls. This exacerbated the economic, political, and energy situation in other oil importing countries who, like the Europeans and Japanese, “not only allowed the world price to prevail domestically, but increased indirect taxes on petroleum products” (Houthakker, 1981: 330). The U.S. was determined to control the price of oil and not let OPEC be the dictator. The most critical foreign policy objective was to convince the largest producer, Saudi Arabia, to conclude its embargo on the United States and to resume production at levels that would stabilize oil prices (Bull-Berg, 1987: 58).

President Nixon took the lead as the embargo continued to deteriorate the energy and economic situation of the United States and other oil importing countries (Randall, 2005: 288). He brought these countries together at the Washington Energy Conference in 1974. Here Secretary of State Henry Kissinger presented “Project Independence,” the objective being United States self-sufficiency in energy (Randall, 2005: 289). Later that year, the countries met again in Paris to establish a mechanism to counter OPEC. Thus, the International Energy Agency (IEA) was founded which set up arrangements regarding sharing oil supplies during emergencies. The IEA also called for the creation of petroleum reserves by its members. Otherwise, the “Nixon Administration policy towards the embargo shifted between behind the scenes diplomacy and some saber rattling in public” (Randall, 2005: 289). Kissinger’s shuttle diplomacy “convinced Arab states to resume shipments of oil to Western states in March 1974” (Hahn, 2005: 60). The oil

embargo crisis cost the United States approximately \$15 billion during just the first quarter of 1974 (Randall, 2005: 290). This was the price America paid for supporting Israel over the desires of Arab producers and not succumbing to oil pressures over other foreign policy objectives.

United States energy and security policy has been shaped by the threat of the oil weapon since the 1973 embargo (Kretzman, 2003). “The current energy security system was created in response to the 1973 Arab oil embargo to ensure coordination among the industrialized countries in the event of a disruption in supply, encourage collaboration on energy policies, avoid bruising scrambles for supplies, and deter any future use of an “oil weapon” by exporters” (Yergin, 2006). Key elements of current coordinated energy and foreign policy between the United States and other importing nations towards the oil threats of OPEC and other oil cartels are: the International Energy Agency, including the maintenance of domestic petroleum reserves; energy conservation; coordination in case of oil disruptions to ensure the sharing of supplies; and the observation and analysis of oil market conditions and changes (Yergin, 2006).

The members of OPEC have very different foreign policy concerns; but through the cartel, the primary goal of each is to maximize profits from oil (Houthakker, 1981: 316). During the 1973 oil embargo, OPEC’s announced “5 percent monthly production cutbacks were canceled within a month. By December 25, OPEC agreed to a 10 percent increase in January production. The promise to tie oil exports to Israeli withdrawal from Palestine had a shelf life of only two months” (Taylor, 2001). The embargo was terminated for economic, not political reasons. “OPEC’s cover story was an attempt to win a few foreign policy points for actions it would have taken anyway... Never once

have they allowed foreign policy considerations to get in the way of the bottom line, self-serving declarations to the contrary notwithstanding” (Taylor, 2001).

The oil crisis of 1973 was a wake up call to policymakers in Washington. The U.S. was forced to realize the power of OPEC and the demands of oil exporting countries. “The growing economic power of OPEC enables them to resist U.S. pressure on a variety of issues from human rights to nuclear proliferation” (Luft, 2005: 5). Also demonstrated by the embargo was the cost America would pay in choosing support of Israel over foreign policy dictated by the petroleum factor. The oil embargo “dramatized America’s dependence on imported oil and the consequences of its insatiable appetite for energy” (Feldman, 1996: 1). The result was a modification in our national energy strategy to include creation of the IEA and the Strategic Petroleum Reserve. Fortunately for the United States, a similar embargo today would be improbable “because of increased flexibility and diversity of supply and more abundant energy reserves” (Feldman, 1996: 12).

Iraq

Iraq is positioned centrally in the Persian Gulf – an area with more than 60 percent of all the world’s oil reserves (Collina, 2005: 3). Iraq’s proven oil reserves are, second only to Saudi Arabia, 11 percent of global reserves (Barnes, Jaffe, and Morse, 2003). Some estimate that Iraq could possibly have as much as 220 billion barrels in reserves, which is about 80 percent of Saudi Arabian reserves (Kretzman, 2003). Additionally, Iraq is the sixth largest importer of petroleum to the United States (United States National Energy Policy, 2001: 8-4).

Like the other Middle Eastern oil producing countries, Iraq gained considerable importance after World War II. However, in June of 1967 Iraq dissolved diplomatic relations with the United States following the Arab-Israeli Six Day War. Iraq claimed that the United States had colluded to support Israel (Lesch, 2003: 328). Although petroleum imports continued to flow into the U.S. market, the countries did not have a good relationship. After the oil embargo and Yom Kippur War of 1973, Iraq was influenced by its dismal economic situation and attempted to improve relations with the West (Lesch, 2003: 328).

Although the U.S previously enjoyed a close relationship with Iran, the political climate changed when the Shah was overthrown during the 1979 Iranian Revolution. The United States was not given preferential treatment by the new government, and U.S. relations with Iran deteriorated. When Iraq invaded Iran in 1980, “the United States criticized the invasion, but its real attitude was very different... Saddam Hussein attacked a state that had taken Americans hostage and was most hostile to the United States” (Lesch, 2003: 328). The United States realized Iraq’s energy potential, and could not risk Iraq’s defeat to Iran.

At a time during the Cold War, the United States was encouraged to assist Iraq because of its position counter to the Soviets. Washington decided to provide Iraq with both direct and indirect assistance. This included “battlefield intelligence; Operation Staunch, designed to deprive Iran of arms; support in the United Nations (UN) for a resolution calling for a cease-fire; and reflagging Kuwaiti tankers” to protect against Iranian gunboat attacks (Lesch, 2003: 329). Secretary of State Kissinger facilitated negotiations between Saddam Hussein and the Shah of Iran which helped to improve Washington’s position in Baghdad (Lesch, 2003: 328). Due to considerable damage to

the petroleum production and distribution structure in Iraq caused by the war, Iraq could not produce or export petroleum at a substantial level (Houthakker, 1981: 315). After the war, the United States strongly supported a Jordanian-Iraqi pipeline which was designed to help prevent an economic collapse in Iraq (Lesch, 2003: 329).

The U.S.-Iraqi relationship was again strained when the war concluded. Both sides began to see glaring differences in their foreign policies. Obstacles to a working relationship included human rights issues; the Iraqi accumulation of weapons of mass destruction (WMDs); opposite stances on Israel; and Iraq's apparent support for terrorist groups in Palestine (Lesch, 2003: 329). It was becoming obvious to Saddam Hussein that the United States would not allow him to dominate the Persian Gulf as he desired. "Saddam offered President Bush a guarantee... that oil would flow undisturbed... at a 'reasonable price' of \$25 per barrel. In return he expected U.S. acceptance of the annexation of Kuwait and Iraq's status as senior U.S. ally in the Gulf" (Lesch, 2003: 344).

President Bush would not accept the annexation. If Iraq captured Kuwait, it would control over 21 percent of global oil supplies. And if Iraq had control over these enormous Persian Gulf resources, it "would have a 'stranglehold' on the economy of most of the nations of the world" (Le Billon and El Khatib, 2004: 124). Baghdad concluded that it could no longer cooperate with the United States. Washington was preventing Iraq's desire for "Gulf and Arab hegemony and what [Iraq] saw as its legitimate national security interests" (Lesch, 2003: 345).

