

UNIVERSITY OF CALGARY
FACULTY OF LAW

LAW 703 - GRADUATE SEMINAR IN LEGAL RESEARCH & METHODOLOGY

ANNOTATED BIBLIOGRAPHY FOR MY PROPOSED THESIS

TITLE: UPSTREAM AND DOWNSTREAM EMISSIONS CONSIDERATION IN PIPELINE
APPROVALS IN CANADA: IMPLICATIONS FOR LAW AND POLICY

BY

ADEWALE AJAYI

DECEMBER 5th, 2018

ANNOTATED BIBLIOGRAPHY

My thesis focuses on how upstream and downstream emissions are considered in the pipeline review process in Canada. The research problem occurs because building a pipeline encourages more upstream pollution, also because both upstream and downstream emissions capture the scope of emissions produced by fossil fuel, and neglect of anyone will result in a hindrance of Canada achieving its climate change obligations. Currently, there are no laws or regulations expressly mandating the recognition of emissions of upstream and downstream emissions in the pipeline review process in Canada. However, there is a bill called the Bill C-69 which seeks to overhaul the current environmental impact assessment and consider Canada's climate change obligations when reviewing pipeline projects. To this problem, I propose two research questions: under the current legal and regulatory framework, how are upstream and downstream emissions considered in the federal environmental assessments of inter-provincial pipelines? The second question is determining the potential legal and regulatory issues that may arise as a result of considering upstream and downstream emissions under the proposed Bill C-69 and what can we learn from similar situations in the USA for policy recommendations in Canada? To answer this question, I seek to examine the intricacies of the review process of the national energy board (NEB), the way upstream, and downstream emissions are considered in the USA, and the best practices from the USA will form suggestions for the Canadian system. In addressing my thesis, I will review the international climate change regime as well as Canadian local climate regime, the attitude of the courts towards the importance of emissions as a consideration in the pipeline review process, and the obstacles that arise in considering upstream and downstream emissions.

SECONDARY SOURCES: BOOKS

Cadman, Rowena Maguire & Charles Sampford, *Governing the climate change regime: Institutional integrity and integrity systems* (Abingdon, Oxon; New York, NY: Routledge 2017).

This book describes the institutional architecture that forms the foundation of an international climate change system. The book discusses the institutions, arrangements, regulations, frameworks, rules, laws, and regulations that seek to implement the United Nations Framework Convention on Climate Change (UNFCCC) international climate change agenda. The central theme of the book is to determine the legitimacy of the governance mechanism of climate change, the failures of previous international climate change governance mechanism to address the complex factors poised to solve climate change, and whether the past failures will impact the Paris agreement or not. The topics include the governance of climate change, evaluating the governance arrangement of the UNFCCC including the Paris agreement, and how to improve governance within the UNFCCC. The information provided in the book will be useful for background understanding of international climate change governance mechanism and how it has been able to address the causes of climate change like fossil fuel effectively. An essential aspect of this book to aid in writing my thesis is to understand the measures taken by the international climate change governance mechanism to contain the expansion of fossil fuel.

Canada National Energy Board, *The public hearing process: Your guide to understanding NEB hearings*, 2011 (Calgary: National Energy Board 2011).

This book summarizes the national energy board¹ (NEB) hearings. The book entails the steps in the hearing process, the modalities in participating in a public hearing process, the makeup of the hearing panels, and the decision of the hearing panel. The book also stipulates the jurisdiction of the NEB to hear the approval of projects and the types of projects to be approved. Also, the book specifies the process of appeal parties can resort to after the refusal of a project by the NEB. This information will be useful for describing the legal and regulatory framework of the NEB in considering pipeline applications. Also, the evidence, the various scientific, social, health, economic, and safety considerations considered by the NEB in the approval of pipelines, oil and gas project, how and when GHG will be considered in the approval process.

Farber, Daniel & Marjan Peeters, *Climate Change Law* (Cheltenham, UK: Edward Elgar Publishing, 2016).

This book is an encyclopedia of environmental law comprising of twelve volumes covering topics ranging from climate change and the environment. The book covers essential topics ranging from goals of climate policy, treaties related to climate change, national and regional perspectives on reducing greenhouse gases, mitigation, and adaptation. Apart from providing a detailed analysis of International climate change treaties and instruments, of vital importance is the analysis of greenhouse gases and climate change. Also, they consider the role of the courts in GHG emissions reductions and traditional regulation's role in greenhouse gas abatement. The information of this book will be used to describe the international legal perception on greenhouse gas emissions and the importance of the judiciary and regulations in reducing emissions from fossil fuel. The content of the book on greenhouse gases will also give

¹ RSC 1985, c N-& [NEB Act].

an understanding of upstream and downstream emissions as a significant contributor to climate change.

Gray, Earle, *Impact of Oil* (Toronto, Winnipeg, Vancouver: The Ryerson Press and Maclean-Hunter Limited, 1969).

This book describes the foundation and development of the Canadian oil and gas industry. The topics include natural gas, petroleum, petroleum prosperity, pipelines, and oil and gas processing. The book employs a historical account of the discovery of oil and gas industry after the decline of the coal industry. The book describes the financial and economic impact of the oil and gas industry, and this gives background information on the oil and gas industry and how Canada's dependency on the oil and gas industry began. Another important aspect of the book is the historical narration of pipelines as an essential factor in the growth of the oil and gas industry in Canada. This information will be useful as background information of the oil and gas industry, and the development of pipelines in chapter one of the thesis.

Gupta, Joyeeta, *Global Climate Governance* (Cambridge, United Kingdom: Cambridge University Press, 2014).

