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Masters of Defence Studies

**Canada as a Global Energy Superpower? How Un-Canadian:
A more realistic energy strategy for Canada**

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Abstract

In 2006 Prime Minister Stephen Harper declared that Canada was a global energy superpower based on huge reserves of oil, natural gas, uranium and hydro-electricity generating capacity. But what is an energy superpower and does Canada want to be one? The importance and the complicated geopolitical nature of oil reveal that there is much more to simply having access to vast resources to be considered an energy superpower. Further analysis of the complicated Canadian condition reveals that there is no way Canada could be considered, or even want to be considered an energy superpower based on a contemporary definition.

Superpower or not, Canada still lacks a coherent energy strategy that will enable it to take full advantage of the resources it possess. Examination of the current geopolitical and unique Canadian situation yields some critical lessons that can be used in the formulation of a Canadian energy strategy. A Canadian energy strategy should include features such as increasing royalties and having a disciplined sovereign wealth fund, a diversified customer portfolio, cooperation with the US on issues such as global warming, the development of a strategic reserve of oil as well as ensuring a supply of western oil to the eastern half of the country through the Sarnia-Montreal pipeline.

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Canada is not a middle power. There are 191 countries in the United Nations and Canada is certainly one of the 10 most important.¹

– Conrad Black

1. Chapter 1 - Introduction

Canada has positioned itself as a middle power for so long that it is part of the country's collective consciousness. From Prime Minister Diefenbaker to Prime Minister Martin, middle power politics was the name of the game for Canada. Perhaps this will always be the case, especially as long as Canada remains in the shadow of the last remaining superpower. Some people, like the infamous Conrad Black, believe that Canada is much more than a middle power and deserves a higher ranking in the world order. Others argue that Canada does not even rank as a middle power but rather only a functional power.² Can Canada ever aspire to be more than a middle power? Considering the lack of a nuclear capability, small population and even smaller military relative to other prominent countries, it is unlikely. However, the one thing that Canada does possess in quantities large enough to be considered significant is oil. Could Canada possibly use this commodity to leverage a more prominent place on the world stage?

It is unclear if this is what the newly elected Prime Minister Stephen Harper had in mind when he made his first speech to the business community at large just prior to a G8 Summit. In the 2006 speech in London to the Canada/United Kingdom Chamber of Commerce, Prime Minister Harper referred to Canada as an emerging energy

¹ Conrad Black, "Canada is More than a Middle Power," *National Post* Jun 24, 2006, <http://proquest.umi.com/pqdweb?did=1066171641&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

² Adam Chapnick, "The Middle Power," *Canadian Foreign Policy* 7, no. 2 (Winter, 1999), 78, <http://proquest.umi.com/pqdweb?did=412919041&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

superpower. To back this claim he went on to state that Canada was the fifth largest energy producer in the world, the largest producer of hydro-electricity and uranium and the third and seventh largest producer of oil and natural gas respectively.³ Prime Minister Harper went on to repeat the Canada is an energy superpower mantra at subsequent public speaking engagements at the Economic Club of New York and Insurance Brokers Association of Ontario.⁴ Was the prime minister attempting to articulate a new direction in Canadian foreign policy or simply attempting to stimulate investment in the Canadian West, which also happens to be his power base? In his speeches, Prime Minister Harper articulated the vast energy resources available in Canada, but there is much more to the moniker of superpower than merely resources. In terms of energy availability, Canada can be truly considered a world leader, but can it be considered a superpower? One of the problems with attempting to label Canada as an energy superpower is the lack of a clear understanding of what defines an energy superpower. With a clearer definition it will become apparent whether Canada ranks as an energy superpower.

Although Canada has significant hydro-electricity generation capacity and uranium reserves, oil is the only resource of importance on the global stage. The importance of oil to the global economy can not be overstated. Access to energy in the form of oil was responsible for the rapid growth in the developed world since the end of the First World War. Oil has evolved into one of the most important commodities on the planet. Access to oil is at the heart of United States (US) foreign policy and shortages

³Jennifer Welsh and Annette Hester, "Superpower? Oil could make Stephen Harper a Superhero," *The Globe and Mail* Feb 2, 2008, <http://proquest.umi.com/pqdweb?did=1422611211&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

⁴ Annette Hester, "Canada as the "Emerging Energy Superpower": Testing the Case," (15 October 2007, 2007).

have the capacity to cause global recessions. The geopolitical nature of oil makes it a complicated subject that is tied to both national security and environmental issues globally. The huge reserves held by Canada means there is a role to play for Canada, however the issue is further complicated by internal dynamics.

The overwhelming majority of Canadian energy exports go strictly to the US which is good for both countries, but limits Canada's ability to influence events globally. As well, due to current trade regulations between Canada and the US in both the Free Trade Agreement (FTA) and the North American Free Trade Agreement (NAFTA), exports of energy are tied to levels based on a three year average. This could potentially result in energy exports to the US even if our own domestic needs were not met. Canada is further constrained by an inability to supply all of its own energy needs from domestic supplies due to infrastructure shortfalls. East/west tensions result from the perceived inequitable distribution of wealth resulting from the fact that the majority of oil resources reside in the west while the east is forced to import foreign oil. Environmental issues result in more difficulties for Canada. The vast majority oil reserves are contained in the oil sands which have a much larger environmental cost associated with production when compared to conventional oil sources. So, while there may be large quantities of oil, it is more difficult to develop those reserves in an environmentally sustainable matter. The waters are muddied more by federal/provincial jurisdictional responsibilities. The provinces control natural resources while the federal government is responsible for the environment and both levels of government do not always share the same strategic vision.

Superpower or not, Canada needs to develop a comprehensive energy strategy to take full advantage of its natural resources. Therefore, in keeping with Canadian values

and interests in the 21st century, an energy policy will require provisions that promote domestic energy security, sound environmental stewardship, sustainability, as well as fostering Canada's relationship with the US.

This paper will attempt to set the stage for analysis and synthesis of a Canadian energy strategy by first looking at the geopolitical nature of oil. The following chapter focuses on three key areas; history and US policies, the Organization of Petroleum Countries (OPEC), followed by supply and demand. The status of the US as the largest consumer of oil, our largest trading partner and neighbour, and the last true superpower causes it to dominate any Canadian energy analysis. OPEC, representing the global supply situation and other supply and demand issues such as peak oil are also discussed.

The next chapter provides a more in-depth look at the definition of an energy superpower. Using an accepted definition of energy superpower as a framework for discussion, three representative oil exporting countries (Saudi Arabia, Russia and Norway) are examined. This analysis serves two purposes; testing the robustness of the definition, and providing considerations for the development of a Canadian energy strategy.

Chapter four provides an overview of the Canadian situation as it pertains to the energy sector. Issues such as the Canadian-US relationship and internal tensions resulting from oil production are expanded upon. The unique Canadian environmental state of affairs resulting from the development of the oil sands is then discussed followed by current policy and economic realities. This analysis accomplishes two tasks: it answers the question of Canada's status as an energy superpower; and frames the current situation for the development of a Canadian energy strategy in the next chapter.

The last chapter extracts lessons learned from previous sections to be used in the formulation of a Canadian energy strategy. It is divided into three sections. The first section looks at what Canada might do in terms of an energy strategy based on what other have proposed. The next section proposes a strategy of what Canada should do based on the lesson learned from previous analysis. The last section discusses the most likely scenario based on the current situation.

2. Chapter 2 – The Geopolitics of Oil

In today's global economy there is no other commodity quite like oil. Although it is fungible, it has few if any substitutes, and, is in limited supply. It is the bases of the global economy and without it there is no growth. A decline in oil availability results in higher prices and economic contraction as was witnessed with the recent price spike in 2008. It is estimated that a decline of one percent in oil translates directory to a decrease of one percent in global Gross Domestic Product (GDP).⁵ To better understand the global nature of oil it is necessary to explore its geopolitical nature from a number of directions. This chapter will briefly touch on the subject from a historical perspective looking at the beginning of international importance of oil and US policy for the past half century. The nature and importance of the Organization of Petroleum Exporting Countries (OPEC) as well as current issues relating to supply and demand are also addressed.

2.1. *History and US Policy*

The international importance of oil as a commodity first came about as a result of Winston Churchill's decision prior to the First World War to convert British naval vessels from coal to oil fired propulsion. This was done despite the fact that Britain did not have a domestic oil supply to speak of yet had significant reserves of coal. The First Lord of the Admiralty was of the opinion that Britain would have to own or control the

⁵ Roy MacMullin, "Can our Society Avoid the Next 'Black Swan'?" *Telegraph-Journal* Mar 30, 2009, <http://proquest.umi.com/pqdweb?did=1669351051&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

resources required to support this transformation. This decision influenced British foreign policy to make securing oil resources a priority. During the same time period the US also converted to an oil powered navy but was not dependent on foreign supplies of oil due to a large domestic supply. It was not until after World War II that the US conceded that control over oil in the Middle East was an important issue.⁶ This was represented by President Roosevelt in 1945 where he extended the protection of American military to Saudi Arabia in return for exclusive US access to Saudi oil.⁷ Since the 1970s, the US has been actively involved in helping to secure access to oil in the Middle East region under a policy commonly referred to as the Carter doctrine.

The Carter doctrine, articulated in a State of the Union Address in January 1980 by then President Jimmy Carter, essentially states that access to Persian Gulf oil is in the national interest of the US. The Carter doctrine was precipitated by the former Soviet Union's invasion of Afghanistan. President Carter believed that the presence of the Soviet Union in Afghanistan, within 300 miles of the Indian Ocean, posed a potential threat to the free flow of oil through the Straits of Hormuz.⁸

Almost every US President from Eisenhower to G.W. Bush actively pursued policies that would help secure external energy resources. President Eisenhower authorized Central Intelligence Operations in Iran resulting in American oil companies obtaining a 40 percent stake in operations there. President Kennedy pursued more secure

⁶ Hester, *Canada as the "Emerging Energy Superpower": Testing the Case*, 7

⁷ Michael T. Klare, "Oil, Iraq, and American Foreign Policy: The Continuing Salience of the Carter Doctrine," *International Journal* 62, no. 1 (Winter, 2006), 33, <http://proquest.umi.com/pqdweb?did=1262406781&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

⁸ Annette Hester, "The New Global Energy Geopolitical Game: Is Canada Ready to Play," *Canadian Foreign Policy in a Changing World*, no. No. 2 (January 2009, 2009), 8.

relations with Saudi Arabia while Nixon supported the Shah of Iran with financial backing and access to military equipment.⁹ President Ford may be the exception as he came to power in the middle of the OPEC oil embargo. He was more concerned with decreasing US dependence on foreign oil, and Middle East oil in particular. In fact, Ford threatened to increase import tariffs on oil in an attempt to curb demand.¹⁰ President Carter, of course, is already known for the Carter Doctrine. President Regan moved to secure energy from Canadian sources through the signing of the Canada - US Free Trade Agreement (FTA). Presidents George H.W. Bush and George W. Bush both made direct intervention in Iraq; George H.W. to liberate Kuwait, and George W. to eliminate the threat of weapons of mass destruction.¹¹ President Clinton expanded the Carter Doctrine beyond the Persian Gulf in an effort to diversify the sources of oil production that the US depended on for oil imports. This was made clear when he indicated that the Caspian Sea basin (formally under Soviet control) should become an important source of energy for the US and their allies.¹² “Although never formally invoking the Carter Doctrine . . . , Clinton applied the same “national security” umbrella to Caspian Sea oil as had Carter to Persian Gulf oil.”¹³

⁹ *Ibid.*, 8

¹⁰“Ford Goes it Alone on Oil,” <http://www.time.com/time/magazine/article/0,9171,913152,00.html> (accessed March/1, 2009). (Ford Goes it Alone on Oil, Time Magazine, Jun 9, 1975)

¹¹Hester, *The New Global Energy Geopolitical Game: Is Canada Ready to Play*, 10 (Annette Hester, Canadian Foreign Policy in a Changing World, p10)

¹² Klare, *Oil, Iraq, and American Foreign Policy: The Continuing Salience of the Carter Doctrine*, 38

¹³ *Ibid.*, 39

The Carter doctrine is still true today and there are those that view the 2003 invasion of Iraq as an extension of that doctrine.¹⁴ The Carter doctrine was essentially repeated by President G.W. Bush in a nationally televised address where he indicated that “the sovereign independence of Saudi Arabia is of vital interest to the United States.”¹⁵ While President George W. Bush may not have been completely successful in Iraq it appears that “the Carter doctrine continues to govern US policy in the Persian Gulf area.”¹⁶ As long as the US and her allies are dependent on the oil from the Persian Gulf region, the Carter Doctrine is likely to remain a prominent part of American foreign policy.

