

**Offshore Oil and Gas Development in Nunavut: Policy Challenges and Lessons from Atlantic
Canada**

By

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Submitted in partial fulfillment of the requirements for the degree

of

Master of Marine Management

at

Dalhousie University

Halifax, Nova Scotia

December 2014

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Abstract

Caplan Vineberg, A. 2014. Offshore Oil and Gas Development in Nunavut: Policy Challenges and Lessons from Atlantic Canada [graduate project]. Halifax, NS: Dalhousie University.

Abstract

Increasing international interest in the extraction of hydrocarbon resources in the Arctic has precipitated renewed incentives for the exploration of offshore oil and gas resources in Nunavut. Canada has offshore development experience on the Atlantic Coast offshore Newfoundland and Labrador and Nova Scotia. This study consisted of a review of federal legislation and federal, provincial, and territorial policies for offshore hydrocarbon development in Newfoundland and Labrador, Nova Scotia and Nunavut, as well as internal and external policy influences. The results of this analysis revealed important considerations for policy development in Nunavut. Although both Newfoundland and Labrador and Nova Scotia are within close proximity and abide by the same federal legislative framework, their development stories are markedly different. Efforts at environmental policy and regulatory reform for offshore development in Canada over the last decade have predominantly been focused on minimizing state bureaucracy. The effect of centralized federal policy for offshore hydrocarbon resource development in Nunavut has not facilitated an increase in exploration in the region. Lack of territorial capacity and effective stakeholder engagement with the local Inuit population has also resulted in failed attempts to advance exploration offshore Nunavut in recent years. Policy for resource development in Nunavut, especially offshore hydrocarbon development, has to involve the people of Nunavut. Territorial capacity to increase economic development will be facilitated when the territory has the jurisdiction to administer its own lands and resources.

Keywords: offshore hydrocarbon development, offshore oil and gas development, Arctic, Nunavut, Newfoundland and Labrador, Nova Scotia, regulation, policy, environment, socio-economic.

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List of Abbreviations

| | |
|-------------------|--|
| AANDC | Aboriginal Affairs and Northern Development Canada |
| CAAP | Canadian Association of Petroleum Producers |
| CanNor | Canada Northern Economic Development Agency |
| <i>CEAA</i> | <i>Canadian Environmental Assessment Act</i> (prior to 2012) |
| <i>CEAA, 2012</i> | <i>Canadian Environmental Assessment Act, 2012</i> |
| CNLOPB | Canada-Newfoundland and Labrador Offshore Petroleum Board |
| CNSOPB | Canada-Nova Scotia Offshore Petroleum Board |
| <i>COGOA</i> | <i>Canada Oil and Gas Operators Act</i> |
| <i>CPRA</i> | <i>Canada Petroleum Resources Act</i> |
| DPR | <i>Canada Oil and Gas Drilling and Production Regulations, 2009</i> |
| EA | Environmental Assessment (conducted under <i>CEAA</i> or <i>CEAA, 2012</i>) |
| FORRI | Frontier and Offshore Regulatory Renewal Initiative |
| GOA | Geophysical Operations Authorization |
| GSC | Geological Survey of Canada |
| IBA | Impact and Benefit Agreement, also Benefit Agreement (BA) |
| IMO | International Maritime Organization |
| IQ | Inuit Quajimijatuqangit |
| IRF | International Regulators Forum |
| Metoccean | Meteorological and Oceanographic |
| NADC | Northern Alberta Development Council |
| NEB | National Energy Board |
| NIRB | Nunavut Impact Review Board |

| | |
|--------|--|
| NLCA | Nunavut Land Claims Agreement |
| NMC | Nunavut Marine Council |
| NOC | Nationalized oil company |
| NPA | Nunavut Political Accord |
| NPC | Nunavut Planning Commission |
| NRCan | Natural Resources Canada |
| NTI | Nunavut Tunngavik Incorporated |
| QIA | Qikiqtani Inuit Association |
| RDC | Research and Development Corporation Newfoundland and Labrador |
| RIAS | Regulatory Analysis Impact Statement |
| SCC | Supreme Court of Canada |
| SEA | Strategic Environmental Assessment |
| SOLAS | International Convention for the Safety of Life at Sea |
| SSRW | Same Season Relief Well |
| UNCLOS | United Nations Convention on the Law of the Seas |
| USGS | United States Geological Survey |

Acknowledgements

I would like to sincerely thank my graduate project supervisor Chris Milley for his guidance and support throughout this challenging process. In addition, I would like to thank Chris Milley and Bruce Batstone for the unforgettable internship opportunity they created for me, and the knowledge they patiently shared with me over the course of the summer and fall. I would like to thank Becky Field, Bob Fournier, the faculty of the Marine Affairs Program, and my fellow students for their support over the duration of the program. I would finally like to thank my family and friends for their constant support and encouragement.

Chapter 1: Background

1.1 Oil and Gas Development Opportunities

The energy development industry generates a substantial part of the Canadian economy (according to Natural Resource Canada (NRCan) over 15 percent), most from oil and gas development, and will continue to do so for the foreseeable future (Natural Resources Canada, 2013a; Natural Resources Canada, 2012). Energy transportation and production in Canada in 2010 represented 6.8 percent of gross domestic product, accounted for over 350,000 jobs, and was a main contributing factor to Canada's overall positive trade balance (Natural Resources Canada, 2013b). After weathering the 2008 financial crisis, the federal government positioned itself to further strengthen the resource sector, streamline the environmental and regulatory processes for project development, and increase its capacity to sell energy products outside of the American market (Natural Resources Canada, 2013a). According to the International Energy Agency, energy demand is likely to increase by more than 30 percent by 2035, with the fossil fuels sector still accounting for over 75 percent of global energy (International Energy Agency, 2013). In addition, the vast majority of net demand growth currently stems from Asian markets (International Energy Agency, 2013). Recently however, surplus oil supply in addition to slowing growth in the Chinese and European economies have resulted in sharp price declines (West Texas Intermediate is down over 25 percent year-to date December 5, 2013 to December 5, 2014) (U.S. Energy Information Administration, 2014). It is uncertain how long these market conditions will last, however they will have an effect on the economic feasibility of certain oil and gas development.

The success and strength of the energy sector over the twenty years has resulted in a dramatic change in growth in certain Canadian regions. The province of Alberta has had unparalleled economic

growth due to the oil and gas sector; however offshore oil and gas development on the east coast and in Newfoundland and Labrador specifically, has begun to change the financial landscape of that region. The government of Newfoundland and Labrador was historically dependent on transfer payments from the federal government to cover the costs of administering provincial services. Today, Newfoundland and Labrador has the fastest growing economy in the country (Natural Resources Canada, 2012). Energy, minerals and metals now represent over 40 percent of Newfoundland and Labrador's nominal GDP (Natural Resources Canada, 2012). The sector also represents seven percent of employment in the province (Natural Resources Canada, 2012). Over the last decade and a half Canada's resource wealth has continued to grow to over an estimated \$1.5 trillion (in 2006 Canadian dollar value), due to increase capacity and favourable market conditions (Islam, 2007). Today, the identification and development of offshore oil and gas resources and associated technologies is a significant stimulus to the provincial economies of Newfoundland and Labrador and Nova Scotia. As an example, Statoil and the Research and Development Corporation Newfoundland and Labrador (RDC) have recently announced a \$3.9 billion fund for three research projects to develop Arctic and harsh-environment ready technology (Research and Development Corporation of Newfoundland and Labrador, 2014). Statoil, RDC, and the government of Newfoundland and Labrador more generally recognize the oceanographic and meteorological (metocean) conditions offshore Newfoundland as an ideal testing ground to establish technological capacity bound for future Arctic offshore exploration and development.

Nova Scotia has not achieved a level of industry growth comparable to Newfoundland and Labrador, however the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) is working to modify its licensing arrangement to increase and diversify investment. As an example, the CNSOPB has submitted a draft of revised *Geophysical, Geological, Geotechnical and Environmental Program Guidelines* (Canada-Nova Scotia Offshore Petroleum Board, 2014a) for public comment specifically

for this reason. The province has also completed a series of strategic environmental assessments (SEA) to speed up future environmental assessment work and identify potential areas of concern. Recently, BP and Shell have both acquired exploration lease rights offshore Nova Scotia for approximately of \$2 billion, hoping to discover oil.

Aside from southeastern Canada, offshore oil and gas development is positioned to escalate in the pan-Arctic region globally. Currently, 30 percent of global oil and gas production is derived from the offshore with resource discoveries in deep and ultra deep water accounting for over 50 percent (World Ocean Review, 2014). In addition, discoveries in the offshore are generally 10 percent greater than those onshore (World Ocean Review, 2014). In the coming years, the expectation is that offshore production will increase as conventional onshore and near shore oil and gas resource stocks begin to deplete. Technological advancement and market incentives will likely also facilitate this process. Likewise, factors like climate change and reduced ice cover, in addition to socio-political and economic incentives are increasingly attracting corporate attention towards the Canadian north (Harsem, 2011; Borgerson, 2013). Globally, resistance from the environmental lobby in light of climate change and recent oil spill tragedies does not appear to be impacting corporate or government interest in exploring and developing offshore resources.

It is estimated that over one quarter of global remaining oil and gas reserves are located in the Arctic (United States Geological Survey, 2008). According to a study published by the United States Geological Survey (USGS) in 2008, the region is estimated to contain the sum of “90 billion barrels of oil, 1,669 trillion cubic feet of natural gas, and 44 billion barrels of natural gas liquids may remain to be found in the Arctic, of which approximately 84 percent is expected to occur in offshore areas” (United States Geological Survey, 2008). In the West Greenland-East Canada Province (the offshore area between Greenland and northeastern Canada), the USGS identified the potential of undiscovered

petroleum resources at 10,697 million barrels of oil, 74,853 billion cubic feet of natural gas, and natural gas liquids at 1,655 million barrels (Schenk, 2010).

Historically in Canada, the northeastern Arctic has not seen as much activity as the Beaufort Sea and Mackenzie Delta region. However, the potential of substantial reserves is increasing corporate investment in the exploration of continental shelf resources offshore Nunavut. Exploration licenses have been issued in the Sverdup Basin and Eastern Arctic to major oil and gas companies like Talisman Energy, Suncor, Husky Oil, and Shell Canada (Aboriginal Affairs and Northern Development Canada, 2014). In addition, seismic testing has been approved by the National Energy Board to commence summer 2014 in the Baffin Bay and Davis Strait region, though not without controversy. The Qikiqtani Inuit Association (QIA) opposes offshore exploration in the Baffin Bay and Davis Strait region for fear that the Inuit will suffer negative consequences without being meaningfully consulted or provided for in the event of either successful development or environmental degradation.

Though the area approved for seismic exploration is outside the boundaries of the Nunavut Land Claims Agreement (NLCA) settlement area, the NEB decision to license exploration in the region is being challenged; the Hamlet of Clyde River and the Nammautaq Hunters and Trappers Organization are angered by the potential environmental effects of seismic testing on their traditional fishing and hunting grounds. The conflict, grounded on the issue of *duty to consult*¹ (on behalf of the NEB with Inuit communities as legally required under the NLCA and Section 35 of the *Constitution Act, 1982*) has resulted in the suit being filed against the NEB and the consortium granted exploration licenses to

¹ According to the *Updated Guidelines for Federal Officials to Fulfill the Duty to Consult*: “The Government of Canada consults with Canadians on matters of interest and concern to them. Consulting is an important part of good governance, sound policy development and decision-making. Through consultation, the Crown seeks to strengthen relationships and partnerships with Aboriginal peoples and thereby achieve reconciliation objectives. In addition to pursuing policy objectives, the federal government consults with Aboriginal peoples for legal reasons. Canada has statutory, contractual and common law obligations to consult with Aboriginal groups. The process leading to a decision on whether to consult includes a consideration of all these factors and their interplay” (Aboriginal Affairs and Northern Development Canada, 2011).

conduct the seismic surveys (Hamlet of Clyde River et al. v. TGS-NOPEC Geophysical company ASA et al., 2014). The uncertainty over potential long-term impacts of seismic testing on marine mammals continues to be problematic.

In addition to the harsh and dangerous metocean conditions in the region, the lack of established infrastructure for the production and exportation of extracted resources, the impacts of increased maritime traffic in the region, and safety requirements in the event of an oil spill, the governance challenges associated with regulating the exploration and production of offshore oil and gas in the Canadian Arctic are of significant concern (Porta et al., 2011). Likewise the policy development challenges for the territorial government of Nunavut are substantial.

1.2 The Management Problem and Research Objective

The Canadian context for business development in the offshore oil and gas sector is one of contradictions. Canada is an attractive market for offshore energy production due to its stable political environment and receptiveness towards industry and resource development (Natural Resources Canada, 2013a). On the other hand, competing interests and environmental concerns have lead to a development environment in Canada that is continuously more challenging for industry to operate in. This challenging environment is the result of at least three causes that include:

- 1) An evolving jurisdictional framework across territorial and provincial boundaries;
- 2) A greater public consciousness as to the potential negative environmental impacts of offshore oil production and transportation; and
- 3) The pursuit of Indigenous rights to lands and resources in traditional territory.

This research project will identify the regulations, laws, and policies that are currently in place along the Atlantic Coast of Canada (Newfoundland and Labrador, Nova Scotia and Nunavut) and make

recommendations to resolve the above issues through policy development and implementation in Nunavut. This research project will answer the following question: **Can the offshore oil and gas exploration and production experiences of Atlantic Canada contribute to policy development in Nunavut?**

This research goal is accomplished by the following:

1. Identifying current policies and regulations for offshore oil and gas development on the Atlantic coast of Canada and in the Canadian eastern Arctic including all relevant institutions, governance arrangements, and international standards under application;
2. Comparing and contrasting the different jurisdictions to identify trans-jurisdictional gaps and conflicts; and
3. Identifying and analyzing issues and potential future issues in the development of offshore policies in the Arctic.

Offshore development in Canada is regulated distinctly in each of the maritime provincial and territorial jurisdictions; different requirements, regulatory bodies, government agencies, and governance systems determine how exploration and production is managed. The *Constitution Act*, 1867, established the federal government's administrative authority over resources offshore of all three Canadian coasts. However, as a result of socio-political factors and the *Newfoundland Reference* (Reference re Newfoundland Continental Shelf, 1984), the current regulatory regime in Atlantic Canada has resulted in a joint management framework between the federal government and the provincial governments of Newfoundland and Labrador and Nova Scotia. This constitutional division of power between the federal and provincial governments has resulted in a unique regulatory regime. Therefore, legislative jurisdiction over offshore resources in regards to management and administration falls cooperatively to multiple institutions of government (Pettie, 2001).