Gupta provides a background of international climate legal regime and describes seven climate processes and measures targeted at different parts of the climate system. Two important climate processes are drivers and GHG sources. He explains how production, distribution, and consumption form drivers of the climate process and how energy and transport relate to GHG emissions. This book will be relevant in describing how the transportation of fossil fuel which includes pipelines adds to the GHG emissions and how pipelines which are used to transport and

distribute fossil fuel, is a driver of the climate process. The analysis from this perspective shows a coordinated process and interaction between pipelines, fossil fuel, GHG, and climate change. The information provided will provide a background understanding of the United Nations Framework Convention on Climate Change (UNFCCC) international climate change agenda in chapter one, and also add extra detail to chapter one in creating a link between upstream and downstream emissions to climate change.

Hughes, David, *Can Canada Expand Oil and Gas Production, Build Pipelines and Keep Its Climate Change Commitments?* (Ottawa: Canadian Centre for Policy Alternative, 2016).

This book describes the challenge of meeting climate change commitments of Canada and expanding pipelines. The topics included are the review of Canadian oil projections based on the National Energy Board projection, implications of greenhouse gas emissions under Canada's Paris climate change obligations, and assessing the development of pipelines with Canada's climate change obligations. The methodology used examines policy on climate change, existing literature for better climate policy, Canadian data on climate change, Canadian data on pipeline capacity, and Canadian data on environmental inventory. It is useful for the research because it provides all relevant background on the nature of Canadian climate change policy and forms the legal and policy framework in part one of the thesis.

Watchman, Paul, *A Guide to Carbon Law and Practice* (London: Globe Law and Business, 2008).

Watchman describes in his book the relationship between climate change and the law. The book focuses on how businesses can be regulated effectively to ensure that climate change is

taken into consideration. The book discusses the need for an adequate legal framework for a global carbon market. The book seeks to understand the nature of GHG, the anatomy of GHG schemes from several regimes, the impact of climate change and carbon in the law, embarking on carbon reduction projects, technology, and trading in the context of the global carbon markets. The topics include the history of climate change and policy, structuring of carbon projects, carbon trading and creating a global carbon market, and climate change litigation. The information provided in the book will be useful for my thesis as it explains the meaning of GHG in a fossil fuel perspective, the history of GHG, and traces how GHG relates to climate change. Also, the book provides a historical background perspective on climate change and the various institutional frameworks on climate change. Also, this book will serve as a good source for recommendations about oil and gas companies developing carbon projects to reduce emissions, use of carbon credits, and carbon extraction technology.

SECONDARY SOURCES: ARTICLES

Hocking, Jennifer, “The National Energy Board: Regulation of access to oil pipelines” (2016) 53:3 Alta LR at 777-815.

The author examines the various criteria considered by the national energy board in considering pipeline approvals while looking at past pipeline projects based on Canadian environmental policy. One of the conclusions that the author reaches is that Canada's environmental problems are best addressed by a combination of approaches in advancing effective environmental policies. These ideas will be used and described in part two to four of the research when describing the Canadian pipeline review process and environmental policy.

Jon O' Riordan, "The Challenges at the Nexus of Canada's Energy and Climate Change Policies" (2018) 60:3 Environment at 4-17.

Jon O' Riordan describes the social governance mechanism in the Canadian energy sector and the changing dynamics in Canadian energy policy in response to climate change obligations. He uses a doctrinal review methodology of Canada's international climate obligations, Canada's climate change policy, and energy policy to discover the effect of one aspect on the other. The work is of immense importance as it aids the understanding of the Canadian climate change policy and its intersection with pipeline development with the proposed changes by bill c-69 in consideration. This article will be important in part one to three of the thesis.

Kruger, Toby, "The Canadian Environmental Assessment Act and Global Climate Change: Rethinking significance" (2009) 47:1 Alta LR 161-183.

The article analyses the relevance of GHG in environmental assessments under the CEAA assessment based on Imperial Oil's Kearl oil sands project and Pembina case.² Although the article was written in 2009, the article provides insight towards the historical perspective on regulatory assessment under the CEAA 1992.³ According to the CEAA, 1992, the paper explains that the standard for the environmental evaluation and review of a project in determining whether the project is likely to have significant adverse environmental effects among many other factors if the project does not meet this qualification, the project will not be allowed to proceed. The article poses a compelling argument in considering whether in assessing the amount of GHG's proposed to be emitted from a project, GHG emission will be seen as significant based on the

² *Pembina Institute for Appropriate Development v. Canada (Attorney-General)*, 2008 FC 302, 323 F.T.R. 297 at para. 79 [*Pembina*].

³ S.C. 1992, c. 37 [*CEAA*].

reasoning of GHG emission of a single project being relevant to the global emission bracket. Basing the analysis on the Imperial Oil's Kearl oil sands project and Pembina case, this information relevant to give a foundational understanding of how oil and gas projects have been assessed under the CEAA before 2012 and how these assessments take into consideration GHG emissions. Also, determining whether there has been a difference between the assessment modalities and the attitude of the court in recognizing GHG as posing a significant adverse effect under CEAA 1992 and CEAA 2012. The article will be a good source for chapter two and four of the proposed thesis.

MacLean, Jason, "Paris and Pipelines? Canada's Climate Policy Puzzle" (2010) 2018) 32:1 *Journal of Environmental Law and Practice* at 47-74.