In the future, it is possible that the Carter Doctrine will be expanded once again to include Africa, another potential source of oil. American involvement in Africa regarding energy security is less advanced than elsewhere, but it is recognized that securing the oil fields of Nigeria would be a key mission for US forces.¹⁷

2.2. *Organization of Petroleum Countries (OPEC)*

There was little change on the international oil scene from the 1909 founding of the Anglo-Persian Oil Company and the forming of the Organization of Petroleum Countries (OPEC) in 1960. During that period the oil markets were primarily controlled

¹⁴ *Ibid.*, 32

¹⁵ *Ibid.*, 35

¹⁶ Klare, *Oil, Iraq, and American Foreign Policy: The Continuing Salience of the Carter Doctrine*, 37

¹⁷ *Ibid.*, 42

by a group of private companies known as the Seven Sisters. Although formed in 1960 OPEC¹⁸ did not begin to exert influence in price setting until 1973 as a result of the embargo.¹⁹ In the 1980s, OPEC had planned to increase output to 32.95 million barrels per day (m b/d) by 1995, but a number of countries fell short of their targets. International sanctions hindered countries like Iraq and Libya and political turmoil in Venezuela resulting from governmental change impacted expansion plans. Nigeria was impacted by civil and political unrest, and Kuwait lagged behind due to internal domestic policies. In all, OPEC's capacity has fallen over the past 25 years from a high of 38.75 m b/d in 1979 to 31 m b/d in 2005 which accounts for almost 40 percent of world demand.²⁰

It was once argued that moderate prices for oil were in the best interest of oil-exporting countries as the low price constrained investment in alternative forms of energy.²¹ In fact Saudi Arabia's oil minister warned his OPEC counterparts that high prices for oil would result in decreased demand and investments in alternative energy sources. As a result, OPEC attempted to maintain oil production levels that would maintain stable prices at a level that would allow for profits, but not encourage development. The relatively low price of oil in the 90s was seen as a subsidy for growth for western industrialized nations. It was good for the west, but not so good for the OPEC nations and other rent seekers that depended on the oil revenues for a larger portion of

¹⁸ Current OPEC members include Algeria, Angola, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela

¹⁹ Hester, *Canada as the "Emerging Energy Superpower": Testing the Case*, 3

²⁰ Joe Barnes and Amy Myers Jaffe, "The Persian Gulf and the Geopolitics of Oil," *Survival* 48, no. 1 (2006), 147, <http://proquest.umi.com/pqdweb?did=1221322181&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

²¹ *Ibid.*, 148

their wealth. It was in OPEC's best interest to shift the burden of price adjustment away from the supply side, back to the oil importing countries.²²

As a result of OPEC members producing beyond their quotas in an attempt to meet market demand, prices were stable for a period almost 20 years from the mid-1980s to 2003²³. This long period of stability and consistent profits allowed OPEC members to fall prey to some of the conditions associated with the resource curse. The easy rents garnered from the oil resources did not encourage further exploration or efficiency improvements in their own industries. Until the 1970's, almost without exception, most of the oil exploration and development in OPEC countries was performed by international oil companies, not the national oil companies that now dominate. And since then, the track record of OPEC countries is generally poor when it comes to exploration and development.²⁴ For most of the twentieth century international oil companies were in charge of the resources, the opposite is true today with state and national oil companies controlling an estimated 80 percent of the world's known conventional oil reserves. The big five oil companies (ExxonMobil, Royal Dutch Shell, BP, Chevron and ConocoPhillips) control less than 15 percent.²⁵ The situation now exists where the national oil companies own the resources but not the capacity to expand or develop those resources.

The US and Saudi Arabia have enjoyed a special relationship since the end of the Second World War and the declaration of President Roosevelt. However, the US-Saudi

²² *Ibid.*, 147

²³ Hester, *Canada as the "Emerging Energy Superpower": Testing the Case*, 3

²⁴ Barnes and Jaffe, *The Persian Gulf and the Geopolitics of Oil*, 149

²⁵ Hester, *The New Global Energy Geopolitical Game: Is Canada Ready to Play*, 1

special relationship has been changing over the past 15 years for a number of reasons. During the cold war the US and Saudis were partners in the common cause of removing the Soviet supported regime in Afghanistan. Then, in 1991, the US and coalition forces removed one of Saudi Arabia's primary threats in the region in the Gulf War. Therefore the Saudis no longer needed to rely on the US as heavily for military protection. The attacks of September 11th and the subsequent invasion of Iraq have further strained relationships between the two countries.²⁶

Iraq is another OPEC member that has come into difficulty recently. The oil production capacity of Iraq was severely damaged due to conflict over the past two wars. Although oil revenues were in excess of US \$18 billion in 2004, it is estimated that it will take over US \$100 billion in investment for reconstruction to bring the Iraq oil production back to its full capacity.²⁷ One would think that oil revenues would help to build the country back up, but in some instances the ability to move forward in Iraq in a democratic fashion is hindered as much by oil as it is helped. The problem results from conflict as to what level of government will receive the oil revenues. The internal debate between oil revenues falling to the local or state authorities is further complicated by the presence of a number of minorities, Kurds and Shi'a- in particular, in the oil rich regions.²⁸ At issue is the newly formed Iraq constitution that gives the provinces much political autonomy, but does not guarantee oil rights. As well, the Shiite parliamentary

²⁶ Barnes and Jaffe, *The Persian Gulf and the Geopolitics of Oil*, 150

²⁷ *Ibid.*, 150

²⁸ *Ibid.*, 151

majority does not want to lose potential oil revenues, especially to the Kurds.²⁹

According to Provincial Governor Majeed, "It will take 15 or 20 years for Iraq to become a stable democratic country."³⁰ It will take a number of years before there is sufficient stability in Iraq to develop the infrastructure to the point it will be able to expand capacity to 5m b/d. "Thus talk of a democratic Iraq breaking the back of OPEC or adding instrumentally to global energy security seems a neoconservative pipe dream rather than a new reality of global oil geopolitics."³¹ It will be some time before Iraq can be considered an oil superpower again.

Conversely, Iran has the potential to be a global energy superpower today and is the biggest wild card in the Persian Gulf region. As one of the OPEC nations with significant reserves of both oil and gas and an anti-western stance, Iran is favour of higher prices for oil and is not afraid to use its influence on the world stage and within OPEC to do so. For example, the mere threat of withholding its exports in 2006 caused significant turmoil on the global oil market resulting in upwards of a US \$6 per barrel increase in the price of oil.³²

Iran plays a significant political role in the region as well for a number of reasons including its nuclear aspirations and proximity to the Straits of Hormuz. Iran's persistent quest to become a nuclear state has caused significant concern for the political stabilization in the region. It is feared that if Iran were to possess the ability to build and

²⁹ Paul Christopher Webster, "Iraq is a Hard Place," *Report on Business Magazine* (Feb, 2009), 38, <http://proquest.umi.com/pqdweb?did=1652412621&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

³⁰ *Ibid.*

³¹ Barnes and Jaffe, *The Persian Gulf and the Geopolitics of Oil*, 153

³² Barnes and Jaffe, *The Persian Gulf and the Geopolitics of Oil.*, 153

launch a nuclear weapon they would dominate the region and impact global access to the resources in the region. If Iran were able to assert more influence over the Straights of Hormuz as it did during the Tanker Wars in the mid 1980s, (where two thirds of the global oil trade transits on a daily basis, including all of Iran's exports) it could effectively shut down global oil trade with devastating results for the industrialized world.³³

2.3. *Supply and Demand*

When discussing the issue of supply and demand in the energy sector a few topic areas usually come up. On the supply side the issues associated with diminishing output capacity and the theory of peak oil are of primary concern. On the demand side the largest consumers, the US and China, dominate the discussions. This section will look at these subjects in turn beginning with the supply side of the equation and the issues of capacity and peak oil.

The supply and demand scenario in the Middle East is entering a new era. Previously the oil industry operated with large redundancies and excess capacity for more production, refining, and transportation if required. Today, that excess capacity no longer exists. A disruption at any place along the supply chain can no longer be absorbed resulting in increased price volatility.³⁴ This new dimension of a razor-thin level of spare capacity is partially the result of the Iraq invasion of Kuwait, the subsequent invasions of

³³ *Ibid.*, 153

³⁴ Barnes and Jaffe, *The Persian Gulf and the Geopolitics of Oil.*, 144

Iraq, and the lack of investment in infrastructure. As a result the OPEC members are now operating at 99 percent of their crude oil production capacity. This compares to 90 percent in 2001 and 80 percent just before the invasion of Kuwait in 1990.³⁵

In early 2008 the price of oil increased by nearly 40 percent in a six month period. Saudi Arabia did not want oil prices to continue to climb for the same reasons as in the 1970s: fear of increased conservation, increased non-OPEC production, and increased investments in alternative energy sources. The June 2008 Global Energy Summit was convened to address the issue of high oil prices, but was not able to accomplish the aim due to extremely low excess capacities for production. The Saudi Arabia pledge to increase production by 200,000 b/d was not enough to impact the price of oil on the open market.³⁶

The current supply shortfalls will only continue to worsen according to the theory of Peak Oil. The theory of peak oil states that oil production in a region will follow a bell curve, expanding exponentially at first then falling off just as quickly following a peak. It was first described by Marion Hubbert in 1956 and was used to predict that the peak US oil production would occur between 1965 and 1970; he was off by one year with peak production having occurred in the US in 1971.³⁷

The US Geological Survey is one of the primary sources of information cited when discussing proven and estimated reserves. And according to the survey there are approximately 3 trillion barrels of oil in a combination of proven reserves, near proven

³⁵ *Ibid.*, 145

³⁶ Hester, *The New Global Energy Geopolitical Game: Is Canada Ready to Play*, 3

³⁷ Nader Elhefnawy, "The Impending Oil Shock," *Survival* 50, no. 2 (Apr/May, 2008), 40, <http://proquest.umi.com/pqdweb?did=1473243111&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

reserves and reserves not yet discovered and exploited. This equates to a 100 year supply at today's rate of consumption, but with a slight one and a half percent growth rate that shrinks to a 70 year supply.³⁸ Based on this information and Hubbert's peak oil theory, "the peak is usually predicted for some time between 2010 and 2020."³⁹ With these predictions and current consumption trends, the next generation will be witness to the end of the dominance of fossil fuels in the global economy. That is, of course, unless there are some dramatic changes on both the supply and demand side of the energy equation.