On August 2, 1990, Saddam Hussein commanded his troops to enter Kuwait. In the process, Iraq took control of the Rumailah oil field (Randall, 2005: 301). "Iraq justified its invasion of Kuwait in 1990 by accusing it of tapping into cross-border oil

fields and maintaining a low price policy which undermined Iraqi oil revenues, ultimately resulting in a devastating combination of war, economic sanctions, domestic rebellion and internal repression” (Le Billon and El Khatib, 2004: 112). President Bush took the lead and responded immediately. America would not allow Kuwait’s sovereignty to be disregarded. U.S. troops were sent to protect Saudi Arabia and to build a coalition force “designed to drive Iraqi forces from Kuwait as well as to defend neighboring countries from potential Iraqi aggression” (Randall, 2005: 301). The Persian Gulf War of 1990-91 was an easy victory for the United States and its allies. They succeeded in defeating the Iraqi military and pushing Saddam’s power back within the boundaries of Iraq.

Soon after, the UN Security Council adopted Resolution 661 which imposed comprehensive sanctions on Iraq (Randall, 2005: 302). In the years after the Persian Gulf War, Iraq’s oil production continued to decline. Initially, the sanctions prevented countries from purchasing Iraqi oil. In 1995 the UN approved the Oil for Food Program which allowed Iraq to sell its oil in the global market as long as the proceeds went towards food, medical drugs and equipment, or humanitarian needs of Iraqi citizens. Iraq was restricted from rebuilding its military or continuing to acquire WMDs.

Washington was forced to reassess its policy towards Iraq following the terrorist attacks of September 11, 2001. The George W. Bush administration decided to invade Iraq on claims that Saddam Hussein had weapons of mass destruction. Vice President Cheney stated the importance of energy security in the Persian Gulf to the U.S. when he stated that:

“should [Hussein’s] ambitions [to acquire weapons of mass destruction] be realized, the implications would be enormous for the Middle East and the United States... Armed with an arsenal of these weapons of terror and a seat at the top of

10% of the world's oil reserves, Saddam Hussein could then be expected to seek domination of the entire Middle East, take control of a great portion of the world's energy supplies, [and] directly threaten America's friends throughout the region." (Klare (b), 2004)

Oil has become a central issue in America's War in Iraq, especially in the eye of the media. The administration repeatedly asserted that oil was not a factor in the decision to invade Iraq in 2003. However, the Bush administration cannot deny the importance of Iraqi oil after the U.S. invasion, regardless of whether or not it was the reason for invasion. As such, Washington must carefully design its approach to the petroleum resources of the country. In planning for the Iraqi invasion, the Department of Defense crafted strategies that "sought to capture Iraq's oilfields intact to provide a source of revenue for the reconstruction of the country" (Klare (b), 2004). The aim was to secure and protect Iraqi oil fields in order to prevent their destruction during the invasion and subsequent conflicts within Iraq.

Arguments disclaiming Washington's oil motivations for the war assert that the United States would not expend the magnificent cost and military effort to obtain oil, a commodity that can easily be purchased in the open global market (Le Billon and El Khatib, 2004: 121-22). Additionally, Iraq's production has remained stagnant. There have been no technological advances or significant investments in the Iraqi oil industry since its war with Iran. "Iraq will remain a relatively marginal oil producer for years to come" (Le Billon and El Khatib, 2004: 122).⁴

Washington and Baghdad place a high priority on the speedy recovery of the Iraqi oil sector (Barnes, Jaffe, and Morse, 2003). "Iraqis place a premium on the restoration of

the country's energy infrastructure. A future regime will be legitimated more by its delivery of services – including provision of energy – than by its commitment to democracy” (Gvosdev, 2003). The U.S. government will have to demonstrate that the profits from future oil sells benefit the Iraqi citizens (Le Billon and El Khatib, 2004: 133). “What is good for the United States may not be good for a post-Saddam regime in Baghdad” (Barnes, Jaffe, and Morse, 2003), and the United States will have to put its interests aside for control of Iraqi oil. Until a stable, internationally recognized government is established in Baghdad, the UN Security Council has decided that the “proceeds of all export sales of petroleum shall be deposited into a Development Fund for Iraq, to be used ‘in a transparent manner ... for purposes benefiting the people of Iraq’” (Le Billon and El Khatib, 2004: 128).

No American oil companies were permitted to do business in or with Iraq during the period after the Persian Gulf War. However, some companies from states supporting the U.S. led Iraqi invasion had developed interests in Iraqi oil. The United States will be judged based on how the Iraq's petroleum resources are handled.

“Several key tests will help determine the place of oil interests in the outcome of the war, including the preferential awarding of Iraqi-paid reconstruction and oil infrastructure rehabilitation contracts to US firms close to the administration; the cancellation or significant modification of current oil development contracts of (non-US) companies; non-competitive awarding of contracts to US/UK oil companies; and the privatization of the Iraqi National Oil Company in a manner preferential to US/UK interests.” (Le Billon and El Khatib, 2004: 123)

Since World War II, United States relations with Iraq have been plagued with conflict. The United States has asserted the role in the international community of protecting the Middle East from Saddam Hussein, whether the threat is real or exaggerated. Iraq's oil reserves make the country critical to both the future of U.S. energy and national security. In 1980, President Jimmy Carter declared that the "secure flow of oil from the Persian Gulf was in "the vital interests of the United States of America" and that America would use "any means necessary, including military force" to protect those interests from outside forces" (Collina, 2005: 3). The first Bush administration used the Carter Doctrine to justify the Gulf War, and the future decisions about Iraq's oil industry made by the second Bush administration will determine the role of oil in the invasion of Iraq (Collina, 2005: 3).

2001 National Energy Policy Examination

"As the NEPDG began its review of U.S. energy policy, its members saw the United States was faced with a grave choice between two widely diverging paths. It could continue down the road it had long been traveling, consuming increasing amounts of petroleum and – given the irreversible decline in domestic oil production – becoming ever more dependent on imported supplies. Or, it could choose an alternate route of reliance on renewable sources of energy and gradually reducing petroleum use." (Klare (b), 2004)

In March 2001, within months of becoming president, George Bush developed a National Energy Policy Development Group (NEPDG) whose task was "to examine every aspect of the nation's energy situation" (Klare (a), 2004: 57). Although the NEPDG

researched all sources of energy (wind, solar, hydrogen, natural gas, nuclear, etc.), the group realized the special importance of oil, and the focus of this paper will be the policy in relation to oil. The group consisted of the secretaries from many of the major executive offices: state, treasury, interior, agriculture, commerce, transportation, and energy as well as other high-ranking officials in various agencies. The NEPDG was headed by Vice President Dick Cheney and the report is therefore sometimes referred to as the Cheney Report.

In his letter to President Bush upon completion of the National Energy Policy (NEP) in May 2001, Cheney stated that they had “developed a national energy policy designed to help bring together business, government, local communities and citizens to promote dependable, affordable and environmentally sound energy for the future.” The NEP consists of eight sections discussing: the energy challenges facing the United States; the impacts of high energy prices on families, communities, and businesses; sustaining the nation’s health and the environment; increasing energy conservation and efficiency; increasing domestic energy supplies; increasing America’s use of renewable and alternative energy; a comprehensive delivery system; and enhancing national energy security and international relationships.

The National Energy Policy first recognizes that the United States faces its “most serious energy shortage since the oil embargoes of the 1970s” (2001: viii). The U.S. faces challenges in encouraging energy conservation, renovating our energy infrastructure, and implementing environmentally friendly ways to increase our energy supply (2001: ix). It notes that if current trends continue, the United States will have “increased dependence on foreign powers that do not always have America’s interests at heart” (2001: x).

To avoid this, the group urges “action to meet five specific national goals. America must modernize conservation, modernize our energy infrastructure, increase energy supplies, accelerate the protection and improvement of the environment, and increase our nation’s energy security” (2001: xi). The NEPDG recommends increasing funding for renewable energy, alternative energy resources and energy efficiency research; this includes wind, solar, biomass, geothermal, coal, hydrogen, and nuclear (2001: xiv). “The President’s goal of reliable, affordable, and environmentally sound energy supplies will not be reached overnight. It will call forth innovations in science, research, and engineering” (2001: xv).

