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Making Oil And Water Mix

OIL TANKER TRAFFIC ON CANADA'S WEST COAST

West Coast Tanker Traffic: The Regional and National Economic Consequences of a Prohibition

ROLAND PRIDDLE

Consequences of Banning Oil Tankers in Western Canada: Safety and Environmental Considerations

PHILIP JOHN

Legal Aspects of an Oil Tanker Ban: Bill C-211 as a Case Study

ROBERT HAGE

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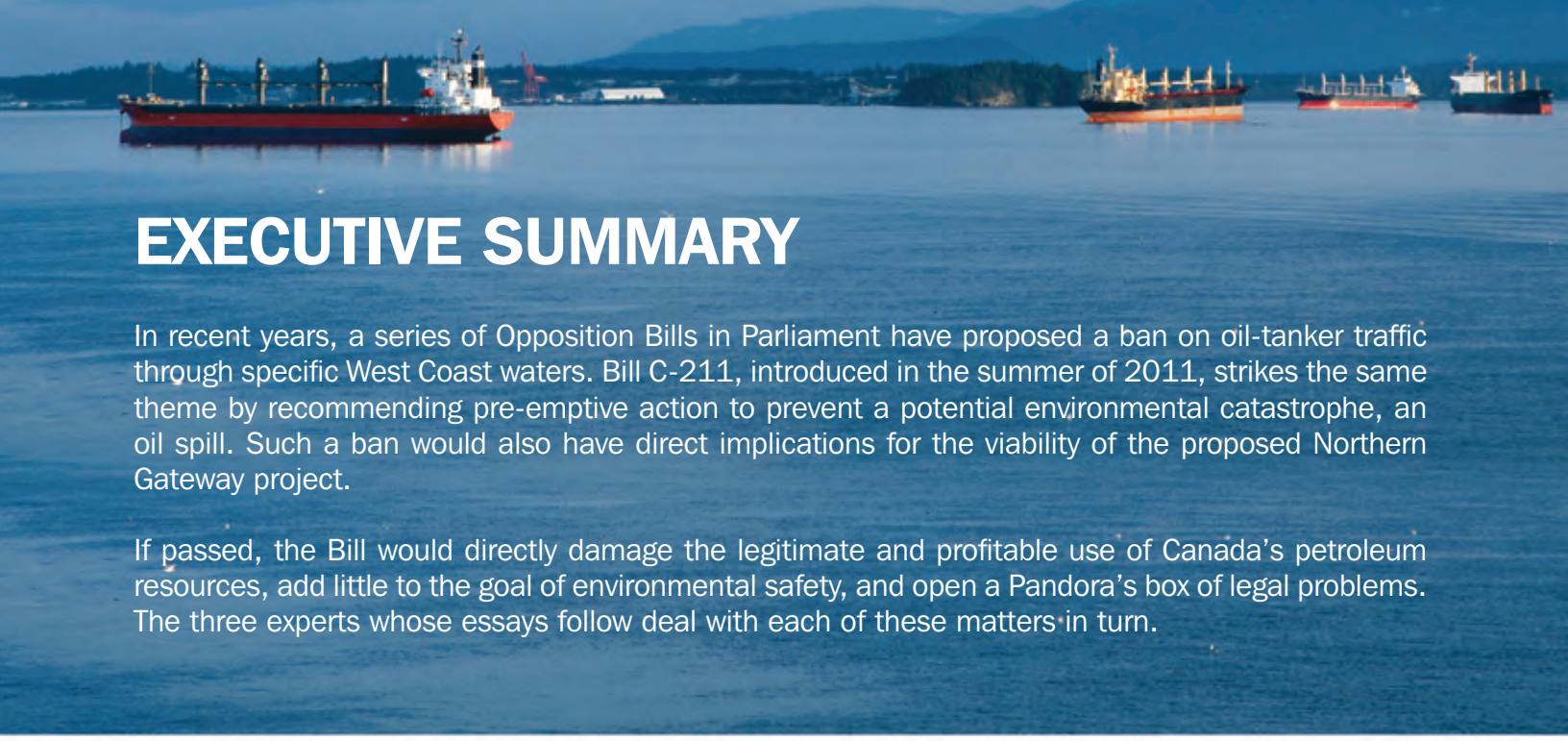


EXECUTIVE SUMMARY

In recent years, a series of Opposition Bills in Parliament have proposed a ban on oil-tanker traffic through specific West Coast waters. Bill C-211, introduced in the summer of 2011, strikes the same theme by recommending pre-emptive action to prevent a potential environmental catastrophe, an oil spill. Such a ban would also have direct implications for the viability of the proposed Northern Gateway project.

If passed, the Bill would directly damage the legitimate and profitable use of Canada's petroleum resources, add little to the goal of environmental safety, and open a Pandora's box of legal problems. The three experts whose essays follow deal with each of these matters in turn.

Canada is the only western country with the potential to significantly increase oil production.

Roland Priddle on the Economic Impact of a Ban

The 30-year economic benefits of a pipeline and port project leading to the export of some 525,000 barrels a day of oil sands products from the Pacific coast are simply staggering. Considering "first round effects" from construction, operating costs, and associated production and investment with the conservative assumption of no net increase in oil sands production, GNP increases by $270 billion, labour incomes go up by $48 billion, government revenues are greater by $81 billion, and 558,000 person years of wide-spread employment are added.

Those numbers are conservative because Canada is the only western industrialized country with the potential to significantly increase oil production in a 25-year time horizon; estimates are that output could more than double. By 2035, about 90 percent of Canada's oil output could be from the oil sands, which offer longer-term development opportunities than conventional oil fields.

Banning oil tanker traffic means forfeiting a nationally important opportunity to further develop and add balance to our trade and investment relationships with the world's largest and fastest growing economic region. Today, Canada exports oil almost exclusively to the United States, and current expectations are that the total US market for crude oil imports – into which we hope to "fit" ever growing volumes of mainly oil-sands material – will decline slowly through 2035. In the same period, China's oil imports are forecasted to triple until they substantially exceed those of the United States.

At the time of this writing, crude oil sold in the US Midwest fetched about $15 per barrel less than oil from North Sea fields. On these data, the case for diversification looks very strong, not only to reduce volatility, but to improve overall returns. Additionally, diversification counterbalances the possibility that changes in US energy policy or regulation impair access to US markets for Canadian crude oils, and may create leverage to prevent legislation that could harm Canadian industries.

Tankers are the most efficient way for Canada to transport crude oil to Northeast Asia. The unit cost of oil transportation by ocean-going tanker is much less than that by modern onshore pipeline, so northeast Asian refineries are in fact closer to the oil sands in economic terms than distant North American markets such as the US Gulf Coast. Shipping oil via

pipeline the 1150 kilometres from Edmonton to Burnaby, BC costs $3.50 per barrel, and sending that same barrel the 8000 kilometres from Kitimat, BC to Northeast Asian refineries on a tanker costs $1.50.

Then there are the entirely expectable "second round" effects of the establishment of a crude oil trade flow from Canada to Northeast Asia. The western Canadian oil industry is a giant re-investment machine. Higher oil revenues from existing production streams would lead to greater than otherwise industry investment, particularly in oil sands production and particularly by Northeast Asian players. This would entrain all of the related spread effects in terms of employment, labour revenues, and government revenues. The market value of the oil sands would be increased for its owners, the people of Alberta.

Based on the evidence so far put on the record of the public review process, there is every reason for members of parliament to want to see a thorough and fair but expeditious regulatory review leading to eventual approval of commercial initiatives that hold such enormous promise. Conversely, a ban on West Coast tanker traffic would inhibit Canada's large-volume entry into the crucial and valuable Northeast Asia crude oil market, cost Canadians hundreds of billions of dollars of lost revenue, and sacrifice tens of thousands of jobs.

Philip John on the Safety and the Environmental Impact of Oil Tankers

Since the mid-1980s, seaborne oil trade has been on the upswing to fuel the world's energy needs but, counter-intuitively, the marine environmental damage caused by oil spills has been declining. Over the last four decades, the volume of oil spills from ships has been rapidly decreasing despite growing maritime trade; only 3.5 percent of the total volume of oil spilled over the last four decades occurred in the 2000s. Canada's trade and accident statistics reflect this global trend, and in the 2000s, there was not a single tanker oil spill by a Canadian vessel. The downward trend in oil spills demonstrates superior construction and regulatory standards and a keen sense of awareness, safety, and environmental consciousness.

Ocean shipping is the most efficient mode of moving cargo over long distances based on energy consumption.

Using the designation of Marine Protected Areas and other regulatory ordinances, as well as partnerships with the private sector, the Canadian government has successfully implemented steps for the prevention of marine oil spills, along with contingency measures for preparedness, containment, and response. Canada's major oil-handling ports and the ecologically sensitive waterways leading to them are highly efficient, with extremely low-risk cargo movement procedures. All these ports and waterways have areas of environmental and ecological sensitivity within their boundaries as well as in their vicinity, which have remained pristine and unspoiled despite decades of oil-handling activity.

Compared to rail, truck, and especially air transportation, ocean shipping is the most efficient mode of moving cargo over long distances based on energy consumption. In economic terms, the typical cost to a Canadian consumer of transporting crude oil by sea on tankers from the Middle East is about half a cent per litre at the pump. From the perspectives of efficiency, productivity, cost-effectiveness, and reduced greenhouse gas emissions, the maritime mode of transportation excels compared to other modes of transportation. However, in our dynamic world of perpetual progress and development we cannot afford to rest on our laurels. The evolving needs of maritime traffic growth, technological advancement, and trade diversification call for responsible environmental stewardship in all sectors of the oil industry, promotion of Short Sea Shipping, a national policy on places of refuge for ships in need of assistance, and the establishment of a national risk assessment strategy for Canada's ports.

Banning oil tanker traffic in coastal waters will only force its delivery by other transportation, which could increase its price and exacerbate environmental risk.

Banning oil tanker traffic in coastal waters will not prevent the consumption of this essential source of energy. It will only force its delivery by other modes of transportation – an action that will increase its price and exacerbate environmental risk. The solution to the problem of potential oil spills is not to ban economic activity, but to boost responsible activity. Outright bans in fear of possible accidents without analyzing risks and returns are inherently detrimental to a healthy economy, high productivity, and efficient business operations, besides adversely affecting Canada's international reputation and standing as an economic powerhouse. Canada's status as a global role-model for responsible progress and development must be preserved. The cost, pollution, and sustainability implications of proposed bans are far too severe and the benefits far too uncertain to make it pragmatic or viable. Its adoption is not recommended.

Robert Hage on the Legal Implications

Without specifically referring to them, Bill C-211 covers five different kinds of juridical waters recognized under Canadian legislation and international law: (1) internal waters, (2) historic or historic internal waters, (3) territorial sea, (4) fishing zones, and (5) the Exclusive Economic Zone (EEZ). It is important to understand the differences between them since a coastal state's rights and obligations, as well as those of flag states whose ships might be plying these waters, vary depending on their nature.

Proposed legislation to prohibit oil tanker traffic in the area defined as Fishing Zone 3 is rife with international complications.

The laws of the coastal state apply to both internal waters and the territorial sea. Section 7 of the Oceans Act states: "For greater certainty, the internal waters of Canada and the territorial sea of Canada form part of Canada." A coastal state has complete sovereignty over internal waters. However, its sovereignty over the territorial sea is subject to the right of ships of all states, whether coastal or land locked, to "innocent passage," meaning they may peaceably pass through the territorial sea. Based on international precedent, Canada generally uses normal baselines to measure the breadth of the territorial sea, and straight baselines where the coastline is dramatically uneven.

An exception to the measurement of the territorial sea using baselines is provided in areas "over which Canada has an historic or other title of sovereignty." There are similar exceptions for "historic bays." These waters are often referred to as "historic internal waters" since a coastal state has the same unimpeded sovereignty over historic waters as it has over internal waters.

Starting in the 1950s, coastal states began to make claims for exclusive fishing zones off their coasts of "widely varying widths." In some areas, Canada started taking its own initiatives on the inner and outer limits of its maritime boundaries by drawing straight baselines (defining the waters as territorial seas) and in others, the Government drew "fisheries closing lines" to create Fishing Zones 1, 2, and 3. Bill C-211 uses Fishing Zone 3 (simply called Zone 3 in the Bill) as the prohibition area for oil tankers.

The 1982 Law of the Sea Convention created a 200 mile EEZ, beginning at the baselines and extending outward, in which the coastal state has sovereign rights over its living or non-living natural resources and with regard to any other activities regarding economic exploitation and exploration. This is balanced by the right of all states to maintain the freedoms of navigation and over flight "and other lawful uses of the sea related to these freedoms." In 1996, Canada implemented its own 200 mile EEZ, but retained the regulations that created the three Fishing Zones.

Understanding these different kinds of juridical waters and how they are determined gives an insight into the problems Bill C-211 presents. While lawful under domestic legislation, the proposed legislation to amend the Canada Shipping Act to prohibit oil tanker traffic in the area defined as Fishing Zone 3 is rife with international complications.

The Bill falls short of its purpose by opening an unnecessary dispute with the United States (and potentially other countries) on the nature of the waters in Fishing Zone 3. Canada has maintained that Zone 3's waters are historic internal waters, meaning that it has the right to entirely regulate maritime traffic. This claim is ambiguous because Canada has only drawn fisheries closing lines, creating exclusive fishing zones, instead of marking the waters with straight baselines,

which would make a clear case for defining the waters in question as internal waters where Canada has complete sovereignty. International and Canadian law do not define "historic waters," making that claim alone difficult to defend. On the face of it, the large prohibited zone would seem to be an area encompassing territorial seas with the right of innocent passage and an EEZ with freedom of navigation. Instead, in Canada's view, it is a Fishing Zone containing historic waters where these rights do not prevail.

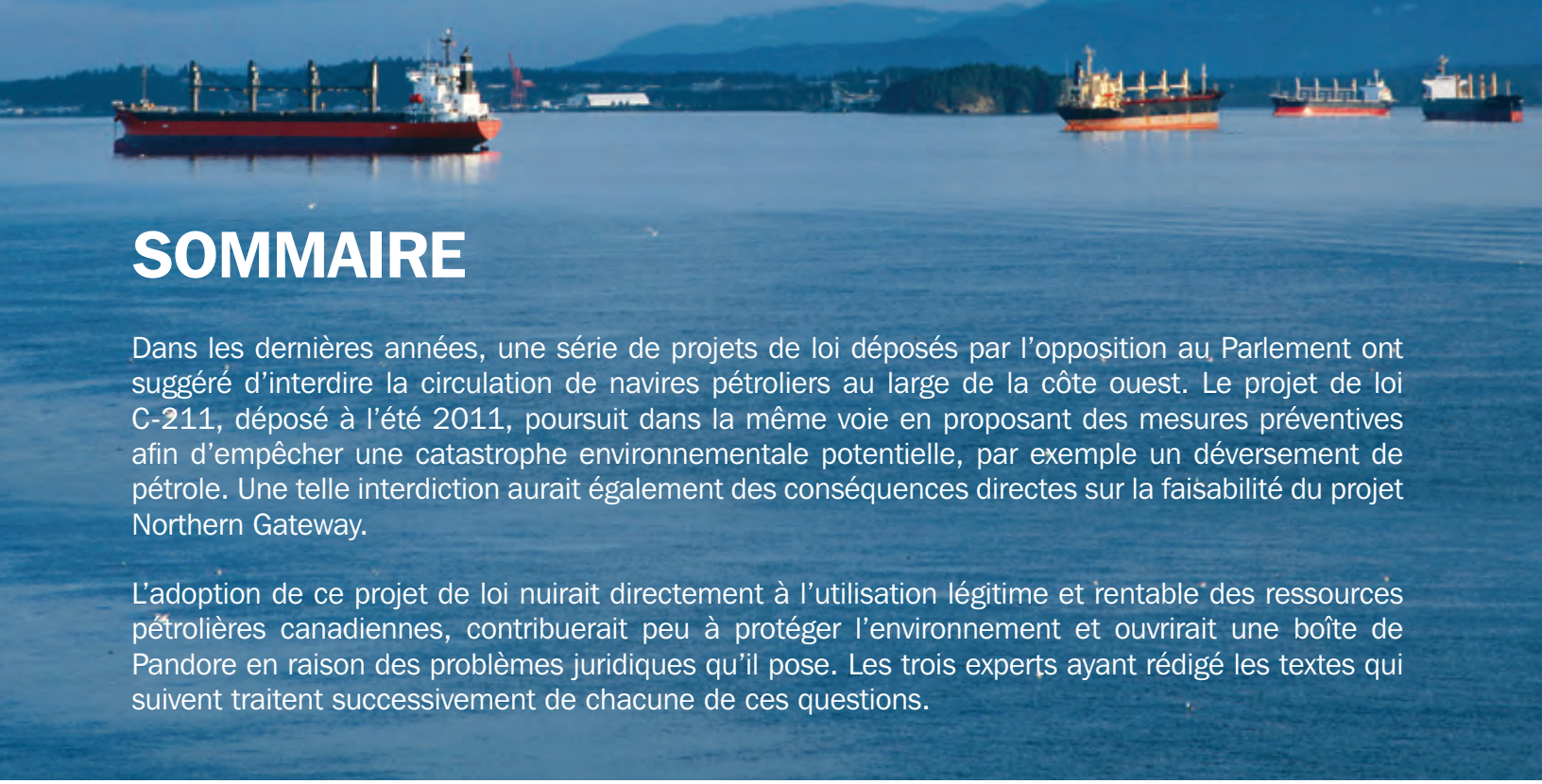
In addition, the only access to some Alaska Panhandle communities is through the disputed area, where the United States argues the waters consist of Canada's territorial sea and EEZ, areas within which its ships have internationally recognized rights. The fact that the Bill would deny the United States oil tanker access to provision its own communities, while Canada has an exception to provision its own, is a recipe for confrontation.

The only access to some Alaska Panhandle communities is through the disputed area.

Canada has no interest in provoking a fight with the United States or other members of the international community on this question. The Bill's international implications will therefore remain untested. Until Canada's western, eastern, and northern maritime boundaries with the United States are finally resolved, legislators should be wary about trying to restrict international maritime traffic off Canada's coasts.