This article has three central themes. The first is establishing that Canada's climate policy gives no room for building more pipelines and the second part examines Canada's climate policy, and third part concludes by sketching out an alternative democratic pathway for Canadian climate change and sustainability policy. It is useful for the research because it supports my research on the nature of Canadian climate change policy, it also gives a general understanding of the intersection of climate change and pipelines, and forms the legal and policy framework in part one and two of the thesis.

Burger, Michael, & Jessica Wentz, "Downstream and Upstream Greenhouse Gas Emissions: The Proper Scope of NEPA Review" (2017).

This article discusses the review of oil and gas projects from the United States of America perspective. The author is concerned about the legal controversy regarding the scope of

environmental review about upstream and downstream emissions of fossil fuel extraction and transportation under the National Environmental Policy Act (“NEPA”). The author argues that such upstream and downstream emissions fall within the scope of indirect and cumulative impacts, thus, under the purview of NEPA. The article is a veritable source for considering how upstream and downstream emissions are regarded from the USA perspective and is essential because the author provides recommendations to the evaluating agencies when they consider these emissions. The understanding of the review process in the USA, how the USA considers emissions, and the recommendations put forward which will be suggestions for best practices, will be essential for chapter three of the proposed thesis when I consider the case analysis of the USA.

OTHER MATERIALS

Bankes, Nigel “Some Things have Changed but Much Remains the Same: the New Canadian Energy Regulator” (15 February 2018), online: ABlawg, http://ablawg.ca/wp-content/uploads/2018/02/Blog_NB_Much_Remains_The_Same.pdf

This blog post discusses the structural changes proposed by Bill C-69. The proposed bill is aimed at overhauling the CEAA and NEB Act. The author analyzes the structural reforms proposed by Bill C-69 and how this differs from the current regulatory framework. The information provided by this post will be relevant in providing a detailed analysis of the structural changes proposed by Bill C-69, and this will give an understanding of how the new bill aims to change the review of new projects and how this differs from the current mode of review.

The information gotten will be necessary for chapter two of the proposed thesis in discussing the changes introduced by the proposed Bill-C69.

DeRochie, Patrick, “The Bill that reforms Canada’s environmental assessment laws allows approval of projects that put Canada’s climate targets out of reach. More change is needed” (April 11, 2018), online: *Policy Options Politiques* <<http://policyoptions.irpp.org/magazines/april-2018/canada-must-make-bill-69-climate-safe/>>.

Patrick in his publication discusses the need for Canadian environmental laws and regulations to be more stringent and assertive in its goal to achieve a safe climate future. He observes that Canada is failing to meet its international climate change obligations. Noting that the current legislation CEAA 2012 does not include a mention of Canada’s climate change obligation, the proposed Bill C-69 seeks to overhaul the current law by ensuring that Canada’s climate targets must be considered when new projects are assessed. Although he acknowledges the importance of the changes, he argues that consideration alone of Canada’s climate targets is not sufficient to halt projects that will hurt the environment. Patrick’s publication is a good source for understanding the transition from the CEAA 2012 to the proposed Bill C-69 and how the latter seeks to include Canada’s climate change obligations as an environmental assessment consideration. The publication will be useful in analyzing whether the change from CEAA 2012 to Bill C-69 will be sufficient enough to bring the required change envisaged by environmentalist. The publication will be helpful in chapter two of the proposed thesis in providing background information on the impact Bill C-69 on Canada attaining its climate change obligations.

Hecker, Markus & Jackie Dawson, “Canada’s Paris-pipeline paradox” (June 4, 2018), online: *The Conversation* < <https://theconversation.com/canadas-paris-pipeline-paradox-97636>>.

This publication is similar to the publication by Patrick DeRochie titled “The Bill that reforms Canada’s environmental assessment laws allows approval of projects that put Canada’s climate targets out of reach. More change is needed” because both publications address the problem of developing pipelines and achieving Canada’s climate change obligations. Markus in his writing discusses the paradox behind the development of pipelines, notably the purchase of the Kinder-Morgan pipeline. He asks the question can Canada move towards a green economy and meet the GHG reduction targets of the Paris agreement while simultaneously expanding the fossil fuel economy via public ownership of what was the Kinder Morgan pipeline? In his analysis, he argued that the purchase of the Kinder Morgan pipeline hinders Canada in achieving its climate change obligations. I will incorporate the concept of competing interest between building pipelines and meeting climate change obligations in chapter two of the proposed thesis.

GRADUATE SEMINAR IN LEGAL RESEARCH AND METHODOLOGY (LAW 703-01)

ANNOTATED BIBLIOGRAPHY ON

ANALYZING HUMAN RIGHTS APPROACH IN ADDRESSING WATER SECURITY

ISSUES IN INDIA

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1. Description of the Research Proposal

The objective of this research will be to analyze the feasibility and appropriateness of adopting the human rights approach in securing right to safe and accessible drinking water in India. It will try to draw examples, if possible, from South Africa and Bolivia. It proposes to study the implications of recognition of human and fundamental right to water on water policies in India with a view to analyzing possible ways to improve them. This research will contribute to the understanding of ongoing water law reforms in India. It is important to note that this research is limited in scope as it only focuses on one aspect of a right to water that is a right to safe and accessible drinking water in India. The main argument of this research will be that right to life is closely connected to the right to water, it should not only be recognized by law but also strongly protected by law. Effective legal recognition and protection of this right would not solve all water problems but it may help to prioritize water, set minimum standards of governance, mobilize political will and fix accountability of government especially towards marginalized sections. The research seeks to answer the following questions: what does the recognition of right to water as human and fundamental right by Indian Courts mean for water sector reforms in India? whether recognition of right to water as a human right would improve drinking water policies in India?