Although the United States is the third-largest oil-producing country in the world, our production is not sufficient to meet demand. There are numerous limiting factors the NEPDG discovered to increasing domestic production: “economic and technological factors associated with depletion of the fossil fuel resource base in the U.S.; regulatory uncertainty; limitations on access to federal lands with high potentials for new discoveries; infrastructure constraints;... and conflicts with legitimate land use, environmental, and other public policy goals” (2001: 5-1). The shortfall between production and demand can be made up by importing more energy, improving energy efficiency, and/or increasing domestic energy supply.

In order to reduce foreign dependence on oil, the United States must improve efficiency, reduce demand, and increase energy input from domestic sources. Since a large portion of oil consumption is in the transportation sector, energy policy is especially pertinent to motor vehicles.⁵ The NEP suggests reducing demand through increased conservation, vehicle efficiency, and alternative fuels as well as by car pooling or using mass transportation (2001: 4-10).

The U.S. government owns over 30 percent of the nation's land, and public lands account for approximately 30 percent of our domestic annual production (2001: 5-6). Portions of this land are restricted for environmental, defense or various administrative uses. The National Energy Policy advocates opening a small portion of the Arctic National Wildlife Refuge (ANWR) for oil development (2001: xiv). Large amounts of recoverable oil resources are contained on the Outer Continental Shelf (OCS), of which 610 million acres is off limits to development (2001: 5-7). The Arctic OCS, where ANWR is located, is estimated to contain 22.5 billion barrels of oil (2001: 5-8). The NEPDG contends that "ANWR production could equal 46 years of current imports from Iraq" (2001: 5-9).

National energy security depends on adequate supplies of energy to support global economic growth (2001: 8-1). "We are self-sufficient in virtually all our energy resources except oil" (2001: 8-3). United States dependence on foreign sources of oil is expected to intensify. Recognizing that considerable resources will be imported, "energy security must be a priority of U.S. trade and foreign policy" (2001: xv). The United States must try to restore its credibility with the oil exporting countries and strengthen relationships within our hemisphere.

Throughout the report, the National Energy Policy Development Group evaluates the current United States energy conditions and makes predictions about the future of energy in our nation. After examining each source of energy and every aspect relating to energy security, the NEPDG makes a total of 105 policy recommendations. These recommendations range from preparing for potential natural disasters, to increasing public awareness of savings associated with Energy Star products, to construction of new pipelines between Canada and the United States.

Here are some of the recommendations I feel are notable in relation to our considerable foreign dependence for oil (please note: this is a random sampling, not a complete list):

- Creating a “Royalties Conservation Fund” that will earmark potentially billions of dollars from new oil production in ANWR to fund land conservation efforts
- Directing the Secretary of Energy to promote greater energy efficiency
- Directing the Secretary of Transportation to review and provide recommendations on Corporate Average Fuel Economy (CAFE) standards that should increase efficiency without hurting the automobile industry
- Directing the Secretary of Treasury and Congress to work together on legislation to increase energy efficiency with a tax credit for fuel-efficient vehicles; including income tax credit for purchase of new hybrid fuel cell vehicles
- Developing ways to reduce petroleum demand by working with the trucking industry to reduce emissions and fuel consumption
- Promoting enhanced oil and gas recovery from existing wells through new technology, and improving exploration technology through partnership with public and private entities
- Considering economic incentives for environmentally sound offshore oil and gas development
- Authorizing exploration and development of the 1002 area of ANWR
- Reassessing limitations on federal lands in order to increase renewable energy production such as biomass, solar, wind, and geothermal
- Increasing the DoE budget in order for research and development of renewable energy resources

- Continuing the ethanol excise tax exemption
- Directing the Secretary of the Interior to renew progress of the Trans-Alaskan Pipeline System to ensure oil flows uninterrupted from Alaska to the West Coast
- Taking steps to ensure America has sufficient refining capacity to meet the demands of customers, adopting comprehensive regulations, and providing more regulatory certainty to refinery owners
- Making energy security a priority of our trade and foreign policy
- Supporting initiatives to open up areas of foreign energy sectors to American investment
- Continuing supporting American energy firms competing in markets abroad, and implementing a system of clear, open, and transparent rules over foreign investment
- Initiating a comprehensive review of U.S. sanctions on oil producing countries; energy security should be a factor
- Supporting the BTC oil pipeline
- Deepening the commercial dialogue with the Caspian states to provide a strong, transparent, and stable business climate for energy and related infrastructure projects
- Supporting exports of U.S. clean energy technologies and encourage their development overseas
- Increasing international cooperation on finding alternatives to oil, especially for the transportation sector
- Calling for an annual meeting of G-8 Energy ministers, or their foreign equivalents
- Ensuring that IEA member states fulfill their stockholding capacities

- Reaffirming that the Strategic Petroleum Reserve is designed for addressing an imminent or actual disruption in oil supplies, and not for managing prices
- Strengthening our trade alliances and working for greater oil production in Africa, the Caspian, and the Western hemisphere

As evidenced by the examples above, the National Energy Policy recommendations include a wide variety of proposals to help increase our energy and national security. Some have argued that this recommendation list is incoherent and counterproductive. In the United States, the liberals generally push for greater conservation while the conservatives argue for increased domestic production (Barnes, Jaffe, and Morse, 2003). These policy recommendations do not limit our energy policy to a single approach. The NEPDG suggests making steps in diverse directions all working toward the ultimate goal of less energy dependency.

Conclusions and Recommendations

“The Stone Age did not end because we ran out of rocks. The oil age will likely be with us for decades to come.” (Ebel, 2005)

Oil is the foundation of industrial society and imperative to the transportation sector in the United States. As our domestic reserves are depleting and our petroleum demand is increasing, the United States increasingly relies on foreign countries to supply us with necessary oil. Oil dependency is a real problem. The United States is in a position where it is beholden to other nations for this important source of energy. Consequently,

since World War II, the United States energy policies and foreign policies have progressively become more interconnected.

Since President Jimmy Carter announced in 1980 that the secure flow of oil from the Middle East was in the vital interest of the United States and that America would use “any means necessary, including military force” to protect this interest, the Carter Doctrine has been a central justification for the use of force in modern United States oil policy (Collina, 2005: 3). I suggest that the United States is not erroneous in its use of military force to protect oil interests in the Persian Gulf, or the world. Oil is an important component of our national security, and we must be prepared to defend our national security. However, I believe this doctrine should be reexamined. We should not abandon our “alliances and security agreements with friendly, democratic states for defense against mutual threats;” however we should avoid military use to arm and “protect undemocratic, repressive regimes for the sole purpose of making sure their oil continues to flow our way” (Collina, 2005: 6). Additionally, a fundamental aspect of our foreign policy should be respect for the sovereignty of nations. Our primary goal should be encouraging diplomatic negotiations rather than military force. “The intersection... between the two imperatives of keeping the world “safe” and keeping the world “powered” will preoccupy American foreign policymakers in the years to come” (Gvosdev, 2003).

Also important in our international relations is our cooperation with other oil-importing nations. “It remains critical for oil importing countries to bind themselves collectively to meet pending disruptions” (Barnes, Jaffe, and Morse, 2003). Additionally, other oil-importing countries share vulnerabilities in oil dependence and therefore share the desire to pursue alternative sources of energy. Our foreign energy policy should

reflect our commitment to share in the research and development of new technologies that will alleviate oil dependency. “The issue of oil is not a uniquely American problem, and policymakers should therefore not pursue a uniquely American solution” (Woolsey, 2004).