In addition to the challenging regulatory framework above, these governance mechanisms and institutions must address a diverse set of issues including: aboriginal rights and concerns (i.e. the *Constitution Act, 1982*, and the Nunavut Land Claims Agreement) environmental protection, health, safety and risk management, scientific and technological capacity, compliance, monitoring and enforcement, and economic benefits to society. In this regard, one company planning to engage in offshore oil and gas exploration and production in eastern Canada would have to go through three distinct processes in each one of the three eastern jurisdictions (Nova Scotia, Newfoundland and Labrador, and Nunavut).

Given the increased interest in Arctic offshore resource development and the prospective challenges mentioned above, now is the time to evaluate how Canada approaches offshore development on the east/northeast Atlantic coast. With the regulatory framework in place under revision to ensure that socio-political, environmental and economic issues are appropriately addressed for the Arctic offshore, now is the time to look at the policies established in Newfoundland and Labrador, Nova Scotia, and Nunavut to ensure that governments are choosing reasonable approaches to development; prioritizing precautionary measures and establishing incentives for sustainable development. These approaches are well documented priorities of the Canadian federal government since the implementation of the *Ocean Act* (S.C. 1996, c. 31) and the development of *Canada's Ocean Strategy* (2002) and *Canada's Ocean Action Plan* (2005) (Porta et al., 2011; The PEW Charitable Trust, 2013; Ebinger et al., 2014), in addition to the Federal Sustainable Development Strategy (FSDS) launched in 2010 (Environment Canada, 2010; Environment Canada, 2013).

The literature describes the many issues of offshore oil and gas development, but does not specifically address comparatively the current situation in Atlantic Canada, Nova Scotia and

Newfoundland and Labrador, and how or if the existing regulatory, policy, and political framework can contribute to strengthening and or improving the evolving governance regime for offshore resource development in Nunavut. Some of the crucial elements that form part of the literary discussion on this subject deal with:

- Domestic and international law and the formation of offshore and Arctic resource development policy;
- Decision-making, who and what contributes to the development of oil and gas regulations and policies;
- Social, economic and environmental implications and consequences of policy decisions;
- Aboriginal governance and social justice; and
- The devolution of administrative responsibilities over lands and resources from the federal government to the territories.

As described by Spicer and Bath (2010), the regulatory framework currently established for the exploration and production of offshore oil and gas in the arctic is complex and still evolving. This is especially evident in Nunavut, where the territory is a fairly new political jurisdiction and the only territory in Canada yet to enter into a devolution agreement with the federal government. As it stands, the territorial government, managed through the Department of Economic Development and Transportation, has no policy for oil and gas development on land or offshore. This is partly due to issues of capacity resulting from the newness of the government and the territorial government's devotion to developing the mining industry, an industry expected to be highly profitable for the region. The institutions established through the NLCA process, including the Nunavut co-management boards (Nunavut Wildlife Management Board, Nunavut Water Board, Nunavut Planning Commission, Nunavut Impact and Review Board) all have roles for terrestrial resource development projects. The

proposed establishment of the Nunavut Marine Council, a consortium of the Boards, has yet to take shape. Without reaching a devolution agreement with the federal government, uncertainty exists as to whether these institutions will ever have an impact on the development of offshore resources.

Currently, the Government of Nunavut is in communication with the NEB and ANND for the purpose of oil and gas development, since the frontier lands are federally governed and outside of the Nunavut Land Claims Agreement (NLCA) settlement area. Though offshore development is outside the settlement area and a devolution agreement is still potentially several years off, the unique features of the territory with a strong majority Inuit population (85 percent), in addition to the Inuit people's historical relationship with the sea and sea ice, the outcome of a devolution agreement could potentially have an effect on the offshore management regime (Penikett and Goldenberg, 2013; Coates and Poelzer, 2014). As industry begins to embark in exploration activities offshore Nunavut, ensuring sound resource management policies are in place is paramount to ensuring efficient and conscientious resource development and management in the territory. In this case, the federal government is responsible for this role. It is also necessary that development policies reflect the goals and objectives of the regional representative governing institution, in this case the territory. In Nunavut, however the federal government is also solely involved in policy development. In Canada, there are obvious power differentials between provincial and territorial governments, with Nunavut having less administrative responsibilities and authority than all of the other regional governments across Canada. In the event of offshore development, the mechanisms that can derive positive outcomes for communities in Nunavut lie in the support structure of Inuit associations and the ability of communities to negotiate appropriate benefit agreements with industry. The negotiation of diligent impact and benefits agreements between industry and stakeholders will have a resounding effect on the success or failure of the oil and gas industry to stimulate the economy over the coming years.

Chapter 2: Methodology

2.1 Research Purpose and Objectives

According to Runhaar et al. (2008) the basic research questions for policy analysis in the domain of sustainable development stem from five areas related to the content of policy, the process of its development, the organizational characteristics of policy development, the effects of policy, and the context or environmental factors affecting the policy at various stages of its development and implementation. The five research questions below were similarly developed to frame the analysis of this paper:

1. What are the laws and policies that govern offshore oil and gas resource development in Newfoundland and Labrador, Nova Scotia and in Nunavut?
2. What are the main institutions at the federal, provincial, territorial and international level that are responsible for and contribute to regulation and policy development?
3. What has been done in Newfoundland and Labrador and Nova Scotia and what have the socio-economic and environmental outcomes been?
4. What are the main policy issues and challenges of developing oil and gas resources offshore Nunavut?
5. Can the experiences of Newfoundland and Labrador and Nova Scotia contribute to policy development in Nunavut?

Research for this project was conducted through a literature review. In addition, individuals were contacted from Aboriginal Affairs and Northern Development Canada (AANDC), the offshore petroleum boards (CNSOPB and CNLOPB), the National Energy Board (NEB), and Nunavut

Transportation and Economic Development to accrue additional information under the guidelines of the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*, whereas the purpose of which was to identify and “collect information from authorized personnel to release information or data in the ordinary course of their employment about organizations, policies, procedures, professional practices or statistical reports” (TCPS 2, 2010, p.16). As such, university ethics approval was not required to complete the research for this project.

As part of the literature review conducted associated with policy analysis for sustainable development, Runhaar et al. (2008) identify the five basic methodological tools for complex policy analysis from the perspective of environmental social science. The five tools identified are:

1. Reconstruction of policy theory;
2. Stakeholder analysis;
3. Impact assessment;
4. Cost-benefit analysis; and
5. Discourse analysis.

Owing to the scope of this research project and the scale of the issue at hand, looking towards the policies established in Atlantic Canada at the provincial level and by the federal government (in offshore Canadian waters and frontier lands) and their roles as regulators and responsible for policy development, the goal of this research was to identify the issues in light of the five policy themes and conduct a brief assessment of those established offshore development policies to date. The purpose of this exercise was to make some initial recommendations for action in Nunavut. As discussed by Runhaar et al. (2008), the five methodological tools have both strengths and weakness from an analytical perspective and in many cases can be complementary. In fact, utilizing more than one methodological tool can yield more complete results than one tool alone. However, to limit the scope of

this paper, the focus of this assessment is on the impact of offshore development policies on societies (Canadians, Newfoundlanders and Labradoreans, Nova Scotians, and Nunavummiut), the environment, and the economy. Reaching a balance between social, economic and environmental impacts are fundamental issues faced by Canadian policy and decision-makers on a daily basis in Canada, where resource wealth is recognized as an economic opportunity and the enjoyment and conservation of the natural environment is also highly valued. Though the scope of this project is limited to just one tool, expanding upon this research through the use of others, like stakeholder analysis and discourse analysis, would be a useful exercise to enhance understanding in the future.

2.2 Literature Review

With the five established research questions in mind, the literature review was conducted in three areas. Those areas are: the development of offshore oil and gas policy in Newfoundland and Labrador, Nova Scotia and Nunavut; the institutions and agencies responsible for setting, regulating, and changing these policies; and the impacts of established policies on societies (Canadians, Newfoundlanders and Labradoreans, Nova Scotians, and Nunavummiut), the environment, and the economy. Academic papers, grey literature in the form of government and third party reports and historical documentation in the fields of marine policy, environmental management, public policy, energy policy, geology, and indigenous affairs were used for this project.

The first area of the review (Section 3) looks at offshore oil and gas policy for each of the three jurisdictions chosen for this report, Newfoundland and Labrador, Nova Scotia and Nunavut. This includes a brief discussion of major milestones and conflicts in each jurisdiction. The implications and consequences of policy decisions are also discussed in relation to socio-economic outcomes and environmental impacts. Finally, the policy review examines the importance of competing maritime

industries in Newfoundland and Labrador and Nova Scotia, like fisheries, tourism, and conservation initiatives, in addition to important cultural and economic considerations in Nunavut.

The legislative and bureaucratic regime for managing offshore oil and gas development are identified and examined in Section 4. This includes the identification of the different agencies involved in the various aspects of offshore regulation, management and policy development. A brief review is conducted on the offshore development boards (NEB, CNSOPB, CNLOPB).

Section 4 also looks at the regulatory framework for offshore development policy in Canada, how it was established, what the major changes have been since its inception and why, and how it compares to other states with established regimes. This includes an examination of major international influences on the development of domestic policies. A review is conducted on some recent developments and changes to offshore oil and gas regulation in Canada. A short exploration of some international bodies established to study and improve the regulatory and management environment is also included. Finally, a brief review of related environmental policies including strategic environmental assessment (SEA) in the different jurisdictions is explored.

Chapter 3: Offshore Oil and Gas Development Policy

Policy Objectives

Identifying each jurisdiction's policy objectives and the corresponding legislation in place for offshore oil and gas development contributes to developing an understanding of the political landscape of each jurisdiction. The governments of all three jurisdictions, including the territorial government of Nunavut, have recognized both the benefits and challenges of developing their non-renewable resource sectors. These policy decisions, resulting in the comparatively slow development of offshore oil and gas on the east coast of Canada (as opposed to offshore Norway and the United Kingdom that began exploration around the same time), are reflective of the strong desire to balance multiple and sometimes competing objectives. Some of these objectives include maintaining the environmental integrity of the region for other maritime uses like fishing and tourism and maintaining traditional livelihoods and cultural practices. Developing a robust oil spill preparedness and response regime is necessary as public awareness of the devastating effects of an oil spill (environmental and economic impacts) is high. Harsh and challenging environmental conditions, especially offshore Newfoundland and Labrador, which include severe winter storms and icebergs have been responsible for the slower pace of development. Finally, the issue of jurisdiction and governance has been a significant factor in shaping the offshore development policies and regulatory regimes in Atlantic Canada and continues to present obstacles in the eastern Arctic.

3.1 Newfoundland and Labrador

House (1999) and Gibson and Flanagan (2013) provide an outlook on Newfoundland and Labrador's economic and social history emphasizing how in the cycles of both prosperity and economic depression and high unemployment (for many years at levels twice the Canadian average for

unemployment) have resulted from the interacting forces of resource industries and government spending. Though federal government spending in Newfoundland and Labrador in the 1970s resulted in an economic upturn (House, 1999), Ottawa's policy agendas from the time of Newfoundland and Labrador joined the Dominion in 1949, have not resulted in addressing the province's number one policy objective of "reducing economic disparity" (Brown, 1991). As a result, the province aimed to increase its "autonomy over resources, and through a decentralized vision of federalism" (Brown, 1991, p.202). The conflict over Newfoundland pursuing a brighter economic future intensified in the late 1970s with Brian Peckford as Minister for Mines and Energy. Though not resolved with the establishment of a joint federal-provincial management regime until Peckford was Premier of the province, Peckford's government pushed for jurisdictional rights to continental shelf resources in what Clancy (2011) and Meek and Beaton (2010) describe as a hostile conflict.

Nova Scotia signed an initial agreement with the federal government over jurisdiction and revenue sharing for offshore petroleum resources in 1982, but Newfoundland and Labrador was unimpressed with the deal (Brown, 1991). Instead, the provincial government was determined to ensure that Ottawa did not maintain an ultimate veto power. Even after losing the Supreme Court of Canada decision in 1984, Newfoundland and Labrador was forced to abandon their fight "over legal ownership in favour of a concept of joint management" (Brown, 1991, p.212).

Regardless of the political entity holding the reins, Gibson and Flanagan (2013) claim that under the current industry-provincial government revenue agreements, due to the low levels of taxes and rents collected by the provincial government from offshore production, it is government spending as opposed to counting on offshore development revenue that is a means of stabilizing and increasing the growth of the provincial economy. The authors indicate that capturing more substantial revenues from oil and gas development has been a missed opportunity especially in regards to corporate income tax. Gibson and

Flanagan (2013) also point to Norway's fiscal regime as having been more fiscally beneficial to the state.

In a review of the Hibernia development project and economic issues related to taxation for offshore development, Locke (1992) discusses the various fiscal and non-fiscal arrangements international governments have made with the oil and gas industry. According to Locke (1992), there are several possible arrangements that can be made including a mix of the following instruments: royalties, cash-flow taxes, production-sharing arrangements, nationalized oil company participation, bids, bonuses and rentals, windfall profits taxes, and income taxes. Overall, governments use these tools to address their policy objectives for resource development. As explained by Brown (1991), Locke (1992), and House (1999), a main objective of the government was to address the gap created after the collapse of the ground fishery in addition to changing Newfoundland and Labrador's economic story from one of hardship to one of lasting prosperity. The challenges of implementing a fiscal regime for offshore development are in regards to ensuring that deriving an income from a proposed project does not diminish the incentives to produce or limit production before the entire reserve is extracted, and ensuring that higher than expected profitability is not a lost opportunity for government after the agreement is in place.