2. Annotated bibliography

Secondary Materials: Books

Bos, Robert. *Manual on the Human Rights to Safe Drinking Water and Sanitation for Practitioners* (London, UK: IWA Publishing, 2016).

This book explains the concept of human right to water and sanitation and progressive realization. It deals with how these concepts can be effectively incorporated in the institutional frameworks. It tries to explore the roles and responsibilities of all actors involved in realization of this right.

This book will be useful to understand the principle of progressive realization and the role of water advocates in forwarding the debate n right to water.

Cullet, Philippe & Koonan Sujith. *Water Law in India: An Introduction to Legal Instruments*, 2nd ed (New Delhi: Oxford University Press, 2017).

It is perhaps the only book which comprehensively deals with latest development in Indian water law reforms. It analyzes new water regulations such as the draft National Water Framework Bill, 2016, and the Model Groundwater (Sustainable Management) Act, 2016. This book will be helpful in identifying the gaps in the water law discourse in India providing in-depth information about existing legal mechanisms.

Cullet, Philippe. *Water Law for the Twenty-First Century: National and International Aspects of Water Law Reform in India*, (United Kingdom: Routledge, 2010).

This book discusses the evolution of water law and examines water law reforms in India. According to this book, the international legal framework is adequate to address ground level problems but yet it plays an important role in shaping water reforms. It also examines the legal aspect of water privatization.

This book will be highly relevant to the present research as it tries to draw a link between fundamental right to water and drinking water. It will help in analyzing and understanding the implementation of water reforms in India so far and will help in explaining the nature of present reforms. It will also help in comparing legal consequences of privatization with human rights perspective.

Cullet Philippe. *Water Law, Poverty and Development: Water Sector Reforms in India*, (New York: Oxford University Press, 2009).

This book highlights the importance of water law in achieving goals of poverty eradication and sustainable development and highlights the role of civil society in water justice. It attempts to critically analyze the ongoing water reforms in India.

It will help me establish how the international law has influenced the water reforms in India. It argues that existing framework in India does not include human rights and environmental dimensions which may support my argument that human rights perspective is important to be included in water studies. Moreover, it will help me to critically analyze the National Water Framework Bill 2016.

Langford, Malcolm & Anna F.S Russell. *The Human Right to Water: Theory, Practice and Prospects* (Cambridge, UK: Cambridge University Press, 2017).

This book discusses right to water from human rights perspective both descriptively and prescriptively. It contains a number of essays from different authors around the world advocating human rights approach to water in countries including India. This will be highly relevant for the present research as it will help in forming arguing in support of such approach in Indian perspective.

Razzaque, Jona. *Public Interest Environmental Litigation in India, Pakistan, and Bangladesh* (Hague, Netherlands: Kluwer law international 2004).

This book attempts to examine public interest litigation and its effect on environment including water. Analyzes national and international developments in environment protection in India and South Africa.

This book will be relevant for the present research as it will contribute to the understanding of the attitudes of South African courts and its implications on right to water.

Secondary Materials: Articles

Baer, Madeline & Andrea Gerlak. "Implementing the Human Right to Water and Sanitation: A Study of Global and Local Discourses" (2015) 36:8 Third World Quarterly 1527.

This paper looks at water as a human right from both global and regional level perspectives. It examines in detail Bolivia which is currently trying to implement human right based approach to water. It argues that the present discourse on water rights lacks local experiences of developing countries and their challenges to make this right a reality. This article will be useful as it tries to trace the implications of human right to water on local level and the lessons which can be learnt from countries who are already implementing human rights-based approach to water services.

Bulto, Takele Soboka. "The Emergence of the Human Right to Water in International Human Rights Law: Invention or Discovery?" (2011) 12:1 Melbourne Journal of International Law 1.

This paper explores the effect of recognition of human right to water by international environmental law. It argues that a free-standing human right to water was implied in socio-economic rights and other water-related treaties. The General Comment No. 15 has only recognized a pre-existing right which already had a legal basis in the ICESCR and international practice. This paper will help in understanding the normative basis of the human right to water and other principles of international water law.

Brunner, Norbert & Vijay Mishra. “The Human Right to Water in Law and Implementation” (2015) 4:1 Laws 413.

This paper explores the justiciability of right to water in India and South Africa. It argues that mere recognition of this right is not enough but its development is crucial as it creates positive obligation on states. This paper will be useful in addressing the issue of affordability of water services in developing countries like India and South Africa. It will help in discussing the implementation challenges of right to water in these countries.

Cahill, Amanda. “The Human Right to Water, a Right of Unique Status: The Legal Status and Normative Content of the Right to Water” (2005) 9:3 The International Journal of Human Rights 389.

This paper focuses on legal and normative aspects of the right to water and argues that there is lack of definition of the scope and core content of this right. It stresses the need to have a definition and clear scope of it so that its status as an independent right get clear. This paper will be helpful in examining the legal definition and scope of this right under the international laws.

Clark, Cristy. “Of What Use is a Deradicalized Human Right to Water?” (2017) 17:1 Human Rights Law Review 231.

This paper presents a critique of rights and commodification debates on water in South Africa and Bolivia. This paper presents an analysis and argues that rights based activism

can be of practical benefits. It will be useful in present research for highlighting structural barriers these countries are facing and will help in drawing lessons for India.

Cullet, Philippe. “The Right To Water In Water- Plugging Conceptual And Practical Gaps” (2013) 17:1 The International Journal of Human Rights 56.

