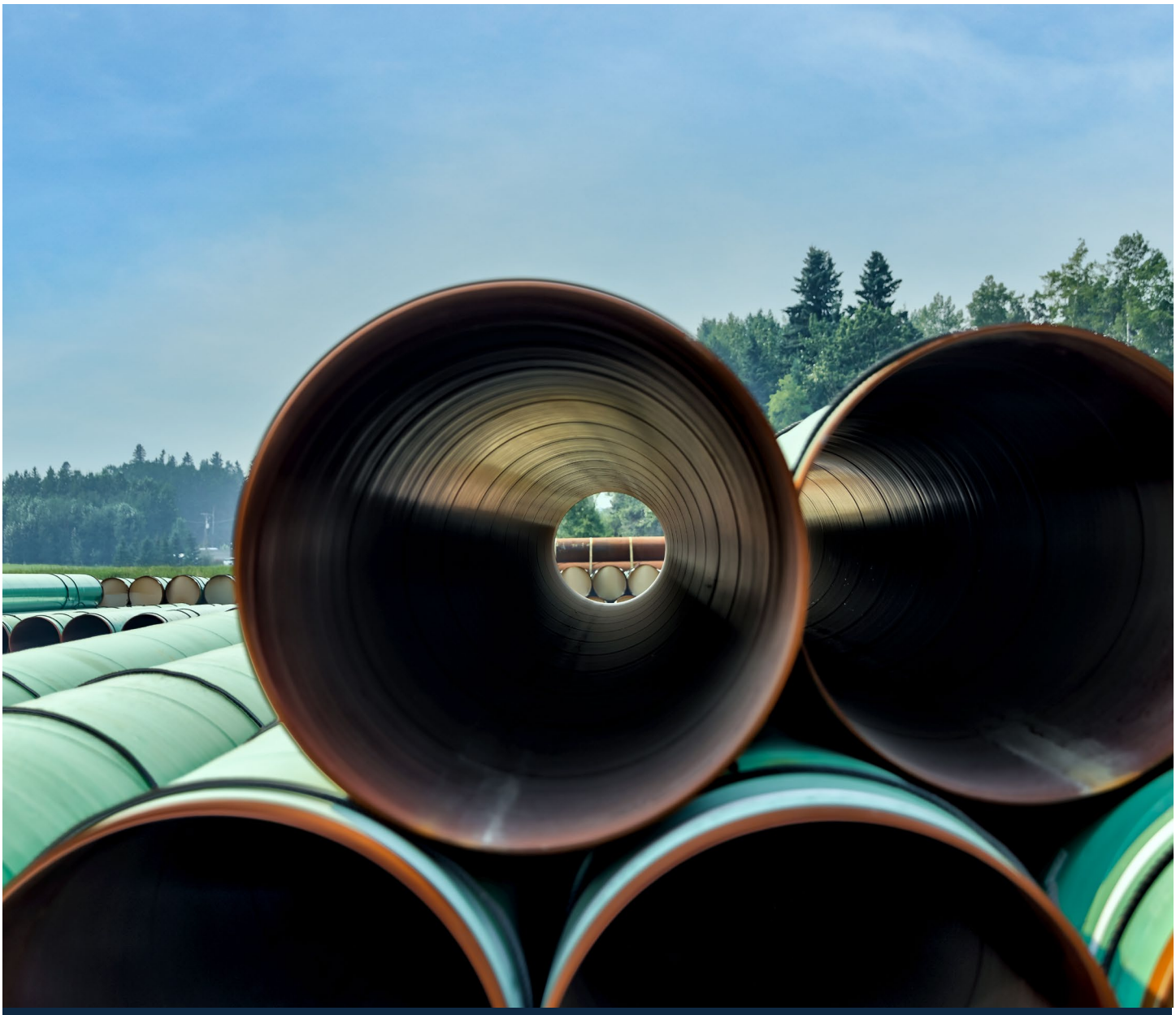

Before Politics Governed Pipelines

Northern Gateway Pipeline Review by the National Energy Board

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BEFORE POLITICS GOVERNED PIPELINES

EXECUTIVE SUMMARY

A major issue in Canadian politics today is whether or not the federal government and the governments of Alberta and British Columbia should authorize and facilitate the construction of a new oil pipeline from Alberta to a port on the northern British Columbia coast.