Conclusion

According to these authors, the proposed ban on oil tanker traffic would cost Canada entry into the North Asian crude oil market, hundreds of billions in lost revenue, and tens of thousands of jobs. The ban would also force Canada to abandon an extremely safe and efficient way to transport oil – oil that then would have to be shipped by means that would increase cost and greenhouse gas emissions. Finally, the ban would undoubtedly be challenged under international law because it would seem Canada does not have the right to prohibit all passage in the area in question, and the ban would prevent the United States from supplying oil to some of their Alaska Panhandle communities. By any measure, the costs of the proposed oil tanker ban are extremely high without any corresponding benefit.



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Dans les dernières années, une série de projets de loi déposés par l'opposition au Parlement ont suggéré d'interdire la circulation de navires pétroliers au large de la côte ouest. Le projet de loi C-211, déposé à l'été 2011, poursuit dans la même voie en proposant des mesures préventives afin d'empêcher une catastrophe environnementale potentielle, par exemple un déversement de pétrole. Une telle interdiction aurait également des conséquences directes sur la faisabilité du projet Northern Gateway.

L'adoption de ce projet de loi nuirait directement à l'utilisation légitime et rentable des ressources pétrolières canadiennes, contribuerait peu à protéger l'environnement et ouvrirait une boîte de Pandore en raison des problèmes juridiques qu'il pose. Les trois experts ayant rédigé les textes qui suivent traitent successivement de chacune de ces questions.

Le Canada est le seul pays occidental qui a le potentiel d'augmenter substantiellement sa production pétrolière.

Roland Priddle à propos des conséquences économiques de l'interdiction

Les avantages économiques sur une période de 30 ans d'un projet visant la construction d'un pipeline et d'un port afin d'exporter quotidiennement 525 000 barils de produits tirés des sables bitumineux à partir de la côte Pacifique sont tout simplement stupéfiants. En tenant compte des « effets de première vague » découlant de la construction, des coûts de fonctionnement ainsi que de la production et des investissements reliés – tout en posant l'hypothèse prudente qu'il n'y aura aucune hausse nette de la production provenant des sables bitumineux –, on prévoit une croissance de 270 G$ du PNB, de 48 G$ des revenus de travail, de 81 G$ des recettes du gouvernement et de 558 000 années-personnes d'emplois dans de multiples secteurs.

Ces données sont prudentes puisque le Canada est le seul pays industrialisé du monde occidental qui a le potentiel d'augmenter substantiellement sa production pétrolière dans les 25 prochaines années. En effet, cette production pourrait plus que doubler selon les estimations. En 2035, près de 90 % de la production pétrolière canadienne pourrait provenir des sables bitumineux, qui offrent des occasions de développement à plus long terme que les gisements classiques.

Interdire la circulation de navires pétroliers équivaudrait à renoncer à une occasion déterminante sur le plan national de développer et de rééquilibrer nos relations en matière de commerce et d'investissement avec une région économique qui est à la fois la plus importante du monde et celle qui connaît la croissance la plus rapide. À l'heure actuelle, le Canada exporte la quasi-totalité de son pétrole vers les États-Unis. Cependant, d'après les dernières prévisions, le marché total d'importation de pétrole brut des États-Unis – au sein duquel on espère « placer » un volume en croissante constante de produits tirés principalement des sables bitumineux – connaîtra un déclin progressif d'ici 2035. Pendant la même période, on prévoit que les importations pétrolières de la Chine tripleront et en viendront à dépasser substantiellement celles des États-Unis.

Au moment d'écrire ces lignes, le baril de pétrole brut se vendait dans le Midwest américain à un cours inférieur d'environ 15 $ à celui du pétrole provenant des gisements de la Mer du Nord. Ces données militent grandement en faveur d'une diversification des partenaires commerciaux du Canada, non seulement pour réduire la volatilité des prix, mais aussi

pour améliorer les rendements globaux. De plus, la diversification contrebalance la possibilité que des modifications à la politique énergétique ou à la réglementation des États-Unis rendent l'accès à ce marché plus difficile pour le pétrole brut canadien. Elle pourrait également constituer un argument de poids pour éviter l'adoption de lois nuisibles aux industries canadiennes.

Les navires pétroliers sont le moyen le plus efficace de transporter le pétrole brut canadien vers l'Asie du Nord-Est. Le coût unitaire du transport de pétrole par navire de haute mer est de loin inférieur à celui des pipelines terrestres modernes. Ainsi, les raffineries de l'Asie du Nord-Est sont en réalité plus proches des sables bitumineux d'un point de vue économique que les marchés nord-américains distants comme la côte américaine du golfe du Mexique. Transporter du pétrole par pipeline sur les 1150 kilomètres qui séparent Edmonton de Burnaby (Colombie-Britannique) coûte 3,50 $ par baril, alors que transporter le même baril par navire pétrolier sur les 8000 kilomètres qui séparent Kitimat (Colombie-Britannique) des raffineries de l'Asie du Nord-Est ne coûte que 1,50 $.

Ensuite, on doit tenir compte des effets « de deuxième vague » qui découleraient certainement de l'établissement de relations fondées sur le commerce de pétrole brut entre le Canada et l'Asie du Nord-Est. L'industrie pétrolière de l'Ouest canadien est une gigantesque machine à réinvestissements. Le fait de tirer des revenus plus élevés de la production actuelle de pétrole mènerait à des investissements supérieurs dans l'industrie, particulièrement dans la production des sables bitumineux et en premier lieu par des acteurs de l'Asie du Nord-Est. Ces investissements causeraient toute une série d'effets d'entraînement sur les plans de l'emploi, des revenus de travail et des recettes du gouvernement. La valeur marchande des sables bitumineux augmenterait au bénéfice de ses propriétaires, soit les membres de la population albertaine.

Sur la base des faits mentionnés jusqu'ici dans le cadre du processus d'examen public, les députés ont toutes les raisons de souhaiter un processus d'examen réglementaire à la fois minutieux, équitable et rapide menant à l'approbation éventuelle d'initiatives commerciales si prometteuses. À l'inverse, une interdiction de circulation imposée aux navires pétroliers au large de la côte ouest freinerait la participation à grande échelle du Canada au crucial et précieux marché du pétrole brut de l'Asie du Nord-Est, mènerait à des pertes de revenus chiffrées dans les milliards de dollars pour la population canadienne et provoquerait le sacrifice de dizaines de milliers d'emplois.

> Le transport maritime est le mode le plus efficace d'expédition de marchandises sur de longues distances sur le plan de la consommation d'énergie.

Philip John à propos de la sécurité et des conséquences environnementales des navires pétroliers

Depuis le milieu des années 1980, le commerce maritime de pétrole a pris de l'expansion afin de répondre aux besoins énergétiques mondiaux. Toutefois, contrairement à ce que l'on pourrait croire, les dommages environnementaux causés par des déversements de pétrole en mer sont en déclin. Lors des quatre dernières décennies, le volume des déversements de pétrole provenant de navires a diminué rapidement, malgré la croissance du commerce maritime : à peine 3,5 % du volume total de pétrole déversé dans les quatre dernières décennies l'a été pendant les années 2000. Les statistiques canadiennes relatives au commerce et aux accidents reflètent cette tendance mondiale. Dans les années 2000, pas un seul navire canadien n'a été responsable d'un déversement de pétrole. La tendance à la baisse des déversements témoigne de normes de construction et de réglementation supérieures ainsi que d'une sensibilisation à l'importance de la sécurité et de la protection de l'environnement.

En attribuant le statut d'« aires marines protégées » à certaines régions et en adoptant d'autres mesures réglementaires, de même qu'en concluant des partenariats avec le secteur privé, le gouvernement canadien a mis en place avec succès une procédure pour éviter les déversements de pétrole maritimes ainsi que des mesures d'urgence axées sur la prévention, le confinement et l'intervention. Les principaux ports pétroliers canadiens et les voies navigables écologiquement fragiles qui y mènent sont hautement efficaces, ayant adopté des procédures de transport de cargaison à très faible risque. Tous ces ports et toutes ces voies navigables possèdent des zones fragiles d'un point de vue environnemental et écologique à l'intérieur de leurs limites et aux alentours. Celles-ci ont été préservées en parfait état malgré des décennies d'activités liées à la manutention et au transport de pétrole.

Comparativement au transport ferroviaire, routier et surtout aérien, le transport maritime est le mode le plus efficace d'expédition de marchandises sur de longues distances sur le plan de la consommation d'énergie. D'un point de vue économique, le transport de pétrole brut par navires à partir du Moyen-Orient représente un coût d'environ un demi-cent par litre à la pompe pour un consommateur canadien. En ce qui a trait à l'efficacité, à la productivité, à la rentabilité et à la réduction des émissions de gaz à effet de serre, le transport maritime excelle par rapport aux autres modes d'expédition. Cependant, dans notre monde dynamique caractérisé par un progrès et des changements perpétuels, nous ne pouvons nous permettre de rester assis sur nos lauriers. Les besoins en évolution de croissance du trafic maritime, de développement technologique et de diversification commerciale nécessitent une approche responsable de la gestion de l'environnement dans tous les secteurs de l'industrie pétrolière, une mise en valeur du transport maritime à courte distance, une politique nationale sur les refuges pour les navires en détresse ainsi que la mise en place d'une stratégie nationale d'évaluation du risque pour les ports canadiens.

Interdire la circulation de navires pétroliers dans les eaux côtières n'aurait pour effet que de rendre nécessaire le transport de pétrole par d'autres moyens, ce qui augmenterait son prix et aggraverait les risques environnementaux.

Interdire la circulation de navires pétroliers dans les eaux côtières n'empêchera pas la consommation du pétrole, une source d'énergie essentielle. Cette interdiction n'aura pour effet que de rendre nécessaire le recours à d'autres modes de transport – une mesure qui augmentera le prix du pétrole et aggravera les risques environnementaux. La solution au problème des déversements potentiels n'est pas d'interdire l'activité économique, mais de favoriser les activités responsables. Des interdictions catégoriques adoptées en raison de craintes d'accidents, sans analyser les risques et les résultats, sont fondamentalement préjudiciables à la santé d'une économie, à la productivité et à l'efficacité des activités commerciales, sans oublier le fait qu'elles nuiraient à la réputation internationale du Canada et à son statut de force économique. La réputation du Canada comme modèle de progrès et de développement responsables à l'échelle mondiale doit être maintenue. Les conséquences en matière de coûts, de pollution et de viabilité des interdictions proposées sont bien trop graves et les avantages beaucoup trop incertains pour qu'elles soient considérées comme pragmatiques ou réalisables. Leur adoption n'est pas recommandée.

Robert Hage à propos des conséquences juridiques

Sans y faire directement référence, le projet de loi C-211 couvre cinq différentes zones maritimes d'un point de vue juridique qui sont reconnus en vertu de la législation canadienne et du droit international : (1) les eaux intérieures, (2) les eaux historiques ou eaux intérieures historiques, (3) la mer territoriale, (4) les zones de pêche et (5) les zones économiques exclusives (ZEE). Il importe de bien en comprendre les différences puisque les droits et obligations d'un État côtier – de même que ceux des États du pavillon dont les navires peuvent naviguer dans ces eaux – varient en fonction de ces types de zones.

Les lois de l'État côtier s'appliquent tant aux eaux intérieures qu'à la mer territoriale. L'article 7 de la Loi sur les océans énonce : « Il est entendu que les eaux intérieures et la mer territoriale du Canada font partie du territoire de celui-ci ». Un État côtier exerce sa pleine souveraineté sur ses eaux intérieures. Toutefois, sa souveraineté quant à la mer territoriale est sujette au droit « de passage inoffensif » des navires de tous les États, qu'ils soient riverains ou sans littoral, ce qui signifie qu'ils peuvent la traverser pacifiquement. Conformément à la jurisprudence internationale, le Canada utilise généralement des lignes de base normales pour déterminer la largeur de la mer territoriale et des lignes de base droites aux endroits où la ligne de côte est très inégale.

Une exception au recours aux lignes de base pour déterminer les limites de la mer territoriale s'applique dans un espace maritime « sur lequel le Canada a un titre de souveraineté historique ou autre ». Il existe des exceptions semblables pour les « baies historiques ». Ces eaux sont souvent désignées comme étant des « eaux intérieures historiques » puisqu'un État côtier y exerce sa pleine souveraineté comme pour les eaux intérieures.

À partir des années 1950, les États côtiers ont commencé à revendiquer des zones de pêche exclusives « de largeurs très différentes » au large de leur côte. Dans certaines régions, le Canada a décidé de prendre l'initiative de déterminer les limites intérieures et extérieures de ses frontières maritimes en tirant des lignes de base droites (désignant les eaux

comme faisant partie de la mer territoriale) et dans d'autres cas, le gouvernement a établi des « lignes de fermeture des pêches » pour créer les zones de pêche 1, 2 et 3. Le projet de loi C-211 utilise la zone de pêche 3 (appelée simplement zone 3 dans le projet de loi) comme espace interdit aux navires pétroliers.

La Convention sur le droit de la mer de 1982 a créé une ZEE de 200 milles marins, commençant aux lignes de base et s'étendant au large, au sein de laquelle l'État côtier exerce des droits souverains quant aux ressources naturelles biotiques ou non biotiques et par rapport à toute activité économique d'exploitation ou d'exploration. Ces droits sont contrebalancés par ceux de tous les États de continuer de jouir des libertés de navigation et de survol ainsi que de « la liberté d'utiliser la mer à d'autres fins internationalement licites liées à l'exercice de ces libertés ». En 1996, le Canada a mis en place sa propre ZEE de 200 milles marins, mais a conservé le décret ayant créé les trois zones de pêche.

Comprendre la nature juridique de ces différents types d'eaux et la manière dont elle est établie permet de prendre conscience des problèmes causés par le projet de loi C-211. Bien que conforme à la législation canadienne, la proposition de modifier la Loi sur la marine marchande du Canada pour interdire la circulation de navires pétroliers dans la région définie comme étant la zone de pêche 3 est susceptible de causer de multiples problèmes à l'échelle internationale.

La modification législative proposée afin d'interdire la circulation de navires pétroliers dans la région définie comme étant la zone de pêche 3 est susceptible de causer de multiples problèmes à l'échelle internationale.

Le projet de loi ouvre la porte à un conflit inutile avec les États-Unis (et peut-être avec d'autres pays) quant à la nature des eaux de la zone de pêche 3. Le Canada prétend que les eaux de la zone 3 sont des eaux intérieures historiques et qu'il a donc pleinement le droit d'y réglementer le trafic maritime. Cette revendication est incertaine puisque le Canada a seulement établi des lignes de fermeture des pêches plutôt que de tirer des lignes de base droites, ce qui aurait donné un argument solide afin de définir les eaux en question comme des eaux intérieures sur lesquelles il exerce sa pleine souveraineté. Ni le droit international, ni le droit canadien ne définissent le concept d'« eaux historiques », ce qui rend une revendication sur cette base difficile à défendre. À première vue, la vaste zone d'interdiction semble être une région incluant la mer territoriale (impliquant le droit de passage inoffensif) et une ZEE (conférant la liberté de navigation). Le Canada est plutôt d'avis qu'il s'agit d'une zone de pêche formée d'eaux historiques où ces droits ne s'appliquent pas.

De plus, la région en litige est la seule voie d'accès à certaines communautés de la péninsule de l'Alaska. Les États-Unis soutiennent que ces eaux font partie de la mer territoriale ainsi que de la ZEE du Canada et que les navires américains y possèdent par conséquent des droits reconnus à l'échelle internationale. Le fait que le projet de loi interdirait l'accès des navires pétroliers des États-Unis à ses propres communautés, alors que le Canada jouit d'une exception pour approvisionner son propre territoire, risque fort de causer des conflits.

Le Canada n'a aucun intérêt à provoquer un litige avec les États-Unis ou avec d'autres membres de la communauté internationale à ce sujet. Les conséquences internationales du projet de loi resteront donc théoriques. Jusqu'à ce que la détermination des frontières maritimes occidentales, orientales et nordiques du Canada soit finalement réglée avec les États-Unis, les législateurs devraient être prudents lorsqu'il est question de restreindre le trafic maritime international près des côtes canadiennes.

Conclusion

Selon ces auteurs, l'interdiction de circulation proposée pour les navires pétroliers empêcherait le Canada de participer au marché du pétrole brut de l'Asie du Nord-Est et causerait la perte de centaines de milliards de dollars de revenus ainsi que de dizaines de milliers d'emplois. Une telle interdiction forcerait aussi le Canada à abandonner une méthode extrêmement sécuritaire et efficace de transporter du pétrole, qui devrait autrement être transporté d'une façon plus coûteuse et émettant davantage de gaz à effet de serre. Finalement, l'interdiction serait sans aucun doute contestée en vertu du droit international puisqu'il semble que le Canada n'ait pas le droit d'interdire toute circulation dans la région en cause et que cette mesure empêcherait les États-Unis d'approvisionner en pétrole certaines de ses communautés de la péninsule de l'Alaska. À tous points de vue, les coûts de l'interdiction de circulation proposée pour les navires pétroliers sont extrêmement élevés, et ce, sans avantages équivalents.

West Coast Tanker Traffic: The Regional and National Economic Consequences of a Prohibition

ROLAND PRIDDLE

Summary

Northeast Asia's growing oil demand gives Canada a valuable opportunity to expand and diversify its export market. Plans to build a pipeline from Alberta to the West Coast are in place, and plans to ship the oil by tanker to Northeast Asia are being challenged by bills and other initiatives threatening to ban crude oil tanker traffic from the coast of British Columbia (BC).

Asia's growing oil demand gives Canada a valuable opportunity to expand and diversify its export market.

The 30-year economic benefits of a pipeline and port project leading to the export of some 525,000 barrels a day of oil sands products from the Pacific coast are simply staggering. Considering "first round effects" from construction, operating costs, and associated production and investment with the conservative assumption of no net increase in oil sands production, GNP increases by $270 billion, labour incomes go up by $48 billion, government revenues are greater by $81 billion, and 558,000 person years of wide-spread employment are added.