This paper recognizes that the right is fully recognized in international law and examines in depth the content of this right with a focus on india. The main argument is that there is a need to recognize this right by the state and provide its content. This paper will help in supporting the argument that India needs to recognize this right and provide safe water to its people especially poor sections of society.

Bluemel, Erik B. “The Implications of Formulating a Human Right to Water” (2004) 31:1 Ecology L. Q. 957.

This article argues that human right to water has emanated from privatization of water. It examines the standing of human right to water as an independent or dependent right and identifies practical challenges in realization of this right. It will be quite useful for present research as it discusses the implication of such right on India and South Africa which will help in understanding and comparing these two countries and drawing lessons for India.

Irujo, Antonio Embid. “The Right to Water” (2007) 23:2 International Journal of Water Resources Development 267.

This paper examines the Role of International Law in the Construction of the Right to Water. The paper argues that conceptual clarification is needed and this right is a part of efforts to combat the problem of poverty. This paper will be helpful because it seeks conceptual clarity of this right within the international law and will further be useful in defining this right.

Khadka, Arjun Kumar. “The Emergence of Water as a Human Right on the World Stage: Challenges and Opportunities” (2010) 26:1 International Journal of Water Resources Development 37.

This article traces the development of water right as a human right in international law. The main argument in this paper is that given the increasing water scarcity with population, industrialization and economic development, water pricing is one of the solutions. It says pricing is crucial in water management and without the same achieving goal of enough clean water to everyone is difficult. This paper is relevant because it examines the relationship between water, human rights, and good governance.

Kiefer, Thorsten & Catherine Brölmann, “Beyond State Sovereignty: The Human Right to Water” (2005) 5:35 Non-State Actors & International Law 183.

This paper traces the shift from state to individual in international water law. It explores the international framework and also highlights the limitations of the right to water in times of water scarcity. It will be relevant to understand the normative implication of such right and the nature of government obligation in the light of recent changes at international level.

Langford, Malcolm. “The United Nations Concept of Water as a Human Right: A New Paradigm for Old Problems?” (2005) 21:2 International Journal of Water Resources Development 273.

This paper argues that problems relating to water pollution, depletion and conflicting uses of limited resource have been present historically, what is new is the scale of these problems and human rights response to them. According to the paper under international law countries

already have a legal obligation to provide clean and safe drinking water without discrimination and tries to put a case for the benefits of a human rights approach. It will be relevant as it provides recommendations for making this right a reality at the local, national and international levels.

Mishra, Aman. “The Right to Water in India: Changing Perceptions” (2015) 2:4 International Journal of Research in Humanities and Social Studies 1.

This paper throws light on the different existing water laws in India their problems and prospects. The paper attempts to identify the core issues with the implementation of these laws and tries to provide remedies. It will be useful in present research to discuss constitutional and legislative framework of water laws available the judicial approach in India. It will further help in highlighting practical gaps in policy framework.

Mishra, Anuja. “Right to Water as a Human right and Indian Constitution: An analysis of various judgments of Apex Court of India” (2018) 23:4 IOSR Journal of Humanities and Social Science 45.

This paper gives an overview of water crisis in India and argues for a rights based approach. Given the importance of water, this paper argues for effective legislative protection of water. The main argument of this paper is that although there is no direct law on right to water in India but Indian judiciary has actively recognized this right. This paper will be a good source of case law recognizing right to water.

Pandey, Amrisha. “Discussing the ‘Human Right to Water in India’: Genesis for Debate?” in C.A. Brebbia, ed, *Water and Society* (UK: Wessex Institute Press, 2017) 57.

This paper traces the judicial interpretation of *right to water* in India and stresses that its realization is restricted by equitable distribution and availability. It argues that the governance of the resource and the rights-based approach for its realization are complementary to one another. It will be useful to identify the links good governance and the realization of the right.

Pandey, Archana. “Human Rights in relation to Water in India” (2014) 19:3 IOSR Journal of Humanities and Social Science 54.

This paper recognizes that India is water problems since a long time and it still persists. It tries to examine the present international and national law framework and governmental water policies. It argues that lack of political will and prevalent corruption in the system are the reasons that India lacks behind in implementing this right. This paper will be useful in looking at various water policies devised time to time by Indian government to address this issue.

Salman, M. “The Human Right to Water and Sanitation: Is the Obligation Deliverable?” (2014) 39:7 Water International 969.

This paper examines the evolution of the right to water and sanitation and also focuses on the implementation challenges. The main question it seeks to answer is whether this obligation is deliverable. It tries to explore the analytical foundations for recognition of the right to water and sanitation and recognizes challenges like absence of legislation poor water management practices, needs for additional financial resources etc. this paper will be relevant as it draws

examples from South African, Armenian and Chilean experiences to provide water to marginalized sections of society.

Santos, Pedro Martínez. “Does 91% of the world’s population really have sustainable access to safe drinking water?” (2017) 33:4 International Journal of Water Resources Development 514.

This paper makes a distinction between Improved and unimproved water sources as per Millennium Development Goal on drinking-water. It argues that improved water sources like household connections, public standpipes, boreholes, protected dug wells does not guarantee safe water. It further suggests that routine monitoring is a key component in providing safe water. This paper will be useful in analyzing ground realities in India beyond the international statistics as it makes references to Government of India reports.

S. McCaffrey, “A Human Right to Water: Domestic and International Implications” (1992) 5:1 Georgetown International Environmental Law Review 1.

This paper explores the right to sustainable development of water resources to meet basic human needs. The main argument is that there is a right to water which is a part and parcel of right to food, health and most importantly right to life. This paper will be helpful in establishing the right to water in relation to other internationally recognized rights.