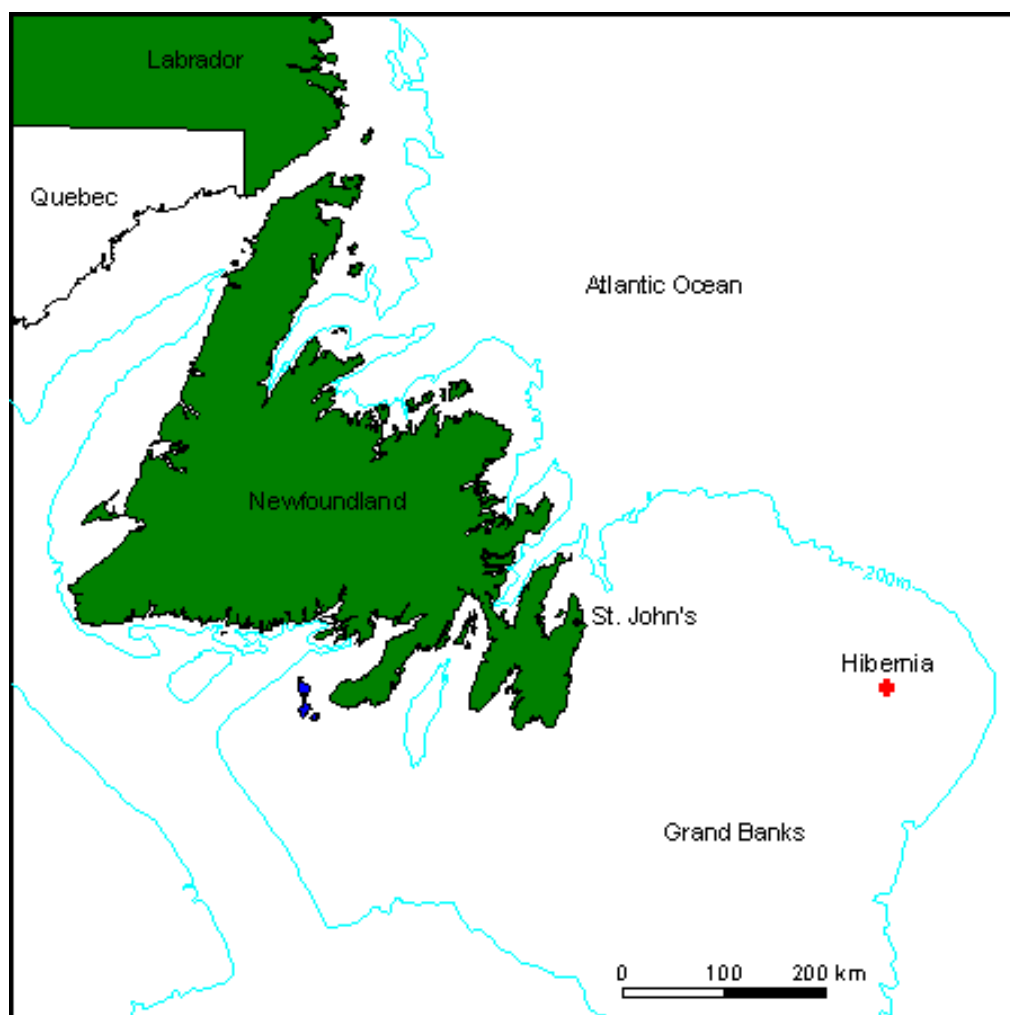
The results of the Hibernia project's fiscal arrangements resulted in industrial benefits for the province and treasury benefits for the federal government (Locke, 1992). This had to do with the arrangement between the federal government and the province for financial support towards the development of the project and as a result of offsetting transfer payments. The province benefited from the arrangement in that it established an environment where industry had the obligation to transfer knowledge and skills to the local workforce and employ local labour and businesses to build the infrastructure and support systems for the project (Locke, 1992). From a political perspective, Locke

(1992) explains the arrangement allowed the province to claim a certain level of revenue from the project (\$18.5 billion over the life of the project in 1987 Canadian dollars) even though there were no economic benefits to residents from the project resulting from increased expenditures or lower taxes. Locke (1992) states that the fiscal arrangement established for the project was reasonable in that one “cannot overcome the revenue-generating potential associated with a marginal project” (p.29). In other words, project scale is a limiting factor and lack of established local industrial resources requires a substantial combined investment from both the proponent and the resource owner (in this case the federal and provincial governments).

The Hibernia project is an interesting case study for Canadian offshore oil development policy because it was the first major offshore resource development project (see Figure 1). It also forced the resolution of complex jurisdictional issues between the federal government and the province of Newfoundland and Labrador. The socio-political environment leading up to the project’s development also stands to illustrate the difference between this jurisdiction and others in Canada. The political dispute that followed the discovery of oil offshore Newfoundland and the development of the Hibernia project was a result of the province’s desire to reap maximum of benefits for the province. By contrast the project itself was not subject to substantial opposition from any stakeholder group (Storey et al., 1991). During the environmental assessment (EA) process for the project, the lack of opposition may have played a role in the project’s lack of concrete socio-economic monitoring plan and lessened community level feedback in the early stages of project development (Storey et al., 1991). At the time, Storey et al. (1991) explain that an increased focus on the management of potential project impacts was the focus of the EA process over the predictability of potential project risks. Monitoring for socio-economic impacts is certainly a useful exercise as the results of which can contribute to increasingly informed decision-making on the policy front both for local government. Additionally, the collection of data can be used to inform policies and decision-making in other jurisdictions. In this case, which body

is collecting the information (the provincial government, the federal government, or industry) and determining which player will absorb the cost of monitoring and data collection is an important consideration. For example the Hibernia projects operation has extended over 20 years. If socio-economic data had been gathered from the outset of the project at the cost of the province, this initiative would not have been sustainable.

Figure 1 – Hibernia Location (Canada-Newfoundland and Labrador Offshore Petroleum Board, 2000).



The development and policy story in Newfoundland and Labrador is substantially more advanced than elsewhere in Canada. However, it took an astonishing amount of time to develop the industry. After over a decade of exploration, the Hibernia oil field was discovered in 1979 (Brown, 1991). After

initial discovery, it took almost 20 years for oil production to begin (Hibernia, 2010). One of the reasons for the delay in development had to do with the jurisdictional conflict between the federal and provincial governments that was not put to rest until the signing of the *Atlantic Accords* in 1985.

Though Newfoundland and Labrador's offshore petroleum industry had a tumultuous start (Brown, 1991), it has most certainly been profitable over recent years and the industry's growth continues to be a provincial priority. As reported in the province's Department of Natural Resources *Strategic Plan 2014-2017*, "oil extraction and support activities accounted for 28.2 per cent of the province's nominal GDP, at over \$8.9 billion" in 2012 (Newfoundland and Labrador Department of Natural Resources, 2014). This industry also accounted for 3.8 per cent of provincial employment in 2013 (Newfoundland and Labrador Department of Natural Resources, 2014). Currently producing oil from the Hibernia, Terra Nova, White Rose and North Amethyst oil fields, the Hebron project is the next in line to begin production in 2017. Finally, Statoil and Husky Energy reported a significant discovery of 300-600 million barrels of recoverable oil in the Flemish Pass Basin in September 2013 (Statoil, 2013). More recently, it has been the objective of both the provincial government and the petroleum board, to attract new and diversified investment. With the vast acquisition of seismic data in addition to modifying the land tenure process², the goal is to encourage industry to invest in exploration and nominate areas of interest that should be considered open for bid (Canada Newfoundland and Labrador Offshore Petroleum Board, 2013a).

Following the groundfish fishery collapse in 1990, the oil and gas industry became a more significant component of the provincial economy. However, statistics published by the provincial

² The new land tenure system announced in 2013 by the CNLOPB, identifies three reasons for the modification: 1) Changes in the tenure system will provide industry with advanced notice of offshore areas open for bid; 2) The new system is intended to increase transparency, predictability and stakeholder input; and 3) Will continue annual calls for bid along with new scheduled frontier areas (Canada Newfoundland and Labrador Offshore Petroleum Board, 2013b). Also see (Canada-Newfoundland and Labrador Offshore Petroleum Board, 2014).

government in 2005 reveal that even though the oil and gas industry represented a much more substantial percentage of GDP than the fishing industry in the 2001-2004 period (almost 30 percent oil and gas industry compared to approximately 10 percent fishing industry), the difference in labour income impacts and employment impacts are quite different (Newfoundland and Labrador Department of Finance, 2005). As indicated in the research conducted by Gibson and Flanagan (2013), the economic impacts of the oil and gas industry if not regulated and distributed conscientiously throughout the province or in targeted areas of high unemployment, do not have an overall positive effect on the province. Whereas oil production and related services and oil development numbers are only slightly higher than fish harvesting and processing for labour impact incomes (\$760 million versus \$722 million), the fishing industry has a more substantial impact on direct and indirect employment (11.9 percent compared to 6.2 percent) (Newfoundland and Labrador Department of Finance, 2005).

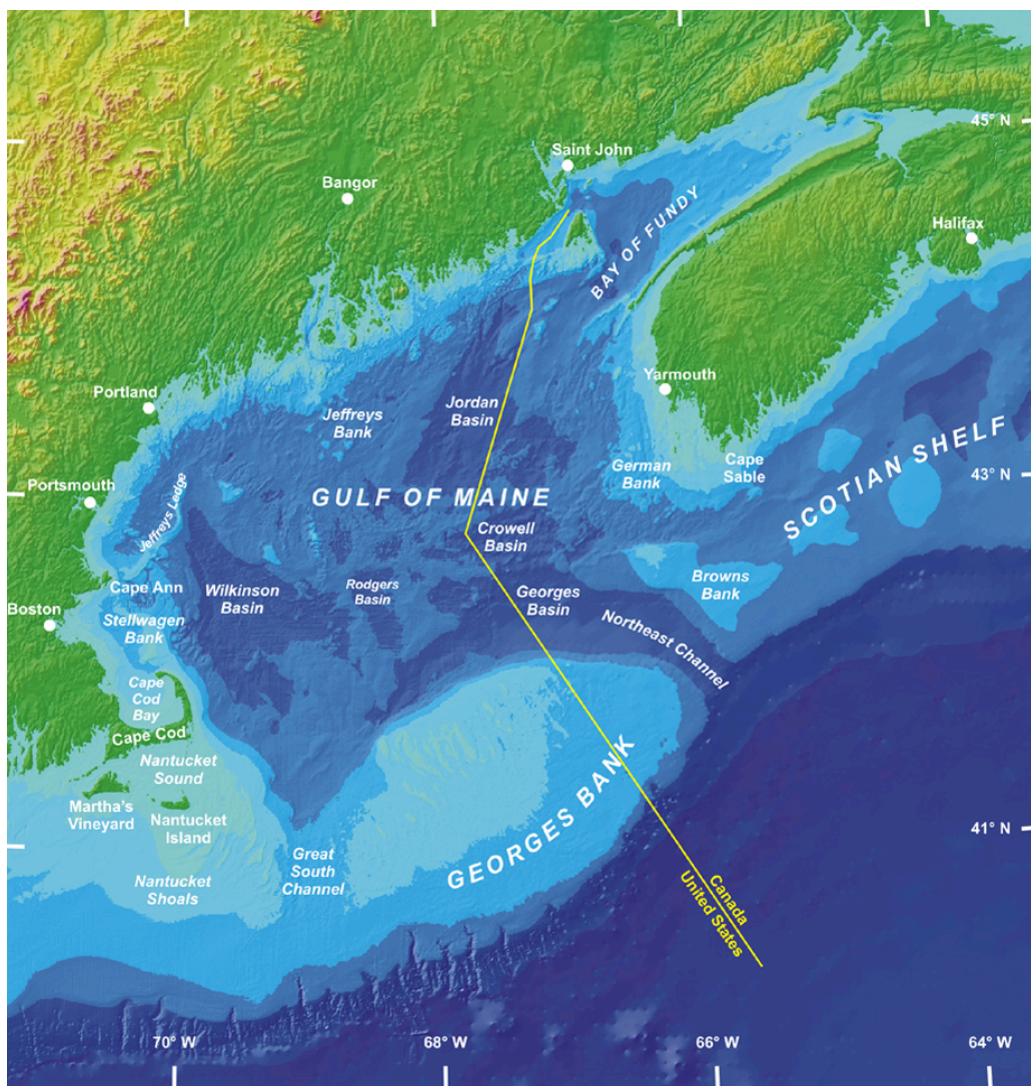
3.2 Nova Scotia

The oil and gas industry has been present off of the coast of Nova Scotia for over 40 years. Royal Dutch Shell's initial expectation in the early 1970's to extract oil and gas resources from beneath the Scotian Shelf, at a level comparable to North Sea and Gulf of Mexico production, however did not materialize (Meek & Beaton, 2010). Since the first offshore drilling discovery well, the Onondaga E-84, only one small oil project has come and gone out of production "while the Sable gas fields continue to export their baseload to the United States and production at the smaller Deep Panuke Project" only began production recently (Meek & Beaton, 2010, p.ix). Meek and Beaton (2010) explain the chilling impact *Deepwater Horizon*³ had on development in Nova Scotia. According to the authors it has a

³ The *Deepwater Horizon* oil spills resulted from an explosion on an offshore drilling platform in the Gulf of Mexico on April 20th, 2010. Eleven people were killed and five million barrels of oil were released into the Gulf over a period of several months. This was the worst oil spill disaster in United States' history and resulted in severe damage to coastal areas

direct impact on the extension of the moratorium on oil and gas drilling on Georges Bank (see Figure 2) until 2015 (Meek and Beaton, 2015). The United States government has extended the ban on the American side until 2017. In addition to this effect, Meek and Beaton (2010) explain *Deepwater Horizon* also resulted in slowing the pace of Arctic exploration and drilling and led industry to believe the Canadian government was intending to toughen regulation offshore Nova Scotia, a regulatory environment they claim, that was at the time of the incident already more stringent than the regulatory regime in the Gulf of Mexico.

Figure 2 - Map of Georges Bank (National Oceanic and Atmospheric Association, 2012).

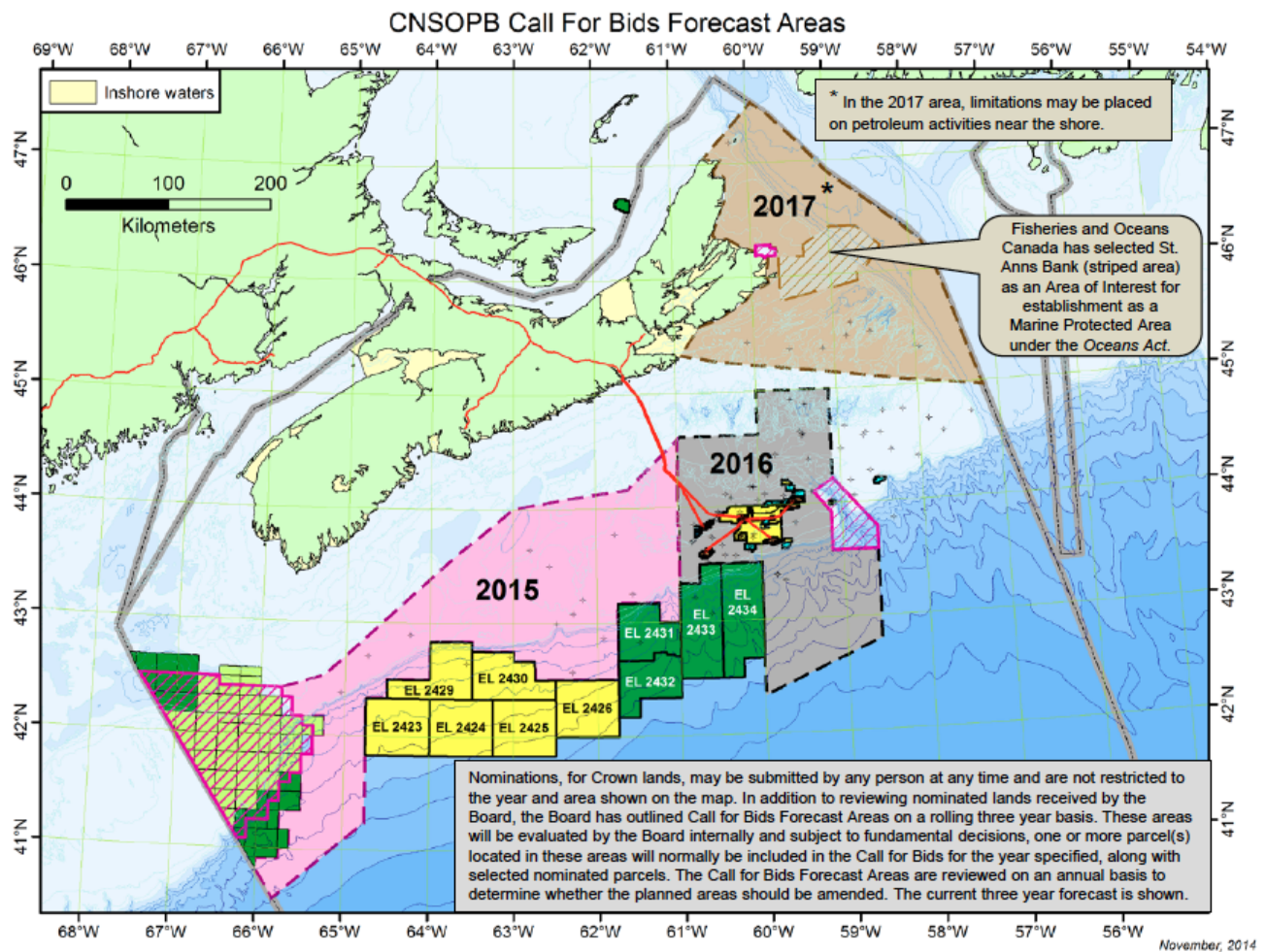


and wildlife in all five Gulf states (Louisiana, Mississippi, Texas, Alabama and Florida) (see National Oceanic and Atmospheric Administration Gulf Spill Restoration, 2014).