Those numbers are conservative because Canada is the only western industrialized country with the potential to significantly increase oil production in a 25-year time horizon; estimates are that output could more than double. By 2035, about 90 percent of Canada's oil output could be from the oil sands, which offer longer-term development opportunities than conventional oil fields.

Banning oil tanker traffic means forfeiting a nationally important opportunity to further develop and add balance to our trade and investment relationships with the world's largest and fastest growing economic region. Today, Canada exports oil almost exclusively to the United States, and current expectations are that the total US market for crude oil imports – into which we hope to "fit" ever growing volumes of mainly oil-sands material – will decline slowly through 2035. In the same period, China's oil imports are forecasted to triple until they substantially exceed those of the United States.

At the time of this writing, crude oil sold in the US Midwest fetched about $15 per barrel less than oil from North Sea fields. On these data, the case for diversification looks very strong, not only to reduce volatility, but to improve overall returns. Additionally, diversification counterbalances the possibility that changes in US energy policy or regulation impair access to US markets for Canadian crude oils, and may create leverage to prevent legislation that could harm Canadian industries.

Tankers are the most efficient way for Canada to transport crude oil to Northeast Asia. The unit cost of oil transportation by ocean-going tanker is much less than that by modern

onshore pipeline, so northeast Asian refineries are in fact closer to the oil sands in economic terms than distant North American markets such as the US Gulf Coast. Shipping oil via pipeline the 1150 kilometres from Edmonton to Burnaby, BC costs $3.50 per barrel, and sending that same barrel the 8000 kilometres from Kitimat, BC to Northeast Asian refineries on a tanker costs $1.50.

Then there are the entirely expectable "second round" effects of the establishment of a crude oil trade flow from Canada to Northeast Asia. The western Canadian oil industry is a giant re-investment machine. Higher oil revenues from existing production streams would lead to greater than otherwise industry investment, particularly in oil sands production and particularly by Northeast Asian players. This would entrain all of the related spread effects in terms of employment, labour revenues, and government revenues. The market value of the oil sands would be increased for its owners, the people of Alberta.

The National Energy Board is engaged in a rigorous, public examination of the Enbridge Northern Gateway Project. A Joint Review Panel (JRP), pursuant to the Canadian Environmental Assessment Act, reviews the environmental effects likely to result from the project and the appropriate mitigation measures. In this particular case, the scope of the project under review by the JRP includes the related pipelines, the tank and marine terminal at Kitimat, and marine transportation within defined areas that include Hecate Strait. Due to the already strenuous safety measures in place, there is no basis for action by the Parliament of Canada to impede crude oil shipments from any part of coastal British Columbia. Quite the contrary; on the evidence so far put on the record of the public review process, there is every reason for members of parliament to want to see a thorough and fair but expeditious regulatory review leading to eventual approval of commercial initiatives that hold such enormous promise. Conversely, a ban on West Coast tanker traffic would inhibit Canada's large-volume entry into the crucial and valuable Northeast Asia crude oil market, cost Canadians hundreds of billions of dollars of lost revenue, and sacrifice tens of thousands of jobs.

Tankers are the most efficient way for Canada to transport crude oil to Northeast Asia.

I Introduction

Tanker traffic has been part of economic life on Canada's West Coast for more than a century. Currently, commercial initiatives are underway to provide large-volume pipeline transportation of mainly oil sands products from Alberta to the West Coast ports of Kitimat and Vancouver for shipment by tanker to Northeast Asia's growing markets. Opposition to these initiatives focuses mainly on the possible marine environmental consequences of an operational failure and has resulted in proposals that would prohibit crude oil tanker traffic on all or part of the West Coast. Specifically, there are Liberal and NDP private member's bills relating to tankers on the north coast of British Columbia currently before the Parliament of Canada. The Green Party of Canada wants tankers to be banned from the south coast too and this position is supported by some environmental groups.[1]

The potential consequences of prohibiting oil tanker traffic on the West Coast include removing an opportunity for Canada to diversify trade and devastatingly high costs in terms of lost income, tax revenues, and jobs.

BACKGROUND

The petroleum industry is a key driver of the Canadian economy as a whole, and particularly of numerous regional economies. Estimated contributions of this sector over the next 25 years include $3.6 trillion in gross domestic product, 25 million person years of employment, and over $1.1 trillion in net revenues for the federal and provincial governments. The net wealth associated with just the oil sands component of the industry is estimated at almost $1.5 trillion, equivalent to about $44,000 for each Canadian or roughly 18 percent of Canada's entire tangible wealth.[2]

In an era of potential resource scarcity, the national importance of this industry can hardly be overestimated: Canada is the only western industrialized country with the potential to significantly increase oil production in a 25 year time horizon.[3] Government and industry estimates are that output could more than double within 20-plus years from now.[4]

THE OIL SANDS

By 2035, about 90 percent of Canada's oil output could be from the oil sands. This petroleum resource, gigantic on a global scale,[5] has been longer studied and is better understood than possibly any other of comparable size. It is managed by the Government of Alberta on behalf of its owners, the people of the province, regulated by one of the world's premier upstream agencies which has been in business for 75 years, and has been successfully commercialized for 45 years.

The oil sands are a capital, technology, and skilled labour intensive business with a strong record of creating employment and business opportunities, including for Aboriginal peoples.[6] There is an 80 year history of remarkable technical progress in extraction, processing, and restoration. The value of oil sands output has grown phenomenally in the past 20 years – Statistics Canada reports a 23-fold increase in the period 1990-2009.[7] The industry is subject to sweeping environmental review, regulation, and monitoring from inception to abandonment and site-restoration. It attracts worldwide investor interest from such countries as China, France, Japan, Korea, the Netherlands, Norway, Thailand, the United Kingdom, and the United States.

Almost half of global oil demand growth in the next five years will come from China.

Another value of the oil sands is the increased time horizon they offer. In contrast with conventional oil fields that typically go into decline within a few years of coming on stream and are completely depleted in less than two decades, oil sands production has a very long and "flat" production curve. This is not a "mine out the ore body and move on" industry, leaving behind ghost towns.[8] The world's first commercial-scale oil sands plant near Fort McMurray, Alberta was commissioned in 1967 and is still going strong. Governments, municipalities, developers, and local populations can therefore think and plan in terms of 50 years rather than 10.

The availability of markets has been an issue since the start of oil sands exploitation. It is going to be critical in a situation where the growth in Canadian oil sands supply will increase by 150 percent to some five million barrels a day available for export by 2035.[9] Canada will be competing against the rest of the world for a growing share of a shrinking US import market. Unique among the world's major oil producers, Canada's exports are still focused on one foreign jurisdiction, the United States.[10] That market is large, varied, and has been historically reliable. Looking ahead, American authorities expect total US consumption of liquid fuels, including fossil fuels (oil) and biofuels (for example ethanol from corn), to rise from about 18.8 million barrels per day in 2009 to 21.9 million barrels per day in 2035. However, the import share, which reached 60 percent in 2005 and 2006 before dropping to 51 percent in 2009, falls to 42 percent in 2035.[11]

Moreover, US national policy seems equivocal on oil sands. Witness the drawn-out saga involved in obtaining presidential permission for TransCanada's Keystone XL pipeline, which is intended to link Canadian crude oil with the largest refining markets in the United States, including Port Arthur, Texas on the Gulf Coast. At the state level, policy in some cases is directed against products derived from the oil sands. California Law AB32 in the *Global Warming Solutions Act (2006)* discourages California refiners from using oil sands crude oils. In the absence of this legislation, refineries in California would represent a logical market for western Canadian crude oils.[12]

Photo Credit: Josh Lopez

By contrast, the Northeast Asia market is still growing and hungry for secure oil supplies from diverse sources.[13] The creation of new arteries to carry Canadian crude oil to the West Coast would approximately double the absolute size of the potential markets available to Canadian oil and would also enable this country for the first time to share in the "Asia premium" charged by the Mideast national oil companies for

crude cargos destined for Asia.[14] Consider China, the world's second largest economy and biggest energy consumer: Chinese oil fields are aging, their reserves-to-production ratios are low, and domestic oil production is nearing its peak. As a result, the country is almost entirely dependent on the international oil market to meet incremental oil demand. According to research by the International Energy Agency (IEA), almost half of global oil demand growth in the next five years will come from China.[15] The Agency bluntly asserts that "it is hard to overstate the importance of China in global energy markets."[16]

The unit cost of oil transportation by ocean-going tanker is much less than that by modern onshore pipeline, so northeast Asian refineries are in fact closer to the oil sands in economic terms than distant North American markets such as the US Gulf Coast.[17] To illustrate: the 2011 pipeline toll for heavy crude oil shipped about 1150 kilometres from Edmonton to Burnaby, BC is some $3.50 per barrel.[18] The forecasted 2016 toll for term shippers by the proposed 1172 kilometre Northern Gateway pipeline from the Edmonton area to Kitimat, BC is of the same order of magnitude, namely about $3.20. At depressed third quarter 2011 spot tanker rates but high bunker fuel prices, the same barrel of oil could be transported some 8000 kilometres from Vancouver to northeast Asia for about $1.50. The forecasted cost of the 2016 shipment of that barrel from Kitimat to northeast Asian refineries is in the range of $2.85-3.25.[19]

> The main reason to diversify is to reduce the risk of having all of one's eggs in the same basket.

II Consequences of a West Coast Tanker Ban

What then would be the knowable consequences of a ban on crude oil tanker traffic affecting upwards of half a million barrels daily of Canada's oil sands products?

AN IMPORTANT NATIONAL OPPORTUNITY TO DIVERSIFY OUR TRADE WOULD BE FOREGONE

Canada's longstanding trade policy objective of diversification dates from at least the Diefenbaker era and is already achieved in terms of other minerals, but would be frustrated in respect to oil, our largest and most important mineral resource. The main reason to diversify is, in simple terms, to reduce the risk of having all of one's eggs in the same basket. According to modern portfolio theory, diversifying one's investment portfolio helps spread risks between countries, currencies, and markets. Moving from a concentrated portfolio to a diversified one can produce the same returns for less risk. The key to reducing risks for the same return is that the more diversified portfolio contains assets that do not behave exactly alike, and so when one falls, another can offset it. Though the analogy is imperfect, one can apply this same reasoning to a country's oil export portfolio. An export mix diversified across regions in which imports do not follow exactly the same path should result in lower volatility for a given rate of growth, compared with a concentrated export mix.[20]

Banning oil tanker traffic means forfeiting a nationally important opportunity to further develop and add balance to our trade and investment relationships with the world's largest and fastest growing economic region. A current survey finds that Canadians engaged in Asia are convinced that a global power shift towards Asia is happening, and feel Canada needs to be engaged in the region if it hopes to play a role in global affairs. Strategically, they see Canada's engagement in Asia as a means for Canada to insert itself in the power shift that will likely affect global affairs over the next century. Canada's involvement in Asia has real potential to reframe Canada's relations with the United States, maturing the relationship to the point where Canada is prepared to assert and pursue its own strategic interests in Asia and where it builds relevance with the Americans because of (rather than in spite of) its relations in Asia.[21] A tanker ban would prevent Canada from inserting itself in that power shift with a new multi-billion dollar oil trade stream.

This positive view of trade diversity is widely shared. Consider the following:

In 2003, the Standing Senate Committee on Foreign Affairs stated, "The Committee is convinced of the importance of a strong trade relationship with the U.S. but is also of the view that Canada would be better off if its trade dependence on its single largest market to the south was reduced. This does not mean that our trade with the U.S. should stop growing but rather that trade with other countries should expand at a higher rate."[22]

In the June 2011 Speech from the Throne, the newly-elected Conservative Government pledged "to continue opening new markets for Canadian businesses in order to create good new jobs for Canadian workers."[23] A West Coast tanker ban would prevent the opening of new markets for one of our premier mineral products.

A report by Ernst and Young in August 2011 asserts "Canada's oil sands are emerging at the centre of global growth as new industry players look to replace reserves", but goes on to say that "sustaining demand is not without its challenges" which include the need to look further afield for customers as the United States begins to look for ways to reduce its dependence on foreign supplies.[24]

Our dependence on the United States for oil exports exposes Canada to changing energy and environmental policies, shifts in oil markets, and uncertain oil price relationships. Because of these uncertainties, projects that would give Canada large-volume access to Northeast Asian markets create value for the Canadian oil producing industry in terms of diversification, stabilization, "real option," and insurance benefits. These important positives would be lost as a result of a tanker ban.

Estimated benefits include $270 billion in additional GDP, $82 billion in taxes, and 558,000 person years of employment.

Canada might stay "lucky" and the US market will accept increasing volumes of Canadian oil on terms as favourable as the Northeast Asian one. But present expectations are that the total US market for crude oil imports – into which we hope to "fit" ever growing volumes of mainly oil-sands material – will decline slowly through 2035.[25] In the same period, China's oil imports are forecasted to triple until they substantially exceed those of the United States.[26] At the time of this writing, crude oil sold in the US Midwest fetches some $25 per barrel less than oil in the eastern hemisphere.[27] On these data, the case for diversification looks very strong, not only to reduce volatility, but to improve overall returns.

In the context of new or enlarged West Coast oil ports, there are three particularly important elements from a Canadian public interest perspective.

FIRST, in the event US federal or state energy policies or US regulation changes and, intentionally or unintentionally, impairs access to some or all US markets for Canadian crude oils, access to Asia Pacific markets could provide a counterbalance by adding flexibility.

SECOND, the existence of the West Coast shipment option would provide important leverage in achieving changes to such limiting policies or regulations, helping to reduce the negative impacts on the Canadian oil sector. Indeed, this option may also allow the exertion of leverage in obtaining exemptions or changes to protectionist US policies or regulations that might affect Canadian industrial sectors other than crude oil.

THIRD, policy and regulatory issues aside, most of the expected growth in oil demand will be in markets not currently accessible to a significant degree by Canadian producers. Combined with an expected increase in netback prices arising from access to the new markets, this would provide both an incentive for increased oil production from existing reserves and an attraction for investment capital to search out, develop, and produce new reserves.

In sum, by reducing the uncertainties faced by Canadian oil producers in maintaining or gaining access to markets at prices based on competitive international oil trading, provision of access to Asia Pacific markets will add substantial option or insurance value to the Canadian oil producing sector. This value may be difficult to quantify but it is nonetheless real and important.[28]

ENORMOUS TANGIBLE NATIONAL, REGIONAL, AND SECTORAL BENEFITS WOULD BE LOST

The 30-year economic benefits of a pipeline and port project leading to the export of some 525,000 barrels a day of oil sands material from the Pacific coast are simply staggering. Considering "first round effects" under the conservative assumption of no net increase in oil sands production, gross national product increases by $270 billion, labour incomes go up by $48 billion, government revenues are greater by $81 billion, and 558,000 person years of wide-spread employment are added.[29]

The main sources of these benefits are as follows:

FIRST, the impacts arising from the construction expenditures associated with the proposed new pipelines and related facilities, including a new West Coast oil port.

SECOND, the impacts arising from the annual operating expenditures associated with the functioning of the pipelines and related facilities such as the storage terminal, port, and associated marine activities on the coast.

THIRD, the impacts arising from the expected increase in revenues to oil producers associated with gains in the netback prices on Canadian oil production, after deducting all increases in transportation costs and after deducting the increased costs of oil going to Canadian refineries as a result of the higher oil prices.

FOURTH, the impacts arising from reinvestment of a portion of the incremental oil revenues in the energy sector (based on historical patterns) and from the associated gains in production.

Benefits are indisputable certainties. The costs are possibilities.

A tanker ban would forego all these benefits.

This summary of the consequences of a tanker ban of course overlooks the entirely expectable "second round" effects of the establishment of a crude oil trade flow from Canada to Northeast Asia. The western Canadian oil industry is a giant re-investment machine. Higher oil revenues from existing production streams would lead to greater than otherwise industry investment, particularly in oil sands production and particularly by Northeast Asian players. This would entrain all of the related spread effects in terms of employment, labour revenues, and government revenues. The market value of the oil sands would be increased for its owners, the people of Alberta.

All this would be sacrificed to a tanker ban.

THE UNSEEN HUMAN DIMENSION OF A TANKER BAN

A West Coast port and pipeline project – like virtually every industrial activity – poses environmental risks for our society. Some people self-identify as risk bearers and consider the potential costs to be unacceptable. We see their faces and hear their voices very clearly in the TV camera's eye, the sympathetic newspaper report, and the radio sound bite.

The project also creates broad benefits for our society. Most of the recipients of those benefits don't self-identify: they cannot draw a line between the project and their welfare. As a result we shall never see through the TV camera's lens the Aboriginal youth who stands to get an apprenticeship, the elderly candidate for hip-surgery whose waiting-time could be shortened, or the academic whose research might receive funding.

These benefits are indisputable certainties. The costs are possibilities. The costs can be mitigated: state of the art engineering reduces already low risks;[30] the consequences of risks that materialize are limited by response preparation; and costs that remain are addressed by insurance.

III What Should Parliament Do?

What then should be the position of members of parliament faced with bills to ban crude oil tanker movements on the north coast and political initiatives which would have the same effect on the south coast of British Columbia?

More than 50 years ago, the Parliament of Canada decided that the determination of the public interest with respect to interprovincial projects such as these should be made by an independent, expert tribunal, the National Energy Board, and that if the tribunal's finding were positive, they should be subject to the ultimate approval of the Governor in Council.

The National Energy Board is now engaged in an intense and extended fact-based, on-the-record, critical public examination of the Enbridge Northern Gateway Project. This is being done in the context of a Joint Review Panel (JRP), which, pursuant to the Canadian Environmental Assessment Act, reviews the environmental effects likely to result from the project and the appropriate mitigation measures.

In this particular case, the scope of the project under review by the JRP includes the related pipelines, the tank and marine terminal at Kitimat, and marine transportation within defined areas that include Hecate Strait.[31]

Separately, marine safety aspects will also be examined in a TERMPOL review process,[32] which will be coordinated by Transport Canada.