Our energy demands should not bring about a fall of U.S. hegemony to foreign oil producers. In order to circumvent the risks and vulnerabilities of oil dependency, the United States must begin taking steps now to alleviate our dependency. This requires a multi-faceted transitional approach. The United States will not be weaned off oil overnight. We are currently a fossil fuel-based economy. A radical change is not likely. The United States should take deliberate but incremental steps towards a new energy era. Neither the United States nor the world will run out of oil in the near future; however, we should immediately begin taking the first steps in order to be prepared for that time or a time when oil exporting countries abuse their energy power. Like the National Energy Policy recommends, we must take steps to not only decrease our oil demands and usage, but we must also take steps to conserve energy, increase domestic supplies, and improve relations with oil exporting countries.

Alternative sources of energy are the key to America’s future. The United States must be dedicated to the research and development of renewable, environmentally friendly, and affordable sources of energy. The major oil companies, car manufacturers, and various other sectors of American business have a large stake in the development of new fuels which will overtake the demand for oil. The government should encourage private companies to promote new sources of energy that will benefit not only the companies’ pocketbooks, but also the greater good of society. Furthermore, the U.S. government should provide economic funding, tax breaks, and incentives to consumers

who choose new alternative fuels and sources of energy over petroleum and to the companies who design and produce them.

Even with successful integration of new energy sources and alternative forms of energy, portions of U.S. society will continue to need and demand some amount of oil. The Middle East will become more powerful as petroleum resources in the rest of the world become scarce. The Persian Gulf countries have the benefit of holding two-thirds of the world's proven oil reserves. It is therefore important to maintain strong international relations with these countries without sacrificing our ideologies and U.S. security. History should not be neglected or forgotten, but diplomacy is the key for the future.

In the post September 11 world, terrorism is a continuous threat. The United States should therefore vigorously guard our energy infrastructure from terrorist attacks. The United States should be prepared to protect U.S. oil tankers and foreign oil tankers shipping to the U.S. It should also take steps to protect oil pipelines, ports, oil fields, refineries and the Strategic Petroleum Reserve.

As this paper shows, the effects of petroleum dependence on our country are enormous. In foreign policy, the United States has given demand for oil an important role in the decision making process. The U.S. government should encourage the United States to take the lead globally in the process of converting our economy from hydrocarbon based to an economy founded on renewable, economical, and environmentally friendly energies in order to alleviate our vulnerabilities to foreign oil producers. However the market and the American public seemingly support the current state of oil dependence. Before the population will encourage a real transition in the economy away from petroleum reliance, economic incentives are necessary. The evolution of an U.S. economy based on petroleum requires the government to set priorities and take realistic

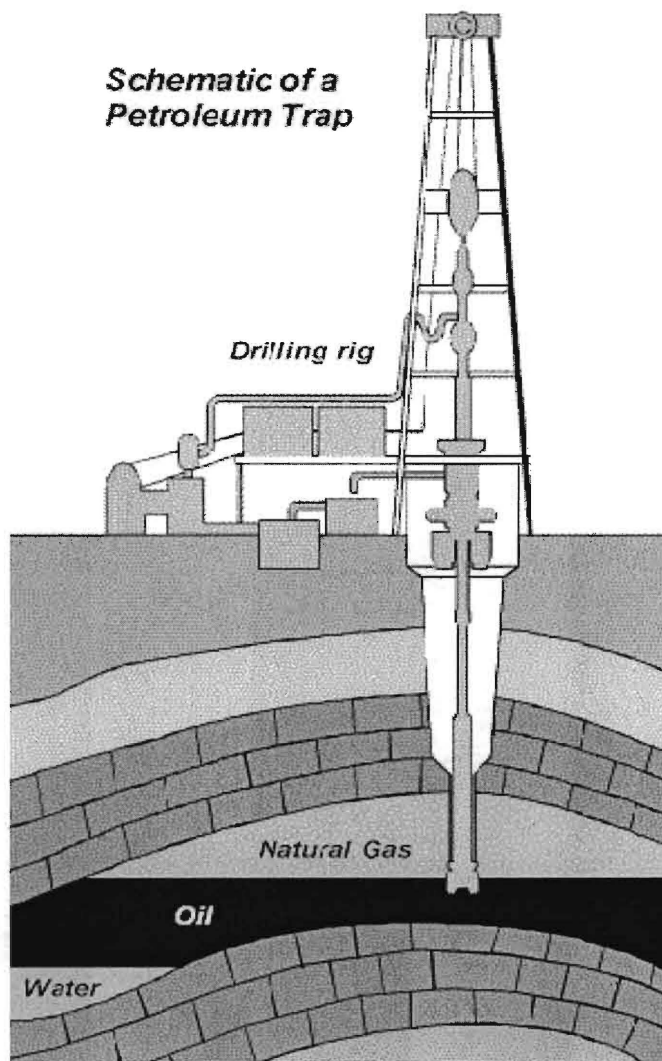
steps towards change. Two fundamental objectives are: first, to discover and develop a new energy direction for the United States; and second, to free our foreign policy from the restraints of oil dependence.

In order to achieve these goals, the initial step of the United States should be to place an increased federal tax on the sale of petroleum products. Since the transportation sector relies almost 100% on oil and accounts for nearly 65% of the oil consumed in the United States each year, this sector should be taxed most heavily through increased gasoline and diesel fuel taxes. Washington should then use these revenues dually for funding research and development of alternative fuels and sources of energy and for providing incentives to companies manufacturing successful new products and the customers who purchase them. Although this approach will likely be controversial and unpopular with the American public, sufficiently increased prices will provide the necessary motivation for the development of alternative fuels and sources of energy and induce the public, the market, and research and development groups to energetically move away from petroleum dependence.

Washington must be careful not to interfere too greatly in the transition. After placing the increased petroleum tax and appropriately distributing the revenue for research and development, the government should let the market work. As gasoline prices increase and successful energy alternatives become available, the population will begin to demand the new products, and these new products will become more affordable. The direction of new fuels and technology will largely be a result of population demands, available technology, and results of research and development. The government should play a minimal oversight role to ensure that the new energy course is in the best long-term interest of the United States versus a quick fix with additional future problems.

Although a radical change is not expected overnight, a gradual shift away from oil reliance will eventually allow the United States more freedom in developing its foreign policy. Ultimately, Washington should be able to formulate policies without being captive to our energy dependence and the pressures of oil exporting countries. An incremental transition to alternative energy sources will eventually push oil concerns far down the priority list of foreign policy objectives. Beginning with a federal tax on transportation fuels and ending with the development of a new direction in U.S. energy policy, the United States will be on the road to greater freedom in our national security.