The issue is made more contentious by the fact that the statements of the leaders and the media coverage of it is dominated by differences of political objectives, not by facts and analysis as determined by an independent expert body. It was not always like this.

Up until 2019, the National Energy Board (NEB) had regulatory jurisdiction over the certification and regulation of interprovincial and international pipelines. The NEB was an independent, quasi-judicial, expert regulatory body that operated at arms'-length from the federal government in carrying out its responsibilities. The federal government rarely overrode the decisions of the Board.

We do not have to guess how an independent, professional body like the NEB would have treated a proposal to build an oil pipeline from Alberta to the BC coast. We can observe the actual process that it followed in reviewing the Northern Gateway pipeline project.

The NEB carried out an exhaustive review over four years. It held 35 public information sessions. Public hearings were held over 180 days; these heard the views of 206 intervenors, 12 government departments and agencies, and 1,179 oral arguments before the Panel. The entire record of the proceedings was published. The panel's report[1] set out a lengthy summary of the evidence it heard and of the Panel's views based on the evidence.

[1] https://iaac-aeic.gc.ca/050/documents_staticpost/cearref_21799/97178/Considerations_-_Report_of_the_Joint_Review_Panel_for_the_Enbridge_Northern_Gateway_Project_(Volume_2).pdf

The Panel found that:

- A large spill due to a malfunction or accident, from the pipeline facilities, terminal, or tankers, is not likely.
- Northern Gateway had followed good engineering practice in determining a proposed route that would avoid or minimize exposure to geohazards (e.g. unstable slopes), reduce pumping requirements, and provide a safe and responsible route for construction and operation.
- Northern Gateway had incorporated appropriate mitigation in its design and operation of the Kitimat Terminal to avoid spills or lessen their effects through appropriate containment and recovery measures.
- Since 1992, there have been no spills throughout the world where the total insurance funds available were insufficient to cover all costs and losses.
- Malfunctions leading to large spills from the marine facilities, terminal or tankers are not likely and may not occur during the life of the project.
- Shipping along the north coast of British Columbia is accomplished safely the vast majority of the time, in the absence of many of the mitigation measures that would be in place for the Northern Gateway project.
- With Northern Gateway's commitments, and with the Panel's conditions, the project was likely to have positive net economic benefits to local, regional and national economies, and can provide positive benefits and opportunities to those local, regional and Aboriginal individuals, communities, and businesses that chose to participate in the project.

Based on the report of the Panel, the National Energy Board approved the Northern Gateway Pipeline subject to 209 conditions, the largest number of conditions ever imposed on a pipeline project. The Harper government approved the project in 2014. Subsequently, the project's approval was overturned by the Federal Court of Appeal in 2016 on the grounds that the federal government (i.e. not Northern Gateway or the National Energy Board) had failed to adequately consult with the affected indigenous communities. The Trudeau government made no effort to conduct such consultations after the court decision.

The NEB's review of Northern Gateway demonstrated on the evidence that an oil pipeline from Alberta to the northern British Columbia coast and the related port and marine shipping could be accomplished in a safe and environmentally responsible way and would yield large economic benefits to British Columbia, Alberta and Canada as a whole.

BEFORE POLITICS GOVERNED PIPELINES

A major issue in Canadian politics today is whether or not the federal government and the governments of Alberta and British Columbia should authorize and facilitate the construction of a new oil pipeline from Alberta to a port on the northern British Columbia coast.

The issue is complicated by the tendency of all three governments to treat pipeline construction as a matter to be decided on the basis of primarily political, if not ideological, considerations. The Alberta government seeks increased access to markets for its principal industry and the resulting higher revenues and economic growth. The federal government, led by Prime Minister Marc Carney, claims to seek "nation-building" projects but is clearly influenced by its desire to pursue "Net-Zero" greenhouse gas emissions and to accommodate the views of both environmentalist and indigenous groups. The government of British Columbia has long strongly opposed to a transit pipeline because of the alleged adverse environmental effects of both the pipeline and the port/shipping facilities and operations.