As to exports from the Westridge (Vancouver) dock of Trans Mountain Pipeline,[33] the National Energy Board in 2006, after a full public hearing and with the approval of the Governor in Council, authorized an expansion of the pipeline facilities of Trans Mountain.[34] This was explicitly driven in part by the potential for increased consumption of Canadian crude oil in Asian markets.[35]

In this light, there is no basis for action by the Parliament of Canada to impede crude oil shipments from any part of coastal British Columbia. Quite the contrary; on the evidence so far put on the record of the public review process, there is every reason for members of parliament to want to see a thorough and fair but expeditious regulatory review leading to eventual approval of commercial initiatives that hold such enormous promise. Conversely, a ban on West Coast tanker traffic would inhibit Canada's large-volume entry into the crucial and valuable northeast Asia crude oil market, cost Canadians hundreds of billions of dollars of lost revenue, and sacrifice tens of thousands of jobs.

Endnotes

1 Bill C-211 (Finn Donnelly, NDP, New Westminster-Coquitlam) received first reading on 14 June 2011. The text is available at http://www.parl.gc.ca/HousePublications/Publication.aspx?Docid=5088572&file=4.

Also Bill C-606 from the 40th Parliament (Joyce Murray, Liberal, Vancouver Quadra) which was given first reading 14 December 2010 and is now before the 41st Parliament. The text is at http://www.parl.gc.ca/HousePublications/Publication.aspx?Docid=4885482&file=4.

These bills would both prohibit crude oil tanker traffic on the North Coast of British Columbia, specifying Dixon Entrance, Hecate Strait, and Queen Charlotte Sound. However, the federal Green Party of Canada is calling for a legislated ban on bulk oil tankers along Canada's entire Pacific Coast; see http://greenparty.ca/media-release/2011-02-25/greens-defend-bc-north-coast-oil-tanker-ban. Greenpeace is among the environmental NGOs which support such a ban; see http://www.greenpeace.org/canada/en/campaigns/tarsands/Get-involved/Keep-our-coast-clear-Legally-ban-oil-tanker-traffic-from-Canadas-West-Coast/.

2 Wright Mansell Research Ltd. 2010. *Public Interest Benefits of the Northern Gateway Project.* 4-5. This report is appendix B to Volume 2, *Economics, Commercial and Financing,* of Enbridge Northern Gateway's Application to the National Energy Board for a Certificate of Public Convenience and Necessity. Volume 2 is available at https://www.neb-one.gc.ca/ll-eng/livelink.exe/fetch/2000/90464/90552/384192/620327/624798/619886/B1-4_-_Vol_2_–_Gateway_Application_–_Economics,_Commercial_and_Financing_(Part_1_of_1)_-_A1S9X7_.pdf?nodeid=619772&vernum=0.

3 In the view of the International Energy Agency (IEA) three non-members of the Organization of Petroleum Exporting Countries (OPEC) have the capability to substantially increase their oil production: Brazil, Canada, and Kazakhstan. Nobuo Tanaka, Executive Director, IEA. Presentation of the IEA's World Energy Outlook, 2010, Jakarta, 22 November 2010. The US Energy Information Administration's (EIA's) 2011 Annual Energy Outlook (AEO) projects that the country's oil production will recover from a low point of about 5 million barrels daily in 2008 to around 6 million by 2015 and remain at about that level through 2035. The text of the 2011 AEO is available at http://www.eia.gov/forecasts/aeo/pdf/0383(2011).pdf.

See under the heading "Crude Oil Supply" at page 82. Note that oil sands are "established reserves" while the resources of the Alaska North Slope, the Gulf of Alaska, etc. are speculative and are therefore not included in the Energy Information Administration's projections to 2035.

4 National Energy Board (NEB). 2011. *Canada's Energy Future: Energy Supply and Demand Projections to 2035,* An Energy Market Assessment, page 16, *Canadian Crude Oil Production Outlook.* The most recent oil outlook prepared by Natural Resources Canada is dated December 2007 and extends to 2020 when Canadian oil production is projected to be about 3.7 million barrels daily; see http://www.nrcan.gc.ca/eneene/sources/crubru/outape-eng.php. The difference compared with later forecasts is probably related to changed expectations regarding oil prices and the incentive they provide for oil production. The Energy Resources Conservation Board (ERCB) forecasts in 2011 that Alberta oil production will exceed 4.5 million barrels a day in 2020. Alberta produces nearly three-quarters of total Canadian crude oil and equivalent; see http://www.ercb.ca/docs/products/STs/st98_current.pdf. Northern Gateway responding to an information request of the Joint Review Panel projects western Canadian crude oil production in 2035 to be 6.242 million barrels daily; see https://www.neb-one.gc.ca/ll-eng/livelink.exe/fetch/2000/90464/90552/384192/620327/624798/707580/B31-3_-_Attachment_JRP_IR_2.2(a)_-_Supply_Forecast_through_2035_-_A2C2V6?nodeid=707801&vernum=0.

5 NEB's staff presentation, May 2011, slide 35. Remaining reserves, in billions of barrels: Saudi Arabia – 260, Venezuela – 211, Canada – 175, of which 98% is oil sands.

6 Aboriginal people are benefitting from oil sands projects. For example, in 2009, there were more than 1600 Aboriginal employees in permanent oil sands operations jobs in northeast Alberta. This figure does not include construction-related jobs. Many major oil sands companies have Aboriginal employment policies to recruit local residents. About 10 percent of the oil sands workforce is Aboriginal. From 1998 to 2009, Aboriginal-owned companies secured $3.7 billion worth of contracts from oil sands companies in the region. This includes $810 million in 2009 alone; see http://www.oilsands.alberta.ca/aboriginalpeople.html. The Fort McKay Group of six companies, completely owned by the Fort McKay First Nations, works extensively with oil sands companies, resulting in more than $100 million in annual revenue; see http://www.fortmckaygroup.com/. The Primco Dene Group owned by the Cold Lake First Nations provides catering, emergency services, and security for oil and gas companies operating in Cold Lake, the largest heavy oil production area outside of the Athabasca oil sands and, incidentally, the largest *in situ* oil sands operation in the world; see http://www.primcodene.com/news.php. The Athabasca Chipeywan First Nations Business Group, which employs 1400 people, has a similar story in the greater Fort McMurray area, the centre of the oil sands industry; see http://acfnbusinessgroup.com/.

As to oil industry relations with Aboriginals, "Suncor was ranked first with several joint ventures and buy-local policies and was the only oil and gas company with an Aboriginal member on its board of directors." Suncor is the largest oil sands producer in Canada. TD Economics, June 2011 citing reports by the Canadian Council for Aboriginal Business and Corporate Knights Aboriginal Relations. See http://www.td.com/economics/special/db0609_aboriginal.pdf. The more general issue of the contribution made by Aboriginal Economic Development Corporations (EDCs) was discussed in John Shmuel's "Aboriginals Tap into Oil Sands," *Financial Post,* July 12, 2011. See http://www.financialpost.com/entrepreneur/Aboriginals+into+sands/5086631/story.html.

7 Reporting on Canada's natural resources wealth, 1990-2009, Statistics Canada states: "Canada's oil sands in Northern Alberta contain vast quantities of crude bitumen; they are one of the largest hydrocarbon deposits in the world. In 1990, the value of crude bitumen from oil sands represented $19 billion or 13% of energy resource wealth. In 2009, the value of crude bitumen reserves was $441 billion – more than the combined value of coal, crude oil and natural gas." See http://www.statcan.gc.ca/pub/16-002-x/2010002/article/11284-eng.htm.

8 The project life of the Kearl oil sand project, operated by Imperial Oil, is stated to be over 40 years; see http://www.imperialoil.ca/Canada-English/operations_sands_kearl_overview.aspx.

9 National Energy Board (NEB). 2011. *Canada's Energy Future: Energy Supply and Demand Projections to 2035,* An Energy Market Assessment, page 16, *Canadian Crude Oil Production Outlook*. Reference case discussion of total crude oil (light and heavy) available for export from 2011 to 2035.

10 This statement is based on an examination of available data for the dozen largest crude oil producers and exporters. More than 99 percent of Canada's crude oil exports go to the United States. Mexico and Venezuela, each of which are in a phase of

declining production and exports, send 88 percent and 65 percent respectively to the United States. Norway exports about 43 percent of her crude oil to the UK while the United Arab Emirates ships 40 percent to Japan, the same proportion which Nigeria exports to the United States. In the case of the world's two leading producer-exporters, Saudi Arabia's largest customer is Japan, taking 16 percent of her shipments and Russia's biggest buyer is Germany with 10 percent. The exceptional Canadian situation is highlighted in a report prepared by American consultants for the US government; see Ensys Energy, *Keystone XL Assessment*. Report prepared for the U.S. Department of Energy Office of Policy and International Affairs. Final Report, December 23, 2010. "For such a major producing region, the WCSB [Western Canadian Sedimentary Basin] crude export system is highly unusual in that it is currently overwhelmingly land-locked. Domestic and export flows are almost entirely via pipeline, and to the USA and eastern Canada, as illustrated in Figure 3-2. Waterborne exports are minor and through only one marine terminal, the Westridge dock, near Vancouver" (15).

11 EIA. 2011. *Annual Energy Outlook*.

12 "In this study, it was assumed that California Law AB32 would make it unattractive to run WCSB oil sands crudes in that state. If AB32 were not in place, refineries in California would represent a logical market for WCSB crudes, replacing declining volumes of Alaskan ANS [Alaska North Slope crude oil] and displacing what have been growing volumes of Middle Eastern crude oil imports." Ensys Energy's *Keystone XL Assessment,* 97.

13 Berrah, Noureddine, Fei Feng, Roland Priddle, and Leiping Wang. 2007. *Sustainable Energy in China: The Closing Window of Opportunity*. Washington D.C.: World Bank. 87-125. "China's growing sense of energy insecurity is justifiable...Energy supply uncertainties and risks can be mitigated and effectively addressed with a comprehensive national energy policy that stresses supply diversity."

14 Muse Stancil. 2010. *Market Prospects and Benefits Analysis for the Northern Gateway Project*. Houston TX. 3, 6, 35.

15 IEA. 2011. *Overseas Investments by Chinese National Oil Companies: Assessing the Drivers and Impacts.* Information Paper. Paris, France. 10-11.

16 IEA. *World Energy Outlook 2010*. 5.

17 "Possibly not immediately apparent is that freight costs for WCSB crudes to northeast Asia (encompassing the markets of China, Japan, South Korea and Taiwan) are lower than those to the U.S. Gulf Coast." Ensys Energy's *Keystone XL Assessment*, 48. In Figure 4-4, the year 2020 transit costs from the WCSB to the US Gulf Coast are put at $7.51/barrel while the costs to China are put at $4.70 (49).

18 Trans Mountain Pipeline U.L.C., Toll Schedule effective May 1, 2011 as filed with the National Energy Board.

19 Enbridge Northern Gateway, Application to the National Energy Board, May 2010, Volume 2, *Economics, Commercial and Financing*, 3-3, 40 (see n. 6).

20 Adapted from Danielle Goldfarb, 2006, *Too Many Eggs in One Basket – Evaluating Canada's Need to Diversify Trade*. C.D. Howe Institute, Commentary No.236: 3. Ms. Goldfarb's study counsels against "government-led geographic trade diversification" (25), points out that "individuals and businesses – not governments – determine trade patterns" (26), and recommends that "Ottawa should turn its attention to providing market information not easily accessible to businesses, and addressing barriers to trade and investment where Canadian firms are already significantly engaged and payoffs are likely to be greatest" (26). Canadian firms are already significantly engaged in efforts to diversify Canadian crude oil trade with the Asia Pacific region and a tanker ban would constitute just such a barrier to trade and investment.

21 Asia Pacific Foundation. 2011. *An Asia Strategy for Canada*. The survey on which this report was based found that 56 percent of Canadians engaged in Asia strongly or moderately supported the building of an oil/gas pipeline from Alberta to the BC north coast; see: http://www.asiapacific.ca/sites/default/files/filefield/points_of_view_asia-pacific_-_international_strategy_for_asia_final_-_2_june_2011_3.pdf.

22 Standing Senate Committee on Foreign Affairs, *Uncertain Access: The Consequences of U.S. Security and Trade Actions for Canadian Trade Policy (Volume 1), Canadian Trade Policy in the Long Term: Closer Integration or Trade Diversification?* See http://www.parl.gc.ca/Content/SEN/Committee/372/fore/rep/rep04jun03part2-e.htm#THE NEED TO DIVERSIFY CANADA'S TRADE.

23 See http://www.speech.gc.ca/eng/media.asp?id=1390.

24 Ernst & Young. 2011. *Exploring the Top Ten Opportunities and Risks in Canada's Oil Sands*. See http://www.ey.com/CA/en/Newsroom/News-releases/2011-Oil-Gas-Top-Risks

25 EIA. 2011. *Annual Energy Outlook*. 2. See http://www.eia.gov/forecasts/aeo/pdf/0383(2011).pdf.

26 IEA Executive Director Tanaka at the Second Global Think Tank Summit, Beijing, 25 June 2011: "In 2000, China's energy demand was half that of the United States, but preliminary data indicate it is now the world's biggest energy consumer...

China is not just a major and growing consumer of interest to the IEA. It is also increasingly dependent on global markets... Oil imports jump from 4.3 mb/d in 2009 to 12.8 mb/d in 2035 – representing all of current Saudi and Mexican production combined – and imports rise from 53% to 84% of demand." See http://www.iea.org/index_info.asp?id=2036.

27 These data can viewed continuously at http://www.bloomberg.com/energy/.

28 Wright Mansell's *Public Interest Benefits of the Northern Gateway Project*, 20-22.

29 Wright Mansell's *Public Interest Benefits of the Northern Gateway Project*, 32-38.

30 For more than 50 years, literally billions of barrels of crude oil have transited the Strait of Juan de Fuca to refineries in Washington State without significant incident. For 70 years, even larger volumes have passed through Casco Bay, Maine, one of the richest inshore fishing grounds in New England and a renowned centre for pleasure boating, to discharge at the South Portland terminal of the Portland-Montreal crude oil pipeline. Virtually all the oil products used by Canadians – motor gasoline, diesel, aviation fuel, home heating oil, industrial fuel oils, asphalt, and lubricants – are derived from crude oils that have either been transported by tanker or by pipelines that cross major rivers or both.

31 Complete information about this project is found at http://gatewaypanel.review-examen.gc.ca/clf-nsi/hm-eng.html.

32 TERMPOL is "The Technical Review Process of Marine Terminal Systems and Transshipment Sites" of Transport Canada. For more information refer to http://www.tc.gc.ca/eng/marinesafety/tp-tp743-menu-655.htm.

33 Filings with the National Energy Board since 2009 are made under the name Trans Mountain Pipeline ULC (TMPL). Kinder Morgan Canada Inc. is the operator of this business; see https://www.neb-one.gc.ca/ll-eng/livelink.exe/fetch/2000/90464/90552/548311/548161/548102/A1I8D3_-_ltr_neb_february_19_2009.pdf?nodeid=547967&vernum=0.

34 National Energy Board. 2006. Reasons for Decision. Terasen Pipelines (Trans Mountain) Inc. OH-1-2006. See: https://www.neb-one.gc.ca/ll-eng/livelink.exe/fetch/2000/90464/90552/267159/399196/439159/438369/A0W6D0_-_Reasons_for_Decision_OH-1-2006_and_Environmental_Screening_Report.pdf?nodeid=438370&vernum=0.

35 TMPL has applied to the National Energy Board for tariff measures that would enable it to provide its customers long-term uninterruptible shipments from Edmonton to Westridge. This, TMPL states, is also required in support of continued offshore market development. For further information, see TMPL's application to the NEB dated November 29, 2010, https://www.neb-one.gc.ca/ll-eng/livelink.exe/fetch/2000/90465/92835/552980/655087/678170/654331/B1-2_-_NEB_Application_-_Trans_Mountain_Pipeline_ULC_-_A1W3Y0.pdf?nodeid=654426&vernum=0. This application is the subject of a current NEB proceeding pursuant to hearing order RH-2-2011; see https://www.neb-one.gc.ca/ll-eng/livelink.exe/fetch/2000/90465/92835/552980/655087/678267/678137/A3-1_-_Trans_Mountain_Pipeline_ULC_-_Firm_Service_Application_-_Hearing_Order_RH-2-2011_-_A1Y2Q1.pdf?nodeid=677623&vernum=0.

About the Author

Roland Priddle is an economist and energy consultant. After starting his career in the oil industry, he spent 33 years with the federal government, most recently as chairman of the National Energy Board. Since retiring in 1997 he has consulted for governments and corporations in Canada and more than 15 other countries. Priddle is a member of the Order of Canada, the Canadian Petroleum Hall of Fame, and was Canadian Energy Person of the Year in 2006.

Consequences of Banning Oil Tankers in Western Canada: Safety and Environmental Considerations

PHILIP JOHN

Summary

A number of bills have been introduced in the House of Commons over the last four years that all sought to formally ban oil tanker traffic on British Columbia's northWest Coast. The bill also provided for similar bans in other maritime areas in the future.

The solution to the problem of potential oil spills is not to ban economic activity, but to boost responsible activity.

Transportation is a vital component of the larger energy sector and Canada has a vibrant marine transportation industry. Energy is the backbone of the world economy and liquid fossil fuels are its primary source. The demand for energy has been on the rise from year to year and is predicted to continue growing along with the reliance on fossil fuels. The tanker shipping industry has responded to the global thirst for oil with massive tonnage increases over the past decade. Since the mid-1980s, seaborne oil trade has been on the upswing to fuel the world's energy needs but, counter-intuitively, the marine environmental damage caused by oil spills has been declining. Over the last four decades, the volume of oil spills from ships has been rapidly decreasing despite growing maritime trade, and Canada's trade and accident statistics reflect this global trend.

Using the designation of Marine Protected Areas and other regulatory ordinances, as well as partnerships with the private sector, the Canadian government has successfully implemented steps for the prevention of marine oil spills, along with contingency measures for preparedness, containment, and response. Consequently, Canada's ports and the ecologically sensitive waterways leading to them have enviable international reputations for efficiency, safety, and environmental consciousness.