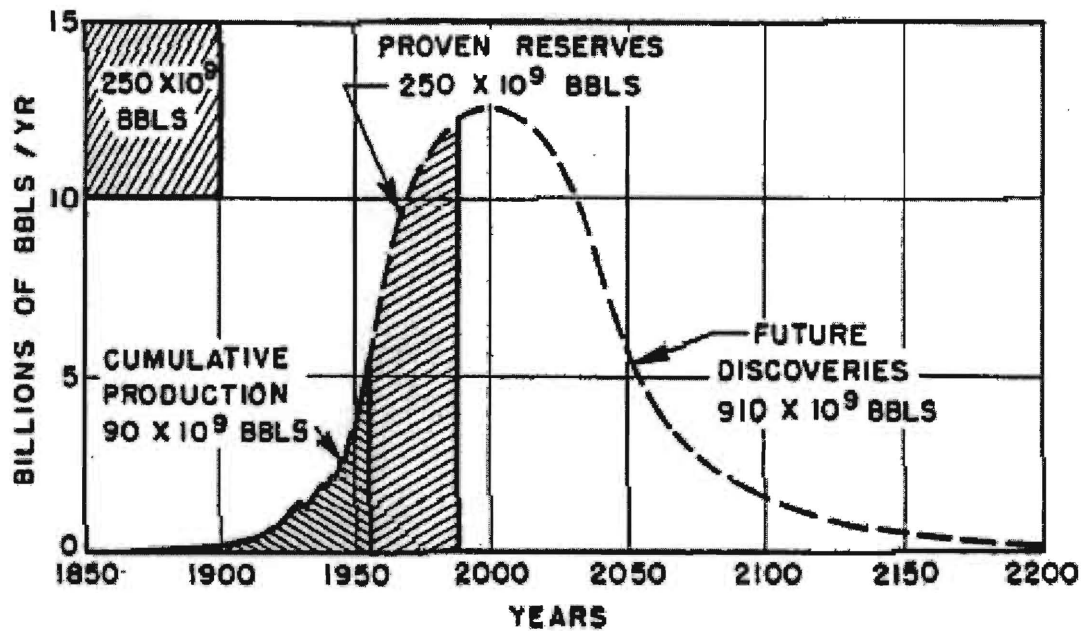
Appendix: Graphs and Charts of Interest



Source: Department of Energy, Energy Information Agency

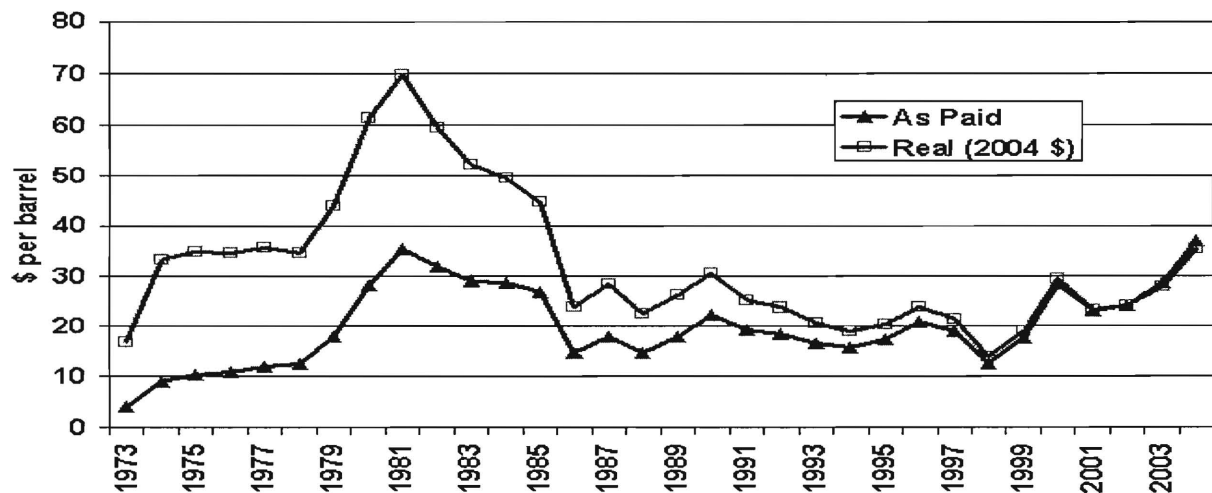
http://www.eia.doe.gov/pub/oil_gas/petroleum/analysis_publications/oil_market_basics/supply_petroleum_trap.htm

Hubbert's Peak



Source: http://en.wikipedia.org/wiki/Hubbert_peak

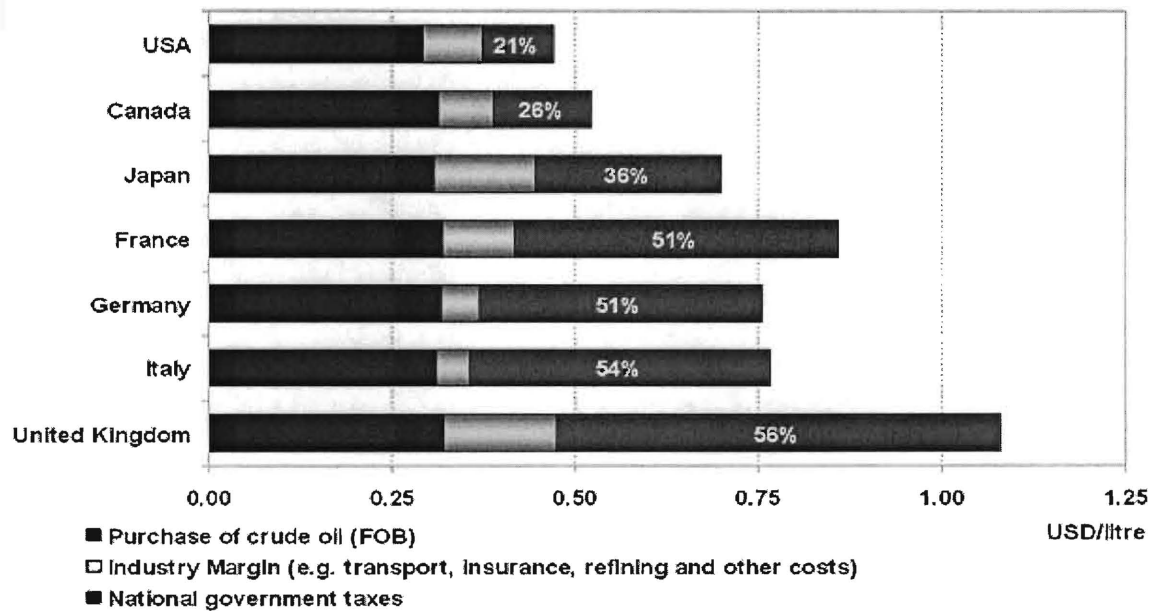
Cost of Crude Oil to U.S. Refiners, 1973-2004



Source: *Monthly Energy Review*, Tables 1.6 & 9.1.

Who gets what from a litre of oil in the G7?

2005



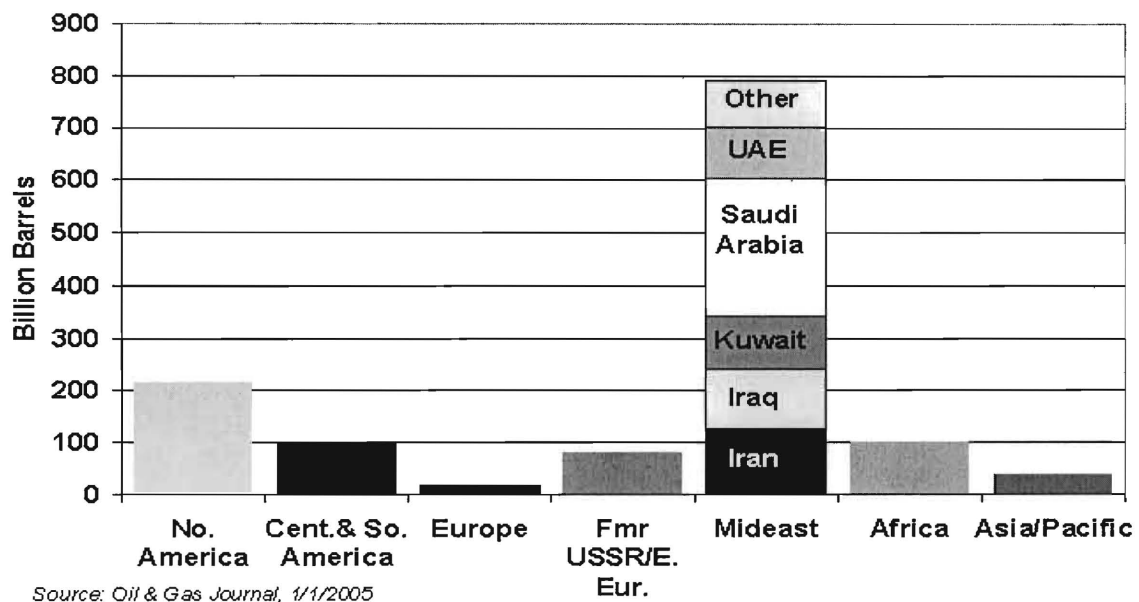
Source: OPEC Research Division, 2006; IEA - Energy Prices & Taxes, Energy Détente, Oil Bulletin Petrolier.