Today, Nova Scotia is producing offshore natural gas at the Deep Panuke and the Sable Offshore Energy Project. The C-NSOPB's most recent annual report (2013) highlights that the province had issued 12 Exploration Licenses at a value of \$2.1 billion in work expenditure commitments (Canada Nova Scotia Offshore Petroleum Board, 2013a). Shell Canada Limited (Shell) and BP Exploration Operating Company Limited (BP) are the leaseholders and both have obtained Exploration Licenses (Canada Nova Scotia Offshore Petroleum Board, 2013b). Shell has taken on two joint venture partners (ConocoPhillips with a 30 percent stake and Suncor with a 20 percent stake) and has been conducting its seismic and geophysical work over the last couple of seasons (2013-2014) (an exploration season typically runs from April to November (BP, 2014a)) (Shell Canada, 2014). BP is conducting its seismic data acquisitions program in the 2014 and 2015 seasons (BP, 2014b). The last Call for Bids (NS13-1), located 125 km off of southeastern Cape Breton was unsuccessful.

In May 2014, the provincial government of Nova Scotia announced a \$12 million investment over four years for the purpose of increasing geosciences knowledge and encouraging industry investment in the offshore oil and gas sector as part of the *Play Fairways Analysis* (Nova Scotia Department of Energy, 2014). The bidding process for offshore frontier lands in the CNSOPB's jurisdiction is as follows. The Board determines which area will be put up for bid in three-year cycles. The chosen area is divided into parcels, with a different segment open for bidding each year. The forecast areas for 2015-2017 land tenure are indicated in Figure 3. However, should a company identify an area of preference outside of the determined areas, an alternative area will be considered by the Board.

Figure 3 – CNSOPB land tenure 2015-2017 (Canada Nova Scotia Offshore Petroleum Board, 2014).



The Nova Scotia Department of Energy announced in their *Statement of Mandate 2013-2014*, that the department is in the process of developing an *Offshore Nova Scotia Growth Plan*, a series of actions to be taken by the department over a five year period to attract oil and gas industry investment (Nova Scotia Department of Energy, 2013). This is a follow up to the *Nova Scotia Offshore Renewal Plan* (2008) that identified five areas for strategic focus including: Geoscience Research, Marketing Initiatives, Business Development and Benefit Opportunities, Policy Initiatives, and Regulatory Enhancements (Nova Scotia Department of Energy, 2008). The *Offshore Nova Scotia Growth Plan* has yet to be completed. The 2008 Renewal Plan had several main objectives, some of which included: a greater government investment in evaluating Nova Scotia’s offshore oil and gas potential, incentivizing

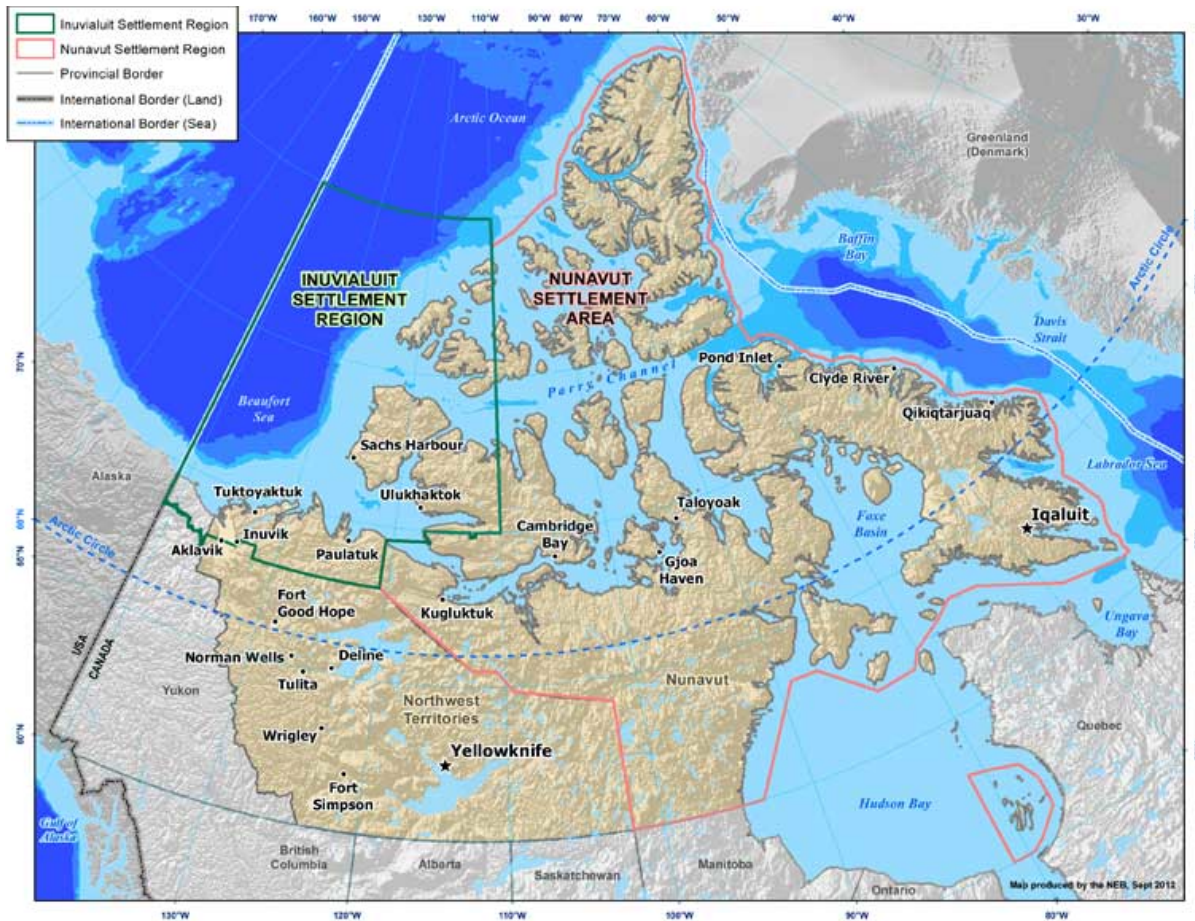
industry to invest in the province by providing more geoscience data and increasing access to geoscience data, increasing industry lead R&D, refining the rights issuance guidelines, modifying the *Coastal Trading Act* to include seismic vessels, the development of the *Frontier and Offshore Regulatory Renewal Initiative* (FORRI), embedding occupational health and safety into the Accord Acts, addressing issues related to the importation of drilling rigs, and encouraging industry partnerships to increase investment and minimize risks (Nova Scotia Department of Energy, 2008). Overall, the provincial government of Nova Scotia recognized the growth in the industry in Newfoundland and Labrador and has been developing its policies over the last several years to improve the economy through the timely development of this sector.

A 2005 study commissioned by the Government of Canada on the *Economic Value of the Nova Scotia Ocean Sector*, illustrates the oil and gas industry's increased economic contribution since the 1990's. It also serves as a good point of comparison to indicate the economic importance of other maritime industries, most notably the fishery. The data available from Statistics Canada's most recent review of the Nova Scotia fishery indicates that the fishing industry has also had increased profitability since the 1990's (Gardner et al., 2005). More importantly the industry is a significant contributor to regional employment in regards to fishing, aquaculture, processing, and technological innovation. Whereas oil and gas industry spending is capital intensive and can be localized, the fishery's distribution across the province is vitally important to communities. The industry also contributes approximately two billion dollars to annual provincial GDP (Fisheries and Oceans, 2006). Similar to the issues discussed by Meek & Beaton (2010), the importance of the fishing industry and fears over negative environmental effects are contributing factors to the lack of successful bids in Area NS13-1. In this case, social pressure is enough of a deterrent to prevent the oil and gas industry from investing in the area.

3.3 Nunavut

The territory of Nunavut was established after the long negotiations process of the Nunavut Land Claims Agreement (NLCA) was settled in 1993 (Wright, 2014). (Figure 4 shows the Nunavut Settlement Area). Nunavut is unique among jurisdictions in Canada as “both a political territorial unit and a constitutionally protected aboriginal land claim” (Wright, 2014, p.198). Created from a division of the Northwest Territories in 1999, Nunavut represents 20 percent of Canada’s landmass. Approximately 85 percent of the territories 35,000 residents are Inuit. The governance model in the territory is a mixture of a Westminster style government (a legacy from the Northwest Territories) in addition to the unique features adopted through the land claims process and from the Nunavut Political Accord (NPA). The NPA was a political initiative to establish an inclusive governance model for all citizens of the territory while emphasizing the importance of the role of *Inuit Quajimijatuqangit* in governance of the territory (Penikett and Goldenberg, 2013). The government of Nunavut is currently working to improve the incorporation of IQ into the different facets of government through programs established under the department of Culture and Heritage. In simplistic terms, IQ is a form of Inuit indigenous knowledge, cultural and societal values, and how this knowledge and these values inform the Inuit way of being. The purpose of the NLCA was to protect the rights of the Inuit population in the territory in addition to those rights protected under the *Constitution Act, 1982*. Though the NLCA maintains that right of the Inuit people to seek self-government under section 35 of the *Constitution Act, 1982*, the social, political, economic and environmental realities across the communities of Nunavut would indicate that the social justice objectives behind the push to establish the territory and this modern treaty have yet to be achieved (see Wright, 2014; Henderson, 2007; Hicks & White, 2000; Fenge, 1994).

Figure 4 - Nunavut Settlement Area and Baffin Bay and Davis Strait (National Energy Board, 2013).



Nunavut Tunngavik Incorporated (NTI) is an Inuit association responsible for ensuring the rights and benefits established through the NLCA are fulfilled on behalf of the federal government. NTI challenged the federal government in court in 2008 for breach of section 12.7.6 of the NLCA; failing to implement a general monitoring plan for development impact. Section 12.7.6 states:

There is a requirement for general monitoring to collect and analyse information on the long term state and health of the ecosystemic and socio-economic environment in the Nunavut Settlement Area. Government, in co-operation with the NPC [Nunavut Planning Commission], shall be responsible for developing a general monitoring plan and for directing and co-ordinating general monitoring and data collection. The NPC shall:

1. In accordance with the plan, collate information and data provided by industry, government departments and agencies, amongst others;

2. In accordance with the plan, report periodically on the ecosystemic and socio-economic environment of the Nunavut Settlement Area; and
3. Use the information collected under Sub-sections (a) and (b) to fulfill its existing responsibilities under Article 11⁴.

(Nunavut Land Claims Agreement, 1993)

Currently the federal government is in the process of appealing the most recent decision granting the plaintiff \$14.8 million in damages for the 17-year delay in action over the establishment of a general monitoring plan (NTI v Canada, 2014).

In recent years as a result of high oil prices and technological advancements, interest in the exploration and development of Canadian Arctic offshore oil and gas resources has increased. However, due to global oil supply glut in 2014 and a drastic reduction in market value, the economic feasibility of extracting Arctic offshore resources in Nunavut will likely result in diminished incentives to expedite development initiatives in the near term. In addition to the dramatic drop in oil prices there remain several other outstanding issues related to offshore oil development in Nunavut. Aside from environmental uncertainty and a lack of developed infrastructure, jurisdictional conflict over the management of coastal and offshore resources in the territory has been problematic. Additionally, as the territorial government is still in its formative years, offshore development policy on behalf of the government of Nunavut (under the mandate of the Department of Economic Development and Transportation) is inexplicit and publicly undocumented. This is both the result of capacity issues, where the mining industry has been an immediate point of focus for policy development, and due to considerable opposition from some communities and designated Inuit associations as well as environmental groups. It is also a result of established jurisdictional boundaries.

⁴ Article 11 deals with the goals and objectives of land use planning in Nunavut and the establishment of the NPC.

Today, Nunavut is the only territory not to have successfully negotiated a devolutions agreement with the federal government. As result, it is the only territory that does not have the authority to administer lands and resources within its jurisdiction. As Dacks (1990) explains, a devolution agreement consists of “devolution of administrative responsibilities to be carried out under federal legislation and the actual devolution of legislative as well as administrative authority” (p.5). This does not however result in a transfer of resource ownership from one jurisdiction to another, rather a legislated authority to manage. Though the success of the Yukon and Northwest Territory’s agreements have had mixed results over resource revenue and benefit sharing, and reaching a final agreement in both jurisdictions was challenging due to stakeholder conflict and disagreement (see Alcantara, 2013; Alcantara et al., 2012; Cameron & Campbell, 2009; Natcher & Davis, 2007), the literature is consistent in indicating that a final agreement can resolve issues of bureaucratic inefficiency, increase the capacity of local (territorial) government bodies, increase localized involvement in the decision-making process for resource development projects, and empower indigenous groups (Dacks, 1990; Cameron & Campbell, 2009; Penikett & Goldenberg, 2013; Coats and Poelzer, 2014).