From the perspectives of efficiency, productivity, cost-effectiveness, and reduced emissions, the maritime mode of transportation excels compared to other modes of transportation. However, in our dynamic world of perpetual progress and development we cannot afford to rest on our laurels. The evolving needs of maritime traffic growth, technological advancement and trade diversification call for responsible environmental stewardship in all sectors of the oil industry, promotion of Short Sea Shipping, a national policy on places of refuge for ships in need of assistance, and the establishment of a national risk assessment strategy for Canada's ports.

The solution to the problem of potential oil spills is not to ban economic activity, but to boost responsible activity. Unless explicitly and unambiguously warranted, interdiction measures are likely to adversely affect Canada's economic development, international reputation, and status as an economic and environmental role model. The cost, pollution, and sustainability implications of proposed bans are far too severe and the benefits far too uncertain to make it pragmatic or viable. Its adoption is not recommended.

Introduction

The energy industry is a critical part of Canada's economy. As of 2009, it directly employed more than a quarter of a million people[1] and represented more than five percent of our nation's economy.[2] The sector has a footprint from one coast to the other and offers a diversity of energy production, ranging from conventional energies like oil and gas to new, alternative energies like wind and solar.

Transportation is a vital component of the larger energy sector as it enables Canadian producers to deliver demanded energy goods to customers around the globe. Water transportation in particular is critical for Canada's non-North American customers.

Canada has a vibrant marine transportation industry. Some 100,000 vessels transit Canadian waters annually transporting more than 360 million tonnes of goods with an estimated commercial value of approximately $85 billion.[3] The total monetary value of marine economic activity in Canada's coastal areas is around $150 billion per year.[4] Marine and marine related activity in Canada contributes over $9 billion annually to the economy, positively impacting the lives and standard of living of all Canadians from coast to coast while employing some 93,000 people.[5]

A series of private member's bills were introduced in the House of Commons over the last four years that would have formally banned oil-tanker traffic on British Columbia's northWest Coast.[6] Bill C-211 is only the most recent bill introduced (2011). In one way or another, all of the bills would amend the Canada Shipping Act to prohibit the transportation of liquid petroleum by oil tankers in areas adjacent to that coast, specifically the Queen Charlotte Sound, Hecate Strait, and Dixon Entrance. It would also allow future governments, on the recommendation of the Federal Minister of Fisheries and Oceans, to designate other areas of the sea in which oil-tanker traffic would be prohibited.

100,000 vessels transit Canadian waters annually transporting more than 360 million tonnes of goods.

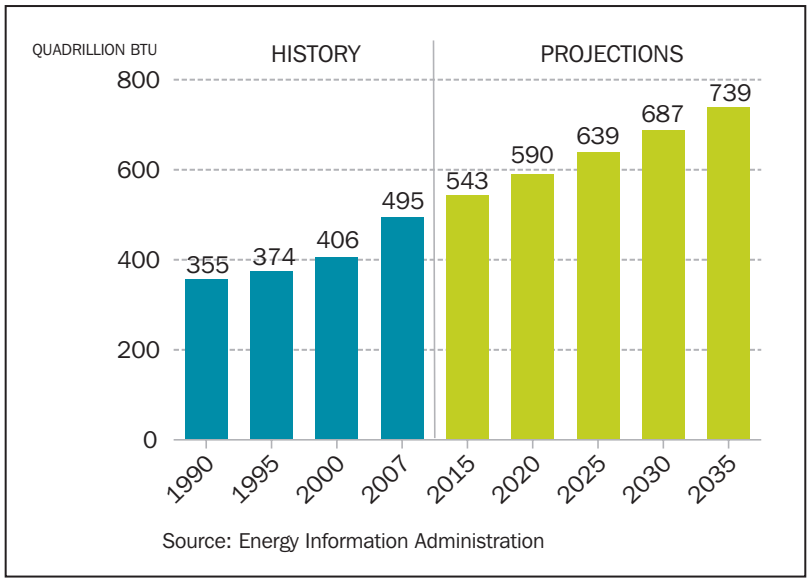
I Background

To lay the foundation for the discussion on the merits of the proposed bans, the role played by energy in our daily lives and its future prospects in contributing to our quality of life, economy, and development will be touched upon, along with the part played by liquid fossil fuels in energy generation and their impact on the oil transportation industry.

DEMAND FOR ENERGY, OIL, AND TRANSPORTATION

The first background point to consider is the long-term viability of the energy industry in Canada. Like any product, the supply of energy is a response to demand. The overwhelming consensus, indeed near unanimity, is that the demand for energy will grow fairly constantly in the future. *The International Energy Outlook 2010* report of the US Energy Information Administration (EIA) projects the total world consumption of marketed energy to increase by 49 percent from 2007 to 2035, as shown in Figure 1.

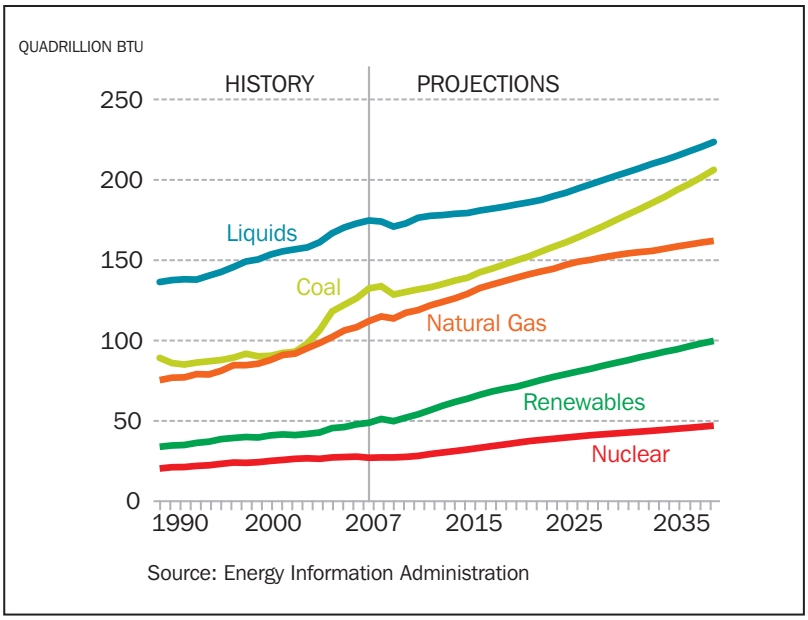
Figure 1 World marketed energy consumption, 1990-2035, in quadrillion Btu's (British thermal units)



Source: Energy Information Administration

Given expectations that world oil prices will remain relatively high through most of the projection period, liquid fuels and other petroleum products are likely to be slow growth sources of energy due to public concern about the environmental impacts of fossil fuel use and strong government incentives for increasing the use of renewable energy in many countries around the world. However, liquid fuels remain the world's largest energy source as shown in Figure 2. Despite advances in alternative energy forms, for the next few decades fossil fuels have no substitute as the prime source of energy.

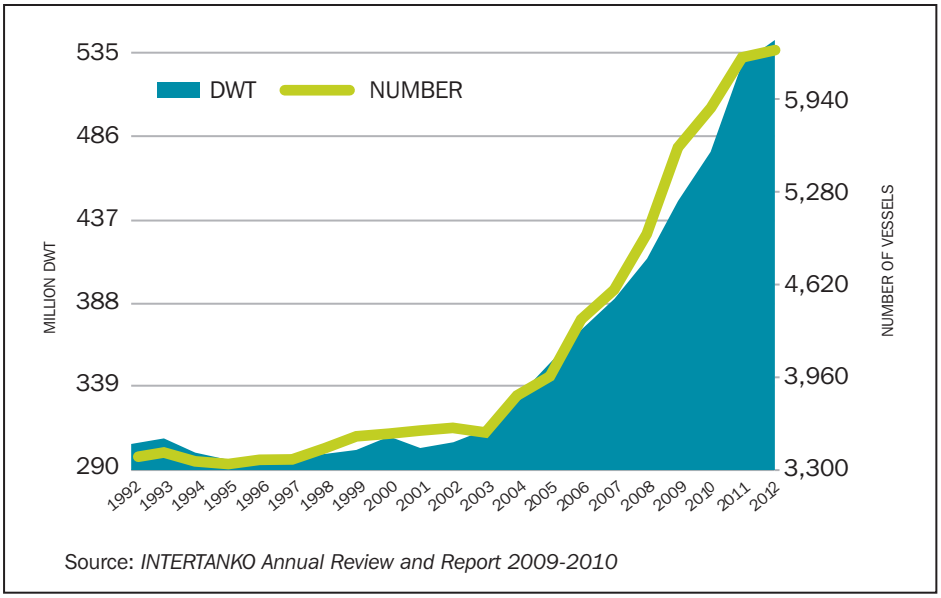
Figure 2 World marketed energy use by fuel type, 1990-2035, in quadrillion Btu's (British thermal units)



Source: Energy Information Administration

To meet this rapidly growing energy demand, the *International Association of Independent Tanker Owners (INTERTANKO), in its Annual Review and Report for 2009-2010*, forecast the development of the worldwide tanker fleet to 2012. This forecast, in terms of dead-weight tonnage[7] (dwt) and the number of ships, is shown in Figure 3. The trend highlights the burgeoning demand for oil and oil transportation services, which means the growth of the tanker trade nationally and internationally.

Figure 3 Projected tanker fleet development (1992-2012)



Source: *INTERTANKO Annual Review and Report 2009-2010*

II Tanker Safety

One of the main underlying premises influencing the preference to ban oil tankers is their potential adverse environmental impact in the case of collisions or other accidents. It is, therefore, important to fully understand the reality of tanker safety, both internationally and nationally.

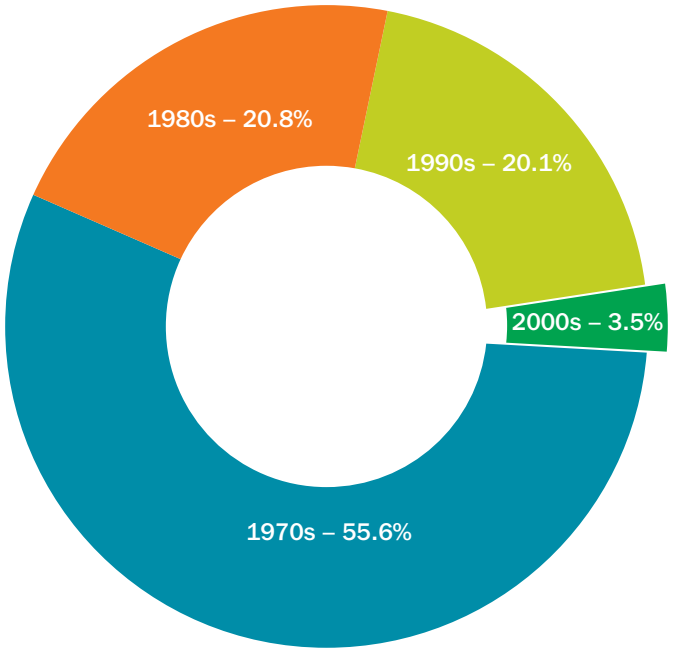
TANKER SAFETY CONSIDERATION

Globally, there has been a marked improvement in tanker safety over the last four decades or so. Even during a period of growing maritime trade, improved codes of practice worldwide have caused a significant reduction in marine accidents and accidental oil-pollution incidents, as illustrated in Figures 4 and 5.

Figure 4 depicts the percentage of total oil spilled by volume, over the last four decades.

Only 3.5 percent of the total volume of oil spilled over the last four decades occurred in the 2000s.

Figure 4 Percentage per decade of total oil spills by volume over the last four decades, 1970-2009

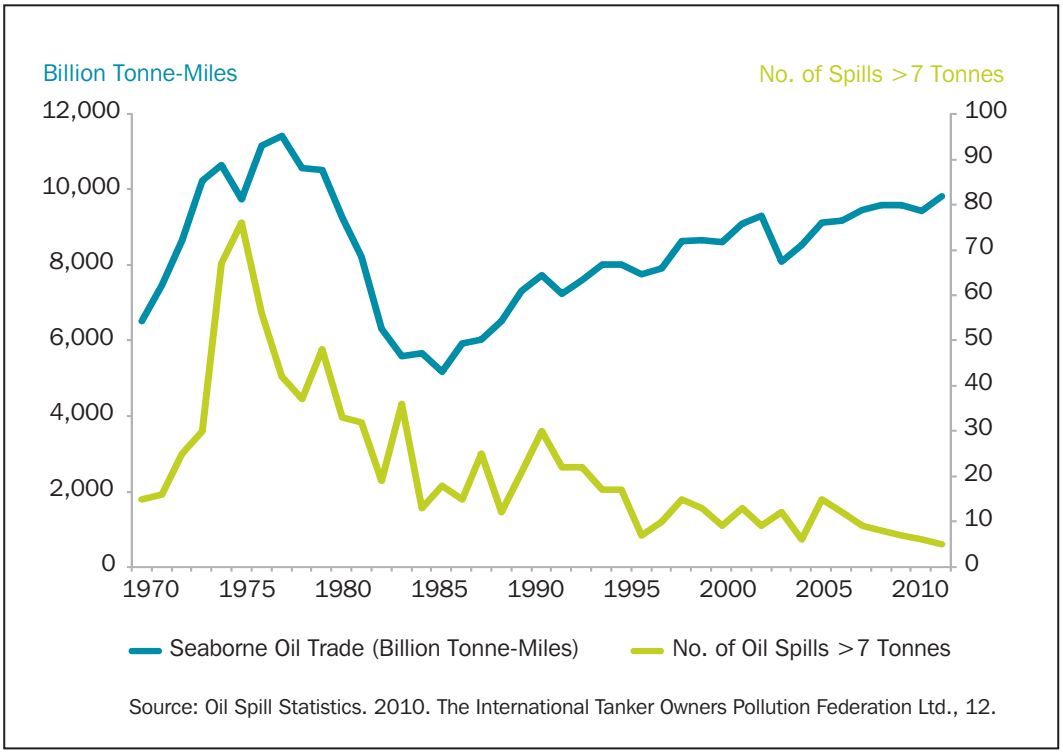


Source: Oil Spill Statistics. 2010. The International Tanker Owners Pollution Federation Ltd., 10.

It is fairly clear that there has been a precipitous decline since the 1970s. In other words, Figure 4 separates the total volume of oil spilled over the last forty years, by decades. Over half the volume, 55.6 percent of the total amount of oil spilled, was in the 1970s. The percentage of the total drops to 20.8 percent in the 1980s and remains fairly constant at 20.1 percent in the 1990s. The percentage for the 2000s drops markedly to 3.5 percent of the total volume of oil spilled over the 40-year period. Put simply, we are getting much better at accident-free transportation of oil for fuelling energy needs.

Figure 5 illustrates and contrasts the level of seaborne oil trade against the number of oil spills in excess of seven tonnes.

Figure 5 The decreasing oil spill trend as the seaborne oil trade increases



Source: Oil Spill Statistics. 2010. The International Tanker Owners Pollution Federation Ltd., 12.

Seaborne oil trade has been growing steadily from 1970, except for a fall in the early 1980s during the worldwide economic recession. Beginning in approximately 1985, the two trend lines diverge, wherein large decreases are recorded in the number of oil spills while the volume of seaborne oil trade increased substantially. Although increased oil movement implies increased risk, the downward trend in oil spills demonstrates superior construction and regulatory standards and a keen sense of awareness, safety, and environmental consciousness.

The number of shipping accidents involving Canadian vessels has steadily declined.

CANADIAN EXPERIENCE

The number of accidents in Canadian waters reported to the Transportation Safety Board of Canada, which is mandatory, has dramatically declined over the past decade by as much as 38 percent.[8] This includes accidents involving both Canadian and foreign-flagged ships, in Canadian waters.

While marine shipping activity has rapidly grown in recent years to meet the world's demands for goods and services, the number of shipping accidents involving Canadian vessels has steadily declined. Given the immense volume of goods transported by ships, the Canadian maritime safety record is impressive compared to the safety record of other modes of transportation and compared to the safety record of other countries. An analysis of trends along major shipping routes in nine countries during recent decades – on routes which experienced more than 25 oil spills over the past 40 years – is shown in Table 1 and Figure 6. Canada's decreasing trend is obvious. It is much envied in the international shipping community.

Table 1 Number of tanker oil spills by country per decade

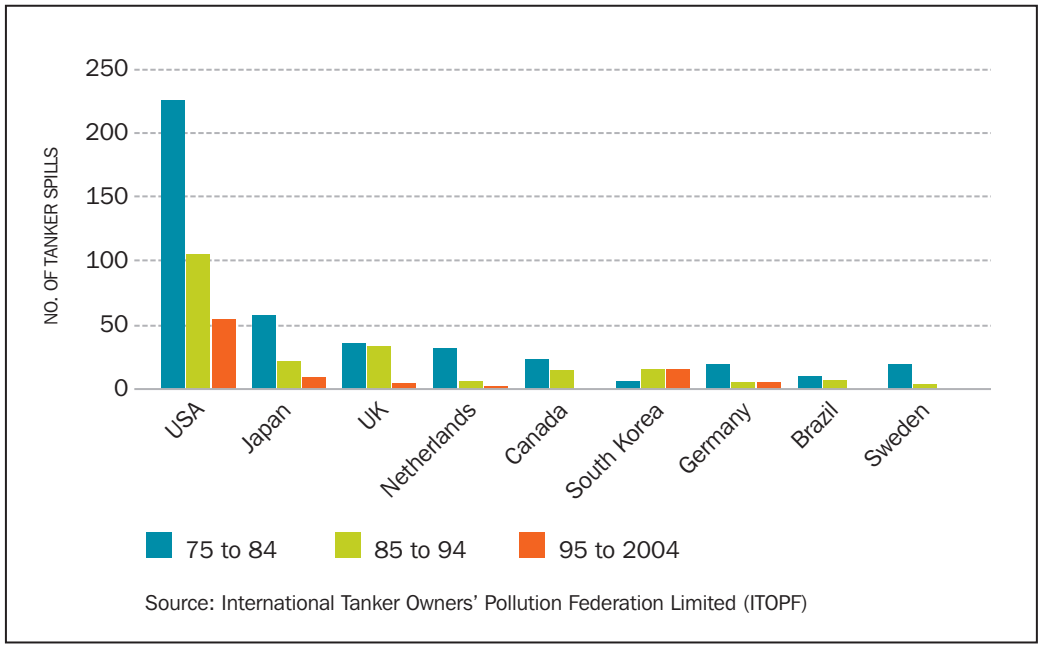
NUMBER OF SPILLS					
COUNTRIES	**1970s**	**1980s**	**1990s**	**2000s**	**Total**
Brazil	7	9	7	6	**29**
Canada	12	18	6	0	**36**
Germany	9	9	5	3	**26**
Japan	39	29	14	4	**86**
Netherlands	20	15	6	0	**41**
Singapore	12	4	5	7	**28**
South Korea	1	10	19	4	**34**
Sweden	19	9	5	0	**33**
UK	34	27	16	2	**79**

Source: International Tanker Owners' Pollution Federation Limited (ITOPF)

The data contained in Table 1 is impressive in terms of Canada's performance (see Figure 6 for another view of this data). The number of spills by decade declined from a high of 18 in the 1980s to 6 during the 1990s, to zero in the 2000s. Canada tied with the Netherlands and Sweden for having recorded zero spills during the 2000s. Most other nations, except for South Korea, recorded meaningful losses and environmental damage through maritime oil spills.