On the demand side we will look at two important consumers, the US and China. In 2004 the US imported 63 percent of its oil requirements, with about 22 percent of those imports coming from the Persian Gulf region. According to the US Department of Energy (DoE), as domestic supplies continue to decline, the US is expected to increase imports of oil from the Persian Gulf region to ever increasing levels.⁴⁰ The fact that majority (two thirds) of US oil consumption is directly related to the transportation sector makes it difficult to change demand requirements. When this is considered in conjunction with the American car culture and tendency to develop sprawling metropolitan areas it is easy to see why some consider that "the American lifestyle on 'petroleum profligacy' leaves the United States a 'permanent hostage to events in the Gulf'."⁴¹ To meet future demand the US DoE predicts that Saudi Arabia will have to increase production capacity to 23.5m b/d by 2025, more than double its current capacity of 9 m b/d. Higher capacity

³⁸ *Ibid.*, 38

³⁹ *Ibid.*, 40

⁴⁰ Barnes and Jaffe, *The Persian Gulf and the Geopolitics of Oil*, 144

⁴¹ *Ibid.*, 144

numbers from the Persian Gulf region are assumed in order to balance the every increasing demand, but no analysis as to how this will happen has been made.⁴²

The impact to the US resulting from issues in the Gulf region is compounded by the ability of the region to affect oil prices through supply manipulation. The US would be impacted by price changes due to the global nature of the commodity even if it did not import any oil from the Gulf region.⁴³ The fungible nature oil means that a barrel of oil produced in Mexico or Canada will cost the US consumer the same price as a barrel of oil produced in the Persian Gulf. This means that if countries like Iran manipulate the price through supply side restraint, the resultant cost increase will be born more by US consumers. For instance, the price increase of US \$6 a barrel induced by Iran threatening to withhold exports in 2006 cost the American economy more than US \$120 million per day based on a consumption rate of 20 m b/d. By comparison, the price increase only cost the second largest consumer of oil, China, US \$14 million per day.

China is a major player in the global energy arena as both the second largest consumer of oil at seven m b/d and the second largest producer of energy. Like the US, China is a net importer of oil, and with a growing economy the requirement for imports of oil will only continue to increase into the future.⁴⁴ “Ten years ago, China was energy self-sufficient. Today it is the world’s third largest oil importer, importing roughly 3m b/d of crude oil and another 500,000 b/d of refined product.”⁴⁵

⁴² *Ibid.*, 146

⁴³ *Ibid.*, 145

⁴⁴ Wenran Jiang, "China's Global Quest for Energy Security," *Canadian Foreign Policy* 13, no. 2 (2006), 105, <http://proquest.umi.com/pqdweb?did=1274875761&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

⁴⁵ Barnes and Jaffe, *The Persian Gulf and the Geopolitics of Oil*, 154

Like the US and other oil importing countries, China is attempting to diversify its energy portfolio. In an effort to reduce the risk of losing access to mid-east oil, China has made a concerted effort to diversify its suppliers and investment holdings to countries such as Sudan, Venezuela, Indonesia, and Nigeria. “Beijing wants to have a strategic partnership with anyone that can supply China with energy.”⁴⁶ The policy of diversification has led China to invest significantly into African countries capable of providing the necessary resources. In 2005 Africa was responsible for 30 percent of the oil imports for China, with Angola accounting for over 43 percent of those imports. As well, one of China’s national oil companies, the China National Petroleum Corporation, has a 40 percent interest in the Greater Nile Petroleum that dominates the oil fields of Sudan.⁴⁷

The investments in Angola and the Sudan highlight the fact that China is not bound by the same western standards regarding investing in areas with questionable human rights records. On the one hand, the investment of China in the global oil system is welcoming as it increases the amount of capital available. On the other hand, there are concerns that because China is not bound by the same western ethical standards, the leverage and influence that western nations may apply to these countries to enforce things such as human rights will be weakened.⁴⁸ China’s international reputation is tarnished from its dealings with Sudan and Chad based on the perception that it is shielding those countries from international pressure to improve human rights records. As a result of their strict business only approach to energy security in Africa, China has come under

⁴⁶ Jiang, *China's Global Quest for Energy Security*, 113

⁴⁷ *Ibid.*, 114

⁴⁸ Barnes and Jaffe, *The Persian Gulf and the Geopolitics of Oil*, 155

international criticism. “Critics charge that China has pursued mercantilist policies in the region for pure economic benefits without human rights or environmental concerns.”⁴⁹

Possibly as a result of these criticisms, or because they have a greater long term vision of energy security, China has announced massive investment plans in renewable energy. “In late 2005, Beijing announced that it would spend US \$150-billion in the next 15 years on renewable energy, an unprecedented financial commitment for ensuring China’s energy security.”⁵⁰ However, without any clear goals, targets or assurances that the investments will be made, it is still uncertain if this plan will significantly impact China’s demand or consumption pattern of energy.

The brief review of the current geopolitical situation and history of oil has highlighted a few key points. First, since World War two, oil has strategic importance to the developing economies, that is without oil there would have been no development. Secondly, the chapter highlighted the complexity of the energy sector, especially when politics and the Persian Gulf region are considered. And finally, it touches on the changing nature of China and its rising importance in the area of global energy.

⁴⁹ Jiang, *China's Global Quest for Energy Security*, 114

⁵⁰ *Ibid.*, 112

3. Chapter 3 – Energy Superpower Defined

To fully understand what is meant by the term energy superpower and whether Canada could be, or want to be considered one, the term needs to be better defined. To begin, the origin of the term superpower will be examined followed by a more modern definition of an energy superpower. The usefulness of this definition will be tested using three net energy exporting countries; Saudi Arabia, Russia and Norway. Important considerations for Canada in the formulation of its energy strategy will then be extrapolated from the analysis of the other oil exporting countries in relation to the definition.

3.1. *Definition*

In defining the term energy superpower we first must look to the origins of the term superpower. This term came about in 1944 near the end of World War II to describe the US and the Soviet Union. The term was first used by a renowned foreign-policy expert from Columbia University, W.T.R. Fox, “because the traditional notion of a “great power” no longer conveyed the true might of US and Soviet Union.”⁵¹ In more simple terms a superpower must meet three conditions; it can exert its influence worldwide, if necessary impose its will worldwide, and superpowers have interests that extend beyond

⁵¹ Welsh and Hester, *Superpower? Oil could make Stephen Harper a Superhero*, F.4

their own region.⁵² If a superpower has global influence and ability to impose its will does the same standard apply to an energy superpower?

The beginnings of the energy powers date back to 1909 with the founding of the Anglo-Persian Oil Company. For the first few decades the oil industry continued to be dominated by private companies known as the Seven Sisters. It was not until the Yom Kippur War in 1972 that OPEC began to exert its influence globally. In response to the western support for Israel, the Arabic dominated OPEC cut production by 5m b/d which was equivalent to eight percent of daily world consumption. The result was a quadrupling of the price of oil in a six month period. The Iraq invasion of Iran in 1978 caused a similar jump in the price of oil from US \$14 to US \$35, but over a three year period instead of just six months. In response, Forbes magazine coined the term “oil superpower” in reference to Iraq.⁵³ The use of the term oil superpower to describe Iraq would seem to indicate that the global influence exerted by Iraq was the direct result of its impact on world oil prices.

The ability to impact the price of oil is only one facet of what constitutes an energy superpower; a more precise definition is required to fully describe the nature and capabilities of an energy superpower. One definition of an energy superpower that is held today by scholars and journalists requires a number of conditions to be met. Those conditions include:

1. significant amounts of both oil and natural gas;
2. control over those resources to set prices;

⁵² *Ibid.*

⁵³ Hester, *Canada as the "Emerging Energy Superpower": Testing the Case*, 3

3. market control beyond own region;
4. government able to utilize energy resources for political gain; and
5. a willingness to use the energy resources to force others to do things they would not otherwise do.⁵⁴

This definition provides a good framework to describe an energy superpower and enables the comparison of different countries to determine if they meet all or only some of the criteria. It is useful to look at examples of countries that are net exporters of oil to see where they stack up against the definition. Three states that may serve for comparison are Saudi Arabia, Russia and Norway.

3.2. *Saudi Arabia*

Possibly due to the fact Saudi Arabia has the largest reserves and is the largest producer of oil in the world, it is usually one of the first countries that come to mind when discussing oil. As one of the only OPEC members with spare capacity, it has the ability to influence prices through manipulation of production output, but has learned that attempting to leverage this control for political purposes is difficult.

When looking at the definition of an energy superpower there is no doubt that Saudi Arabia meets the standard of having significant amounts of both oil and natural gas. It has the largest proven reserves of oil and, according to the *Oil and Gas Journal*, it has the fourth largest proven natural gas reserves in the world⁵⁵. Despite these vast

⁵⁴ Welsh and Hester, *Superpower? Oil could make Stephen Harper a Superhero*, F.4

⁵⁵ Energy Information Administration, "Natural Gas"
http://www.eia.doe.gov/emeu/cabs/Saudi_Arabia/NaturalGas.html; Internet; accessed 27 Mar 2009.

reserves, the Saudis still have issues to deal with as a result of their oil wealth. For instance, Saudi Arabia faces a growing population that is expanding much faster than oil revenues are able to account for. In 1982 the oil revenue represented US \$30,000 per capita; by 2003 that figure dropped to US \$9,300 per capita as the population expanded from 7m to 22m.⁵⁶ An expanding population is not a problem provided the government is able to ensure its citizens are cared for, and this is possible as long as there are sufficient oil revenues to provide the necessary services or purchase loyalty directly. If the population continues to grow at a rate that exceeds oil revenues then conditions for internal turmoil will ripen.

The oil and gas industry in Saudi Arabia is primarily state controlled through the state-owned oil company Saudi Aramco. Therefore the state is able to control the resources and set prices it charges to domestic and foreign consumers. As a member of OPEC Saudi Arabia also has the ability to exert market control worldwide. Although the government of Saudi Arabia has demonstrated in the past the willingness to use the resource for political gain such as the embargo in 1972, recent history indicates that it is more interested in stability than political gain. The same applies to the last criteria of a willingness to use energy resources to force others to their will. Therefore, based on the definition Saudi Arabia clearly demonstrates three of the five criteria to be considered an energy superpower. In the strictest sense then Saudi Arabia cannot be considered an energy superpower due to its unwillingness to use the resource for significant political gain or to force others to do its will.

⁵⁶ Barnes and Jaffe, *The Persian Gulf and the Geopolitics of Oil*, 149

The important consideration that can be gleaned from the Saudi Arabia example is that simply having the necessary resources is not sufficient to be considered an energy superpower.

3.3. *Russia*

In terms of supplies of energy, Russia has the largest proven reserves of natural gas, stands second largest in coal, and ranks eighth in terms of oil reserves. Moreover, in terms of export capacity, Russia is largest exporter of natural gas and second largest exporter of oil in the world.⁵⁷ Therefore Russia meets the first criteria of significant amounts of both oil and natural gas.