Map of the Middle East

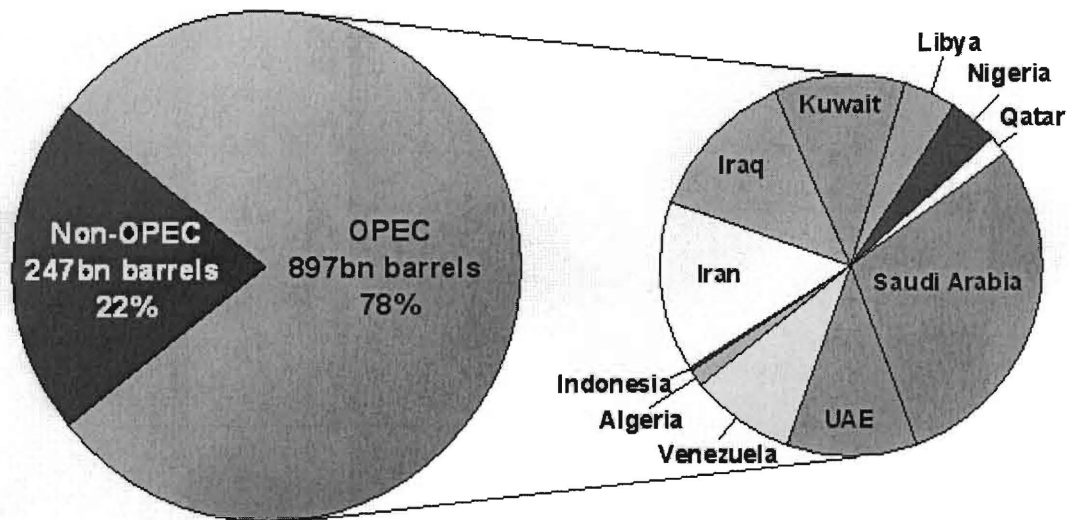


Source: <http://www.map-zone.net/img/continent/middle-east/map.gif>

Oil Reserves, Jan. 1, 2005

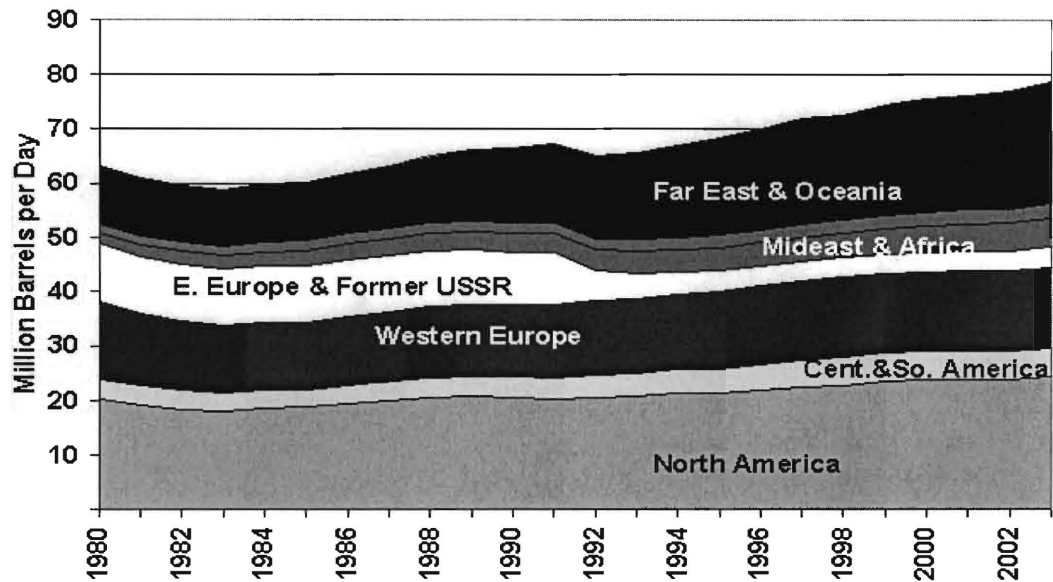


OPEC Share of World Crude Oil Reserves (2004)



Source: <http://www.opec.org/home/PowerPoint/Reserves/OPEC%20share.htm>

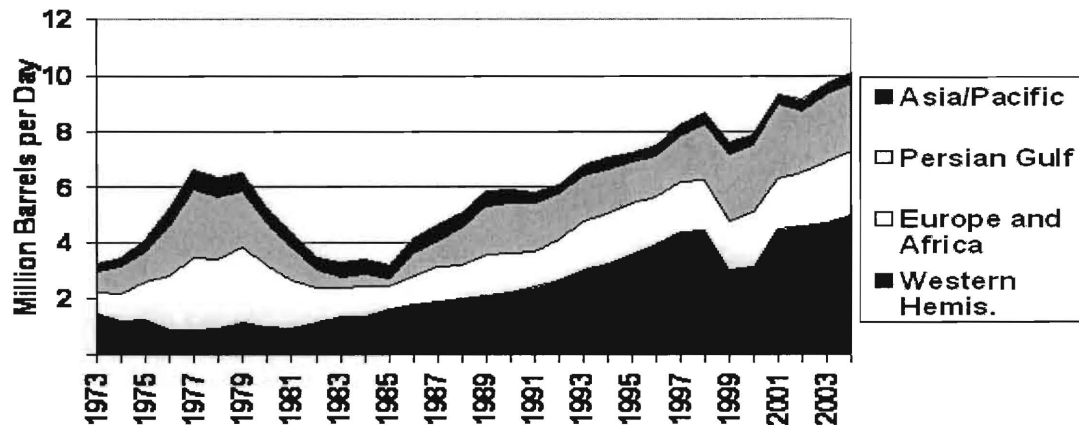
Global Oil Consumption, 1980-2003



Source: International Energy Annual 2.2

http://www.eia.doe.gov/oil_gas/petroleum/info_glance/petroleum.html

U.S. Crude Oil Imports by Area of Origin, 1973-2004



Source: Monthly Energy Review, Table 3.3

http://www.eia.doe.gov/pub/oil_gas/petroleum/analysis_publications/oil_market_basics/trade_image_origin.htm#U.S.%20Imports%20by%20Area%20of%20Origin