Canada tied with the Netherlands and Sweden for having recorded zero spills during the 2000s.

Figure 6 Number of tanker oil spills by country per decade



Source: International Tanker Owners' Pollution Federation Limited (ITOPF)

To Canadians, the marine environment represents strong and deep ties to our heritage and, consequently, prevention of oil spills as the first line of defence is universally recognized as critical. Simultaneously, preparedness and response for

unforeseen contingency situations have been established nationwide as a second line of defence by the development of a network of human and material resources for deployment to combat, contain, and minimize accidental damage to the marine environment. The decreasing oil spill statistics bear witness to the success of Canada's government and private sector partnership in respecting and preserving the integrity of the ocean resources, while promoting and encouraging trade and economic activity. A fundamental spirit of cooperation has blossomed and evolved through training, corporate understanding, mutual respect, and concerted action, which bodes well for enhanced future national economic development, and should therefore be bolstered by a supporting regulatory regime. On the other hand, proscription measures, unless clearly and unequivocally justifiable, are likely to discourage investment and hamper economic growth and national progress.

Canada is now a world leader in minimizing the number of accidents and oil spills.

Canada's safety performance with respect to tanker transportation has improved over the last four decades, as has much of the maritime world. Canada is now a world leader in minimizing the number of accidents and oil spills in an environment of markedly increasing maritime transportation volume. During the past few years, the Canadian federal government has undertaken and completed a number of important initiatives related to transportation policy and has increasingly recognized the critical role that marine transportation can play in achieving broader economic and social objectives.

To prepare for the challenges of the future, the Canadian regulatory regime continues to be proactive and aggressive in maintaining and enforcing high maritime standards. As the federal body responsible for the Government of Canada's transportation policies and programmes, over the last two years (2009-2010), Transport Canada has:

- ratified eleven international maritime conventions,
- published 45 maritime regulations,
- adopted the *North American Emission Control Area*,
- assisted with the modernization of the Canadian *Navigable Waters Protection Act*,
- amended the Canadian *Arctic Waters Pollution Prevention Act*, and
- developed various planning and performance management tools to enhance compliance and enforcement, education and awareness, programme management and the regulatory framework.

As has so often been demonstrated, partnership between business and governmental regulatory authorities in an environment of mutual understanding, awareness, and respect for safety and protection of our resources and heritage will benefit all parties and the nation, for a win-win outcome. Outright bans in fear of possible accidents without analyzing risks and returns are inherently detrimental to a healthy economy, high productivity, and efficient business operations, besides adversely affecting Canada's international reputation and standing as an economic powerhouse. Canada's status as a global role model for responsible progress and development must be preserved.

III Environmental Considerations

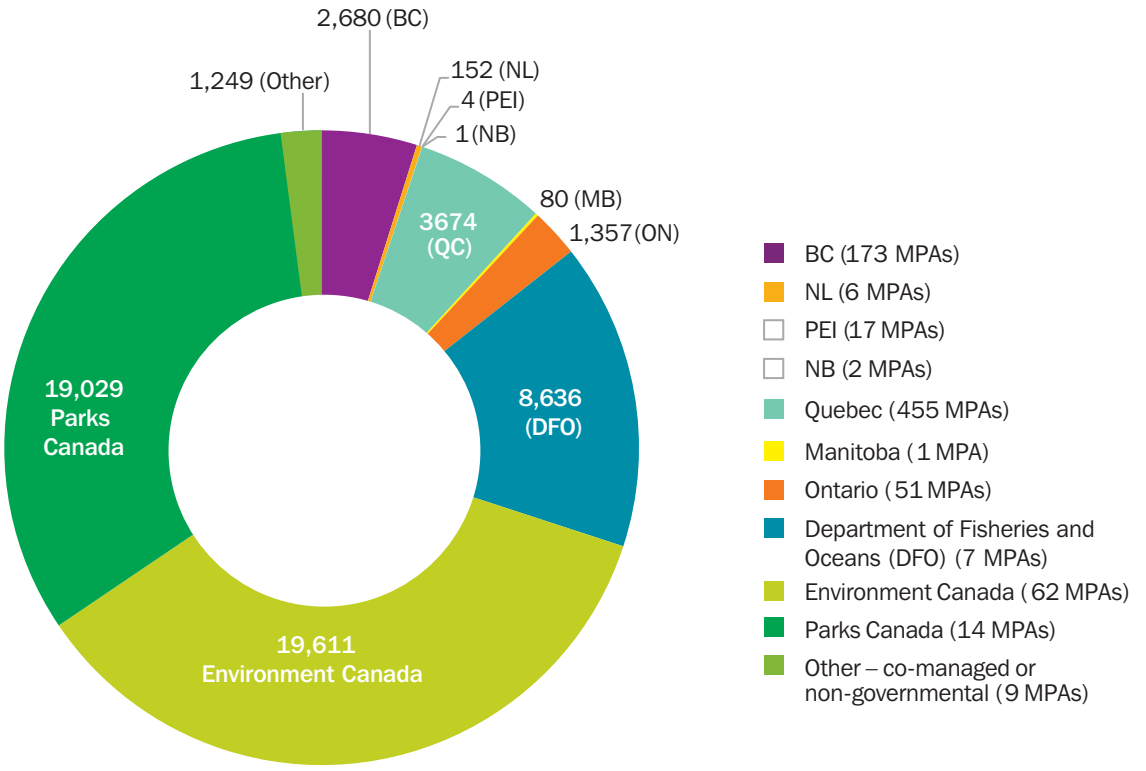
Integrally related to concerns over safety are considerations regarding the environmental impact of tanker accidents. This section discusses two key aspects of environmental concerns: ecologically sensitive areas and the environmental impact of alternative modes of transportation.

ECOLOGICAL SENSITIVITY AND TANKER TRAFFIC

A maritime nation with the world's longest coastline, Canada is bordered by three oceans, the Great Lakes, and an immense sea of Arctic ice. These natural environments support an intricate web of marine life. The federal government, along with the provinces and territories, is working to conserve Canada's marine ecosystems through the development of Marine Protected Areas (MPAs). The designation and preservation of MPAs under a legal code enhances biodiversity and improves the health, integrity, productivity, and sustainable use of our natural resources, while contributing to the vitality of Canada's coastal communities and industries.

The existing MPAs cover over 56,000 square kilometres of Canada's oceans and the Great Lakes – roughly equivalent to the area of the province of Nova Scotia. Figure 7 shows the square kilometre breakdown of MPAs under federal, provincial, and non-governmental agencies. The total number of MPAs managed by each jurisdiction is shown in brackets on the left. Of the 797 current MPAs, 705 are under provincial jurisdiction, 83 are under federal jurisdiction, and 9 are managed by non-governmental organizations or through co-management arrangements.

Figure 7 Marine protected areas protected by each jurisdiction in square kilometers



Note: The governments of Nova Scotia, Northwest Territories, Nunavut, and Yukon do not currently have established Marine Protected Areas

Canada's major oil-handling ports and the ecologically sensitive waterways leading to them are highly efficient, with extremely low-risk cargo movement procedures. All these ports and waterways have areas of environmental and ecological sensitivity within their boundaries as well as in their vicinity, which have remained pristine and unspoiled despite decades of oil-handling activity.

Existing Marine Protected Areas cover over 56,000 kms of Canada's oceans and Great Lakes.

These ports and waterways – including Vancouver, west-coast tanker lanes from Alaska, Hamilton, Montreal, Quebec, the St. Lawrence River, Saint John, the Bay of Fundy, Passamaquoddy Bay, Halifax, the Gulf of St. Lawrence, St. John's, Come-by-Chance, Placentia Bay, and St. Mary's Bay – have earned international reputations for their cargo-handling safety and environmental consciousness. Their emergency response plans are supported by environmental assessments, continuous monitoring,,and oil-spill trajectory modeling for rapid response, containment, and clean-up. In the highly unlikely event of the need arising, British Columbia's northWest Coast would be similarly protected by such rigorous control systems.

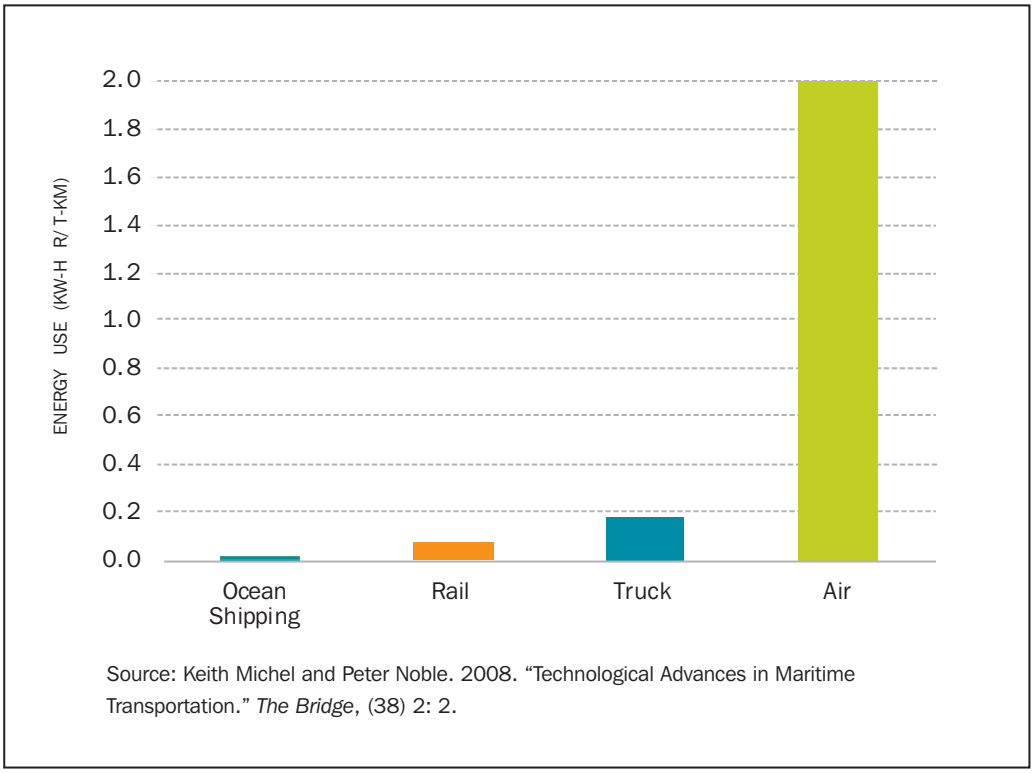
COST-EFFECTIVENESS AND EFFICIENCY OF SHIPPING

Compared to other modes of transportation, ocean shipping has significantly improved its efficiency. The implementation of new technological concepts like double-hulled oil tankers, container ships, Liquefied Natural Gas (LNG) carriers, open-hatch forest-product ships, chemical carriers, and car carriers have revolutionized the way goods are moved. The high productivity of shipbuilding, a rise in the efficiency of hulls and propulsion systems, a reduction in manpower requirements through automation, and economies of scale brought about by large ship sizes are other improvements made in maritime transportation.

Shipping is a comparatively efficient mode of moving cargo over long distances based on energy consumption.

As shown in Figure 8, shipping is a comparatively efficient mode of moving cargo over long distances based on energy consumption. The high carrying capacity of marine tankers translates into low costs to customers and the consuming public when compared with other modes of transportation. For example, the typical cost to a Canadian consumer of transporting crude oil by sea on tankers from the Middle East, in terms of purchase price per litre of gasoline at the pump, is about half a cent.

Figure 8 Comparative efficiencies of transportation modes



Source: Keith Michel and Peter Noble. 2008. "Technological Advances in Maritime Transportation." *The Bridge*, (38) 2: 2.

The high efficiency of maritime operations also contributes to comparatively lower greenhouse-gas emissions per tonne-mile of cargo moved by ships than by other modes of transportation. This assures the sustainable and viable nature of commercial maritime activity. If we are to remain committed to leaving behind a responsible and rational trade and economic legacy for future generations, we have no option but to embrace the most efficient, safe, and cost effective mode of transportation.

IV Recommendations and Conclusion

Canada's renowned regulatory regime has provided powerful checks and balances to prevent the degradation of our natural environment. We are blessed with abundant natural resources, which are being sustainably developed. The commendable reputation of several of Canada's oil-handling terminals, ports, and waterways is a source of national pride. As a littoral nation bordering three oceans and the Great Lakes, Canada has a vibrant maritime tradition. Even so, management and regulatory practices must be dynamic and keep pace with the evolving needs of maritime traffic growth, technological advancement, and trade diversification. The recommendations and conclusion of the study are presented in this section.

Short Sea Shipping is increasingly being recognized worldwide as a viable solution for the reduction of greenhouse gas emissions.

RECOMMENDATIONS

Four specific safety and environmental conservation recommendations are of particular significance to the oil and natural gas tanker-shipping industry:

- The vitality and security of the marine environment is of paramount importance to all Canadians and any threat to it negatively affects all associated businesses. The consuming public, as the end-user of fossil fuel energy, wants assurances from all the upstream sectors of the oil industry: exploration, production, transportation, storage, distribution, and retail supply. The oil tanker transportation sector is therefore intimately concerned with events in any of the sectors that could be potentially hazardous to our national marine heritage. A chain is only as strong as its weakest link. Responsible environmental stewardship is an imperative obligation for all the links of the oil supply chain. As a consequence of the Deepwater Horizon drilling rig disaster in the Gulf of Mexico in April 2010, Canada needs to strengthen the inspection and maintenance regime of offshore oil and natural gas exploration and production equipment, especially in view of Canada's burgeoning offshore development activity on the east coast. Redundancy and fail-safe characteristics must be incorporated in blowout preventers, which should be constructed on the multiple-stack concept.

- Short Sea Shipping is increasingly being recognized worldwide as a viable solution for the reduction of greenhouse gas emissions, alleviation of highway traffic congestion, and cross border trade facilitation, due to the high environmental and operational efficiency of the maritime mode of transportation. The promotion of Short Sea Shipping in Canada is especially vital due to the large volume of trade by road transportation between Canada and the United States. The increasing navigability of the Arctic waters and the Northwest Passage due to global warming reinforce the need to encourage Short Sea Shipping in Canada to service the northern communities and to exploit the natural resources of Canada's Arctic region. Scientists predict an ice-free Arctic summer by 2030. Short Sea Shipping will significantly diminish the cumulative human footprint on the marine and terrestrial environments, and its advocacy is crucial for a sustainable future.

A national policy on places of refuge for ships in need of assistance is another recommendation worthy of urgent consideration.

- A national policy on places of refuge for ships in need of assistance is another recommendation worthy of urgent consideration. From a holistic perspective, shipping is a necessary trade activity that impacts the marine and coastal environment. With increasing developmental pressures on coastal areas, close interaction and co-operation between the maritime sector and users of the coastal and marine environment are essential and necessary. A national policy on places of refuge for ships in need of assistance would amalgamate the interests of all stakeholders, to provide an effective remedial solution in the unlikely event of a maritime emergency.

- Lastly, responsible management of Canada's environmental resources and growing maritime trade requires the establishment of a national risk assessment strategy for Canada's ports. Such a risk assessment strategy would identify the shortcomings (if any) of the ports in dealing with emergencies and offer suitable alternative plans to account for those shortcomings or provide the resources needed to upgrade the emergency response capability of the ports.

CONCLUSION

Bills proposing a ban on tanker traffic would effectively give politicians sweeping powers to curb an important source of economic growth for Canadians. Banning oil tanker traffic in coastal waters will not prevent the consumption of this essential source of energy. It will only force its delivery by other modes of transportation – an action that will increase its price and exacerbate environmental risk.

Banning oil tanker traffic in coastal waters will not prevent the consumption of this essential source of energy.

The health of Canada's economy, communities, and ecology is irreversibly intertwined with the sustainable development of our natural resources. As a source of energy, fossil fuels have no alternative for the foreseeable future. The safety, cost-effectiveness and efficiency of marine tanker transportation have been exemplary, especially in Canada. We can continue to let the benefits of resource development percolate throughout our society, even as we provide resources to sustain and augment the vigour and biodiversity of our ecological heritage.

The solution to the problem of potential oil spills is not to ban economic activity, but to boost responsible activity. Canada's commendable maritime regulatory and management regime strives to strike the right balance between responsible economic activity, safety, and environmental conservation. The designation of Marine Protected Areas ensures the awareness and understanding of preservation and protection of our rich environmental heritage.

To sustain this trend, potential areas of improvement can and must be constantly investigated and pursued. We can embrace measures that will reduce environmental risk in coastal areas, measures that make far more sense than Bill C-211, which forbids activity in a transportation mode with an enviable record for safety and sustainability.

The positive and beneficial consequences of tanker shipping far outweigh its negative and detrimental effects. New prohibitions will jeopardize our economic security with little or no environmental benefit.

Endnotes

1 The most recent figure available, for 2009, was 257,000 people employed, according to Natural Resources Canada, at: http://www.nrcan.gc.ca/stat/stat-eng.php#a2.