Recently, using some capitalist as well as dictatorial manoeuvring, Russia deliberately brought many of the state's natural resources and infrastructure under state control.⁵⁸ This gave the state control of the resources and ability to set prices. More importantly, the current Russian leadership demonstrated a willingness to use those resources to political advantage and to force others to do things they would not otherwise have done.⁵⁹ In Georgia, Prime Minister Vladimir Putin demonstrated a willingness to use political power and brute force to regain the necessary strategic energy assets, and then use strong-arm tactics to renegotiate gas contracts to more favourable terms for Russia by threatening to and then following through with shutting off supply.⁶⁰ Thus the

⁵⁷ Welsh and Hester, *Superpower? Oil could make Stephen Harper a Superhero*, F.4

⁵⁸ *Ibid.*

⁵⁹ *Ibid.*

⁶⁰ Hester, *Canada as the "Emerging Energy Superpower": Testing the Case*, 5

current political leadership of Russia has clearly demonstrated three of the five necessary criteria, with the proven reserves of oil and gas satisfying a fourth. Only the criterion of market control beyond its own region is questionable.

The geographical location of Russia along with its ability to transport vast quantities of oil and natural gas via pipeline to multiple consumer regions (Western Europe, former east bloc countries, and Asia) enable it to have influence beyond its own region. Others argue that because the reach into Asia is limited at the present time and it is dependent on the European market, Russia can only be considered a regional energy superpower.⁶¹ This argument can be discounted if one considers that the ability to influence the Asian market still exists, it may not be as strong as in Europe due to market share differences, but it is still present. Also, the sheer volume of oil and natural gas exported by Russia will yield a global influence.

When Russia is held up against the definition of an energy superpower it is evident that all of the necessary criteria are met. Three important lessons can be pulled from the Russian energy picture. First, to be an energy superpower, a state must “be able to control access to supplies – reserves and transport – enough to be a price setter...”⁶² Second, Russia is attempting to use its energy advantage to leverage political influence beyond its regional market.⁶³ The third thing to consider is the willingness to use the military in securing energy resources as was evidenced in 2008 in Georgia where “Russia

⁶¹ *Ibid.*, 5

⁶² *Ibid.*, 6

⁶³ *Ibid.*, 6

asserted control over one of only two oil and gas transport outside its territory which connect the oil-rich Caspian region to Europe and the West.”⁶⁴

On the surface Russian actions in the energy sector may appear short sighted and strictly designed to maximize profits. However, when viewed in terms of the larger context a broader strategy emerges, “using oil and gas, in particular, to build clout in Europe’s club, the European Union, while also increasing its influence in its ‘near abroad’ of the former Soviet Union and spreading its reach into Asia.”⁶⁵ The strong-arm methods used by Russia to achieve the strategy of greater influence in the European Union and Asia may not be the best example for Canada to follow. However, the strategy of using its energy resources to obtain greater influence outside of its own region may be something for Canada to emulate, using more Canadian like tactics of course.

Saudi Arabia and Russia are two examples of countries with vast reserves of oil and natural gas but have little else in common with Canada from a political or ideological point of view. Saudi Arabia was close to meeting the definition of an energy superpower, and Russia did meet all of the necessary criteria. The next country to be examined is Norway which appears on the surface to have more in common with Canada than the first two countries.

⁶⁴ Hester, *The New Global Energy Geopolitical Game: Is Canada Ready to Play*, 5

⁶⁵ Mathew Burrows and Gregory F. Treverton, "A Strategic View of Energy Futures," *Survival* 49, no. 3 (Autumn, 2007), 81, <http://proquest.umi.com/pqdweb?did=1334433571&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

3.4. Norway

Like Canada, Norway is a constitutional monarchy with a mixed economy and large reserves of both oil and natural gas. In terms of policy regarding the use of revenue from natural resources, oil and gas in particular, Norway has elected to take a slightly different path than Canada. Norway was the tenth largest producer and third largest exporter of oil in 2006, yet was still paying US \$2.30 per litre of unleaded and had some of the highest income taxes in the world. The reason for the high fuel prices and taxes is that instead of using oil revenues to reduce taxes and subsidize consumption, Norway is investing in the future through a Government Pension Fund also known as the oil fund. The Pension Fund receives 96 percent of all oil revenue and nothing can be withdrawn until the oil is gone. As well, to ensure diversification, none of the money can be invested inside Norway. Another important distinction is the royalty scheme in which oil companies must contribute 78 percent of all profits to the fund.⁶⁶ In 2008, 17 years from initial start, the fund held over US \$368 billion. In 2005, as a result of oil wealth, Norway was considered the third-wealthiest nation per-capita gross domestic product and enjoyed perks such as free health care and university education.⁶⁷

Norway is an anomaly in terms of oil exporting nations in the manner it has been able to avoid the Dutch disease or resource curse. The phenomena was named after the

⁶⁶ Doug Saunders, "Frugal Norway Saves for Life After the Boom," *The Globe and Mail* Jan 31, 2008, <http://proquest.umi.com/pqdweb?did=1421373111&Fmt=7&clientId=1711&ROT=309&VName=POD>.

⁶⁷ Richard Tomlinson and Vibeke Laroi, "Norway Oil Fund Lehman Losses Exacerbate Kingdom's Worst Return," Bloomberg.com, <http://www.bloomberg.com/apps/news?pid+20670001&refer=&sid=aBMkhtkUBEds> (accessed February/21, 2009).

Netherlands due to the manner in which that country dealt with the discovery of oil reserves in the 1970s. While there was an oil boom in the country the currency inflation and price increases resulted in a decline in exports and job losses. Norway has avoided the resource curse through diversification and investment discipline.⁶⁸

Norway meets two of the necessary criteria to be considered an energy superpower; significant amounts of oil and natural gas, and by being the third largest exporter of both oil and natural gas Norway has market control beyond its own region.⁶⁹ Although the government of Norway has a large stake in the energy sector with 71 percent of Statoil which controls over 60 percent of Norway's oil and gas production, the sector is not state controlled which limits Norway's ability to set prices.⁷⁰ The remaining two criteria to be considered a superpower, using the resources for political gain or for coercion, are not usually associated with a constitutional monarchy like Norway. Therefore, although Norway has significant oil and gas exports and has benefited greatly from them, it can not be considered an energy superpower.

After reviewing three countries that, like Canada, are net exporters of energy, what are the key considerations for Canada in the formulation of an energy strategy? First, the example of Saudi Arabia demonstrated that just having massive reserves of oil and gas does not constitute a superpower. There are two important lessons to be learned from the Russian example. One, to be considered a superpower a state must be willing to use force and coercion to influence events for their own national interest. Also, it is

⁶⁸ Saunders, *Frugal Norway Saves for Life After the Boom*, A.8

⁶⁹ Energy Information Administration, "Norway"
<http://www.eia.doe.gov/emeu/cabs/Norway/Profile.html>; Internet; accessed 28 Mar 2009

⁷⁰ Energy Information Administration, "Norway"
<http://www.eia.doe.gov/emeu/cabs/Norway/Oil.html>; Internet; accessed 28 Mar 2009

important to have a strategy that goes beyond the short term gains associated with resource revenue. Norway is an example of how a country can avoid the boom and bust cycle associated with the energy sector through careful regulation and strict discipline. More importantly, Norway provides an example of a nation able to exploit the natural resources to the net benefit of the entire country without being considered an energy superpower.

4. Chapter 4 – The Canadian Situation

From a global perspective Canada is not unique when it comes to any one particular aspect of the energy sector. However, when examined in total, the combination of individual factors adds up to a unique Canadian situation. While Canada may share some similarities with other nations, an understanding of the unique Canadian circumstances is required to develop a truly Canadian energy strategy.

An analysis of the current Canadian situation with respect to the energy sector will answer the question as to whether Canada can be considered an energy superpower. A deeper understanding of the issues facing Canada will also allow for the development of an energy strategy that truly reflects the current reality. Those issues include the history of the energy sector in Canada, Canada's relationship with the US, availability of energy resources, the east-west and federal provincial tensions, environmental concerns as well as the current policy and economic reality.

4.1. *History*

Although most historians will credit the first oil well in North America to the town of Titusville, Pennsylvania, the first oil well was actually drilled in Canada in 1858 in south-western Ontario near Black Creek (later named Oil Springs). This discovery marked the birth of the oil and gas industry in Canada.⁷¹ Presently, Canada is considered second in the world in proven reserves of oil, but Canada was not always so well

⁷¹ Tony Clarke, *Tar Sands Showdown: Canada and the New Politics of Oil in an Age of Climate Change* (Toronto: James Lorimer & Company Ltd., 2008), 15.

endowed with energy supplies. For example, during both world wars it required assistance from the US to augment supply. In fact, the federal government under the Minister of Munitions C.D. Howe and Supply took control of the energy file without any provincial protest.⁷² In 1956, as a result of Canada's inability to supply its own energy needs, C.D. Howe, then Minister of Trade and Commerce, pursued a Trans-Canada pipeline to transport gas from Alberta to Ontario. However, controversy surrounding the construction would contribute to the eventual defeat of the government the following year.⁷³ The new minority government under Prime Minister Diefenbaker elected to study the pipeline issue further through a Royal Commission on Energy. The pipeline was supported by western interests, but international oil companies like Imperial Oil believed it would be more advantageous to supply their refineries in Montreal from less expensive imports from Venezuela. In a move that would be mimicked by another conservative prime minister thirty years later, Diefenbaker signed away the West's right to access domestic markets east of the Ottawa Valley so as to ensure an exemption from American import restrictions.⁷⁴ This deal, struck behind closed doors between Prime Minister Diefenbaker and President Eisenhower effectively prevented Canada from developing a national energy strategy.

A major chapter in the Canadian energy sector concerns the National Energy Program (NEP). The NEP was enacted in 1980 by the Trudeau government with the goal of developing Canada into oil self-sufficient country with the entire country able to benefit from the increasing price of oil. This led to the creation of Petro-Canada and the

⁷² Hester, *Canada as the "Emerging Energy Superpower": Testing the Case*, 9

⁷³ *Ibid.*, 9

⁷⁴ *Ibid.*, 9

building of the pipeline from Sarnia to Montreal.⁷⁵ The vision of an energy independent country, while noble, resulted in increased tensions both between the west and the federal government, and between the US and Canada. The rift with the west was due to perceived federal meddling in provincial affairs, in this case natural resources. Western politicians were so enraged by the program that then Mayor of Calgary and future Premier of Alberta Ralph Klein was quoted as saying, “Let the eastern bastards freeze in the dark,”⁷⁶ in reference to the NEP. The tensions with the US were the result of decreased multinational industry access to resources, and a differential pricing schemes for domestic and export markets.⁷⁷ In 1984 the new Conservative government under Prime Minister Brian Mulroney immediately set out to mend fences both in Canada and with the US. He did this by dismantling any remaining remnants of the NEP and negotiating the Western and Atlantic Accords on energy. Mulroney also negotiated the Canada-US Free Trade Agreement (FTA) and then the North American Free Trade Agreement (NAFTA) with US.⁷⁸ Although there has been some re-negotiation of federal/provincial resource agreements in recent years, it is the NAFTA and its predecessor, the FTA, that the most influence energy issues today.