Sultana, Farhana & Alex Loftus. “The Human Right to Water: Critiques and Condition of Possibility” (2015) 2:1 WIREs Water 97.

This paper tries to analyze the ongoing debates over the human right to water. It rejects the idea that the right to water depoliticises struggles for water justice and argues that

such a right should be seen in local setting. This paper will help in understanding struggles for the right to water and the importance of local governance for effective realization of this right for stable and lasting water governance.

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GRADUATE SEMINAR IN LEGAL RESEARCH AND METHODOLOGY

ANNOTATED BIBLIOGRAPHY
ABANDONMENT AND RECLAMATION OBLIGATIONS
FOR ENERGY PROJECTS: ALBERTA IN THE WAKE OF *REDWATER*

BY
KIMBERLY MACNAB
DECEMBER 3, 2018

PROJECT DESCRIPTION

This annotated bibliography has been prepared for my major paper, which will focus on the Supreme Court of Canada's upcoming decision, *Orphan Well Association, et al. v Grant Thornton Limited, et al.*, Docket 37627, often referred to as the *Redwater* decision. In *Redwater*, a junior oil and gas company went into receivership while in possession of a number of oil and gas assets in Alberta with little value and significant abandonment and reclamation liabilities. Federal bankruptcy legislation allows a receiver to disclaim those assets, while provincial oil and gas legislation places the licensee's obligations for those assets on the receiver.

This conflict sets the stage for a constitutional struggle between federal bankruptcy legislation and provincial environmental regulation, invoking multiple constitutional doctrines including interjurisdictional immunity and federal paramountcy. My paper will primarily involve a constitutional analysis of the Supreme Court of Canada's *Redwater* decision. While the decision has not yet been released, there are older Canadian cases dealing with the same intersection of provincial environmental regulation and federal bankruptcy law, as well as significant scholarship on the topic. This annotated bibliography provides a sampling of those sources.

LEGISLATION

Bankruptcy and Insolvency Act, RSC 1985, c B-3.

Companies' Creditors Arrangement Act, RSC 1985, c C-36.

Conservation and Reclamation Regulation, Alta Reg 115/1993.

Environmental Protection and Enhancement Act, RSA 2000, c E-12.

Hydro and Electric Energy Act, RSA 2000, c H-16.

Oil and Gas Conservation Act, RSA 2000, c O-6.

Pipeline Act, RSA 2000, c P-15.

Renewable Electricity Act, SA 2016, c R-16.5.

JURISPRUDENCE

Harbert Distressed Investment Fund, LP v General Chemical Canada Ltd, 2007 ONCA 600.

Newfoundland and Labrador v AbitibiBowater Inc, 2012 SCC 67.

Northstar Aerospace, Inc (Re), 2013 ONCA 600.

Nortel Networks Corporation (Re), 2013 ONCA 599.

Orphan Well Association v Grant Thornton Limited, 2017 ABCA 124.

Orphan Well Association, et al v Grant Thornton Limited, et al, Docket 37627.

PanAmericana de Bienes y Servicios v Northern Badger Oil & Gas Limited, 1991 ABCA 181.

Redwater Energy Corporation (Re), 2016 ABQB 278.

SECONDARY SOURCES: MONOGRAPHS

Hogg, Peter W, *Constitutional Law of Canada* (Toronto: Thomson Carswell, 2007) (loose-leaf updated 2018, 5th ed).

Peter Hogg is the preeminent constitutional scholar in Canada. This seminal text covers major developments in constitutional law and contains analysis of the doctrine of federal paramountcy in a variety of contexts, including the intersection of federal bankruptcy law and provincial environmental regulation. The text is useful to my paper in that it provides the foundation for understanding the various constitutional principles at play in *Redwater*, including their jurisprudential history.

SECONDARY SOURCES: ARTICLES

Bebchuk, Lucian Ayre & Jesse M Fried, “The Uneasy Case for the Priority of Secured Claims in Bankruptcy” (1996) 105:4 Yale LJ 857.

The authors are both professors at Harvard Law School. The article challenges the principle in bankruptcy law that secured creditors have priority over unsecured creditors in the sense that they receive the entire amount of the secured claim before any payment is made to unsecured creditors. The priority of secured creditors is a foundational principle of bankruptcy law.

While the article does not deal with regulatory claims (focusing more broadly on unsecured claims), its examination of the underlying rationale for the priority of secured creditors over other

interests is at the core of the *Redwater* case. In this way, it will provide a useful theoretical foundation for my paper's examination of which claims should receive priority in bankruptcy, and whether there are any principles specific to bankruptcy law that should inform the constitutional analysis in *Redwater*. A feature to keep in mind for this source is that it deals with American bankruptcy law; however, the foundational principles on which it focuses, namely the priority of secured creditors, is common to Canadian and American bankruptcy regimes.

Ben-Ishai, Stephanie & Stephen J Lubben, "Involuntary Creditors and Corporate Bankruptcy" (2012) 45:2 UBC L Rev at 253.

Stephanie Ben-Ishai is an associate Professor at Osgoode Hall Law School, and Stephen Lubben is the Harvey Washington Wiley Chair in Corporate Governance & Business Ethics at Seton Hall University School of Law. The article provides a comparative analysis of insolvency regimes in Canada and the United States, specifically as it relates to what the authors refer to as "involuntary creditors" which includes environmental claims. It will be useful to my paper as it canvasses the way in which both the Canadian and American regimes treat environmental remediation obligations upon a corporation's insolvency.

While the article does not contain a Canadian constitutional analysis, it will help in my research by highlighting the US regime's treatment of the same types of issues in a comparative framework.