2 In 2009, a year in which its income was depressed, the energy sector's activity delivered $79.4 billion in value (calculated by Natural Resources Canada at: http://www.nrcan.gc.ca/stat/stat-eng.php#a2, in constant 2002 dollars) in a total economy of just over $1.5 trillion. (http://en.wikipedia.org/wiki/List_of_Canadian_provinces_and_territories_by_gross_domestic_product).

3 Canadian Coast Guard. 2004. "Canada as a Maritime Nation." Available at www.ccg-gcc.gc.ca/overview-apercu/context_e.htm.

4 Fisheries and Oceans Canada. 2005. "Canada's Oceans Action Plan for Present and Future Generations." Available at www.dfo-mpo.gc.ca/canwaters-eauxcan/oap-pao/pillar2_e.asp.

5 Canada's Marine Industry Alliance. 2005. "Canada's Marine Industry: A Blueprint for a Stronger Future by Canada's Marine Industry Alliance." Available at http://www.tmq.ca/anglais/publication/canevas_eng.pdf; see page 5.

6 This was only one of three private member's bills proposing a tanker ban on Canada's West Coast.

7 Deadweight Tonnage (also known as deadweight, abbreviated to DWT, D.W.T., d.w.t., or dwt) is a measure of how much weight a ship is carrying or can safely carry. It is the sum of the weights of cargo, fuel, fresh water, ballast water, passengers, and crew. The term is often used to specify a ship's maximum permissible deadweight, the DWT when the ship is fully loaded so that its Plimsoll line is at the point of submersion, although it may also denote the actual DWT of a ship not loaded to capacity. Deadweight tonnage was historically expressed in long tons but is now usually given internationally in tonnes (metric). Deadweight tonnage is not a measure of the ship's displacement and should not be confused with Gross Registered Tonnage (GRT) or Net Registered Tonnage (NRT).

8 Data describing this improvement is available at http://www.tsb.gc.ca/eng/stats/marine/1999/ss99.asp.

About the Author

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Dr. Philip John earned his Ph. D. in Civil Engineering (Marine) at the University of New Brunswick and is the Marine Fleet Manager of the Woodward Group of Companies of Newfoundland and Labrador. He has been working in the maritime field throughout his career and was the Marine Superintendent of Texaco Marine Services Inc. in Port Arthur, Texas, U.S.A. and the Marine Fleet Manager of Rigel Shipping Canda Inc. in Shediac, New Brunswick, before joining the Woodward Group of Companies. He also sailed for twelve years on commercial tanker vessels and obtained Master of Business Administration and Master of Science in Transportation Management degrees in the United States, after his sea-going tenure as a Chief Engineer.

Philip has written and published a policy on places of refuge for Canada, entitled "Towards a Canadian Policy on Places of Refuge for Ships in Need of Assistance" (http://hdl.handle.net/1882/18101 and http://www.amazon.com/s/ref=nb_sb_noss?url=search-alias%3Dstripbooks&field-keywords=Places+of+Refuge+Philip&x=18&y=17). He has also written the chapter for Canada in the International Maritime Organization publication entitled "Places of Refuge for Ships: Emerging Environmental Concerns of a Maritime Custom" (http://nijhoffonline.nl/view_pdf?id=nij9789004149526_nij9789004149526_i-562-148 and http://www.amazon.com/s/ref=nb_sb_noss?url=search-alias%3Dstripbooks&field-keywords=Places+of+Refuge+Maritime+Custom+Nijhoff).

He has authored several published articles and papers on subjects of national, technical, economic and social interest and has won 'Best Paper' awards at the Canadian Transportation Research Forum Conferences in 2009 and 2010 for his papers on maritime and port environmental safety.

He is involved with the Rotary Club and several charitable community and church activities. He has won a national award for 'Gallantry at Sea' and has travelled extensively all over the world. He believes strongly in the need for discipline, mental and physical exercise, and the eternal quest for knowledge. He welcomes opportunities for intelligent discussion, stimulating debate, and thoughtful interaction with interested parties.

Legal Aspects of an Oil Tanker Ban: Bill C-211 as a Case Study

ROBERT HAGE

I Introduction and Background

Since 2007, a group of Opposition Members of Parliament has introduced motions and private member's bills in the House of Commons in a concerted effort to ban tanker traffic on the north coast of British Columbia (BC). On June 14, 2007, Denise Savoie, the NDP Member of Parliament for Victoria, introduced a motion stating that the Government should "impose a formal federal moratorium on the passage of international tanker traffic... in the Dixon Entrance, Hecate Strait and Queen Charlotte Sound."[1] While the House rose before the motion was debated, in June 2008 a private member's bill introduced by Catherine Bell, the NDP Member of Parliament for Vancouver North would have legislated a prohibition on the transport of oil in an oil tanker in a defined area off the West Coast.[2] This Bill died on the order paper when the session ended, but Don Davies, the NDP Member of Parliament for Vancouver Kingsway, introduced an identical private member's bill on October 7, 2009.[3]

Legislative efforts to ban oil tanker traffic on this portion of Canada's West Coast opens a Pandora's box of issues involving the United States.

On December 7, 2010, Nathan Cullen, the NDP Member of Parliament for Skeena-Bulkley Valley, succeeded in having the House of Commons adopt a motion stating that "the Government should immediately propose legislation to ban bulk oil tanker traffic in the Dixon Entrance, Hecate Strait and Queen Charlotte Sound as a way to protect the West Coast's unique and diverse ocean ecosystem..."[4] In a bipartisan Opposition gesture, on December 14, 2010, Joyce Murray, the Liberal Member of Parliament for Vancouver Quadra and a former BC Environment Minister, introduced her own private member's bill which followed the intent of Catherine Bell's and Don Davies's proposed legislation in a different format.[5]

Joyce Murray's bill also died on the order paper, and with a new session of Parliament the NDP again took the lead on March 26, 2010 with Fin Donnelly, Member of Parliament for New Westminster-Coquitlam, introducing the same legislation as his NDP predecessors.[6] When that session ended and the current 41st Parliament began, Mr. Donnelly re-introduced a slightly amended version, Bill C-211, on June 14, 2011.[7] While the motions and bills are not explicit, statements and press releases issued by the parliamentarians advancing these initiatives clearly indicate that their purpose is to stop the development of Enbridge's proposed Northern Gateway Pipeline. The project would carry crude oil from Alberta's oil sands to a new marine terminal in Kitimat at the end of a sea arm, the Douglas Channel, on the West Coast of BC[8] for onward shipment by tanker to Asia. On February 23, 2001, the Premiers of British Columbia, Alberta, and Saskatchewan issued a joint letter to Prime Minister Harper asking him to "act in the national interest to defeat this bill."[9] Federal Transport Minister Chuck Strahl then stated that a cursory review of the proposed legislation raises serious concerns about how it could hurt Canada's economic recovery.[10]

What these MPs do not seem to realize is that their legislative efforts to ban oil tanker traffic on this portion of Canada's West Coast opens a Pandora's box of issues involving the United States, including Canada's historic claims to these waters, the Alaska Panhandle boundary, the passage of nuclear submarines, innocent passage, and fishing rights. The area designated in Bill C-211 is a microcosm of the different approaches Canada and the United States have taken to coastal waters. Canada, as one of the world's largest coastal states, has been a champion of coastal state claims to wider areas of jurisdiction, including the use of "historic waters," within which Canada has complete jurisdiction. The United States, a world power with widespread merchant marine and naval interests, has been an advocate for the rights of flag states (while at the same balancing its own interests as an important coastal state).

This paper will examine the legality of Bill C-211 under domestic and international law, particularly the international implications of prohibiting the passage of oil tankers in the prohibition area. This will require a review of the nature of the

waters and the distinction between internal waters, historic waters or historic internal waters, the territorial sea, fishing zones, and the Exclusive Economic Zone (EEZ). In sum, the proposed legislation is rife with international complications. The Bill, if passed, would hinder oil supplies from reaching some Alaska Panhandle communities and prohibit oil carried in bulk in tankers in an area where the United States maintains it has freedom of navigation and where Canada claims it has the right to entirely regulate maritime traffic in Canadian historic waters. The United States might well have the support of other flag states in challenging Canada. The analysis will consider the remedies available to them and Canada's response.

BILL C-211

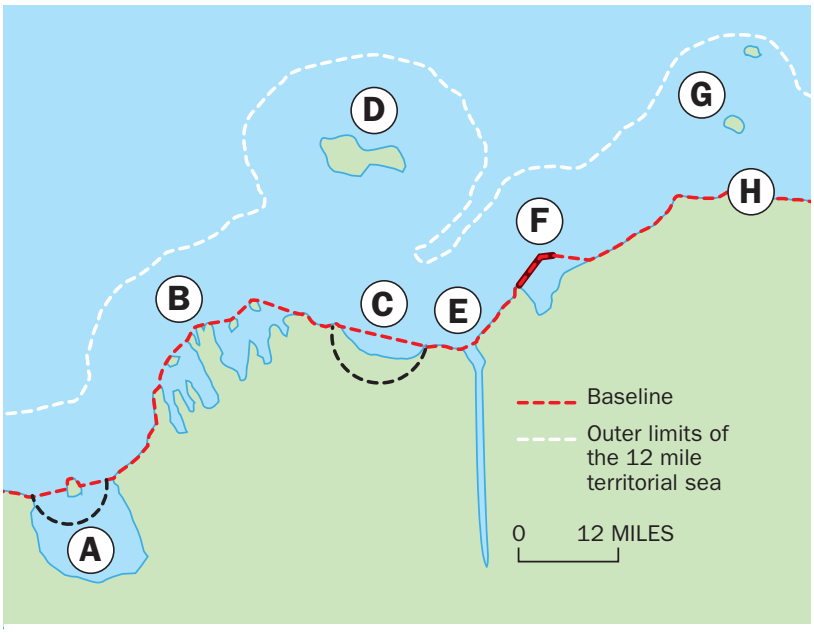
The Bill is quite short. The Preamble simply states that the "transportation of oil in oil tankers in certain areas of the sea adjacent to the coast of Canada poses a risk to the marine environment."[11] The Bill amends Part 9, entitled Pollution Prevention – Department of Transport, of the Canada Shipping Act[12] by adding new sections to 189.1 and 189.2. Section 189.2(1) provides that no person shall transport oil in an oil tanker in "the areas of the sea adjacent to the coast of Canada known as Dixon Entrance, Hecate Strait, and Queen Charlotte Sound."[13] Section 189.2(2) states the applicable sea areas "are those areas included within Zone 3 as described in the Fishing Zones of Canada (Zones 1, 2 and 3) Order made under the Oceans Act."[14] The Bill makes clear, however, in Section 189.2(3) that the oil tanker prohibition does not apply to the transport of gasoline or other fuels intended for use in coastal and island communities in *Canada* (emphasis added).[15]

DEFINING CANADIAN JURIDICAL WATERS

Without specifically referring to them, Bill C-211 covers five different kinds of juridical waters recognized under Canadian legislation and international law: (1) internal waters, (2) historic or historic internal waters, (3) territorial sea, (4) fishing zones, and (5) the Exclusive Economic Zone (EEZ). It is important to understand the differences between them since a coastal state's rights and obligations, as well as those of flag states whose ships might be plying these waters, vary depending on their nature.

Any examination of these five different kinds of juridical waters along the coast of British Columbia first requires an understanding of the international legal concept of "straight baselines" (see Figure 1). The traditional way of measuring

Figure 1 The construction of baselines



A Indentation is larger than a semi-circle whose diameter is two closing lines, and is therefore a bay. Thus bay closing lines (which total less than 24 miles) are baselines.

B Straight baseline on indented coast fringed with islands.

C Indentation is smaller than area of semi-circle drawn on closing line. Therefore this is not a bay.

D An island generatiing its own territorial sea.

E Baseline is a line drawn across the mouth of the river that flows directly into the sea.

F Harbour works forming part of the baseline.

G Low tide elevations. One is less than 12 miles from the coast and therefore forms the baseline. The other is more than 12 miles from the coast and therefore does not affect the construction of the baseline

H On the rest of the coast the baseline is the low water mark.

Source: Churchill, R. R. and A. V. Lowe. 1988. *The Law of the Sea.* 2nd ed. Manchester U.K.: Manchester University Press.

the width of the territorial sea was from the low water mark along the coast. In the 19th century the Norwegians began a new way of measuring by drawing straight lines from the outermost points of the rampart of rocks and islands which fringe the Norwegian coast.[16] They used them to measure the breadth of the territorial sea. The Norwegians started to exclude foreigners from fishing in areas on the landward side of these lines and after a series of confrontations with British fishermen, the UK challenged Norway's limits before the International Court of Justice in 1949.[17]

The Court's 1951 decision in the Anglo-Norwegian Fisheries case[18] recognized the validity of drawing straight base lines where the topography of the coast is "very broken along its whole length…"[19] In 1956, Prime Minister Louis St. Laurent stated the decision of the Court had "set a principle which should be applicable to our own shores."[20] The Canadian Government started drawing its own baselines to measure the territorial sea along portions of Canada's eastern and western coasts. It drew straight baselines along the western side of Vancouver and Queen Charlotte Islands,[21] thereby excluding foreign fishermen from the landward side. (The Queen Charlotte Islands are now called Haida Gwaii but for simplicity the former name will be used in this article.) For reasons that will be discussed further, baselines were not drawn on the West Coast of the BC mainland itself.

Article 7 of the UN Convention on the Law of the Sea, to which Canada is a party, reflects the Court's decision. It states that "in localities where the coastline is deeply indented and cut into, or if there is a fringe of island along the coast in its immediate vicinity, the method of straight baselines joining appropriate points may be employed in drawing the baseline from which the breadth of the territorial sea is measured.'[22] By linking the outermost points on the rampart of rocks and islands with straight lines on charts along their coast, the Norwegians for example, were able to extend their fisheries jurisdiction many miles from the low waters mark along its shores. Canada, like other coastal states with similar shorelines, has followed this precedent for the same reasons.

Sovereignty over the territorial sea is subject to the right of ships of all states to "innocent passage."

I) INTERNAL WATERS AND TERRITORIAL SEA

Article 3 of the Convention states that "[e]very State has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, measured from baselines determined in accordance with this Convention."[23] Article 5 describes a "normal baseline" as the low water mark along the coast "except where otherwise provided in this Convention."[24] For our purposes, the most significant exception is Article 7, straight baselines, referred to above. Section 4 of the Oceans Act implements these Articles into Canadian law.[25] Article 8 of the Convention describes internal waters as those "waters on the landward side of the baseline of the territorial sea."[26] Canada has implemented this provision in Section 6 of the Oceans Act.[27]

The distinction between internal waters and the territorial sea is important since under international law, the coastal state has complete sovereignty over internal waters (as well as its historic internal waters which will be discussed below).[28] A coastal state therefore has the right to bar or solely regulate the passage of ships in its internal waters. However, its sovereignty over the territorial sea is subject to the right of ships of all states, whether coastal or land locked, to "innocent passage."[29] Article 18 of the Convention defines "passage" as navigating through the territorial sea for the purpose of traversing that sea without entering internal waters, calling at a port outside internal waters, proceeding to or from internal waters, or a call at such a port.[30] Article 19 states that passage is "innocent" as long as it is not prejudicial to the peace, good order, or security of the coastal state.[31] The laws of the coastal state apply to both internal waters and the territorial sea. Section 7 of the Oceans Act states: "For greater certainty, the internal waters of Canada and the territorial sea of Canada form part of Canada."[32]

II) HISTORIC INTERNAL WATERS

There is an additional aspect to the delimitation of the territorial sea and the determination of internal waters: historic title to waters. Section 5(3) of the Oceans Act entitled "Baselines where historic title" provides an exception to the measurement of the territorial sea using baselines in areas "over which Canada has an historic or other title of sovereignty."[33]

The Law of the Sea Convention recognizes the existence of historic title "and other special circumstances" in determining the delimitation of the territorial sea[34] as well as an exception to compulsory binding dispute settlement.[35] Similar exceptions also apply to "historic bays."[36] These waters are often referred to as "historic internal waters" since a coastal state has the same unimpeded sovereignty over historic waters as it has over internal waters.[37]

Neither the Convention nor Canadian law defines what is meant by "historic title" nor "historic bay" although there is a good sized body of academic literature and some judicial findings on the subject.[38] In "Historic Waters in International Law with special reference to the Arctic," Professor Donat Pharand provides six provisions to help determine the existence of historic waters, including the existence of exclusive authority and control by the coastal state over a long period of time as well as acquiescence by foreign states, particularly those affected by the claim.[39]

III) FISHING ZONES AND EXCLUSIVE ECONOMIC ZONES (EEZ)

The final subject for consideration is fishing zones and the Exclusive Economic Zone (EEZ). Starting in the 1950s, coastal states began to make claims for exclusive fishing zones off their coasts of "widely varying widths."[40] These claims were one of the factors leading to the convening of the Third United Nations Conference on the Law of the Sea in 1973 and the resulting 1982 Convention on the Law of the Sea.[41] Before the Conference began, Canada started taking its own initiatives on the inner and outer limits of its maritime boundaries including drawing straight baselines along the western coasts of Vancouver and Queen Charlotte islands in 1969, the 12 mile territorial sea, and the right to create exclusive fisheries zones in 1970.[42] In 1971, the Government drew "fisheries closing lines" in the Gulf of St. Lawrence, the Bay of Fundy, Dixon Entrance, Hecate Strait, and Queen Charlotte Sound[43] to create Fishing Zones 1, 2 and 3. Bill C-211 uses Fishing Zone 3 (simply called Zone 3 in the Bill), as the prohibition area for oil tankers. In 1977, Canada also created exclusive 200 mile fishing zones on its East (Zone 4) and West (Zone 5) coasts and the Arctic (Zone 6).[44]

The large prohibited zone would seem to be an area encompassing territorial seas with the right of innocent passage and an EEZ with freedom of navigation.