Though no devolution agreement to date has been successful in negotiating the transfer of administrative responsibilities over offshore resources and it is unlikely that offshore resources will form part of an initial agreement, the government of Nunavut is certainly in pursuit of this end. Part three of the section 3.2 of the *Lands and Resources Devolution Negotiation Protocol* (2008) states:

- a) *The parties acknowledge that it is the position of the GN and NTI that the ultimate objective of devolution is the transfer of administration and control in respect of Crown lands and resources in all areas, both onshore and in the seabed. The parties further acknowledge that it is the position of the GN and NTI that a devolution agreement should make no distinction between resource management regimes onshore and in the seabed in and adjacent to Marine Areas.*
- b) *The parties acknowledge that, owing to, among other factors, the need of the GC to consider national consistency and coherency in seabed resource management, the GC is not prepared to negotiate seabed resource management during the initial phase of devolution negotiations.*

- c) *The parties recognize the need for the integration of onshore and seabed oil and gas management in order to contribute to the shared objective of having an efficient and effective resource management regime in Nunavut. Therefore, the parties undertake to discuss the management of onshore and seabed oil and gas resources as an integrated unit in a future phase of devolution negotiations and, accordingly, the Agreement-in-Principle shall contain a commitment by the Parties as to the timing of the commencement of negotiations regarding the role of the parties in the management of onshore and seabed oil and gas.*
- d) *Notwithstanding the timing or pace of devolution negotiations in respect of oil and gas management, the parties are willing to work to develop administrative arrangements which seek to provide the GN greater input in respect of oil and gas management in Nunavut.*

In the event of achieving a devolution agreement in the future, the territory may gain more authority to drive the collection of taxes and rents and improve the economy through job creating initiatives as a result of increased development. It is unclear however how long the path to policy creation in the oil and gas sector will take in the territory.

The rules established through the *Constitution Act, 1867*, the *Charter of Rights, 1982*, and the NLCA establish the rights of the Inuit people and the jurisdictions of the territorial government of Nunavut and the federal government in regards to offshore resources. Federal policy is geared towards increasing offshore development in the Arctic. The federal government recognizes Nunavut's offshore resources as a potential boon to the economy, in addition to increasing Canada's claim over Arctic sovereignty. The Canada Northern Economic Development Agency (CanNor) has recently announced a \$6.7 million geoscience research fund (federally funded) for Nunavut (Canada Northern Economic Development Agency, 2014).

Recently, the exploration of offshore resources failed to advance in the NLCA settlement area. In 2010, the area of Lancaster Sound was of interest for offshore oil and gas exploration. Under the jurisdiction of the NLCA settlement area, the Nunavut Impact Review Board (NIRB) was responsible for screening the Geological Survey of Canada's (GSC) proposal to conduct seismic tests in the area

(Wright, 2014). The NIRB was one of the three territorial resource management boards established following the NLCA, along with the Nunavut Wildlife Management Board (NWMB), and the Nunavut Water Board (NWB). Established through section 12 of the NLCA and the *Nunavut Project Assessment Act*, the NIRB is an agency that uses both traditional knowledge and scientific methods to assess potential impacts of a proposed development project. NIRB approved the seismic program in Lancaster Sound, however opposition from QIA (representing the five communities of Pond Inlet, Gris Fiord, Arctic Bay, Clyde Inlet and Resolute Bay) challenged the approval through the Nunavut Court of Justice (Wright, 2014). The judge found in favour of QIA on the grounds of *duty to consult* and accommodate and granted an injunction. At the same time as the GSC's expressed interest in the area's hydrocarbon potential, Parks Canada was working towards establishing a marine conservation also in Lancaster Sound (Wright, 2014). Resulting from regional lack of support for the advancement of exploration in addition to the ecological, cultural, and legal implication of pursuing development there, the federal government announced that it would indeed establish a marine conservation area in the eastern entrance to Lancaster Sound (Wright, 2014). The significance of this event according to Wright (2014) emphasizes the government of Canada and the government of Nunavut's responsibility to "consult fully with local Inuit about any proposed development or exploratory searches in relation to resource extraction", recognizes the importance of cultural heritage and environmental protection, and indicates that even though a self-governing territory has been established "the requirement for Canadian federal government consultation and accommodation of Inuit rights" does not end (p.210).

Current exploratory initiatives targeted in the Baffin Bay and Davis Strait area are outside of the NLCA settlement area. As a result they are under exclusively federal jurisdiction and the approval process for exploration permits does not require the involvement of NIRB or other territorial agencies. The territorial government is cautiously supportive of offshore exploration in the region as a mean to increase the regional economy despite the fact that the federal government has the decision-making

authority and federal agencies like AANDC have a measure of control in the benefit outcomes process (i.e.: jobs, rents, education and training) for territorial residents.

Impact and Benefit Agreements (IBA) can have significant effects on the success of projects and their impact on communities. A transparent and meaningful agreement has the potential to alter the mindset of individuals impacted through the decision-making process. IBAs are contractual agreements between a corporate entity and a community (either indigenous or a municipality) where a resource development project is proposed to occur. In 2013, a report was compiled for the Northern Development Ministers Forum on *Benefit Agreements in Canada's North* (Annon., 2013). The report outlined the main purpose of benefit agreements, the most substantive reason being *corporate social responsibility* and *social license* to operate. In addition, the report compiled a table of the potential contents of resource development projects benefit agreements, which may include:

- Economic incentives like revenue sharing or royalty payments;
- Employment opportunities;
- Training or education, job specific or general education;
- Community development initiatives like hosting community events;
- Project partnerships;
- Contractual opportunities (goods and services);
- Environmental management initiatives; and
- *Duty to consult*.

(Northern Alberta Development Council, 2013)

The law does not require that companies enter into benefit agreements in all situations, however today and especially in the interest of indigenous communities, it is expected. It is a legislative requirement for development projects on Crown land and “under the land claims agreements in Nunavut and Newfoundland and Labrador” (Northern Alberta Development Council, 2013, p.10). Under the terms of the *Atlantic Accords*, the federal-provincial agreements have required companies to produce socio-economic benefit plans. The report above and the Impact and Benefit Agreement Research Network (see IBA Research Network, no date) have identified through their research affiliates some problems that should be addressed with regard to their use, approach, implementation, and success. Some of these problems include: issues of transparency (often the contents of agreements are not disclosed publicly), the role of the government in the implementation and regulatory process, follow-up and compliance after the agreement is difficult to determine on a broad scale due to the private nature of the agreements, and the lack of standardization and sharing between jurisdictions and communities. The federal government announced its intentions to address the issue of confidentiality between industry and communities and in March 2014, released a report outlining its intentions to investigate and develop a protocol for *Mandatory Reporting Standards for the Executive Sector* (Natural Resources Canada, 2014). The objectives of the report are to target the economic incentives, over \$100,000, negotiated between provincial, territorial, and municipal governments, indigenous groups and the corporate entity in question (Natural Resources Canada, 2014).

Chapter 4: Offshore oil and Gas Legislation, Management, Regulatory Regime

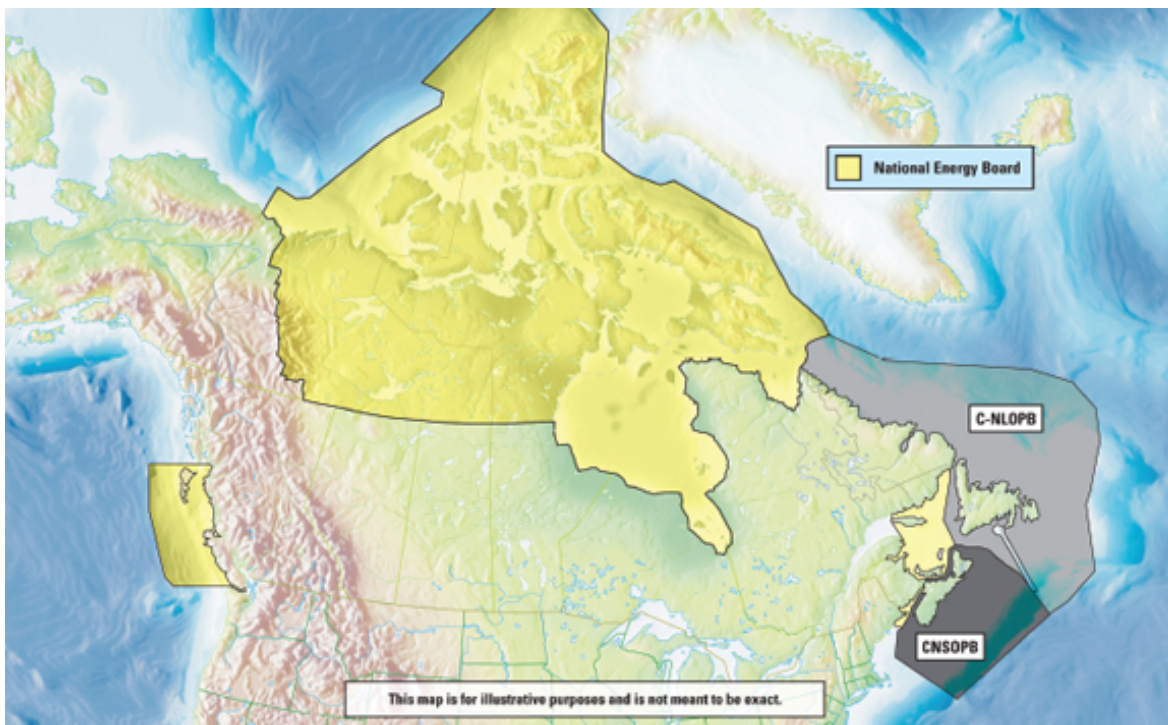
4.1 Legislation and Management

The *Constitution Act*, 1867, establishes the jurisdictional divide between federal, provincial, and territorial authorities for Canada's offshore. The federal government has sole administrative authority over all Canadian offshore marine areas beyond the low water mark at 12 nautical miles until the outer limits of the continental shelf, including subsurface resources and Sable Island, aside from the offshore areas adjacent to Newfoundland and Labrador and Nova Scotia. Newfoundland and Labrador and Nova Scotia have separate joint management arrangements with the federal government established in the *Accord Acts*.

The *Accord Acts* (Canada-Newfoundland Atlantic Accord Implementation Act, 1987; Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act, 1988) were agreed upon and implemented after a legal battle ensued over the jurisdiction over offshore resources between Newfoundland and the federal government. Newfoundland argued that it was not in the same legal position as the other Canadian provinces because it was a "separate Dominion prior to 1949" (Plourde, 2010). Though the Supreme Court of Canada (SCC) affirmed the federal government's jurisdiction over marine resources in 1967 (Reference re Offshore Mineral Rights, 1967), as well as the Newfoundland Court of Appeal in 1983 (Reference re Mineral and other Natural Resources of the Continental Shelf, 1983) and the SCC again in 1984 (Reference re Newfoundland Continental Shelf, 1984), it became politically unpalatable for the federal government not to negotiate with the province. Nova Scotia, as opposed to pursuing a legal remedy, opted to negotiate an agreement directly with the federal government. This resulted in the establishment of a joint management framework between Nova Scotia and the federal government; Nova Scotia was granted limited access to royalty payments up to an established ceiling, the right to impose taxes on industry (sales and corporate), protection from

a reduction on equalization payments, and a \$200 million fund from the federal treasury for offshore development (Plourde, 2010). The agreement reached with Newfoundland in 1985 was more favorable for the province, eliminating the royalty cap, providing the province with veto powers over “fundamental decisions” in regards to offshore development, and reduced federal powers in the joint management regime (Plourde, 2010). Nova Scotia shortly thereafter was granted the same rights in 1986.

Figure 5 – Map of regulatory jurisdictions NEB, CNLOPB, CNSOPB (National Energy Board, 2011).



The *Canada Oil and Gas Operator Act* (COGOA) (Canada Oil and Gas Operators Act, 1985) and the *Canada Petroleum Resources Act* (CPRA) (Canada Petroleum Resources Act, 1985) are the main legislative mechanisms governing offshore development. CPRA deals with the lease of Crown ‘frontier lands’ to industry for the purpose of oil and gas exploration and development. This includes areas offshore from the territorial sea (12 nautical miles) to the end of state’s exclusive economic zone.

CPRA requires that federal government first grant permission for the issuance of a ‘call for bids’ for land tenure. Additionally, it allows the federal government to attach conditions or restrictions to the exploration rights for the purpose of environmental protection. COGOA deals with the federal governance of offshore oil and gas exploration, production, processing and transportation. In addition, its purpose is to promote environmental protection, human safety, and the conservation of hydrocarbon resources. Due to the division of power mentioned above, the COGOA names the National Energy Board (NEB) as the regulatory and management authority for offshore oil and gas projects off the coasts of British Columbia, Yukon, Northwest Territories, Manitoba, Nunavut, Ontario, Quebec, New Brunswick, and Prince Edward Island. Newfoundland and Labrador and Nova Scotia are regulated by their own respective energy boards the Canada-Newfoundland and Labrador Offshore Petroleum Board (CNLOPB) and the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB). The Boards collectively are responsible for determining offshore areas open for lease, issuing lease rights, issuing licenses for the different stages of project development, and regulating operators engaged in development projects. This is the case for all provincial jurisdictions. In the territories, Aboriginal Affairs and Northern Development Canada (AANDC), fulfills the function of determining which areas will be open for bid for exploration licenses. In addition it also has regulatory responsibilities with the NEB. Finally, AANDC is responsible for approving Impact and Benefit Agreements (IBAs), also referred to as Benefit Agreements (BAs) established between the corporate entities engaged in a development project in their jurisdiction, and the local indigenous community or communities affected by the project.

As explained above, the energy boards (NEB, CNLOPB and CNSOPB) are responsible for the regulation of offshore development as it occurs under Canadian jurisdiction and law. The boards are also responsible decision-making authorities along with AANDC to ensure that industry observe the appropriate regulations, and that Crown lands are leased to corporations following the proper protocols

with full consideration of potential environmental, social and economic impacts. As Clancy (2011) explains however, “[a]lthough the boards enjoy substantial autonomy as Crown agents, they are responsible to designated federal and provincial ministers, who also have the power to review, confirm, and override selected types of decisions.” Ministerial authority in this regard arises through a series of trumping arrangements (Brown, 1990). Harrison (2013) explains although the boards claim that they have independence, not only is this not technically the case, but in recent years the level of autonomy mentioned by Clancy (2011) has been further eroded where more power has been transferred to the decision-making authority of the Federal Cabinet.