⁷⁵ Ibid., 9

⁷⁶ The Council of Canadians, “Letting Canadians Freeze in the Dark”
<http://www.canadians.org/publications/CP/2006/autumn/energy.htm>; Internet; accessed 31 Mar 2009

⁷⁷ Ibid., 9

⁷⁸ Ibid., 9

4.2. *Canada's Relationship with the US*

Canada and the US have a very close relationship that is characterized by their proximity, sharing the largest undefended border in the world, being each others largest trading partner, and having a very similar culture. In the words of Conrad Black, “Ninety-five per cent of Canadians live within a hundred miles of the US border, and it is practically impossible to distinguish a Canadian from an American from a northern state.”⁷⁹ Regardless, many Canadians take pride in identifying themselves as being ‘not American’, despite their obvious similarities. Canada has enjoyed a privileged relationship with the US for a number of years, but it has grown especially tight since the 1988 signing of the Canada-US FTA and then, in 1994 the signing of NAFTA.⁸⁰ In the words of Jennifer Welsh, “The US, as the world’s hegemon and Canada’s dominant trading partner, has been and should be a primary focus of our diplomacy.”⁸¹

While the relationship between Canada and the US has been based in trade, the terrorist attacks of September 2001 have increased the importance placed upon security issues between the two countries.⁸² The US focus on security provides a good opportunity for the Canadian government to improve relations between the two countries. The US is actively seeking partners that will assist in ensuring peace and order in the world. This comes at a time when the Canadian government is also looking to increase involvement

⁷⁹ Black, *Canada is More than a Middle Power*, 1

⁸⁰ Ian F. Fergusson, "United States-Canada Trade and Economic Relationship: Prospects and Challenges: RL33087," *Congressional Research Service: Report* (05/18, 2007), 1, <http://search.ebscohost.com/login.aspx?direct=true&db=tsh&AN=26313599&site=ehost-live>.

⁸¹ Welsh and Hester, *Superpower? Oil could make Stephen Harper a Superhero*, F.4

⁸² Fergusson, *United States-Canada Trade and Economic Relationship: Prospects and Challenges: RL33087*, 1

and commitment to the process of promoting democracy. The Standing Committee on Foreign Affairs tabled a report on democracy promotion that recommended Canada increase both political and financial commitment to the cause. The link between democracy and security (democracies do not go to war with each other) presents a rare opportunity for Canada to pursue a course of action that supports both Canadian values, the spread of democracy, and national interests, increased security and better relations with the US.⁸³

The recent February 2009 meeting between President Obama and Prime Minister Harper represented another opportunity to further entrench political and economic ties between the US and Canada. The relationship between Canada and the US is a balanced one as each has something the other wants.

The United States wants energy security and a renewed military commitment from Ottawa in Afghanistan, while Canada wants investment of money and technology in its energy sector and cooperation on dealing with related environmental issues.⁸⁴

However, it will be a balancing act to ensure Canadian interests are being maintained while still improving relations with the US.

The US is one of the top three oil producers in the world and account for 25 percent of global demand. However, due to the huge demand they still need to import almost 60 percent of their crude oil requirements. As the US' share of global production continues to decline the percentage of demand that is imported will continue to rise. The

⁸³ Jennifer Welsh, "Promoting Democracy Abroad," *Literary Review of Canada* 15, no. 10 (Dec, 2007), 20, <http://proquest.umi.com/pqdweb?did=1396979001&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

⁸⁴ "U.S., Canada: Drawing the Outlines of an Oil Sands Deal," Stratfor, http://www.stratfor.com/analysis/20090219_u_s_canada_drawing_outlines_oil_sands_deal (accessed February/27, 2009).

calls for energy independence are common to both Democrat and Republican. However, the problem is that most Americans equate energy independence with domestic production which is in decline. Canada is the top supplier of oil to the US and the “true deliverer of energy security”.⁸⁵ When it comes to US energy security, Canada is the ideal partner. As a member of an exclusive group of eight countries that control 78 percent of the known reserves of oil, Canada is the only one that “can claim to be a stable, developed democracy.”⁸⁶ The question is whether Canada can leverage that position more appropriately to obtain the best long term advantage.

Trade and energy security are at the heart of Canadian and US interests. The US receives 54 percent of its oil imports from the countries in the western hemisphere primarily Canada, Mexico and Venezuela. Canada and Mexico are responsible for 16 and 15 percent of US oil imports respectively. However, Mexico and Venezuela both suffer from political restraints that make them less reliable suppliers; in fact the present leadership in Venezuela would prefer not to have to supply the US at all. As a result of good political relations and ability to expand production, Canada is in the most advantageous position relative to other western suppliers when it comes to interactions with the US.⁸⁷ As a result of its advantageous position, Canada has enjoyed a trade

⁸⁵ Hester, *The New Global Energy Geopolitical Game: Is Canada Ready to Play*, 4

⁸⁶ Derek DeCloet, "Shaking the Foundations," *The Globe and Mail* Feb 2, 2008, <http://proquest.umi.com/pqdweb?did=1422615351&Fmt=7&clientId=1711&RQT=309&VName=POD>.

⁸⁷ Hester, *The New Global Energy Geopolitical Game: Is Canada Ready to Play*, 11

surplus with the US for a number of years, and energy has recently become the largest portion of that surplus.⁸⁸ Is there any way that Canada can benefit from this trade surplus?

Canadians like to think that its trade surplus and especially its energy reserves provide a comparative advantage in any trade negotiations with the US. Canadians believe that the extensive proven reserves can be used as bargaining chip in any negotiation with the energy-hungry US, but the reality is more complex. Canada and the US are inexorably linked economically due to the FTA signed 1988 and later NAFTA in December 1992. There is a proportionality clause (article 605) that is built into NAFTA which essentially requires Canada to continue to export the same proportion of its energy resources to the US as it has for the previous 36 months. However, this agreement was signed at a time when, in the words of Gordon Laxter, it was “widely assumed that oil was plentiful, prices would stay low, imports were secure, peak oil was a long way off, and warnings of dramatic climate change overblown.”⁸⁹ The end result is the same regardless of what was thought when the agreement was signed; Canada is not in control of its own energy exports. As discouraging as it may be, this was not the first time that Canada agreed to relinquish some sovereignty of its resources to ensure access to US markets. As previously mentioned, Prime Minister Diefenbaker negotiated an exemption for Western Canada from US protectionist measures provided it forgo domestic markets

⁸⁸ Pierre Alvarez, "Energy Security Calls for a Continental Vision," *The Globe and Mail* Feb 16, 2009, <http://proquest.umi.com/pqdweb?did=1645883741&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

⁸⁹ Gordon Laxer, "IT'S NOT JUST EASTERN CANADIANS WHO'LL FREEZE IN THE DARK: Missing but Badly Needed-a Canada-First Energy Policy," *CCPA Monitor* 13, no. 6 (Nov, 2006), 39, <http://proquest.umi.com/pqdweb?did=1167653251&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

east of the Ottawa Valley.⁹⁰ In both cases, the government of the day believed it was acting in Canada's best interest to secure trade with the US.

Despite the importance of Canadian-US trade relations, it is also important for Canada to pursue a diversified customer portfolio to avoid monophony behaviour by the US. To this end, Canada has sought to engage China as a potential customer for Alberta oil. The connection between China and Canada is relatively recent with very little interaction between the two countries prior to 2005. Since 2005 China has made investments in the Alberta oil sands through direct investment and with an MOU to assist in the development of the Gateway pipeline from Alberta to the Pacific coast capable of delivering 200,000 b/d to China.⁹¹ The relationship between China and Canada is of particular importance to the US as well. Energy trade between Canada and China is good for both countries because it diversifies supply for China and the customer base for Canada. However, for every barrel of oil that Canada supplies to China, there will be one less for export to the US. "What is good for Canada or China may not be good for the United States."⁹² It is this potential for diversification of customers that is worrisome for the US.

To American strategic planners, there are also political implications beyond economics, Canada and Venezuela, together supplying a third of the crude imports by the United States, may have more leverage over Washington with their oil also going to China.⁹³

⁹⁰ Hester, *Canada as the "Emerging Energy Superpower": Testing the Case*, 9

⁹¹ Jiang, *China's Global Quest for Energy Security*, 122

⁹² *Ibid.*, 122

⁹³ *Ibid.*, 123

Therefore, even though the ability to export to China may be in the Canadian interest, it must be balanced against the relationship with the US.

The important things to consider relative to the Canada-US relations are the importance of cross-border trade, security (both physical and for energy), and the constraints resulting from multilateral and bilateral agreements already in place. Canada and the US can continue a symbiotic relationship, but Canada must be careful to balance its interests with those of its partner or risk losing international influence along with autonomy.

4.3. *Availability*

The birth of the Canadian oil and gas industry began with conventional oil back in 1858, but those once abundant conventional oil and gas reserves are in decline in Canada. There is potential in more unconventional areas such as coal bed methane, shale gas and in areas off Nova Scotia and the Mackenzie Valley, but all of these sources have higher environmental and exploration costs associated with them.⁹⁴ As conventional oil resources continue to decline, the shortfall in production will come for the expanding exploitation of the oil sands.

With existing technology it was estimated by the Alberta Energy and Review Board that amount of recoverable oil associated with the oil sands is in excess of 175

⁹⁴ Hester, *Canada as the "Emerging Energy Superpower": Testing the Case*, 6

billion barrels, second only to Saudi Arabia with 265 billion barrels.⁹⁵ The oil sands can be divided into two types based on the location and method of extraction. Of the estimated 175 billion barrels of oil equivalent in the oil sands, only 20 percent is close enough to the surface to be extracted by mining operations. The remaining 80 percent or 143 billion barrels must be extracted by in situ methods. While this may result in less of the visible blight on the landscape then experienced with open pit mining operations, it is currently less efficient and more water intensive.⁹⁶ Current production levels are in excess of one million b/d, but government of Alberta forecasts increases in production capacity to 3 million b/d by 2020 and then up to 5 million b/d by 2030.⁹⁷

4.4. *Tensions*

Canadian policies are shaped and influenced by its geography. In the case of oil the majority of reserves are located in the west. The geographic separation between the resources in the west and the population in the east results in tensions when it appears that there is an inequitable distribution of what are perceived by some to be national resources. It is the responsibility of the federal government to ensure that the rents associated with the western concentrated resources are equitably distributed across the country. This results in tensions between the federal and provincial governments.

⁹⁵ Erin Anderssen, Shawn McCarthy and Eric Reguly, "An Empire from a Tub of Goo," *The Globe and Mail* Jan 26, 2008, <http://proquest.umi.com/pqdweb?did=1418806951&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

⁹⁶ Hester, *Canada as the "Emerging Energy Superpower": Testing the Case*, 7

⁹⁷ *Ibid.*, 7

Other than location, there are a number of related factors that contribute to the east west divide that currently exists in the Canadian energy sector. One issue is simple access to the resource. For example, although Canada is a net exporter of oil, it still requires greater than one million b/d to be imported to meet domestic demand in the east. The ability to move oil from the Alberta region to eastern Canadian refineries is dependent on the Enbridge Pipeline running from Sarnia to Montreal. This pipeline was originally intended to do just that as part of the NEP but due to economic realities it has been running from Montréal to Sarnia bringing imported oil to southern Ontario refineries for many years. There were plans to reverse the flow once again (Trailbreaker Project) at a cost of CAN \$350 million, but the recent drop in world oil prices has caused Enbridge to put that project on hold.⁹⁸ As a result of not having access to the oil from the west there have been fears that the east could run out of energy, which seems to be incongruent with a net exporting nation.