Bourassa, Kelly, Ryan Zahara & Chris Nyberg, "Restructuring Challenges in the Oil and Gas Sector: The Treatment of Regulatory Orders Post-Redwater" (2016) 54 Alta L Rev 383.

The authors of this article represented the senior secured lender in the Alberta Court of Queen's Bench case, *Redwater Energy Corporation (Re)*, 2016 ABQB 278. The article provides an overview of the provincial regulatory framework and federal insolvency regime giving rise to the main conflict in the case, and as such provides useful context for analyzing the constitutional issues at play. The remainder then considers practical challenges facing licensees and creditors within that regime and options for those parties in the insolvency process.

The article provides a helpful insight from the perspective of insolvency professionals as well as persons intimately familiar with the arguments at the court of first instance.

Clarkson, Alexander, "In the Red: Towards a Complete Regime for Cleaning Up Environmental Messes in the Face of Bankruptcy" (2011) 69:2 UT Fac L Rev 31 at 45.

Alexander Carson acts as counsel for the Public Prosecution Service of Canada. The article takes the position that Canada's scheme of allocating the costs of environmental remediation upon bankruptcy is environmentally harmful and unjust. It uses three Canadian cases to highlight problems with the current scheme, and posits common themes arising from the decisions. The article then canvasses common law and legislative attempts at a solution and concludes that they have not been effective to date. The article argues that the solution to environmental cleanup at bankruptcy is to amend federal legislation to give the Crown a super-priority charge for environmental remediation over the entirety of the debtor's estate.

The article contains an analysis of Canadian decisions, including *Newfoundland and Labrador v AbitibiBowater Inc*, 2012 SCC 67, in which courts have grappled with the same issues as in the *Redwater* litigation. It will be a useful source for my paper because it highlights a number of the larger policy and value-laden issues which are before the Supreme Court of Canada in *Redwater*, and also presents a view that the current regime is not adequate while providing a potential solution.

Guzman, Etienne Ravilet, “Canadian Financial Assurance Frameworks for the Remediation of Mining Sites: An Assessment of Ontario’s British Columbia’s and Quebec’s Schemes and Three Potential Reform Initiatives” (2017) 31 J Env’tl L & Prac 1.

Etienne Guzman was an articling student at the time of the article’s publication. The article discusses financial security regimes designed to cover the costs of remediating mining sites in Ontario, British Columbia and Quebec. The specific remediation activities for oil and gas wells and mining operations differ significantly. However, the article’s comparative analysis of multiple Canadian provincial regimes dealing with financial assurance for end-of-life obligations in the energy industry will be useful to my paper because it discusses potential measures for ensuring sufficient funds are available at a project’s end-of-life. This includes an analysis of the specific mechanisms to do so (e.g. using a “remediation trust”) which may be able to withstand the ordering of priority in bankruptcy. The analysis is not specific to, or dependent on, the particulars of remediation activities for mining operations.

Harris, Steven L & Charles W Mooney Jr, “Measuring the Social Costs and Benefits and Identifying the Victims of Subordinating Security Interest in Bankruptcy” (1996-1997) 82 Cornell L Rev 1349.

Steven Harris is a Professor at the Chicago-Kent College of Law and Charles Mooney Jr. is a Professor at the University of Pennsylvania Law School. Together with the Bebhuk and Fried article, this source will ensure that my paper takes a balanced approach in weighing the interests at stake in the *Redwater* case. In particular, it provides an analysis of the interests of secured creditors and a discussion of the broader societal interests that are served by prioritizing secured claims in bankruptcy. Although the Canadian constitutional dimension is absent from this article, it strengthens the theoretical foundation for weighing the different interests at stake in *Redwater*.

Lund, Anna, “Lousy Dentists, Bad Drivers, and Abandoned Oil Wells: A New Approach to Reconciling Provincial Regulatory Regimes with Federal Insolvency Law” (2017) 80 Sask L Rev 157.

Anna Lund is an Assistant Professor at the University of Alberta’s Faculty of Law. This article analyzes the competing goals of environmental regulation and insolvency law (protection of health, safety and the environment versus economic benefits of the insolvency and restructuring regime) within the Canadian constitutional framework. The article analyzes how courts have dealt with the conflict in various cases dealing with regulatory regimes (both environmental and otherwise) where there is a direct conflict with federal insolvency legislation. Specifically, the article criticizes the current legal test for whether a regulatory obligation is a provable claim in

bankruptcy, as formulated in *Newfoundland and Labrador v AbitibiBowater Inc*, 2012 SCC 67, and recommends a reformed test.

The article's analysis of the incentives created by the test and its recommendation for a new solution provide a useful perspective for the overarching goal of my paper, which is to analyze potential solutions for regulating end of life obligations for energy projects within the current constitutional framework.

Lund, Anna, "*Newfoundland & Labrador v AbitibiBowater: Environmental Issues in Abitibi's Insolvency, Examining the Regulator-Creditor and Past-Operations Expense Tests*" in Janis Sarra, ed, *Annual Review of Insolvency Law*, 2012 (Toronto: Carswell, 2013) 509.

This article drives to the heart of the issue in *Redwater*. Anna Lund's analysis of the *Newfoundland and Labrador v AbitibiBowater Inc*, 2012 SCC 67 decision is undertaken with a broad view of the balance required when the obligations triggered by the bankruptcy regime are in direct conflict with a public interest such as ensuring remediation of industrial sites. The article's analysis is directly relevant to my paper and will provide a useful view of competing policy considerations.