Professor Donald McRae notes that the purpose of Canada's actions was to maximize the country's interests by expanding its maritime boundaries in conformity with existing or developing international law over areas where Canada had traditionally exercised jurisdiction.[45] More particularly, it involved asserting claims to enclose waters as historic and to establish certain areas, such as Fishing Zone 3 on the West Coast, as subject to exclusive Canadians fisheries jurisdiction "even before the concept of a 200-mile fishing zone or EEZ had emerged."[46] Professor McRae concludes that the 1982 Law of the Sea Convention generally embodied these expansionist strategies.[47]

Indeed, Part V of the Law of the Sea Convention created the 200 mile EEZ in which the coastal state has sovereign rights over its living or non-living natural resources and with regard to any other activities regarding economic exploitation and exploration.[48] This is balanced by the right of all states to maintain the freedoms of navigation and over flight "and other lawful uses of the sea related to these freedoms."[49] The Convention states that the EEZ is not to extend beyond 200 miles from the baselines from which the breadth of the territorial sea is measured.[50] In 1996, Canada implemented its own 200 mile EEZ but retained the regulations that created the three Fishing Zones in the Gulf of St. Lawrence, Bay of Fundy, and off Queen Charlotte Island for reasons that appear related to its historic waters claims that will be seen below.[51] For reasons that are not clear, however, it also retained the existing 200 mile Fishing Zones off its east and West Coasts and in the Arctic.

Understanding these different kinds of juridical waters and how they are determined gives an insight into the problems Bill C-211 presents. On the face of it, the large prohibited zone would seem to be an area encompassing territorial seas with the right of innocent passage and an EEZ with freedom of navigation. Instead, in Canada's view, it is a Fishing Zone containing historic waters where these rights do not prevail.

II Bill C-211 under Domestic Law

Before considering Bill C-211's international implications, it is important to determine whether it is lawful under Canadian law. The Bill is an amendment to Part 9, Pollution Prevention, of the Canada Shipping Act. Section 186(1) of the Act states that "this Part applies in respect of vessels in Canadian waters or waters in the exclusive economic zone of Canada."[52] The Interpretation Act defines "Canadian waters" as including the internal waters and territorial sea of Canada.[53] Section 185 states that oil is a pollutant.[54] Bill C-211 cross references the Canadian Oil and Gas Operations Act, which defines oil as crude petroleum and any other hydrocarbon except coal and gas and oil tanker as a vessel constructed or adapted to transport oil in bulk.[55] While Part 9 is focused on the regulation of discharges from vessels, there would appear to be nothing contrary to the Act to add provisions prohibiting oil tankers navigating in defined areas off the coasts of Canada.

International law poses the real challenge to Bill C-211.

The Government has previously used the Canada Shipping Act to deal with pollution threats. In 1969, it amended the Canada Shipping Act to prohibit the discharge of polluting substances by ships. This provision applied to Dixon Entrance, Hecate Strait, and Queen Charlotte Sound.[56] The Government also used its regulatory powers under the Act to limit the amount of oil that could be transported in tankers to terminals in Maine through Head Harbour Passage, which Canada regards as part of the historic internal waters of the Bay of Fundy.[57] (The quantity was relatively so small as to make the transport uneconomic). In 2007, Canada went a step further, threatening to ban the passage of vessels carrying liquefied natural gas (LNG) through the same strait. While no action has since been taken, it can be presumed the legislative vehicle would be the Canada Shipping Act.[58]

Mr. Donnelly dropped a provision in C-211, which had been in all of the previous private member's bills, including his own, Bill C-502. Section 189.3 of that Bill permitted the Minister of Fisheries to recommend to Cabinet the designation of "other areas of the sea within Canadian waters in which the transportation of oil by tankers is prohibited." From a domestic point of view, this provision was the most problematic. In support of this provision, Joyce Murray stated that "the ministerial power to make such a recommendation already exists under Sections 190(1)(c) and 120(1)(k) of the Canada Shipping Act. The bill therefore grants Cabinet no new authority in this regard."[59] Firstly, the provisions she referred to give the initiating regulatory authority to the Minister of Transport, not the Minister of Fisheries. While the Minister of Fisheries is given responsibilities in Part 8 of the Act for responding to or preventing pollution, all of the regulatory authority under the Act rests with the Minister of Transport. The Oceans Act gives the Minister of Foreign Affairs the right to make regulations prescribing areas of the sea adjacent to the coast as Canada as fisheries zones.[60] This Minister would appear to be the most appropriate choice, if such a provision is indeed necessary. It was doubtful whether this provision, as drafted, would survive Parliamentary scrutiny and Mr. Donnelly simply omitted it from the Bill's latest version.

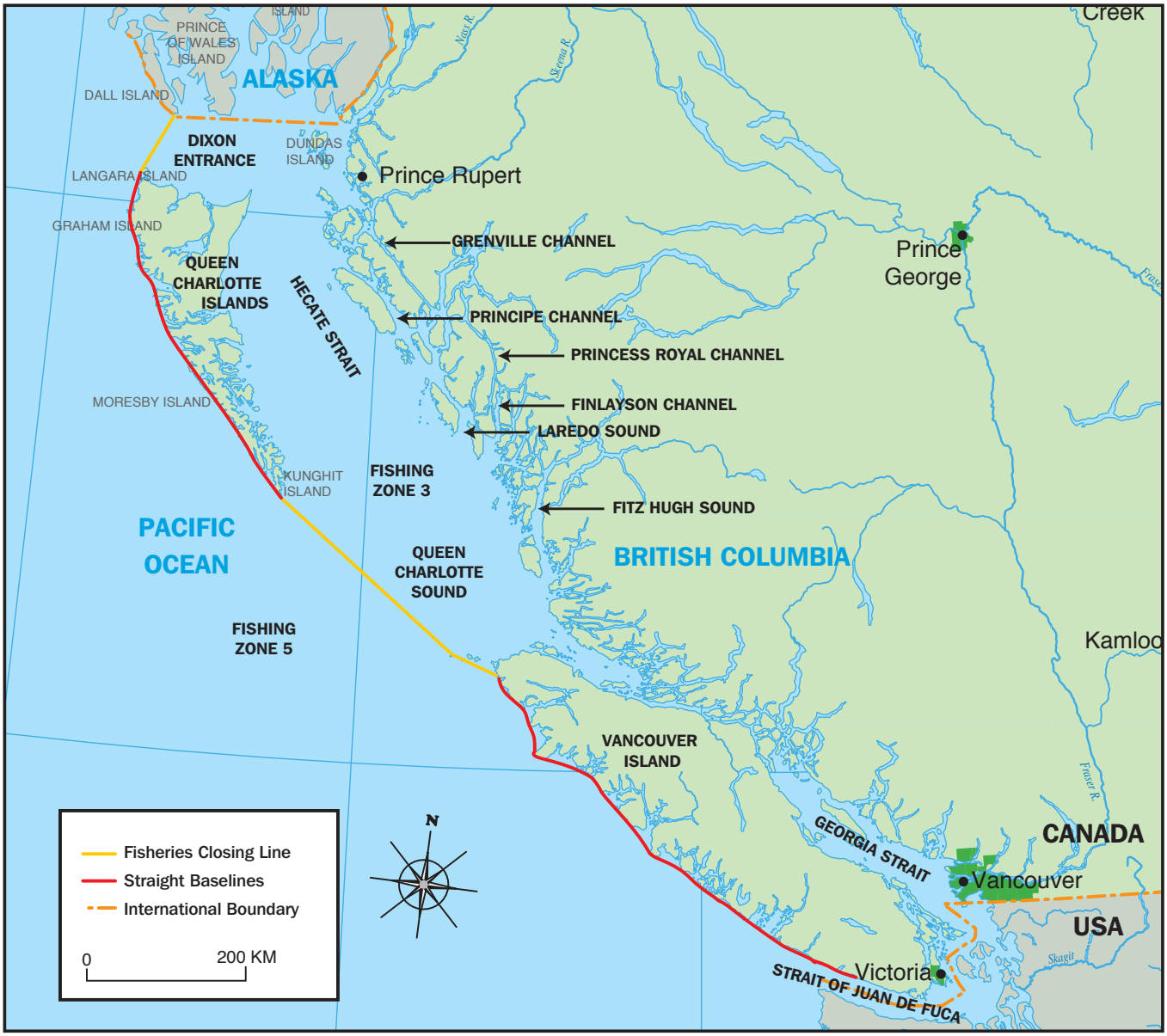
III Bill C-211 under International Law

International law poses the real challenge to Bill C-211 since its application depends on Canada's international legal rights over the waters in the designated prohibition area. The examination of the nature of the waters has indicated that Canada has complete sovereignty over the internal waters or historic internal waters as well as over the territorial sea subject to the right of innocent passage. Bill C-211 would exclude that right. Internal waters are defined in the Convention as those waters on the landward side of the baselines to measure the territorial sea. The Interpretation Act defines internal waters "in relation to any other state" in the same way.[61]

In 1963, Prime Minister Pearson told the House of Commons that Canada intended to proceed to establish straight baselines.[62] It was understood that these lines would extend around the Arctic islands, across the mouths of the Gulf of St. Lawrence and Bay of Fundy, and across Queen Charlotte Sound (which would effectively enclose the Hecate Strait).[63] Drawing straight baselines across Queen Charlotte Sound would clearly indicate that the waters on the landward side are internal. But as Professor Jacques-Yvan Morin pointed out in 1973, "for various reasons, including the opposition of

the United States, [Canada] has not yet initiated the "closing" by straight baselines of the straits which give access to these waters."[64] Now in 2012, Canada has still not done so on BC's West Coast although in 1985 it did draw straight baselines around the Arctic Archipelago,[65] which, in the words of then Foreign Minister Joe Clark, "define the outer limit of Canada's historic internal waters."[66] See Figure 2 for the current lines drawn in West Coast waters.

Figure 2 West Coast waters



Source: TL McDorman. 1995. "The West Coast Salmon Dispute: A Canadian View of the Breakdown of the 1985 Treaty and the Transit Licence Measure." 17 Loyola of Los Angeles International & Comparative Law Journal 17(477): 506.

Nevertheless, Canada has not abandoned its claim that the waters in Fishing Zone 3 constitute historic internal waters.[67] The main bases for the claim appear to be Dixon Entrance, just south of the Alaska Panhandle, and north of Hecate Strait. Canada maintains that when the Alaska Boundary Tribunal drew a line from point "A" on Dall Island eastward across Dixon Entrance to point "B" at the mouth of the Portland Channel, it established the international land/maritime boundary between Canada and the United States (see Figure 3).

Figure 3 The maritime boundary drawn by the "A-B line"

Figure 4 The maritime boundary drawn using principles of equidistance

Source: www.wikipedia.com.

The United States argues that it is a line of land allocation only, and the true maritime boundary should be determined using the principles of equidistance (see Figure 4), that is along a median line every point of which is equidistant from the US and Canadian coasts.[68] The differences of approach to this question led to confrontations between the two countries over fishing rights, with US vessels fishing in what Canada regarded as its internal waters without authorization[69] and over the passage of nuclear submarines through the entrance on their way to a sonar testing site in the Behm Canal in US waters, which are part of the Alaska Panhandle.[70] Since the 1890s, Canadian authorities have maintained that Dixon Entrance and Hecate Strait are Canadian waters and there is a recorded Canadian claim in 1909 that the waters of Hecate Strait are internal.[71] The claim for a similar status for Queen Charlotte Sound is of more recent vintage and "has no apparent antecedent in British or Canadian practice."[72]

McRae has referred to Canada's fisheries closing lines in Fishing Zone 3 and the two other fisheries closing lines in the Gulf of St. Lawrence and the Bay of Fundy as retaining an "ambiguous although largely irrelevant status."[73] "Ambiguous" would appear to be the operative word. Canada can point to a fairly consistent line of statements that the waters of

Dixon Entrance and Hecate Straight are historic internal waters. It has more difficulty making the same argument for Queen Charlotte Sound. While the establishment of straight baselines would definitively set out Canada's claim, it has refrained from drawing them, apparently relying on weaker "fisheries closing lines" to mark it out instead. Perhaps Canada hopes that by using a gradual approach, over time it can avoid confrontation regarding its claim. If so, it does not need to provoke the United States and others, which, as demonstrated below, the Bill will do.

IV Reactions of Foreign States

Needless to say, it would be the United States that would be most affected by the provisions of Bill C-211, should it become law. The United States has been consistent in protesting Canadian actions on the West Coast when it believes its interests have been affected, including the implementation of straight baselines on the western shores of Vancouver and Queen Charlotte Islands in 1969,[74] the establishment of fishing closing lines followed by the creation of Fishing Zone 3,[75] their rejection of the permission Canada granted to US submarines to transit Dixon Entrance in 1991 (the United States maintained that since it had the right of innocent passage it did not need Canada's permission),[76] Canada's enforcing its fisheries regime in Dixon Entrance,[77] and Canada's imposition of a transit fee on US salmon trawlers along the Inside Passage in BC's coastal waters.[78]

The United States would be most affected by the provisions of Bill C-211.

If this Bill or something similar were to become law, the United States would likely object on two grounds. First, section 189.2(3) of the proposed bill provides an exception for the transport of gasoline and other fuels to coastal or island communities in Canada. The chart shows that the most convenient means of access to US waters north of the Dixon Entrance is through the prohibited area. The legislation would therefore not permit the transit of fuels by tanker to US communities and islands, something that would clearly be unacceptable to the United States.

Second, the United States appears to have taken to heart the guidance from the International Court of Justice in the Anglo-Norwegian Fisheries case that one question for consideration in determining maritime claims is whether foreign states have accepted or tolerated the practice.[79] It is hard to find a Canadian maritime claim on the Atlantic, Pacific, or Arctic coasts of Canada that the United States has not protested at one time or another. Since Bill C-211 prohibits oil tanker traffic in an area the United States regards as either the territorial sea or the EEZ of Canada where US vessels would enjoy either innocent passage or freedom of navigation, a protest can be expected. It is immaterial whether United States oil tankers actually use the prohibited area, aside from using Dixon Entrance to provision their own communities to the north of the "A-B Line." In fact, Canada and the United States have agreed that oil tankers plying between Alaska and the southern United States do so in traffic lanes that are about 115 miles distant from the Queen Charlotte Islands.[80]

While the United States is not a party to the Law of the Sea Convention, the vast majority of the world's states are, and any party has the right to take another party to compulsory dispute settlement procedures "concerning the interpretation or application of this Convention."[81] As indicated above, a party can make an optional exception to accept conciliation rather than binding decisions, which Canada has done, regarding claims involving historic bays or title.[82] It would nevertheless be open to a party to the Convention to initiate conciliation procedures against the Bill should it become law on the basis that it impedes the Convention rights of their vessels to innocent passage and freedom of navigation.

As it has in the past, the United States would likely rely on protesting Canada's actions through a diplomatic note regarding the legislation and by exercising what it regards as its international rights to innocent passage and freedom of navigation by ignoring the Canadian requirements, particularly by continuing to provision its communities above the "A-B Line" with fuel. Previous experience on the West Coast indicates that Canada has sought to mollify US concerns by permitting passage, non-enforcement, or withdrawing the measure.[83] Should a State Party to the Law of the Sea Convention utilize the Convention's compulsory dispute settlement procedures against Canada, the Government would have no choice but to submit to conciliation procedures with an uncertain result.

CONCLUSION

While Bill C-211 makes no mention of the Northern Gateway pipeline project, statements by the Bill's sponsor, Fin Donnelly, its current supporters in the House of Commons, and those MPs who have introduced similar legislation over the past four years make clear that this is seen as another means of stopping the project. The proposed legislation to amend the Canada Shipping Act to prohibit oil tanker traffic in Fishing Zone 3 is lawful under domestic legislation.

However, the Bill falls short of its purpose by opening an unnecessary dispute with the United States (and potentially other countries) on the nature of the waters in Fishing Zone 3. Canada has maintained that Zone 3's waters are historic internal waters, but has left its claim ambiguous by only drawing fisheries closing lines in the 1970s.[84] The United States argues the waters consist of Canada's territorial sea and EEZ, areas within which its ships have internationally recognized rights. The fact that the Bill would deny the United States oil tanker access to provision its own communities, while Canada can provision its own, is a recipe for confrontation.

The United States argues the waters consist of Canada's territorial sea and EEZ, areas within which its ships have internationally recognized rights. Denying the United States oil tanker access to provision its own communities, while Canada can provision its own, is a recipe for confrontation.

Two conclusions stand out. First, it appears from the five largely similar private member's bills introduced by the Opposition in nearly every session of Parliament over the past four years that those opposed to tanker traffic off the northern coast of British Columbia see this as a further, effective tool to try to stop the Northern Gateway project. At one time during a period of minority government, their private member's bills had a chance of passing the House of Commons and possibly even the Senate when it had a Liberal majority. There is no chance of passage under a majority Conservative Government. It appears clear, however, that the Opposition will continue their legislative campaign, and the publicity it generates, in any further sessions of the 41st Parliament and beyond until the project is abandoned or they reluctantly accept that it will proceed.

Secondly, seemingly unbeknown to the Bills' sponsors, the proposed legislation brings to the fore the complicated international situation regarding the status of the waters off BC's West Coast. The United States currently treats those waters as part of the territorial sea where they have the right to innocent passage and an EEZ with freedom of navigation. The only way for US oil tankers to access the Alaska Panhandle is through the disputed area. Despite claiming Zone 3 as historic internal waters, for various reasons, Canada has been vague about the boundaries, relying on fisheries closing lines instead of drawing stronger straight baselines. Bill C-211 would definitively block foreign access to those waters, without exception. Canada has no interest in provoking a fight with the United States or other members of the international community on this question. The Bill's international implications will therefore remain untested. Until Canada's western, eastern, and northern maritime boundaries with the United States are finally resolved, legislators should be wary about trying to restrict international maritime traffic off Canada's coasts.

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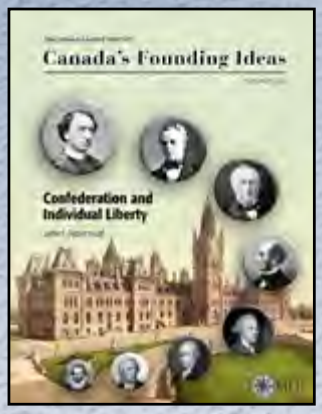

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