The fact that the federal government is responsible for environmental issues is another area that causes friction between the federal and provincial governments. While the province has the ability to dictate terms to industry with regards to the natural resources, there is still a need for the federal government to be involved to ensure the long term environmental sustainability of projects. This dynamic is highlighted by the following quote from Annette Hester:

The matter of environmental sustainability of energy production illustrates the enormous challenges of reconciling federal and provincial jurisdictions in an

⁹⁸ Andrew Chung, "Activists Push Policy Change for Oil Pipeline; Environmentalists Warn Enbridge Plan would Limit Ontario, Quebec Consumers to Carbon-Heavy Crude," *Toronto Star* Jan 21, 2009, <http://proquest.umi.com/pqdweb?did=1629914451&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

extremely complex global scenario particularly in a country, such as Canada, where provinces have diverging strategic interests.⁹⁹

The next section will further explore the environmental challenges associated with the energy sector and the unique problems posed by exploitation of the unconventional oil sands.

4.5. *Environmental*

Canadians are more aware of environmental issues today than in the past and with this awareness comes a growing concern. The high environmental cost associated with development of the oil sands adds to this environmental anxiety. There are three primary environmental concerns to be considered when discussing development in the oil sands; greenhouse gas (GHG) emissions, global warming, and secondary resource usage including land, water and natural gas. While environmental issues associated with oil production are not unique to Canada, these particular problems are more prominent in the development of the oil sands due to its unconventional nature.

To understand the environmental issues it is necessary to understand the nature of the oil sands or bitumen and how the oil is extracted. The oil is trapped in suspension with an aggregate which combine to form the bitumen. The bitumen must be extracted from the earth in one of two methods; traditional strip mining, or using steam, the bitumen can be extracted by an insitu-method. Both methods require large quantities of steam to separate the oil from the sand aggregate. Although the processes have been

⁹⁹ Hester, *The New Global Energy Geopolitical Game: Is Canada Ready to Play*, 20

improving in efficiency and more recycled water is being used, there are still concerns over the amount of water being extracted from the Athabasca River for oil sands use. As well, there is an issue with the used water and the potential for contaminating the fresh water supply in the region and further downstream.¹⁰⁰ It is estimated that the production of one barrel of synthetic oil from the oil sands currently requires from two to four barrels of fresh water, about 750 cubic feet of natural gas, and four tonnes sand and overburden.¹⁰¹ Industry does make efforts to reduce fresh water usage through improved technology and recycling. At present, according to industry sources, water used in mining projects in the oil sands is comprised of about 85 percent recycled water.¹⁰²

Another water related concern resulting from the development of the oil sands is what to do with all of the waste water accumulating in the tailings ponds. The tailings ponds are large man made lakes that are common to most mining operations that consist of the waste water from the extraction process and store the cloudy water so the sediment can settle out. Although they are called ponds, in the oil sands these ponds total over 50 square kilometres in size. It estimated that there is enough suspended clay trapped in the tailings ponds to fill a ditch 20 metres wide and 10 metres deep from Fort McMurray to Edmonton to Ottawa. It was initially believed that the clay would settle out in a few years and so it could then be returned to the landscape; this did not happen. It is now believed that it may take as many as 500 to 1000 years for the clay to settle on its own.¹⁰³

¹⁰⁰ Hester, *Canada as the "Emerging Energy Superpower": Testing the Case*, 7

¹⁰¹ Erin Anderssen, "The Climatic Costs of Rapid Growth," *The Globe and Mail* Feb 1, 2008, <http://proquest.umi.com/pqdweb?did=1422090001&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

¹⁰² Canadian Association of Petroleum Producers, "Environmental Challenges and Progress in Canada's Oil Sands," (April 2008, 2008), 11.

¹⁰³ Anderssen, *The Climatic Costs of Rapid Growth*, A.14

At 50 square kilometres the tailings ponds seem large, but they are in proportion to the overall size of the mining operations in the oil sands area. For example, there are currently oil sands recovery leases in place for surface mining an area the size of Florida. (see Figure 4.5.1) The sheer size of the operations and the strip mining extraction method



Figure 4.5.1¹⁰⁴

result in soil reclamation issues. The mining process must first remove the overburden (also know as the boreal forest) and then remove the bitumen which can run for hundreds

¹⁰⁴ Alberta Geological Survey, "Alberta Oil Sands," http://www.ags.gov.ab.ca/energy/oilsands/alberta_oil_sands.html; Internet; accessed 21 April 2009

of feet deep. It is argued that it will be impossible to return this land to its former state.¹⁰⁵ However, the land and water use issues are local in nature and as a result are primarily only a Canadian concern. The larger more universal issue is the GHG emissions associated with oil sands development and its contribution to global warming.

GHG emissions are one of the many environmental concerns related to energy production in Canada. Unlike other forms of environmental degradation associated with energy extraction or production that are localized, GHG emissions have a much wider impact due to the contribution to global warming and the requirement to meet limits set out in the Kyoto Protocol. Unconventional oil production is estimated to produce as much as three times as much greenhouse gasses per barrel compared to conventional oil sources. Although the extraction process has improved efficiency, reducing the emission per barrel by 53 percent since 1990, absolute production levels have outpaced the efficiency gains resulting in an overall increase in GHG emissions.¹⁰⁶

There is a misperception that the oil sands are responsible for a large portion of Canada's GHG emissions. According to the Canadian Association of Petroleum Producers, Canada is responsible for two percent of all global GHG emissions with the oil sands accounting for only five percent of that amount. Therefore, the oil sands are only responsible for less point one percent of the global total.¹⁰⁷ However, the GHG emissions associated with the oil sands are sufficiently large that it deserves particular attention. If oil sands production levels increase as predicted and there is no new

¹⁰⁵ Anderssen, McCarthy and Reguly, *An Empire from a Tub of Goo*, F.1

¹⁰⁶ Hester, *Canada as the "Emerging Energy Superpower": Testing the Case*, 7

¹⁰⁷ Canadian Association of Petroleum Producers, *Environmental Challenges and Progress in Canada's Oil Sands*

technology advances Canada will not be able to meet international climate change commitments.¹⁰⁸ One of the technologies currently being used to reduce GHG emissions associated with oil sands development is carbon capture and storage or CCS.

CCS attempts to capture the carbon dioxide expelled as part of the waste product in processing and funnel it underground for permanent storage so it is not released into the atmosphere. However, the process is expensive and there is not enough economic incentive to encourage industry to utilize the technology for the sole purpose of limiting GHG emissions.¹⁰⁹ There is a possibility that the US will impose a penalty of ten to twenty dollars per tone of carbon dioxide on oil recovered from the oil sands due to its approximately 40 percent higher carbon footprint than conventional oil. Although current CCS technology costs around eighty dollars per tonne of sequestered CO², the carbon penalty will encourage further innovation in CCS and other technologies driving down the cost. However, until the processes can be made more cost effective, implementation of these technologies will be difficult to justify from strictly a dollars and cents point of view.¹¹⁰

The oil sands of western Canada were partially responsible for the boom of the last few years, especially when the price of oil spiked to its highest levels ever in 2008. However, like most booms, it could not last forever and the price of oil has dropped to levels one third what it was less than a year ago. The decreasing price of oil on the global

¹⁰⁸ Anderssen, *The Climatic Costs of Rapid Growth*, A.14

¹⁰⁹ Shawn McCarthy, "Shifting Sands: Looking for Solutions to the Carbon Conundrum," *The Globe and Mail* Feb 2, 2008, <http://proquest.umi.com/pqdweb?did=1422615341&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

¹¹⁰ Shawn McCarthy, "Oil Sands Producers Stuck Over a Barrel," *The Globe and Mail (Index-Only)* Feb 20, 2009, <http://proquest.umi.com/pqdweb?did=1648367611&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

market as a result of the recent downturn in the economy has at least one environmental upside and was able to accomplish what the federal and provincial governments were not willing to do; slow investment and progress in the oil sands. During the frenzy to capitalize on the higher oil prices, there was a perception that projects were going ahead with little to no environmental scrutiny. The reality is that as long as oil is a commodity in demand it will be exploited. The lower price has slowed investment and expansion but it has not stopped. The slower pace does provide an opportunity for the governments to re-focus and determine what direction should be taken regarding future development. Will Canada take advantage of this opportunity? Only time will tell.

4.6. *Current Policy and Economic Reality*

As much as the federal government would like to be able to speak on behalf of all Canadians and act unilaterally in energy issues, there are a number of constraints preventing it from doing so. In order to understand internal Canadian dynamics, it is important to understand the division of power between the provinces and the federal government as it relates to natural resources. Natural resources are a provincial responsibility which gives the provinces the ability to regulate all aspects of development including negotiation of royalty regimes with the companies exploiting the resource. The federal government retains the ability to determine taxation, control interprovincial transportation, and most importantly, control over international imports and exports.¹¹¹ If we look back to the definition of an energy superpower, this one devolution of authority

¹¹¹ Hester, *The New Global Energy Geopolitical Game: Is Canada Ready to Play*, 14

for resources to the provinces would negate Canada from meeting the condition of control to set prices.

This splitting of powers allows the provinces some autonomy, but hinders the federal government from being able to act on behalf of all Canadians. The energy sector is further complicated when the private ownership of the infrastructure is also taken into account. There are no state run oil companies which further limits the influence of the federal government in relation to the energy sector. As well, the ability to control exports is limited by the provisions of NAFTA that mandate export levels and market pricing. The current energy situation in Canada results in a federal government with few levers of control. “This is the reality that confronts Stephen Harper: an oil industry that is owned exclusively by the private sector, entrenched provincial jurisdiction leaving no space for federal interference, and trade with the United States tightly regulated.”¹¹² NAFTA then effectively prevents Canada from having any market control beyond its own region, arguably it also prevents any market control in its region. Harper’s assertion of Canada as an energy superpower is getting weaker.

Event though the federal government lacks the flexibility to act unilaterally, it has played and will continue to play a major role in the development of energy markets, despite the notion that free markets are the best way to ensure efficient control. Energy resources are too important to leave to industry alone; there are issues of national security involved. “In fact, worldwide, but particularly in Canada, energy markets and development, with very few exceptions, have always been and will continue to be all

¹¹² Hester, *Canada as the "Emerging Energy Superpower": Testing the Case*, 9

about politics.”¹¹³ National interests will always be an important part of energy dynamics. The problem facing Canada is the ability of or willingness of the federal government to develop a long term vision that is in keeping with Canadian interests and make the necessary investments to see it through.