The joint management agreements established by the federal and provincial governments of Canada, Newfoundland and Labrador and Nova Scotia, aimed to resolve jurisdictional conflict over which government authority had the mandate to control the development of offshore resources on frontier Crown lands offshore of provincial boundaries. The achievement of establishing the joint management arrangements was no small measure and at times was highly confrontational (Meek & Beaton, 2010). Though the establishment of the federal-provincial boards resolved some development issues (i.e. certainty of constitutional jurisdiction⁵) as Clancy (2011) explains, their establishment also lead to several other problems “including a complicated pattern of accountability”:

The board members are appointed by senior [government officials] not only to exercise delegated powers but also to follow policy directions from above. Furthermore, joint management boards answer to not one but two ministerial masters, who sit at separate cabinet tables and may be elected by different political parties. Finally, it is important to recognize that an offshore board such as the CNSOPB is not the sole agency with important policy and regulatory responsibilities offshore. In fact, the “offshore state” for the Scotian Basin includes more than a dozen departments and agencies from the federal, provincial, and municipal levels (Clancy, 2011, p.77).

⁵ Clancy (2011) uses the example of early exploratory drilling offshore Nova Scotia to illustrate the issue of jurisdictional complexity. In 1959, when Mobil Canada sought lease rights to the Sable Island area, they were required to file for mineral rights from Nova Scotia and petroleum rights from the federal government (Axford, 1983), an extensive and expensive process.

A fall 2012 report from the Office of the Auditor General of Canada on *Atlantic Offshore Oil and Gas Activity* indicates some management problems that must be resolved for both the CNLOPB and the CNSOPB in the areas of environmental risk mitigation and response. The report's objectives were to determine whether the Atlantic petroleum boards, along with corresponding federal agencies "have managed the environmental risks and impacts of offshore oil and gas activities according to applicable legislation, regulations, directives, good practices, and agreements with other players" (Office of the Auditor General, 2012, p.9). The reports findings were also the result of contributions from the Department of Fisheries and Oceans, Transport Canada, the Canadian Coast Guard, Natural Resources Canada and Environment Canada. All of these agencies are involved in Canada's ocean resource policy development and governance regime. Some of the main issues that will be of focus in the following sections of this project that have also been reported by the Office of the Auditor General as problematic are:

- A lack of advancement towards the planned use of goal-oriented regulation;
- An unsatisfactory approach to the Boards' use of strategic environmental assessment (SEA);
- A lack of coordination among the Atlantic petroleum boards and with federal agencies, and
- A lack of framework to track and coordinate between these regulatory bodies based on lessons learned (Office of the Auditor General, 2012).

4.2 International Influences and Offshore Development

International laws and conventions have in the past and continue today to shape and influence both legislative action and policy decision-making in Canada. Spicer and Bath (2010) discuss the international legal regime as it pertains to offshore hydrocarbon development as a means of illustrating potential legal challenges in the pursuit of Canadian Arctic offshore development. Though the ocean

has been delineated and partitioned through the *United Nations Convention on the Law of the Sea* (UNCLOS), (for the purpose of creating exclusive zones for the economic and security needs of independent states) international laws and norms have been designed and are practiced with the transboundary impacts of ocean activities in mind. For the most part, these international laws as they pertain to the development of offshore resources have been aimed at granting and controlling exclusive rights, controlling pollution, establishing and controlling transportation and safety, and the protection of marine species for the purpose of conservation.

In order for international laws to function and have the necessary controlling effects on states, at the domestic level, independent states must establish their own laws designed to respect these international agreements. As an example, Canada's implementation of the rules established by UNCLOS for the "maritime rights of coastal states" is manifested through the *Oceans Act* (Spicer and Bath, 2010, p.258). In addition to dealing with the issue of jurisdictional sovereignty, the *Oceans Act* itself is Canada's strategy for managing its ocean jurisdiction.

Aside from international conventions, there are other organizations that exist for the purpose of influencing international policies related to the development of offshore resources. As examples, the International Maritime Organization (IMO), the International Regulators' Forum (IRF) and the Arctic Council are international bodies with representation from stakeholder states and peoples that establish soft rules to guide international state and corporate behaviour. Canada participates in all three organizations as they affect domestic government policy and decision-making.

The IMO is a United Nations organization established for the purpose of creating an international standard and regulatory framework for shipping safety, security and environmental performance (International Maritime Organization, 2013). In addition, IMO standards cover all aspects related to

shipping including “ship design, construction, equipment, manning, operation and disposal – to ensure that this vital sector remains safe, environmentally sound, energy efficient and secure” (International Maritime Organization, 2014a). Canada is a long standing and a founding Member State of the IMO. According to Transport Canada, Canada has the “longest coastline in the world at 243,000 km,” it has “an average of 21,000 international ships” visiting Canadian ports and navigating through Canadian waterways annually, with maritime trade valued at \$170 billion (2010 Canadian dollars) (Transport Canada, 2011). Transport Canada explains clearly that Canada’s active involvement with the IMO since 1948 is due to the organization’s ability to develop and apply maritime policy internationally (Transport Canada, 2011).

As explained above, the means by which these international standards become applicable and enforceable in Canadian waters is through the establishment of corresponding domestic legislation, in this case the *Canada Shipping Act, 2001*. Transport Canada also indicates that the government’s objective is to “harmonize domestic regulations with international standards as much as possible” (Transport Canada, 2011). To date Canada has ratified or acceded to eight IMO conventions including:

- International Convention for the Prevention of Pollution from Ships (MARPOL);
- International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001;
- International Convention for the Control and Management of Ships’ Ballast Water and Sediments;
- 1988 Protocol of the International Convention for the Safety of Life at Sea (SOLAS);
- 1988 Protocol to the International Convention on Load Lines,
- 1966 International Convention on Standards of Training, Certification and Watch Keeping for Fishing Vessel Personnel;
- International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001; and

- Supplemental Fund Protocol of 2003 to the 1992 International Oil Pollution Compensation Fund.

(Transport Canada, 2011)

As a Member State, Canada is also working with the IMO as it develops the new Polar Code. The Polar Code, once established, will be mandatory for ships operating in the harsh environment of Arctic and Antarctic waters (as part of SOLAS chapter XIV) (IMO, 2014b). As a result, the rules established through the IMO will have an impact on offshore exploration and development support vessels and mobile drilling units.

The Arctic Council was established following the Ottawa Declaration in 1996. According to the Declaration, drafted by international government representatives and ministers, Arctic indigenous organizations, and environmental organizations, the Council was developed as a new intergovernmental forum focused on addressing the challenges faced by governments and communities in the North. Canada, Denmark, Finland, Iceland, Norway, Russia, and the United States are participating members. The Inuit Circumpolar Council, the Saami Council, and the Association of Indigenous Minorities of the North, Siberia, and the Far East of the Russian Federation are all Permanent Participants since the founding of the council. The Council is mandated towards “improving the economic, social and cultural well-being in the North,” with sustainable development and indigenous issues at the forefront (Arctic Council, 1996). Canada is in the middle of its second chairmanship of the Council, with Leona Aglukkaq (Member of Parliament from Nunavut and Minister of Environment) as Canada’s Minister for the Arctic Council. The focus of the Council as it is led by Canada through 2015, is on responsible resource development, safe shipping, and sustainable communities (Government of Canada, 2013). With respect to resource development, the policy objective is to recognize the role the private sector plays in Arctic economic development. This policy

has led to the establishment of the Arctic Economic Council (Arctic Council, 2014). In addition, the Canadian government has pledged to continue the work on oil-pollution prevention and follow-up as part of the *Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic* (signed May, 2013) (Arctic Council, 2013).

The International Regulator Forum (IRF) is composed of 11 international regulators including both the CNLOPB and the CNSOPB. Other members include the US Bureau of Safety and Environmental Enforcement (BSEE), Australia's National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA), the Norwegian Petroleum Safety Authority (PSA), the Danish Energy Association (DEA), Mexico's National Hydrocarbons Commission (CNH), New Zealand Department of Labor (DOL), the Brazilian National Petroleum Agency (ANP), Great Britain's Health and Safety Executive (HSE), and the Netherlands' State Supervision of Mines (SSM). The purpose of the forum is to collaborate, measure effectiveness and raise offshore health and safety standards for human and environmental protection related to offshore installations, day-to-day operations, and in the event of emergency situations (International Regulators Forum, 2010). Under the IRF's membership eligibility requirements all members are required to be nationally legislated petroleum regulators with "independent decision-making, separate from the operations that they regulate and from royalty collection" (International Regulators Forum, no date).

4.3 Regulatory Regime Framework

Regulatory regimes for offshore exploration and development can be divided into three categories: prescriptive, performance-based, or hybrid (a mélange of both prescriptive and performance based regulation). Canada has a hybrid regulatory model (Grant et al., 2006; Severson et al. 2011).

According to Severson et al. (2011), the NEB has chosen a hybrid model because it allows for both compulsory means of compliance to be met as well as the use of flexibility in some regulation where greater use of new technology or innovation can be implemented effectively. The provincial and federal governments have recognized the merits of moving towards a performance-based regime and the federal government has to date made some changes. Canada refers to its preferred regulatory regime in the 2009 RIAS as “goal-oriented”. This is likely the case due to its main international policy influences for offshore oil and gas development, the North Sea (United Kingdom and Norway) and the United States (due both to proximity and close political and policy development relationship with Canada⁶). A prescriptive regulatory directive is implemented when regulators determine the need for a compulsory means of ensuring compliance (Dagg et al., 2011). A performance-based regulation is assigned often when flexibility for the operator is preferred for the implementation of new technologies or more efficient processes (Dagg et al., 2011). The goal-oriented approach is defined in the RIAS for the *Canada Oil and Gas Drilling and Production Regulations* (2009) as follows: “[g]oal or performance-based regulation sets regulatory goals or performance objectives to be achieved and allows companies to identify the means to meet them” (Canada Gazette, 2009).

In a 2010 Senate committee review of offshore development in Canada following the *Deepwater Horizon* incident, the then Chairman and CEO of the NEB, Gaétan Caron, described the Boards reasoning behind moving towards goal-oriented regulation:

The old regulations represented an out of date, one size fits all system, sometimes labelled as “check the box regulation.” The new regulations require companies to demonstrate that they can operate safely in specific situations, using the most advanced technology tailored to their circumstances. The onus is on industry to demonstrate to us that they can protect their workers, the public, and the environment. [In reference to the DPRs amended in 2009] If the operator cannot demonstrate this, they cannot drill (Canada, Parliament, 2010a).

⁶ As an example, see Caron (2014), p.5. Collaboration on regulatory issues is taking place between Canadian regulators and the United States Bureau of Safety and Environmental Enforcement (BSEE) and the Pipeline Hazardous Materials Safety Administration (PHMSA).

One of the aims of the Senate report in regards to identifying the framework of the offshore development regulatory regime was to determine whether the current rules are being designed and implemented with the highest degree of clarity. The report explains that an effect of prescriptive regulation is that rules are not open to misinterpretation (Canada, Parliament, Senate, 2010). However as identified in the report and explained by the then Minister of Natural Resources, prescriptive rules have the effect of leading to uncertainty as a result of needing to be consistently updated by regulators to reflect technological advancements (Canada, Parliament, 2010b).

Currently, federal regulators are facing several challenges as they work towards striking a balance between prescriptive and performance-based regulation. Two examples on the policy agenda that have been revisited several times throughout the years deal with the Same Season Relief Well (SSRW) policy (Canada, Parliament, Senate, 2010; National Energy Board, 2014) and the preauthorized use of chemical dispersants by industry operators as part of their emergency response capabilities in the event of an oil spill (Trudel, 2004; Office of the Auditor General, 2012; Fisheries and Oceans Canada, 2014). This regulatory balance is further challenged due to the operational mandate of both Atlantic Boards, where as an example, the Chief Conservation Officer has the dual mandate for both environmental protection and ensuring the efficient extraction of hydrocarbon resources (Office of the Auditor General, 2012).

There are both positive and negative attributes for either prescriptive or performance-based regulation. The main argument for the adoption of a performance-based regime is that it 1) takes the responsibility in the event of a failure out of the hands of the regulator and places culpability on the operator, 2) it incentivizes the operator to be always improving its operating systems towards increasing and achieving greater efficiency and safety, and 3) the incentives of a performance-based regime necessitate frequent investment in research and technological development on behalf of industry. The main arguments to maintain or adopt a prescriptive-based regime are: 1) to ensure that

operators are following the exact rules determined by the regulators (as determined by citizens), utilizing at least a minimum standard of care, and 2) the regulators have themselves the knowledge to regulate the current technology or processes utilized by the operator. The literature indicates a state's choice of regulatory regime is directly correlated with the political culture of the state in question in addition to the relative human, financial, and organizational capacity of the government or mandated regulatory body. The character of the political regime establishing the regulatory model also has an effect on its nature.

This same regulatory and political dichotomy occurs should a state decide to either nationalize oil development or create a national oil company (NOC) (Thurber & Istad, 2010). As an example, Norway's NOC Statoil and its domestic approach to offshore development had impacts on its choice of regulatory model, its eventual regulatory reform process, state development, R&D, and industry competition. The Norwegian model for offshore oil and gas regulation is often cited as the example of goal-oriented regulation. According to Grant et al. (2006) during the period of time when Norway began to enhance its capacity to increase offshore development, the institutions of government did not have the capacity necessary to functionally regulate operators. Thus, the governance model was built around establishing a framework of goals for operators to accomplish throughout project lifecycle while simultaneously building up the knowledge and capacity of regulators (human, organizational, and financial).

The Canadian government outlined three reasons for the modification of its frontier drilling and production regulations in addition to evolving international standards for the management of risk: 1) the desire to reduce duplication between existing regulations, 2) administrative capacity both physical and in terms of costs, 3) to increase the capacity of corporate entities to develop and utilize technological development for safety and efficiency (Dagg et al., 2011). Grant et al. (2006) have

analyzed the Canadian offshore oil and gas regulatory regime in comparison to the United Kingdom, Norway, and Australia and have identified the particular elements of the Canadian regime that are either performance-based or prescriptive. Aside from the DPRs discussed above, there has been some modification to Occupational Health and Safety regulation. However, there have not been significant changes in recent years to further goal-oriented regulation in the areas of environmental risk management.

More recently highly publicized incidents like *Deepwater Horizon*, in addition to the increasing impact of environmental groups and indigenous rights claims, have increased the pressure on regulators and operators to improve health, safety and environmental performance. Though Canada has not experienced the level of development on par with the Gulf of Mexico or North Sea regions, offshore development policies have been aimed at regulatory reform for the purpose of increasing development for a number of years.