The issue is made more contentious by the fact that the statements of the leaders and the media coverage of it is dominated by differences of political objectives, not by facts and analysis as determined by an independent expert body. It was not always like this.

THE NATIONAL ENERGY BOARD

Up until 2019, the National Energy Board (NEB) had regulatory jurisdiction over the certification and regulation of interprovincial and international pipelines. This authority derived from the Canadian constitution, which grants to the federal government the authority over interprovincial and international trade and commerce, and from the provisions of the *National Energy Board Act*. The NEB was an independent, quasi-judicial, expert regulatory body that operated at arms'-length from the federal government in carrying out its responsibilities. It was created in the 1950's precisely because the government of the time wisely saw that pipeline issues could become highly politicized, and so it was important that an independent body assess the economic, financial, environmental and engineering issues and offer its advice before it took the final decision. The federal government rarely overrode the decisions of the Board.

We do not have to guess how an independent, professional body like the NEB would have treated a proposal to build an oil pipeline from Alberta to the BC coast. We can observe the actual process that it followed in reviewing the Northern Gateway pipeline project.

The Northern Gateway pipeline was a proposed twin pipeline system by Enbridge to transport diluted bitumen from Bruderheim, Alberta to a marine terminal in Kitimat, British Columbia. An application to build the project was filed with the NEB in 2010. The NEB established a Joint Review Panel including two permanent members of the Board and a third member appointed on the advice of the Minister of the Environment to carry out a joint review under the provisions of the *National Energy Board Act* and the *Canadian Environmental Assessment Act*. The panel was instructed to conduct a thorough assessment of the project and to submit a report as to whether or not it was in the public interest.

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The Panel carried out an exhaustive review over four years. It held 35 public information sessions. Public hearings were held over 180 days; these heard the views of 206 intervenors, 12 government departments and agencies, and 1,179 oral arguments before the Panel. The entire record of the proceedings was published. The panel's report[2] set out a lengthy summary of the evidence it heard and of the Panel's views based on the evidence.

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PARTIAL LIST OF SUBJECTS REVIEWED BY THE NEB PANEL

The Panel carried out an exhaustive review of the proposed project, as guided partly by the requirements of legislation but also in response to the issues of public concern identified during the consultation and public hearing processes. It spent a disproportionate amount of its time and effort assessing the environmental issues.

The subjects studied included these:

- Whether the project was in the Canadian public interest
- The adequacy of Northern Gateway's consultation process, especially with aboriginal groups
- Public safety and risk management (e.g. pipeline location and design, the Kitimat Terminal, leak detection, corrosiveness of the products shipped, post-construction monitoring and inspections)
- Environmental behavior of the products to be transported
- Emergency prevention, preparedness and response (e.g. regulatory framework, consequences of spills, spill prevention and mitigation, emergency preparedness and response)
- Environmental Assessment (e.g. purpose and need for the project, alternatives, environmental assessment methods, environmental effects, follow-up and monitoring)
- People and Communities (e.g. effects on fisheries and forestry, effects on land use, heritage resources, social and cultural wellbeing, traditional land use, employment and economic effects, health)
- Economic Feasibility (e.g. demand, adequacy of existing pipeline capacity, markets)
- Financial, tariff and tolling matters

THE KEY ENVIRONMENTAL ISSUES CONSIDERED

BURDENS OF A POTENTIAL LARGE OIL SPILL

The Panel found that a large spill due to a malfunction or accident, from the pipeline facilities, terminal, or tankers, is not likely. Generally, the frequency and size of oil spills have been declining sharply over the last fifty years, both in the case of pipelines[3] and marine shipment[4].