Someone once said that it takes money to make money. That is especially true in the energy sector where massive investments are required upfront to exploit the resources followed by continued investment for maintenance and to improve efficiency and capacities. The oil sands are more resource intensive than other types of oil exploitation as a result of higher production costs. It is very resource and labour intensive to extract the bitumen and then process it into a useable form. Current technology and process permit profitability when the price of oil is above US \$20 per barrel and while higher prices for oil encourage more investment to exploit the resource, lower prices have tendency to discourage investment.¹¹⁴ The resulting boom and bust cycle is familiar to western Canada, but some strategic investment could increase stability while supporting Canadian national interests at the same time. For instance, there is significant investment required to build the infrastructure necessary to bring the heavy Canadian oil south to the refineries in Texas. As much as 400,000 barrels a day could be sent south to Texas for processing if the infrastructure is improved. The increased importance of Canadian oil to Americans would result in increased leverage to Canadian policy makers.¹¹⁵

¹¹³ Hester, *The New Global Energy Geopolitical Game: Is Canada Ready to Play*, 17

¹¹⁴ Anderssen, McCarthy and Reguly, *An Empire from a Tub of Goo*, F.1

¹¹⁵ Barrie McKenna and David Ebner, "The Kinder, Gentler Energy Superpower," *The Globe and Mail* Jan 28, 2008, <http://proquest.umi.com/pqdweb?did=1419453151&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

There are a number of international and national agreements, accords and principals that guide policies related to energy, but there is no unifying strategy that links them all together and provides a vision of where Canada plans to move in the future. Principals such as a market oriented structure, respect for provincial jurisdictions and targeted intervention when necessary do not amount to a strategy. Despite the claim of superpower status, the current government has demonstrated a lack of foresight in terms of energy strategy, “it does not appear that Stephen Harper believes a grand strategy is necessary for the nation’s future prosperity.”¹¹⁶ What is preventing the federal government from developing and implementing a true national energy strategy? Is it a question of being too difficult, or, more likely, is it that they do not know where they want to go?

One of the difficulties is the complexity of the issue. Environmental issues are one example of this complexity. In general, Canadians are concerned with the environment and environmental issues. However, many environmental issues are complex and are not easily translated into policies that understood by the general public. This was evident in the last federal election with the Liberal “Green Shift” plan that, although based on sound environmental logic, did not play well to the general public.¹¹⁷ Constantly weighing the economic issues against the environmental impact and how the government should manage the resources in an environmentally sustainable manner is one of the conundrums facing both industry and the government. Global warming and GHGs are a good example. Unless the government is able to convince the oil companies that it is in their

¹¹⁶ Hester, *The New Global Energy Geopolitical Game: Is Canada Ready to Play*, 24

¹¹⁷ *Ibid.*, 20

best interest to develop and invest in technology that will reduce GHG emissions, progress will be slow. “Ultimately, the driver behind carbon capture in Canada is likely to be Big Oil’s fear of loosing its \$100-billion bet on the oil sands.”¹¹⁸

It is also interesting to note that Canada is one of the few countries that do not have a strategic reserve of oil. A strategic reserve is a stockpile of oil sufficiently large to be considered to be a 90 day supply that can be released by the government in the event of a supply disruption. Although Canada is a net exporter of oil, it still depends on imports for the eastern portion of the country due to the inability to supply oil from one end of the country to the other. This problem is the result of high infrastructure costs associated with cross country distribution and the proportionality clause in NAFTA.¹¹⁹ Canada is the only member of the IEA besides Norway that does not have a strategic reserve. However Norway, unlike Canada, supplies its own needs first so does not require one.¹²⁰ The lack of a strategic reserve combined with the inability of western oil to flow east leaves the country exposed to international supply fluctuations and decreases overall energy security.

Another complicating factor is that Canada is dependent on exports and has a resource based economy. Canadian exports have been dominated by commodities since 2004 when the portion exceeded 50 percent for the first time in over a decade, and despite the fact that oil accounts for only a small portion of overall exports, the Canadian

¹¹⁸ McCarthy, *Shifting Sands: Looking for Solutions to the Carbon Conundrum*, B.1

¹¹⁹ Gordon Laxer, "Canada Needs Plan to Cope with Future Oil Shortage Shocks," *CCPA Monitor* 14, no. 9 (Mar, 2008), 21, <http://proquest.umi.com/pqdweb?did=1455664031&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

¹²⁰ Gordon Laxer, "PUTTING AMERICAN ENERGY NEEDS FIRST: Energy Security for the U.S. Means Insecurity for Canada," *CCPA Monitor* 14, no. 2 (Jun, 2007), 34, <http://proquest.umi.com/pqdweb?did=1294072081&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

dollar has been acting like a petro dollar. These two factors are important as it subjects the entire economy to the possible boom and bust cycles associated with commodities based economies.¹²¹ The majority of Canada's energy resources are concentrated in the west, mainly in Alberta. When this concentration of resources is considered in conjunction with the provincial control and the impact of a rising Canadian petro-dollar on the eastern manufacturing sector of Ontario and Quebec, it is easy to see how it can become a divisive issue and make matters more complicated for the federal government.¹²² On the one hand, if things are going well in the oil patch the west is happy; on the other hand it has a negative impact on the manufacturing sector as a result of a higher dollar making exports more expensive making the east unhappy.

The issue of a western prosperity at the expense of the eastern manufacturing sector is a recent phenomenon. Canada is still coming to grips with its new found oil wealth as it was only in April of 2003 that the US Geographic Surveyors declared that the Oil Sands in Canada can be considered a proven reserve.¹²³ Another newly developing factor is the relationship with the US as their largest supplier of oil. Perhaps it is this relationship that Prime Minister Harper was hoping to influence when he referred to Canada as an energy superpower in 2004. If so, the actions of the federal government since that comment are not reflective of any attempt to wield that power.

In fact, there are some individuals that are in direct opposition to the prime minister's claim. An article in the *Globe and Mail* from January 2008 claimed that:

¹²¹ Eric Reguly, "Superpower? Oil could make Stephen Harper a Superhero," *The Globe and Mail* Feb 2, 2008, <http://proquest.umi.com/pqdweb?did=1422615361&Fmt=7&clientId=1711&RQT=309&VName=PQD>.

¹²² Hester, *Canada as the "Emerging Energy Superpower": Testing the Case*, 34

¹²³ Anderssen, McCarthy and Reguly, *An Empire from a Tub of Goo*, F.1

Despite its growing importance as a supplier to the world's biggest oil consumer, Canada is the anti-superpower: a gentle giant that doesn't wield its oil clout as a geopolitical club (think Russia or Venezuela), or set a benchmark for world prices (like Saudi Arabia). It isn't lawless or war-ravaged (Nigeria or Iraq).¹²⁴

Others also share this view. Annette Hester, a Senior Associate at the Center for Strategic and International Studies, stated in a recent article for the Canadian International Council that "Although many have argued with substantive reasoning, including the author, that Canada is not a superpower and more importantly does not want to be one, the Prime Minister is unrepentant."¹²⁵

This leads to the question posed at the beginning of the paper as to whether or not Canada can even be considered an energy superpower. The provincial control of natural resources prevents national control to set prices. NAFTA prevents market control beyond its own region. As a middle power with limited military capacity there is ability or willingness to use resources for political gain or as a tool for coercion. The only criterion that Canada is able to meet with regards to superpower status is the significant supply of oil. Some may argue that this criterion is also suspect due to the fact that the majority of reserves are unconventional requiring extensive processing before it is useable. Therefore, based on the definition provided in this paper, Canada cannot be considered an energy superpower. Prime Minister Harper's claims to the contrary must be taken for what they are, political rhetoric designed to raise the profile of the Canadian energy sector and promote international investment.

¹²⁴ McKenna and Ebner, *The Kinder, Gentler Energy Superpower*, A.8

¹²⁵ Hester, *The New Global Energy Geopolitical Game: Is Canada Ready to Play*, 23

If Canada is not an energy superpower then what is it? What can it do with the extensive energy reserves it does possess? These questions will be explored further in the next chapter.

5. Chapter 5 – What can Canada Do?

Canada is well positioned to fully realize the competitive advantage it has by virtue of its extensive oil reserves and relative position next to the largest oil consumer and last real superpower in the world. What is currently lacking in Canada is a long term strategic vision for the energy sector that will enable that to happen. To develop that strategy we should first look back to the previous sections for lessons learned. The remainder of the chapter will examine possible Canadian energy strategies. First based on what others have proposed, then using the lessons learned to suggest a course of action to take, followed by the most likely scenario based on the current government structure and political reality.

5.1. *Lessons Learned*

There are a number of lessons for Canada that can be extracted from the look at the history and geopolitics associated with oil. First and foremost is the relative importance of energy security in today's global economic climate. The US, guided by the Carter doctrine, has demonstrated the willingness to use all resources at its disposal, including its military, to secure stable access to international oil supplies. Russia has demonstrated a similar willingness to use force to secure access to customers. In an effort to secure international oil supplies China has stopped short of force, but has engaged in partnerships with states that are considered less than desirable due to human rights or environmental concerns. The lesson to be derived for Canada is that it is important to

secure access to a portfolio of customers to ensure a consistent demand without giving any one particular customer excessive leverage on the demand side. This is a most difficult lesson to put into practice for Canada given our proximity to the US and the trade accords that guarantee access to resources.

We learned from the examples of other oil exporting nations that simply exploiting the resource and extracting rent for short term gain can result in the resource curse or Dutch disease. We have already seen elements of that in Canada with the rise and fall of the Canadian petro-dollar significantly impacting the eastern manufacturing sector. The Norwegians have so far avoided the Dutch disease and so provide a possible example of how to solve this problem. The key factors from the Norwegian model include higher rents extracted from the companies exploiting the resource, more state control of the resources through state controlled companies, and an externally focused sovereign wealth fund that is designated for the future when the resource eventually runs out. Two things learned from the Russian example are that a long term strategy for energy resources can support national interests, and that to be a price maker it may be necessary to use overt coercion. That is not something Canada is likely to do, so it is constrained to be a price taker in the global energy market.

The review of the relationship between Canada and the US highlighted the importance of that relationship in terms of trade and security. The relationship exists on three levels; we depend on each other as trading partners; the US depends on Canada for energy security; and Canada depends on the US for national security. One other learning point from the review of the relationship is that, like most relationships, it will ebb and flow depending on the major players involved. Consistency in the relationship results

from bilateral or multilateral agreements that are more enduring than the administrations of either government.

The discussion of the Canadian situation also revealed a number of guiding principles for any Canadian long term energy strategy. An important history lesson that all subsequent governments have taken to heart is the NEP. The NEP was such a divisive issue between the west and the federal government that there are still echoes of it today. There are also east west tensions resulting from a perceived inequity of resource revenue distribution. These tensions will have to be taken into consideration for any government that implements a national energy strategy. Another take away is the importance of the environment and the requirement to develop resources in a sustainable manner that has the right balance between economic and environmental concerns.

With these lessons fresh in our minds we can now consider what is required to develop a truly Canadian vision and long-term strategy for our future in the energy sector and in the world. First, possible strategies that have been proposed by others will be examined under the heading of possible course of action. Next, a possible course of action using the lessons learned will be proposed under the heading of 'What Canada Should Do'. And finally, the most likely path that will be taken by the present minority government will be explored.

5.2. *Possible Courses of Action*

Along with the lessons gleaned from the early portions of the paper, there are some big picture issues that must also be considered in energy strategy formulation. The

first issue is the link between energy security, national security and the environment. According to a report by The CNA Corporation on National Security and the Threat of Climate Change, “Climate change, national security, and energy dependence are a related set of global challenges.”¹²⁶ It is difficult to have an energy strategy that does not impact the environment or national security as well as energy issues. There will always be trade offs between the three areas. This can be represented by a policy triangle where the relative length of each side will represent the importance apportioned to each of the factors. The shape of the triangle is not all that important; it will be different for every policy. It is more important for policy makers to be aware that trade offs will be required than to be concerned with the overall shape.