Starting in 2005, an inter-jurisdictional policy initiative titled the Frontier and Offshore Regulatory Renewal Initiative (FORRI) was planned to begin the process of overhauling Canada's legislative framework for the development of frontier and offshore energy resources. The process was designed to engage stakeholders, both aboriginal and industry, and relevant government departments and management boards (including the NEB, CNSOPB, CNLOPB, NRCan, AANDC, CAAP, provincial and territorial governments etc.) to improve Canada's economic competitiveness, and ensure that resource development would occur in an environmentally and socially responsible manner (see Canada Gazette, 2009). The program successfully completed the overhaul and amalgamation of Canada's *Drilling Regulations* and *Production and Conservation Regulations* in 2009; operational as of 2010 as the *Drilling and Production Regulations* (DPRs). FORRI had the intention of overhauling all development regulation for the purpose of inter-jurisdictional harmonization after completing the

DPRs over a four-year period, however the program failed to be completed in the planned timeframe. In March 2014, the NEB released a statement regarding northern frontier oil and gas development and regulation stating that the board is still working with the Canadian government and the provinces of Nova Scotia and Newfoundland and Labrador, in addition to the Atlantic petroleum boards, on FORRI (National Energy Board, 2014c). Information on the initiative itself however, is not regularly shared with the public and it does not appear that any significant developments have been made since 2009.

The *Regulatory Impact Analysis Statement* (RIAS) on behalf of the federal government that resulted from the FORRI program and the amalgamation of the DPRs, outlined the main goals of overhauling the regulations (Canada Gazette, 2009). Namely, the government recognized that to achieve a high standard and in line with existing international standards (notably Norway's) for risk and safety management, environmental protection, economic development, management capacity on behalf of the regulators, technological advancement and industry investment in research and development (R&D), in addition to establishing a more efficient regulatory regime, Canada would have to adapt its regulatory regime. Though the NEB, CNSOPB and CNLOPB are the primary regulators for frontier and offshore development, ultimately regulatory reform is subject to the decisions of Parliament. The pace of regulatory reform has been lengthy and is ongoing both in Canada and internationally and the political process for achieving substantive regulatory change can be cumbersome (Canada, Parliament, Senate, 2010; Hanson 2011).

The literature is consistent in emphasizing that the process of initiating regulatory changes to the offshore development industry has often coincided with the occurrence of catastrophic incidents resulting in either deaths and/or substantial environmental damage. Examples of which include:

- Norway and the capsizing of the Alexander Kielland drilling rig;
- The United Kingdom and the sinking of the Piper Alpha production platform;

- The United States and the Union Oil Company Santa Barbra blowout⁷ and the *Deepwater Horizon* blowout in the Gulf of Mexico (see National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011);
- Australia and the Montara well blowout; and
- Atlantic Canada and the Ocean Ranger semi-submersible rig capsizing and the Cougar helicopter crash (both offshore Newfoundland and Labrador⁸) (see Canada-Newfoundland and Labrador Offshore Petroleum Board, 2011; Canada-Newfoundland and Labrador Offshore Petroleum Board, 2010).

In addition to the impetus for regulatory amendment as a result of negative experiences both domestically and internationally, the desire to increase offshore development in the face of increasing public scrutiny is a strong motivating factor for regulatory renewal at the national level (Caron, 2014).

4.4 Environmental Policy

Under the *Canadian Environmental Assessment Act, 2012 (CEAA, 2012)*, the Atlantic petroleum boards are responsible for jointly (e.g. CNLOPB with the federal government in Newfoundland) assessing environmental effects of proposed projects on federal Crown lands (Office of the Auditor General, 2012). Strategic environmental assessment (SEA) as Doelle et al. (2013) explain, is a tool that can be used to complement project-based EAs especially in the areas of cumulative effects (Duinker & Greig, 2006) and “broader policy issues” (p.103). The advantage of pursuing SEA in addition to the

⁷ According to Hanson (2011), the Union Oil Company incident had a more drastic effect on regulatory reform than either Exxon Valdez or BP *Deepwater Horizon*, which both resulted in bureaucratic restructuring over regulatory regime change.

⁸ As a result of the crash that killed 17 people, the CNLOPB launched the Offshore Helicopter Safety Inquiry to improve the safety and risk management regime for helicopter transportation for workers in the Newfoundland and Labrador offshore area. The two-phase reports are available through the CNLOPB (Canada-Newfoundland and Labrador Offshore Petroleum Board, 2011; Canada-Newfoundland and Labrador Offshore Petroleum Board, 2010).

EA process⁹ is also to thoroughly consider alternatives to a proposed resource development project before significant “decisions and commitments have already been made” (Doelle et al., 2013, p.103); “at the level of regional policies, plans and programs, when alternative futures and options for development and conservation are still open” (Noble et al., 2013, p.297). SEA emerged to fill an evident gap in the EA process internationally (Noble et al., 2013). Specifically with reference to marine-based projects, it has the potential to address the challenging circumstances of potential marine environmental impacts that tend to extend beyond the boundaries of land-based projects often over multiple jurisdictions. This is also critical where oil and gas development projects carry additional risks to the marine environment globally (Fidler & Noble, 2012; Campagna et al., 2012; Wagner & Armstrong, 2010). Significantly, SEA has the ability to address a void in the ability of the public to influence potential development projects (O’Faircheallaigh, 2010).

In 2010, the federal government issued a Cabinet directive in order to increase environmentally conscientious decision-making on behalf of government departments and agencies. *The Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals* was designed with the intent of solidifying the government’s commitment to sustainable development. The Directive states that SEAs should be conducted in the event that the following two conditions are met:

1. The proposal is submitted to an individual minister or Cabinet for approval; and
2. Implementation of the proposal may result in important environmental effects, either positive or negative.

(Government of Canada, 2010)

Both the NEB and AANDC are subject to this directive, however no SEA was conducted prior to issuing the Davis Strait and Baffin Bay 2D seismic Geophysical Operations Authorization (GOA).

⁹ EA is a legal requirement for certain projects under *CEAA, 2012*. SEA by contrast is recognized as a management tool.

The NEB determined in its review of the application that the EA process for issuing the GOA did not present any significant environmental effects with the proponents proposed “environmental protection procedures and mitigation measures, and compliance with the Board’s regulatory requirements and conditions” (National Energy Board, 2014b, para. 4). The NEB also stated that in order to fulfill the EA for the GOA they held public consultations; for which there was a “high degree of public interest” and a level of public participation surpassing all other past EAs for GOAs (National Energy Board, 2014b, para. 2). Though the environmental effects, according to the EA and NEB analysis were deemed insignificant to permit the seismic testing, following the 15 stipulated conditions and following the proponents established plans and government regulations, the high level of public interest seems to suggest an overall anxiety over the long term development future of the region. This level of public interest in the project also seems to indicate that a SEA should be triggered under the Cabinet

Directive:

Departments and agencies are also encouraged to conduct strategic environmental assessments for other policy, plan or program proposals when circumstances warrant. An initiative may be selected for assessment to help implement departmental or agency goals in sustainable development, or if there are strong public concerns about possible environmental consequences (Government of Canada, 2010, p.1).

The Directive guidelines go on to explain the benefits of utilizing SEA when developing policy, plan and program proposals and states that by completing a SEA departments and agencies will be better able to fulfill their mandates and:

1. Optimize positive environmental effects and minimize or mitigate negative environmental effects;
2. Consider potential cumulative environmental effects;
3. Implement the Federal Sustainability Development Strategy;
4. Save time and money by drawing attention to potential liabilities for environmental clean-up and other unforeseen concerns;
5. Streamline project-level environmental assessment by eliminating the need to address some issues at the project stage;

6. Promote accountability and credibility among the general public and stakeholders; and
7. Contribute to broader governmental policy commitments and obligations.

(Government of Canada, 2010, p.2).

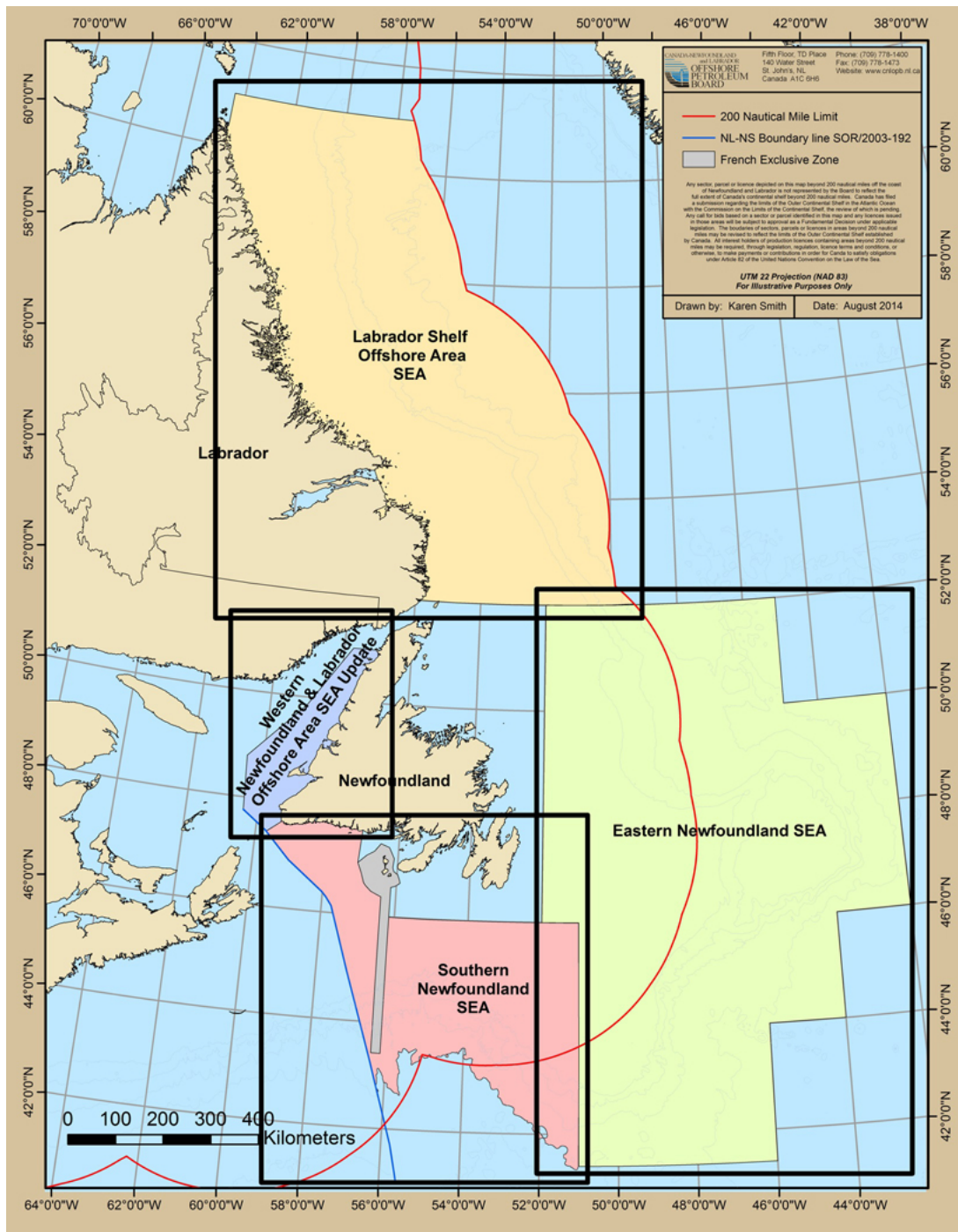
The 2012 report from the Office of the Auditor General uses the example of the Old Harry formation to illustrate a similar point. Located in the Gulf of St. Lawrence, the area is of significant ecological and economic importance (fisheries, recreation and transportation) and as a result of “the high level of public concern about the environmental impacts of offshore petroleum activities in the area”, the Minister of Environment required that an EA be completed for the region even though exploratory drilling does not meet the requirements for an assessment under *CEAA, 2012* (Office of the Auditor General, 2012). The report also recommends that the results of up-to-date SEAs be publicly known “prior to issuing a call for bids” (Office of the Auditor General, 2012, p.13). For the province of Nova Scotia the practice of assessing environmental effects prior or during the call for bids is the result of a joint policy directive with the federal government (Office of the Auditor General, 2012). For Newfoundland and Labrador there is no restriction (Office of the Auditor General, 2012).

Fidler and Noble (2012) highlight a significant limitation in the implementation of SEAs in Canada. They explain that “[t]here is a need and an opportunity for SEA offshore to adopt a much broader approach to socioeconomic issues than solely marine resource conflicts, to contribute to community planning in advance of offshore development” (p.18). Norman (2005) explains that addressing socio-economic impacts can assist communities to deal with the opportunities and challenges of offshore resource development. The study completed by Norman in 2005 also illustrates that addressing issues of community and local government capacity is of paramount importance.

The Nunavut Tunngavik Incorporated (NTI) passed a resolution at their October 2013 Annual General Meeting that due to “ongoing substantial concerns” of Inuit of the Qikiqtani Region, they requested that no permit for the GOA be issued without conducting an SEA for the region (Baffin Bay, Davis Strait, Hudson Bay, Hudson Strait, Foxe Basin, Lancaster Sound and Parry Channel) (Nunavut Tunngavik Incorporated, 2013). NTI (2013) states that a SEA can be helpful in resolving Inuit concerns over the effects of seismic testing on the environment and wildlife. In addition, conducting a SEA for the Davis Strait and Baffin Bay region is “an integral step in combining Inuit Quajimajatuqangit and scientific knowledge and identifying gaps in knowledge respecting the effects of oil and gas related activity, in addition to addressing the concerns brought forward by communities regarding oil and gas activity in general” (Nunavut Tunngavik Incorporated, 2013, para. 3).

Newfoundland and Labrador has conducted four SEAs since 2002 for areas of potential interest to future offshore oil and gas exploration activity. These offshore areas include Eastern, Southern, and Western Newfoundland and the Labrador Shelf Offshore Area (see Figure 6). Nova Scotia has completed several SEAs for the Eastern and Western Scotian Shelf and Slope, Eastern Sable Island, Western Banquereau and the Gully, as well as the Laurentian Sub-basin (completed between 2003 and 2014). Currently, AANDC is involved in a four year regional EA in Canada’s Western Arctic in response to increased offshore oil and gas exploration in the region. The Beaufort Regional Environmental Assessment is a multi-stakeholder initiative involving territorial and federal governments, the private sector, academia and representatives from the Inuvialuit Settlement Region.

Figure 6 - Map of Strategic Environmental Assessments Newfoundland and Labrador (see Canada-Newfoundland and Labrador Offshore Petroleum Board, 2014b).



Chapter 5: Summary of Findings and Recommendations

The summary below provides a list of findings based on the results of the research conducted. First, in **Section 5.1**, the policy environment and initiatives are discussed for each of the three regions. This includes an account of major events and significant legal and jurisdictional disputes that shaped the political and jurisdictional relationship between the provinces and territory with the federal government. This section also considers the economic impact of the oil and gas industry in each respective jurisdiction. Finally, this section discusses the impact of other maritime industries on the oil and gas industry as well as cultural values and priorities that have motivated offshore oil and gas policies in each jurisdiction.