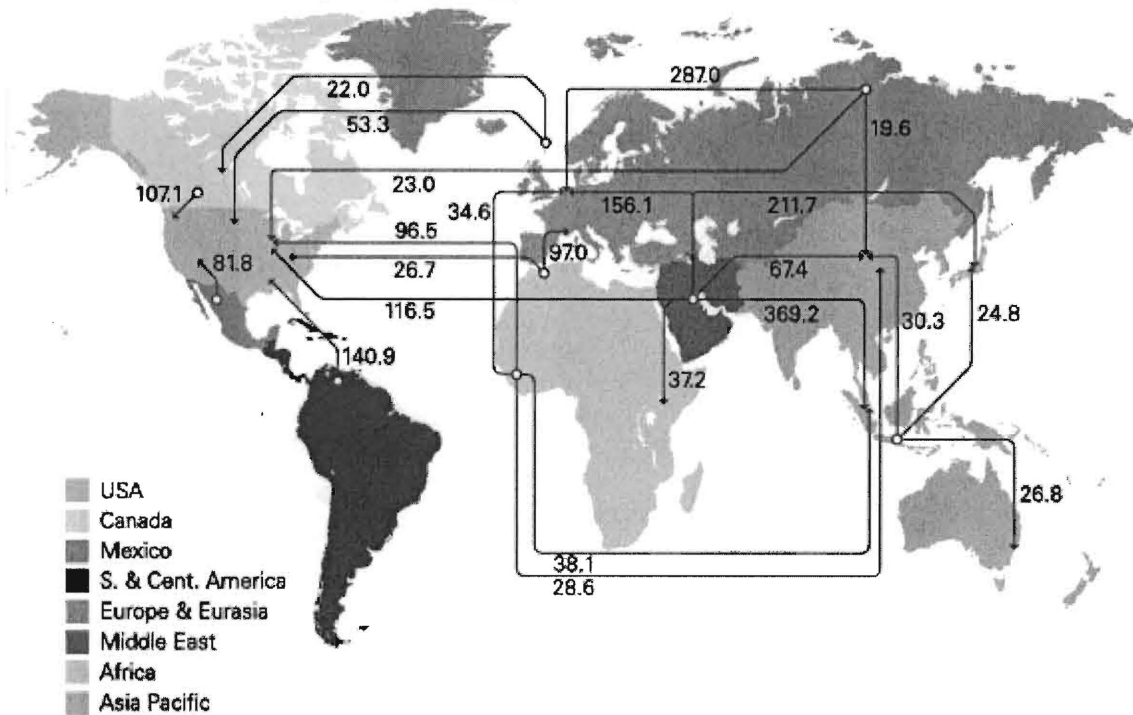
Major Sources of U.S. Petroleum Imports, 2001*

Total	Petroleum	Crude Oil	Refined Product
Canada	1.83	1.36	0.47
Saudi Arabia	1.66	1.61	0.05
Venezuela	1.55	1.29	0.26
Mexico	1.44	1.39	0.05
Nigeria	0.89	0.84	0.04
Iraq	0.80	0.80	0.00
Norway	0.34	0.28	0.06
Angola	0.33	0.32	0.01
United Kingdom	0.32	0.24	0.08
Algeria	0.28	0.01	0.27
U.S. Virgin Islands	0.27	0.00	0.27
Kuwait	0.25	0.23	0.01
Total Imports	11.87	9.33	2.54

Source: Energy Information Administration

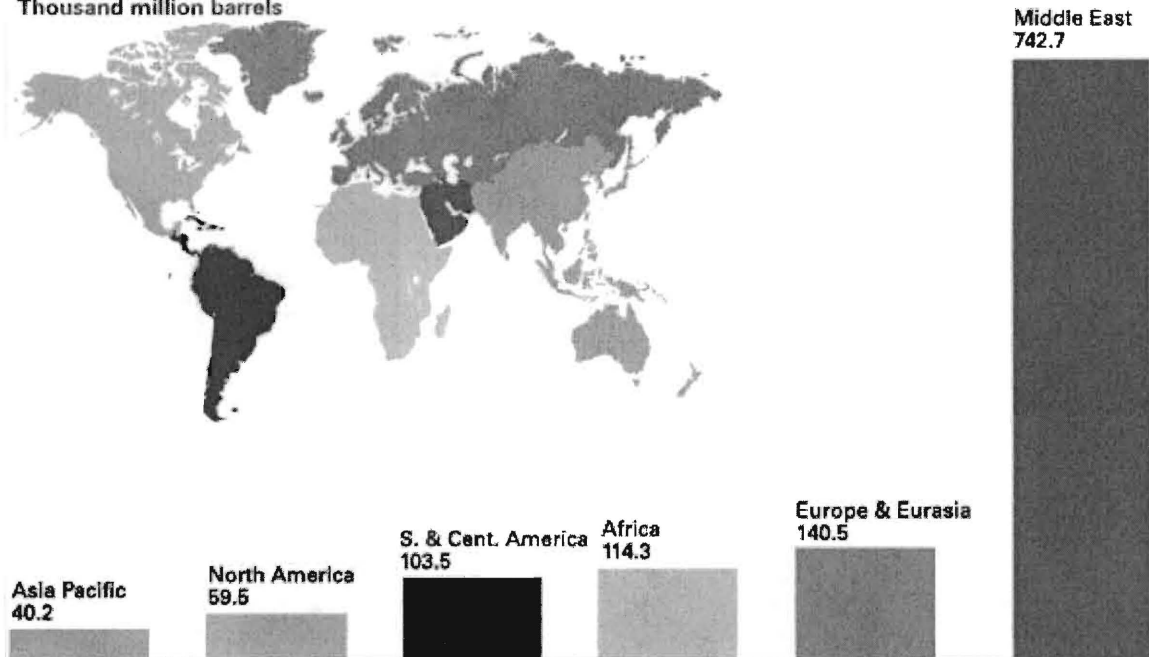
*Table includes all countries from which the U.S. imported more than 200,000 barrels per day in 2001. (all volumes in million barrels per day)

Major trade movements
Trade flows worldwide (million tonnes)



Source: <http://www.bp.com/sectiongenericarticle.do?categoryId=9010951&contentId=7021575>

Proved reserves at end 2005
Thousand million barrels



Source: <http://www.bp.com/sectiongenericarticle.do?categoryId=9010942&contentId=7021565>

Bibliography

- Bahgat, Gawdat. American Oil Diplomacy in the Persian Gulf and the Caspian Sea. Gainesville: Univ Press of Florida, 2003.
- Barnes, Joe, Amy Jaffe, and Edward L. Morse. "The New Geopolitics of Oil." The National Interest 2003 Energy Supplement. 23 Feb 2006 <http://www.ciaonet.org/olj/ni/ni_energysupp03/ni_energysupp03c.html>.
- Bergsten, C. Fred. "Foreign Economic Policy for the Next President." Foreign Affairs 83.2. Mar/Apr 2004.
- Billig, Michelle. "The Venezuelan Oil Crisis." Foreign Affairs 83.5 (Sep/Oct 2004): 2-7.
- Bull-Berg, Hans Jacob. American International Oil Policy: Causal Factors and Effect. London: Frances Pinter (Publishers), 1987.
- Bush, George W. "President Discusses Hurricane Effects on Energy Supply." U.S. Department of Energy. The White House, 26 Sep 2005. 3 Nov 2006 <<http://www.whitehouse.gov/news/releases/2005/09/20050926.html>>.
- Cave, Damien. "The United States of Oil." Salon 19 Nov 2001. 5 Oct 2006 <http://archive.salon.com/tech/feature/2001/11/19/bush_oil.html>.
- Chester, Edward W. United States Oil Policy and Diplomacy: A Twentieth-Century Overview. Westport: Greenwood Press, 1983.
- Collina, Tom Z. "Oil Dependence and U.S. Foreign Policy: Real Dangers, Realistic Solutions." Testimony. Committee on Foreign Relations Subcommittee on Near Eastern and South Asian Affairs. 19 Oct 2005.
- "Consultative Meeting of the OPEC Conference." OPEC press release 17/2006. 20 Oct 2006. 31 Oct 2006 <<http://www.opec.org/opecna/Press%20Releases/2006/pr172006.htm>>.
- Copley, Gregory R., ed. "Oil's Most Important Swing State." Defense and Foreign Affairs' Strategic Policy May/Jun 2006. 4 Oct 2006 <<http://wev.lexis-nexis.com/universe.htm>>.
- Deffeyes, Kenneth S. Hubbert's Peak: The Impending World Oil Shortage. Princeton: Princeton Univ Press, 2001.
- Ebel, Robert E. "US Foreign Policy, Petroleum and The Middle East." Middle East Economic Survey Vol XLVIII.44 (31 October 2005). 19 May 2006 <<http://www.mees.com/postedarticles/oped/v48n44-5OD01.htm>>.