[3] https://blog.friendsofscience.org/2018/06/22/oil-pipelines-and-water-addressing-the-myths/
[4] https://friendsofsciencecalgary.wordpress.com/2016/11/18/moving-oil-by-tanker-in-canada-the-facts/

The Panel further found that Northern Gateway had taken steps to minimize the likelihood of a large spill through its precautionary design approach and its commitments to use innovative and redundant safety systems. Examples of design enhancements included: thicker pipe, additional block valves; complementary leak detection systems; re-routing the pipeline away from major rivers, wherever feasible; trenchless river crossings, wherever feasible; a Tanker Acceptance Program; use of escort tugs; and navigational safety enhancements.

ROUTE SELECTION

Northern Gateway had selected a proposed one-kilometre-wide route corridor and general facility locations, recognizing that decisions on the more precise locations of the pipeline and related facilities would depend upon additional studies and a second NEB review. Several alternative routes were considered. **The Panel found that Northern Gateway had followed good engineering practice in determining a proposed route that would avoid or minimize exposure to geohazards (e.g. unstable slopes), reduce pumping requirements, and provide a safe and responsible route for construction and operation**.

EMERGENCY PREVENTION, PREPAREDNESS AND RESPONSE – ONSHORE

Northern Gateway committed that the pipeline would be designed, constructed and operated in a manner consistent with the National Energy Board *Onshore Pipeline Regulations*, which govern integrity, safety, security, environmental protection, and emergency management.

The Panel found that the Northern Gateway had incorporated appropriate mitigation in its design and operation of the Kitimat Terminal to avoid spills or lessen their effects through appropriate containment and recovery measures.

EMERGENCY PREVENTION, PREPAREDNESS AND RESPONSE – MARINE

Transport Canada is the federal government department with jurisdiction over navigation and shipping, coastal fisheries, and aids to navigation. It also has a comprehensive legislative and regulatory framework to ensure that marine transportation is safe, secure, and environmentally responsible.

The department conducts a review process for proponents involved in building and operating a marine terminal system for bulk handling of oil, chemicals and liquified gases (the "TERMPOL process"). After reviewing the Northern Gateway project, the TERMPOL committee recommended a number of mitigation measures, and Northern Gateway committed to fully implement those measures. The NEB Panel made such compliance a condition of a certificate.

The marine shipping risk analysis reviewed by TERMPOL included estimates of the "mitigated return periods" for various sizes of spills from project tankers. The estimates indicated that a return period of a spill of oil, condensate or bunker fuel was 250 years. The estimated return period for an oil spill of any size was 350 years. The estimated return period for any condensate spill was 890 years. **The estimated return period for an oil spill of greater than 40,000 cubic metres was 15,000 years. The project sponsor testified that the probability corresponding to a return period of 250 years is 18.2 per cent in 50 years (the approximate project life), or an annual probability of 0.004.** Opponents of the project played upon the finding that an oil spill was not "impossible", but refused to acknowledge that the probability of a large spill was extremely low.

In the highly-unlikely event of an oil spill, there is a marine spills liability and compensation regime in Canada. This regime is governed under the *Marine Liability Act* and associated regulations, which are administered by Transport Canada. There are various regimes available to pay for cleanup and compensation costs, such as ship owners' insurance and domestic and international funds. A single oil pollution incident may draw compensation from multiple regimes. **Between ship owner insurance and other federal legislation and international agreements, in 2014 there was approximately $1.35 billion worth of coverage. This is the largest amount of coverage available in the world.**

The Panel noted the evidence that, since 1992, there have been no spills throughout the world where the total funds available were insufficient to cover all costs and losses.

The Panel found that *"malfunctions leading to large spills from the marine facilities, terminal or tankers are not likely and may not occur during the life of the project."*

SHIPPING OFF THE NORTHERN B.C COAST

The Panel heard many expressions of concern regarding allegedly dangerous environmental conditions and navigation hazards on the West Coast. In fact, tankers associated with the project would have used established shipping channels currently used by large vessels.

Here is its statement of findings:

"*The evidence indicates that Northern Gateway has appropriately considered potential wind and wave conditions within project planning through wind and wave analyses and its commitment to establish operational limits for shipping and terminal berthing.*

The evidence before the Panel indicates that shipping along the north coast of British Columbia is accomplished safely the vast majority of the time, in the absence of many of the mitigation measures that would be in place for this project. These would include reduced vessel speeds, escort tugs, redundant navigational systems, and avoiding congestion in the narrower parts of the shipping channels."