In **Section 5.2**, the findings summarize the legislative and regulatory framework for offshore oil and gas development in Canada and in each of the respective jurisdictions. The nature and characteristics of the regime are discussed as well as new developments in oil and gas regulation. This section also includes significant findings based on environmental regulation and management in Canada, SEA and the use of IQ.

The recommendations of this report based on the findings are available in **Section 5.3**. The recommendations identify how the lessons learned in Atlantic Canada (Newfoundland and Labrador and Nova Scotia) can contribute to policy development in Nunavut. The recommendations indicate that developing an offshore oil and gas policy in Nunavut is one means of addressing the conflicting and complex nature of the offshore oil and gas business environment in Canada.

5.1 Policy

Newfoundland and Labrador

1. Offshore hydrocarbon development resulted from the province's economic incentive to maximize provincial revenues from the resource sector.
2. Dependence on federal government spending did not have the result of increasing the province's capacity to buildup its own economic drivers.
3. Conflict over jurisdiction led to a lengthy legal dispute and resulted in substantially delaying the development process by creating an unstable investment environment. This precipitated the establishment of a joint-management regime granting Newfoundland and Labrador (and later Nova Scotia) with decision-making authority.
4. There is disagreement over the success of the provincial government's use/negotiation of project-based fiscal arrangements. Overall, where no or limited infrastructure exists and the jurisdiction has limited experience, encouraging industry to invest requires commitments from both levels of government that results in lower revenues for the provincial government.
5. The collection of environmental and socio-economic data was a missed opportunity in the early years of project development offshore Newfoundland.
6. The economic impacts of offshore development tend to be localized and thus should be appropriately balanced with other regional maritime economic activities.

Nova Scotia

1. The impact of environmental disasters like *Deepwater Horizon*, in addition to the comparative importance of the fishing industry has resulted in a more cautious approach to offshore development.
2. Recent provincial policies have been aimed at increasing and diversifying industry investment in the offshore oil and gas sector with the hope of establishing a regime of similar success to Newfoundland and Labrador.
3. Long term strategies targeted towards growing Nova Scotia's offshore oil and gas industry have recently resulted in attracting significant corporate investment.
4. Social pressure continues to be a deterrent to industry investment in offshore areas of importance to the fishery.
5. Leadership from the provincial government to expedite offshore exploration and development is lacking.

Nunavut

1. The territory was established following the largest land claims agreement in Canadian history with the intent of protecting Inuit rights and integrating IQ into the institutions of territorial government. To date the federal government has yet to fully meet all of its obligations under the NLCA as it pertains to resource management and decision-making in the territory.
2. The offshore areas of interest for exploration are outside the NLCA settlement area and are exclusive federal jurisdiction. The potential impacts of exploratory activities on communities within the settlement area have led to legal action against the NEB and industry proponents.

3. The territory has no documented policy for offshore oil and gas development aside from its devolutions negotiation protocol. This protocol indicates that the territory intends to pursue an eventual agreement with the federal government over the right to administer offshore oil and gas resources.
4. Benefit agreements are now the only potential means of local communities to extract value from offshore resource projects, though they are not a legal requirement.

5.2 Legislation and Regulation

1. The three petroleum boards are the responsible agencies for the regulation of offshore resource exploration and development, and along with AANDC in the Arctic, establish the management framework and regime for land tenure.
2. The petroleum boards are subject to federal and provincial ministerial approval and have been in recent years increasingly influenced by national resource development policies.
3. Government, academic, and NGO reports indicate that the boards have yet to resolve regulatory gaps in the areas of environmental risk, mitigation and response stemming from a lack of coordination among federal and provincial agencies, an incomplete transition to goal-oriented regulation, and an unsatisfactory use of SEA.
4. Canada has indicated its intention of transitioning to goal-oriented regulation as a means of increasing bureaucratic efficiency, encouraging the development of state-of-the-art technology while placing the burden on industry, and reducing regulatory duplication. The FORRI program has yet to make substantial changes since the DPRs were completed in 2009.
5. Regulatory amendment internationally has coincided with environmental disaster and/or loss of life and has not been precipitated by increased knowledge or technological capacity.

6. SEA serves the purpose of identifying risks and alternatives prior to proposed projects before fundamental decision-making has occurred. SEAs have been completed for offshore Newfoundland and Nova Scotia, some after project development had already occurred.
7. SEA is recognized as an opportunity to meaningfully engage stakeholders in the decision-making process and can assist with the fulfillment of *duty to consult*. For Nunavut it also presents the opportunity to incorporate IQ into the decision-making process. This can be achieved by facilitating local territorial governance agencies to document IQ and implement it in the environmental management of the territory.
8. There is no legal requirement for SEA to be completed prior to the issuance of exploration permits. If it is deemed necessary by the Minister of Environment due to high levels of public interest in the proposed project, or due to significant potential negative impacts, an EA may be mandated and completed prior to the issuance of exploration permits.

5.3 Recommendations

At the outset of this project, the intention was to identify important issues that have resulted in the current situation in Newfoundland and Labrador and Nova Scotia. In that respect, the purpose of this project was to determine whether the experiences of Atlantic Canada could inform future decision-making in Nunavut. The results of this analysis indicate some relevant and interesting findings.

The challenges faced by decision-makers when it comes to the development of offshore resources are complex. Newfoundland and Labrador and Nova Scotia were and continue today to endeavor to make policy decisions that support both the growth and diversification of their economies and the protection of resources and environments that are fundamentally important to those who live in their jurisdictions. At the same time, there is a public expectation that the regulation of offshore oil and gas

projects is appropriate and comprehensive in light of the potential risks. The federal government has also established policies and programs through its sustainable development initiative and through CanNor that also emphasize the importance of sustainable development, economic diversification and stakeholder and community participation in the resource development process.

It is clear that there are still many unknowns in regards to the long-term effects of offshore exploration and development in Atlantic Canada, even more so offshore Nunavut. An opportunity exists however to reconcile some of these issues in Nunavut before any significant steps towards offshore development occur. If market conditions as of late are any indication of the economic potential of near term offshore projects in Nunavut, federal government investment in Arctic scientific and technological research is an appropriate and necessary investment in the future economic growth and prosperity of the territory and its citizens and for Canadians more generally.

Policy development for Nunavut should recognize the fact that social pressure has acted as a deterrent to resource development projects in both Newfoundland and Labrador and Nova Scotia. In addition, as it was necessary for the federal government to resolve disputes over jurisdiction, decision-making authority, and access to fiscal benefits, it is also necessary that the federal government address the issues that have precipitated legal action against the NEB over exploration in the Baffin Bay and Davis Strait area. This has perhaps unnecessarily created a hostile environment for industry to operate and invest in. The federal policy objectives for northern economic and resource development cannot be met if the only means for citizens of Nunavut to assert their voices in the decision-making process is by challenging the NEB in court. Though the legal requirements for acquiring exploration permits are explicit, in the event of substantial public interest and concern the government should exercise its ability to use the environmental assessment process.

In Newfoundland and Labrador there is an absence of environmental and socio-economic data from the early days of offshore exploration and development in the region. In Nunavut, the opportunity exists to identify and track environmental and socio-economic data at the outset of project development. More broadly, the opportunity exists to collect baseline environmental data before a significant increase in regional maritime activities occur, including shipping and tourism.

In addition to the federal government utilizing the environmental assessment process for the Baffin Bay and Davis Strait region, the approach that federal institutions of government have taken to perform consultation duties with Inuit communities appears to be unsatisfactory. Some of the problems that stem from this issue result from a lack of meaningful involvement in offshore resource governance in the territory. Granted the area at issue is under the sole jurisdiction of the federal government and in the event of a future devolution agreement with the territory, the offshore may not form part of the initial agreement. This does not mean that citizens of the territory should not be involved in the offshore resource development planning processes that will affect them and future generations.

Overall, the lack of successful advancement of recent offshore development projects in Nunavut indicates that stakeholder confidence in the decision-making institutions and the process in general is low. This sentiment certainly stems from the historic relationship of the Inuit people with the federal government in addition to the federal government's jurisdictional authority over lands and resources in the territory. Another aspect of this problem stems from the fact that the decision-making authorities and the management regime for offshore oil and gas regulation and land tenure are absent from the territory. The NEB exercises its decision-making and regulatory roles from Calgary and has no regional office in the territory and AANDC is directed through Ottawa. As the current arrangement stands, it does not appear as though the people of Nunavut can substantially benefit from the development of

offshore oil and gas resources when they are left out of the decision-making process and are highly concerned about future environmental risks that are not being addressed preemptively.

Though the NEB has indicated that it is in pursuit of the continued transition to goal-oriented regulation, it is unclear what the next steps are and when these transitions will occur. The advancement of the FORRI initiative seems to have likewise stalled. It is clear that there are significant outstanding regulatory issues in terms of the level of disaster preparedness and response that exists in all three jurisdictions. This is the result of a lack of coordination among federal institutions and as a result of a shortage of resources. The purpose of transitioning to goal-oriented regulation is to put the burden on industry to use the most up-to-date technology and take responsibility in the event of a failure, something the federal government does not have the resources to do.

While properly communicating the objectives and completing the transition to goal-oriented regulation, federal institutions like AANDC should be working towards improving the consultation process with Inuit communities throughout the many stages of project planning and development. The responsibility for *duty to consult* lies with the government, not with industry. Additionally, AANDC should be working with the territory of Nunavut, Department of Economic Development and Transportation, to improve the benefit agreement process for territorial residents. As part of the policy development process for oil and gas development in the territory, the government of Nunavut needs to have established clear objectives for attaining benefits through project development that in addition to fiscal arrangement, can increase infrastructure, training, capacity and the skills of territorial residents.

To meet the federal policy objectives of economic diversification and sustainable development, Nunavut's oil and gas policy should recognize the importance of other industries including those of significant cultural importance. In this regard, the use of a SEA in areas of interest for offshore

exploration and development will allow for an investigation of important environmental, social, and economic considerations. In addition, this process provides the opportunity to engage stakeholders and Inuit organizations like QIA that represent thousands of citizens in the territory. Organizations like QIA that have expressed serious concerns about the future of the offshore industry in their region have an influence over the outcomes of proposed projects. Finally, SEA is also an opportunity to integrate IQ into the decision-making process. Following the rules established by the NLCA, IQ should form a part of the decision-making process for offshore development in Nunavut from the get-go.

Finally, the federal government has a responsibility to help Nunavut gain its administrative independence as a territory. This is necessary for the wellbeing of the citizens of Nunavut. Nunavut is now the only territory that does not have the authority to administer its own lands and resources. Part of this problem is a result of the territorial government's lack of institutional capacity. It should be the responsibility of Nunavut to plan for resource development in its jurisdiction and to communicate and facilitate the advancement of its plans with the approval of the citizens residing within its boundaries. It is without question that the impacts of oil and gas exploration and development offshore will have impacts on territorial residents. The federal government must consider how meeting its obligations to the territorial government and its residents can be better achieved through the inclusion of Inuit and territorial governance institutions within the regulatory regime for offshore Nunavut. As an example, utilizing the institutions created through the land claims process is a means to engage both stakeholders and decision-makers in the territory. Completing the establishment of the Marine Council (composed of the NWB, NWMB, and NIRB) is a worthwhile endeavor.

In summary, the Federal Government of Canada should work with the Territorial Government of Nunavut to accomplish the following:

1. Anticipate backlash based on public concern over potential environmental impacts;

2. Develop a strategy to communicate to the citizens of Nunavut the nature of the Canadian regime for oil and gas exploration, production and transportation;
3. Invest in Arctic scientific and technological research;
4. Work with communities to conduct an inventory of the areas of interest for potential oil and gas exploration and development using a tool like SEA;
5. Assist communities in Nunavut and designated Inuit authorities to document IQ;
6. Develop a plan to implement IQ in the policy planning process for oil and gas development;
7. Advance the devolutions process;
8. Recognize that the devolutions process in Nunavut will be unique from the other territories and anticipate potential jurisdictional issues;
9. Meet the obligations under the NLCA that have yet to be met; and
10. Strengthen Inuit governing institutions to manage resource development in the territory.

Chapter 6: Conclusion

The experiences of both Newfoundland and Labrador and Nova Scotia can contribute to the development of offshore oil and gas policy for Nunavut. Both jurisdictions, though contextually and politically different from Nunavut operate under the same regulatory environment and face some of the same political, social, and environmental challenges.

As the territory of Nunavut continues to develop its governing capacity, developing an oil and gas policy and development strategy in the coming years is of paramount importance. Although not the only means of stimulating regional growth, adopting conscientious and responsible objectives for offshore resource development and governance can have a drastic effect on the territory's economy. It has the potential to lead to the improvement of government services, increase infrastructure, and increase employment opportunities and education and training for territorial residents.

Balancing the objective of increasing industry investment in the resource sectors of the territory, while ensuring that the environment also supports the preservation of culturally significant practices is a challenge. The need to pursue and preserve the rights of the Inuit people residing in the territory also presents a challenge. It is clear that the offshore development mentality of the federal government in the Arctic is at odds with meeting this objective.

The federal government of Canada cannot continue to operate following the current regulatory and management regime arrangements without experiencing opposition from communities residing within the territory. It is bad business practice to foster an environment where communities are challenging industry in court as a result of inadequate government planning, regulatory requirements, and government support.

The objectives of the Canadian federal government and the designated regulatory bodies (NEB, CNLOPB, CNSOPB) are to transition the current offshore oil and gas regulatory regime to one that is more efficient. The government has at its disposal tools that can help advance the explorations process in Nunavut. Communities and Inuit organizations are unsatisfied with the environmental due diligence that is required for exploration permits. Inuit organizations and stakeholders have requested that the government (under the operation of AANDC) conduct a SEA to identify important environmental, socio-economic, and cultural considerations prior to advancing exploration. In addition, the Minister of Environment (coincidentally, also a Member of Parliament from Nunavut) has the authority to request that an EA be conducted for the Baffin Bay and Davis Strait region. However, as opposed to recognizing and planning for community opposition in the territory (as was experienced in Lancaster Sound), the federal government went forward with business as usual.

Instead of fostering a healthy and efficient regulatory and business environment in Nunavut, the federal government has achieved the exact opposite. To move forward with offshore oil and gas development in the territory, as was necessary in Newfoundland and Labrador and Nova Scotia, the federal government must move forward with increasing the capacity of the territorial government to administer and plan for the management of its own resources. In the time being, the federal government should also be prepared to take more responsibility for environmental planning and due diligence or face costly project delays.

Finally, it is of significant importance that both the territory through its policy development initiatives and the federal government in its current jurisdictional capacity foster more meaningful opportunities for the citizens of Nunavut to participate directly in the establishment of resource development plans for the territory. Addressing this issue is necessary for the federal government to

meet its obligations under the NLCA and the *Constitution Act, 1982*, and for the territorial government to establish the institutions expected by its citizens since Nunavut's establishment.

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