- Economides, Michael and Ronald Oligney. The Color of Oil: The History, the Money and the Politics of the World's Biggest Business. Katy: Round Oak, 2000.
- Everest, Larry. Oil, Power and Empire: Iraq and the U.S. Global Agenda. Monroe: Common Courage Press, 2004.
- Feldman, David Lewis, ed. The Energy Crisis: Unresolved Issues and Enduring Legacies. Baltimore: Johns Hopkins Univ Press, 1996.
- Ghosh, Arabinda. OPEC, the Petroleum Industry, and United States Energy Policy. Westport: Quorum Books, 1983.
- Gvosdev, Nikolas K. "Competing for Power." The National Interest 2003 Energy Supplement. 23 Feb 2006 <http://www.ciaonet.org/olj/ni/ni_energysupp03/ni_energysupp03a.html>.
- Hahn, Peter L. Crisis and Crossfire: The United States and the Middle East Since 1945. Washington, D.C.: Potomac Books, 2005.
- Henderson, Simon, "President Bush's National Energy Policy and the Middle East." Address. The Washington Institute for Near Eastern Policy. Policy Watch 536. 21 May 2001.
- Houthakker, Hendrik S. "Energy Considerations in United States Foreign Policy." Cato Journal Vol 1, Issue 2. (Fall 1981): 313-337.
- Ikenberry, John G. Reasons of State: Oil Politics and the Capacities of American Government. Ithaca: Cornell Univ Press, 1988.
- Klare, Michael T. Blood and Oil: The Dangers and Consequences of America's Growing Petroleum Dependency. New York: Metropolitan Books, 2004.
- Klare, Micheal T. "Bush-Cheney Energy Strategy: Procuring the Rest of the World's Oil." Common Dreams News Center Jan 2004. 5 Oct 2006 <<http://www.commondreams.org/views04/0113-01.htm>>.
- Klare, Michael T. "Oil, Geopolitics, and the Coming War with Iran." Common Dreams News Center 11 Apr 2005. 5 Oct 2006 <<http://www.commondreams.org/cgi-bin/print.cgi?file=/views05/0411-21.htm>>.
- Klebanoff, Shoshana. Middle East Oil and U.S. Foreign Policy: With Special Reference to the U.S. Energy Crisis. New York: Praeger Publishers, 1974.
- Kretzman, Steve. "Oil, Security, War: The Geopolitics of U.S. Energy Planning." Multinational Monitor Magazine Jan/Feb 2003. 5 Aug 2006. <http://www.thirdworldtraveler.com/oil_watch/oil_security_war.html>.

- Le Billon, Philippe, and Fouad El Khatib. "From Free Oil to 'Freedom Oil': Terrorism, War and US Geopolitics in the Persian Gulf." Geopolitics Vol 9 Issue I (Winter 2004): 109-137.
- Lesch, David W., ed. The Middle East and the United States: A Historical and Political Reassessment. 3rd ed. Boulder: Westview Press, 2003.
- Luft, Gal. "America's Oil Dependence and its Implications for U.S. Middle East Policy." Briefing presentation. Senate Foreign Relations Subcommittee on Near Eastern and South Asian Affairs. 20 Oct 2005.
- Luft, Gal. "Dangerous Dependence." Institute for the Analysis of Global Security 20 Oct 2003. 5 Oct 2006 <<http://www.iags.org/n1020032.htm>>.
- Morgan, April. "Oil." Class lecture. Political Science 471. University of Tennessee, Knoxville. 20 October 2005.
- Morse, Edward L., and James Richard. "The Battle for Energy Dominance." Foreign Affairs Mar/Apr 2002. 23 Feb 2006 <<http://www.foreignaffairs.org/20020301faessay7969/edward-l-morse-james-richard/the-battle-for-energy-dominance.html>>.
- "OPEC Reassures Market of Adequate Supplies." OPEC press release 13/2006. 10 Aug 2006. 31 Oct 2006 <<http://www.opec.org/opecna/Press%20Releases/2006/pr132006.htm>>.
- Pickerill, Martha. "The Power of Oil: It's costly, it's polluting and other countries control most of it. Is oil worth the trouble?" Time for Kids 8.1 21 Feb 2003. 5 Oct 2006 <<http://www.timeforkids.com/TFK/magazines/story/0,6277,423836,00.html>>.
- Randall, Stephen J. United States Foreign Oil Policy Since World War I: For Profits and Security. 2nd ed. Montreal: McGill-Queen's Univ Press, 2005.
- Roberts, Paul. The End of Oil: On the Edge of a Perilous New World. New York: Houghton Mifflin Company, 2005.
- Rutledge, Ian. Addicted to Oil: America's Relentless Drive for Energy Security. New York: I.B.Tauris, 2005.
- Standlee, David M. Oil, Globalization, and the War for the Arctic Refuge. Albany: State Univ of New York Press, 2006.
- Taylor, Jerry. "Don't Worry About Energy Security." Cato Institute 18 Oct 2001. 5 Oct 2006 <<http://www.cato.org/dailys/10-18-01.html>>.
- Telhami, Shibley. "The Persian Gulf: Understanding the American Oil Strategy." The Brookings Review 20.2 (Spring 2002). 5 Oct 2006 <<http://www.brookings.edu/press/REVIEW/sping2002/telhami.htm>>.

- United States. Dept. of Energy. "Energy Sources: Oil." 31 Oct 2006 <<http://www.energy.gov/energysources/oil.htm>>.
- United States. National Energy Policy Development Group. National Energy Policy. Washington: Government Printing Office, 2001.
- United States. United States Embassy Italy. "Oil Dependency a Major Concern, Energy's Abraham Says" 20 Jun 2002. 5 Oct 2006 <http://www.usembassy.it/file2002_06/alia/a2062006.htm>.
- "Where We Stand: Our Principles on Creating Energy Security in the United States and Abroad." The Heritage Foundation. 5 Oct 2006 <<http://www.heritage.org/research/features/mandate/2005/topic.cfm?topic=26.htm?>>.
- Woolsey, James R. "Implications of U.S. Dependence on Middle East Oil." Address. The Washington Institute for Near Eastern Policy. Policy Watch 882. 7 July 2004.
- Wirth, Timothy E., C. Boyden Gray, and John D. Podesta. "The Future of Energy Policy." Foreign Affairs 82.4. Jul/Aug 2003.
- Yankelovich, Daniel. "The Tipping Points." Foreign Affairs 85.3 May/June 2006. 4 Oct 2006 <<http://web.lexis-nexis.com/universe.htm>>.
- Yergin, Daniel. "Ensuring Energy Security." Foreign Affairs Mar/Apr 2006. 4 Oct 2006 <<http://web.lexis-nexis.com/universe.htm>>.
- Yergin, Daniel. The Prize: The Epic Quest for Oil, Money, and Power. New York: Simon and Schuster, 1991.
- Yetiv, Steve A. Crude Awakenings: Global Oil Security and American Foreign Policy. Ithaca: Cornell Univ Press, 2004.

Notes

¹ At this point, there are no agreed upon standards for reserves calculations (Kretzman).

² One barrel of crude oil equals 42 gallons. After refining, a barrel yields almost 20 gallons of gasoline (United States, DoE, Energy Information Agency).

³ Abdulah Tariki of Saudi Arabia and Perez Alfonso of Venezuela took the lead in establishing OPEC (Randall 264).

⁴ Currently Iraq produces only 2 percent of global oil production. It might take several years for it to reach a 6-7 percent mark of global production (Le Billon and El Khatib 122).

⁵ Approximately 65 percent of the oil consumed each year is used for transportation (United States, National Energy Policy 6-8).