In other words, the Panel findings call into question the justification of the actions of the Trudeau government in 2019 when it imposed a moratorium on oil tanker shipment off the northern British Columbia coast.

ECONOMIC BENEFITS

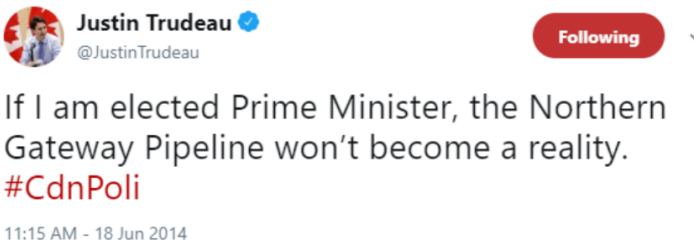
Northern Gateway offered estimates of the total economic effects of the project derived from using Statistics Canada's 2008 inter-provincial Input-Output Model. Based on these projections, the economic effects from the construction and operation of the project facilities could include:

- **A gain of $312 billion in Canadian GDP, or an annual average gain of $9.2 billion;**
- **A gain of $98 billion in government revenues, or an annual average increase of $2.9 billion;** and
- An increase of 907,000 person-years of employment, or an annual average increase of over 27,000 person-years of employment.

Northern Gateway committed to a target of 15 per cent of Aboriginal employment for construction labour. The company said that project construction was expected to require 10,335 person-years of employment in British Columbia and 3,535 person-years of employment in Alberta.

The grant description goes on to read:

> *"WCEL aims to establish the conditions under which a) opposition parties holding a parliamentary majority work together to enact a legislative tanker ban under a minority government and/or incorporate a ban promise in their manifestos, committing them to act following an election that produces a majority government, and b) First Nations declare their own bans on transportation of tar sands crude oil through their territories and waters."*



West Coast Environmental Law was very active on the tanker ban. More details in this report. https://blog.friendsofscience.org/wp-content/uploads/2019/02/Manufacturing-A-Climate-Crisis-2A-FINAL.pdf

The Panel agreed that Northern Gateway had produced a credible estimate of the general economic benefits of the project, noting that the actual economic effects could only be determined once the project was constructed and placed in operation. It concluded:

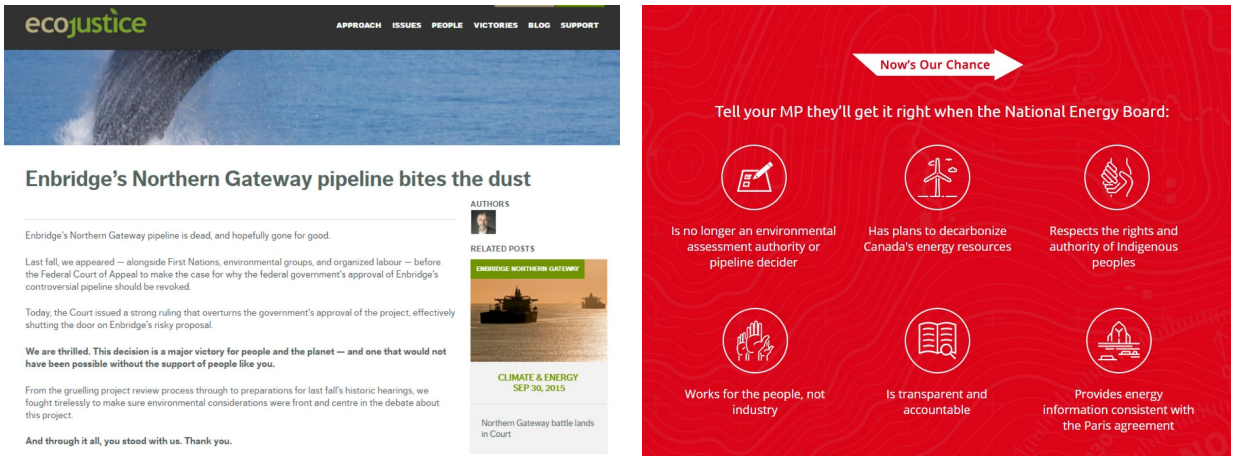
"The Panel is of the view that, with Northern Gateway's commitments, and with the Panel's conditions, the project is likely to have positive net economic benefits to local, regional and national economies, and can provide positive benefits and opportunities to those local, regional and Aboriginal individuals, communities, and businesses that chose to participate in the project."