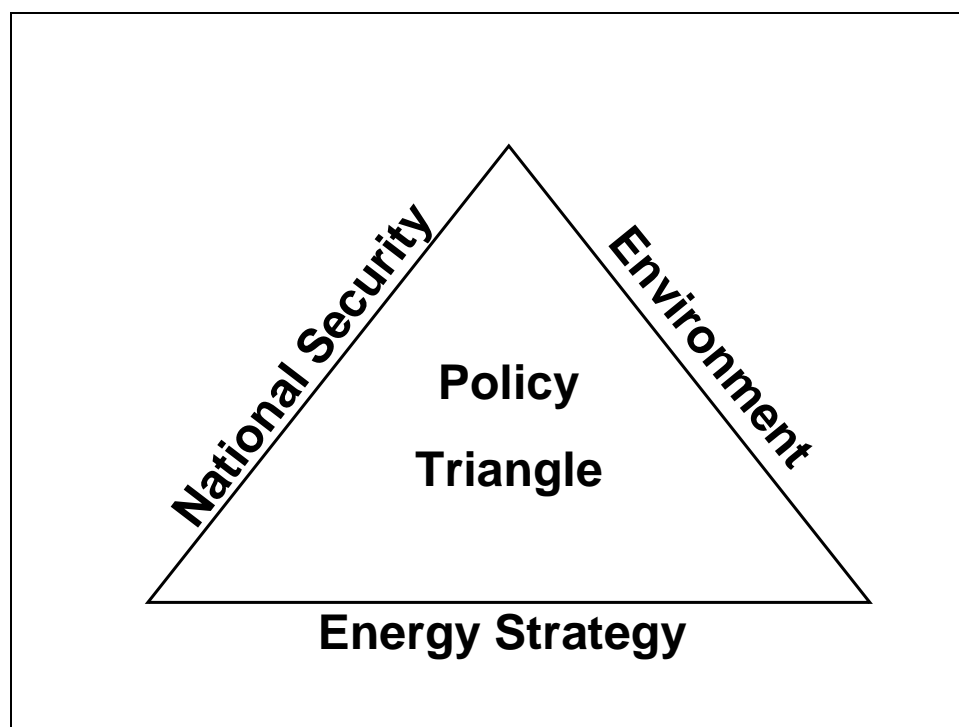


Figure 5.2.1 – Policy Triangle

¹²⁶ CNA Corporation, "National Security and the Threat of Climate Change," <http://securityandclimate.cna.org/>; Internet; accessed February 21, 2009.

Gordon Laxer, a professor of political economy at the University of Alberta, has a clear view of what needs to be included in a comprehensive Canada First Energy strategy. In his view five things should be considered or included in Canada's energy strategy:

1. Incorporate the Dinning principle which requires energy reserves of 10 to 15 years for Canadian requirements before any exports are allowed;
2. Stop any projects in the oil sands that have not yet been approved and increase conservation measures. The banked oil supplies will be worth more in the future and conservation will make them last longer;
3. Increase royalties to levels comparable with Norway to obtain more of the economic rents;
4. Reverse the Sarnia-Montreal pipeline; and
5. Change the Alberta leasing policy so that no oil can be exported until Canada's requirements are met. ¹²⁷

These policies would require strong federal and provincial cooperation as well as a re-negotiation of NAFTA to come to fruition. All of Laxer's points support a Canada first energy strategy, but would be difficult to implement as a result of trade agreements and the federal-provincial power sharing arrangement regarding energy resources. While some of his points such as reversing the pipeline and increasing the royalty fees are possible in today's climate, the others are not. To be considered an effective Canadian

¹²⁷ Laxer, IT'S NOT JUST EASTERN CANADIANS WHO'LL FREEZE IN THE DARK: Missing but Badly Needed-a Canada-First Energy Policy, 39

energy strategy the provisions must be implementable. A more practical Canadian energy will be proposed next.

5.3. *Optimal Course of Action*

A more practical Canadian energy strategy will be based on implementable provisions that provide due consideration to the realities of the current Canadian and global energy climate. First, the Norwegians have provided the bases for two provisions; increased rents and a sovereign wealth fund designated for future use when resources run out. The increased rents will put more of the profits in the hands of Canadians as opposed to the foreign owned oil companies. There will be some resistance from the business community, but as long as the operations are profitable, companies will continue to invest and develop. The sovereign wealth fund will use the increased revenues as a hedge against future economic difficulties. However, unlike Norway which invests 100 percent outside of their own country, a certain percentage of the Canadian fund would be required to be invested inside Canada in an effort to more evenly distribute the oil windfall currently concentrated in the western regions.

The next tenant of the Canadian strategy comes from the study of the geopolitics of oil. It was noted that both China and the US are pursuing a strategy involving a diversified portfolio of suppliers. Canada must also pursue a strategy that encourages a diversified consumer portfolio. Trade agreements with the US already guarantee Canadian access to that market, so an effort must be made to add other consumers to the portfolio. China and other Asian pacific countries are prime candidates; however this will

require the ability to export oil via pipeline to west coast ports for furtherance across the pacific. This would not only serve to increase the number of potential consumers, but it would also provide some leverage when negotiating with the US which currently holds a monopoly position.

Canada's relationship with the US is of vital importance for issues of trade and security. Canada cannot neglect this relationship and should be doing what it can to nurture it. Canada will have to use what little leverage it does have to ensure agreements between the two countries are in line with national interests and values. Short of re-negotiating NAFTA, there are steps that can be taken including encouraging investment and cooperating to solve common problems such as global warming. This may include tariffs on oil that will reflect the true cost of developing the resource when it comes to GHG emissions. The additional costs will incentivise improvements in efficiency and technology such as CCS that will further decrease emissions.

Sustainability and environmental stewardship are two common themes that are currently top of mind in the Canadian public and should be incorporated into a Canadian energy strategy. Sustainability is a term usually applied to alternative energy forms or renewable sources such as hydro-electricity. Canada currently only generates 15 percent of our energy resources from renewable resources. This is only slightly better than the global average of 14 percent and well behind Brazil which produces 45 percent of its energy requirements from renewable resources.¹²⁸ Canada needs to target a much higher percentage of renewable energy for its production portfolio. This can be done through a combination of mandated or legislated requirements to utilize renewable energy, and

¹²⁸ Hester, *Canada as the "Emerging Energy Superpower": Testing the Case*, 23

through incentives to increase capacity. The incentives could take the form of guaranteed contracts and set prices for renewable energy, or negative incentives that penalize the use of non-renewable energy. This is an opportunity for Canada to take a global leadership role in the area of renewable resources and sustainability.

The link between energy security, national security and the environment must also be addressed as part of the Canadian strategy. The national security aspect is already taken into consideration as part of the Canada-US relations and the environmental issues are addressed through the sustainability theme. In terms of energy security there are a few additional measures that will have to be taken. First, a strategic reserve of oil needs to be established to help shelter Canadians from future price shocks or supply shortages. Considering that Canada is the only country in the IEA besides Norway that does not have a strategic reserve, implementation of this measure is well overdue. Second, as suggested by Gordon Laxter, the pipeline between Sarnia and Montreal should flow from west to east. While this would not provide all of the oil requirements for the eastern portion of the country, it will go a long way towards the Canada first requirement of an energy strategy.

It is recognized that all of these suggestions are not new or revolutionary. However, all of these suggestions are implementable and have the potential to shape Canada's actions and image in a positive manner; but first, they must be implemented, or at least promulgated as part of a national strategy. That will require a strong government with the vision to see the potential and the will to carry out the actions necessary to make it happen.

5.4. *Most Likely Course of Action*

It will take a strong government with vision to act and take advantage of the opportunities currently available to Canada. While the current minority government has demonstrated a willingness to talk the talk referring to Canada as a global energy superpower, it is likely not strong enough to implement significant policy changes necessary to secure a truly Canada first energy strategy. A minority government by nature has a limited time horizon that is not congruent with developing a long term vision or strategy. Minority governments are also more risk adverse due to the requirement to gain consensus from other parties to pass legislation. As a result of this short term vision and consensus requirement, the current government is unlikely to implement any controversial policies relating to energy strategy. Therefore, what can they do within the constraints placed upon them?

The timing is right for more emphasis on environmental issues as a result of the new US administration's focus on the environment. The slow down in the economy also presents the opportunity to encourage investment in alternative resources through government sponsored infrastructure development. An investment in renewable resources would provide the government an opportunity to both foster US relations and assume a leadership role on environmental issues. Therefore, it is possible that the government will move towards a policy that encourages more renewable energy development, but will likely stop short of mandating a target amount.

The current government has also demonstrated a willingness to discuss energy issues in terms of national interests with the US. This trend will continue and result in

new bilateral agreements regarding the use of energy resources and impacts on the environment. These agreements may go as far as a common carbon tax or carbon cap and trade system. Although these possibilities are only speculation, they represent possible opportunities that are not beyond the capabilities of the current government to implement.

This chapter addressed the question of what Canada should do with the energy resources it fortunate to possess. It all starts with the need for a long term strategy and vision which is not normally associated with a minority government. A minority government is more likely to choose the more politically expedient path, but that does not mean it cannot move incrementally in the right direction. Regardless of the road chosen by the Canadian government, it is imperative that the strategy be promulgated as a complete and coherent document that is in line with Canadian values and contributes to its national interests. A coherent and comprehensive strategy has the ability to focus governments and prevent unnecessary resource expenditures on counterproductive policies.

6. Chapter 6 - Conclusion

This paper set out to explore the question of whether or not Canada could be considered an energy superpower or if it even wanted to be considered one. Further to that initial question, the intent was to propose a Canadian energy strategy that reflects Canadian values and interests in the 21st century. To do so the geopolitical nature of oil was examined along with a definition an energy superpower using other oil exporting countries as examples. Following an analysis of the unique Canadian situation and based on the definition being used, it was evident that Canada would not be able to meet all of the criteria necessary to be considered an energy superpower. However, Canada still has the potential to use the resources available to their advantage. To do so, it is necessary to develop a national energy strategy that reflects Canadian values and interests in the 21st century. Should this also include actively pursuing membership in OPEC? In light of decreasing conventional oil reserves, Canada's unconventional oil will rise in international importance. Would Canada be better positioned inside OPEC to take advantage of this eventuality?

Aspects of a Canadian energy strategy proposed were influenced by deductions from earlier sections of the paper. The optimal course of action included increasing royalties and having a disciplined sovereign wealth fund like Norway. It also included a diversified customer portfolio to avoid possible monopony and increased leverage when dealing with the US. Cooperation with the US on issues such as global warming through the use of carbon tariffs and investment in CCS technology would form part of the strategy as well. This may include bilateral carbon cap and trade agreements with

emphasis on increasing use of renewable resources. If Canada does not take steps to reduce overall GHG emissions, it will not meet Kyoto commitments. Where is the best return for investment of limited national resources to meet those environmental commitments? National energy security would be increased through the development of a strategic reserve of oil as well as ensuring a supply of western oil to the eastern half of the country through the Sarnia-Montreal pipeline.

It is recognized that none of these provisions are new or revolutionary in nature, but that was not the intent. The intent was to develop a number of provisions that are implementable in the near future. It is also recognized that the federal government is in a difficult position and can not necessary act in a manner that will please all parties. There will always be a trade off between environmental concerns, economic concerns, and national and international security concerns. However, it is vital that the government take advantage of what power it does posses in order to develop and promulgate a national energy strategy that is complete, coherent, in line with Canadian values, and contributes to our national interests. No easy task to be sure.

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