CONDITIONS

Based on the report of the Panel, the National Energy Board approved the Northern Gateway Pipeline subject to 209 conditions, the largest number of conditions ever imposed on a pipeline project. The Harper government approved the project in 2014.

OUTCOME OF REVIEW

Subsequently, the project's approval was overturned by the Federal Court of Appeal in 2016 on the grounds that the federal government (i.e. not Northern Gateway or the National Energy Board) had failed to adequately consult with the affected indigenous communities. The Trudeau government made no effort to conduct such consultations after the court decision. Consequently, the project's sunset clause, which set a deadline for construction to begin, expired on December 31, 2016, confirming the project's demise.



The environmental law charity, Ecojustice, ran heavy point-and-click media campaigns against Northern Gateway and other pipelines, and also against the National Energy Board.

RETROSPECTIVE

The Organization for Economic Cooperation and Development (OECD) has over the last three decades published a number of studies and proposed guidelines for regulatory decision making including decision making related to the review and approval of major infrastructure[5]. Notably:

- Regulations should have a sound legal and empirical basis, serving clearly defined policy goals.

[5] https://www.oecd.org/content/dam/oecd/en/publications/reports/2008/10/oecd-guiding-principles-for-regulatory-quality-and-performance_g1gh9eb3/9789264056381-en.pdf

- Regulators must examine and compare the costs and benefits of a proposal against feasible alternatives, with benefits exceeding costs
- Regulators should prioritize actions based on risk assessment to protect the public interest
- The process and effects of regulation should be transparent.
- Rules should be clear, consistent, comprehensible and accessible to the people and businesses they affect.
- Regulators should provide opportunities for all interested parties to provide input.
- Regulators should be accountable for their decisions and ensure that they are made on an objective and impartial basis

In its review of the Northern Gateway project and others over many decades, the National Energy Board adhered to these principles. Contrast this with the political process by which the Trudeau government forced the abandonment of the project and the way in which the current Mark Carney government is reviewing proposed "nation-building projects". The basis of decisions are hidden, lacking in evidence, ignore costs and incomprehensible to the people they most affect.

The NEB's review of Northern Gateway demonstrated on the evidence that an oil pipeline from Alberta to the northern British Columbia coast and the related port and marine shipping could be accomplished in a safe and environmentally responsible way and would yield large economic benefits to British Columbia, Alberta and Canada as a whole. We cannot turn back the clock and recreate the National Energy Board (as desirable as that may be), but Canadians can insist that current federal and provincial decision makers heed the evidence and sound, independent advice that has already been offered.

ABOUT THE AUTHOR

Robert Lyman is an economist with 27 years of experience as an analyst, policy advisor and manager in the Canadian federal government, primarily in the areas of energy, transportation, and environmental policy. He was also a diplomat for 10 years. Subsequently he has worked as a private consultant conducting policy research and analysis on energy and transportation issues as a principal for Entrans Policy Research Group. He is a frequent contributor of articles and reports for Friends of Science, a Calgary-based independent organization concerned about climate change-related issues. He resides in Ottawa, Canada. Full bio.

ABOUT FRIENDS OF SCIENCE SOCIETY

Friends of Science Society is an independent group of earth, atmospheric and solar scientists, engineers, and citizens that is celebrating its 23rd year of offering climate science insights. After a thorough review of a broad spectrum of literature on climate change, Friends of Science Society has concluded that the sun is the main driver of climate change, not carbon dioxide (CO2).

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