Milani, Jonathan, "Frustrating the Purpose of the Receivership Remedy: Federal paramountcy in *Saskatchewan (Attorney General) v Lemare Lake Logging Ltd.*" (2017) 80 Sask L Rev 253.

Jonathan Milani was a JD candidate at the time this article was published. The article examines three decisions relevant to the issues in *Redwater: Saskatchewan (Attorney General) v Lemare Lake Logging Ltd.*, 2015 SCC 53, *Alberta (Attorney General) v Moloney*, 2015 SCC 51, and *407 ETR Concession Co v Canada (Superintendent of Bankruptcy)*, 2015 SCC 52. The decisions were all released by the Supreme Court of Canada together, and all deal with the conflict between provincial statutory restrictions affecting property and federal bankruptcy law. The article critiques the approach to the federal paramountcy test, and as such will be useful to ensure that my examination of case law applicable to, and cited in, the *Redwater* decisions is thorough.

Newman, Dwight, "Canada's re-emerging division of powers and the unrealized force of reciprocal interjurisdictional immunity" (2011) 20:1 Const Forum 7.

Dwight Newman is a Professor of Law at the University of Saskatchewan. The article discusses the Supreme Court of Canada's then-recent innovation in *Canadian Western Bank v Alberta*, 2007 SCC 22, that the constitutional doctrine of interjurisdictional immunity could be reciprocal. The article points out constraints and new developments of the doctrine and posits that the ideal outcome for Canadian federalism is the use of the doctrines of interjurisdictional immunity and federal paramountcy in a reciprocal fashion, depending on context. This article will be useful for my paper because the arguments before the Supreme Court of Canada in *Redwater* included the reciprocal application of interjurisdictional immunity. The decision will likely touch on these types of principles. How those principles interact with the modern conception of cooperative federalism is likely an area worth exploring in my paper.

Sarra, Janis, "Of Paramount Importance: Interpreting the Landscape of Insolvency and Environmental Law" in Janis Sarra, ed, *Annual Review of Insolvency Law*, 2012 (Toronto: Carswell, 2013) 453.

Dr. Janis Sarra is currently the University of British Columbia Presidential Distinguished Professor. The article provides six interpretive principles for addressing the intersection of insolvency restructuring legislation and environmental law, in light of the Supreme Court of Canada's decision in *Newfoundland and Labrador v AbitibiBowater Inc*, 2012 SCC 67. The principles are: (i) when determining the scope of legislative authority, courts should interpret statutory language before turning to inherent or equitable jurisdiction; (ii) courts should attempt to harmonize interpretation of insolvency laws; (iii) courts should prefer an interpretation of federal statute which does not conflict with provincial legislation; (iv) both federal and provincial laws must be valid and applicable to the case in order for paramountcy to be invoked; (v) paramountcy should be applied to operational conflict only where dual compliance is not possible; and (vi) while authority under insolvency legislation is broad, courts should exercise that authority having regard to the legislation's purposes and the principle that provincial legislation cannot be rendered inoperative where it is possible to comply with both statutes.

Dr. Sarra's goal, as stated in her article, is to "ensure that there is a principled and transparent way to interpret the respective legislation in a manner that preserves the integrity and objectives of the legislation, and gives effect to validly enacted legislation where possible." The article is useful in that it provides an abstract and principled approach for analyzing the intersection between environmental and insolvency law, which is the key issue in *Redwater*.

Spirizzi, Frank, "Environmental Clean-Up Cost Liability Looms Large for Directors of Insolvent Canadian Companies" (2014) 33:2 Am Bankr Inst J 56.

This article discusses the *Northstar Aerospace, Inc (Re)*, 2013 ONCA 600, and *Nortel Networks Corporation (Re)*, 2013 ONCA 599, cases decided in the wake of *Newfoundland and Labrador v AbitibiBowater Inc*, 2012 SCC 67. The article will be useful for my paper in that it examines the jurisprudence directly at issue in *Redwater*, and particularly is written from a business-focused perspective. Along with other sources authored by bankruptcy practitioners from a perspective of investment risk, the article will help provide a balanced approach to the costs and benefits of each side of the case argued in *Redwater*.

Stewart, Fenner, "Interjurisdictional Immunity, Federal Paramountcy, Co-operative Federalism, and the Disinterested Regulator: Exploring the Elements of Canadian Energy Federalism in the Grant Thornton Case" (2018) 33 BFLR 227.

Fenner Stewart is an Assistant Professor of Law at the University of Calgary. The article analyzes the case and focuses on four constitutional issues at play: interjurisdictional immunity, federal paramountcy, the principle of cooperative federalism and the "disinterested regulator" defence. It does so through the lens of Canadian energy federalism, which is the "compact between provinces and the federal government, which designates the rights and responsibilities associated with Canadian energy resource production, management and transport.

The article provides the most recent academic discussion on issues raised in the *Redwater* case as it was published after, and takes into account, argument in the case at the Supreme Court of Canada in February 2018. It focuses on the constitutional aspects of the case, which will be of significant use in my paper.

SECONDARY SOURCES: OTHER

Dachis, Benjamin, Black Shaffer & Vincent Thivierge, “All’s Well that Ends Well: Addressing End-of-Life Liabilities for Oil and Gas Wells” (September 2017), online: *CD Howe Institute, Commentary No. 492* <<https://www.cdhowe.org/public-policy-research/all%E2%80%99s-well-ends-well-addressing-end-life-liabilities-oil-and-gas-wells>>.

The authors are researchers at the C.D. Howe Institute which provides policy research and commentary. The commentary provides a recent overview of the issue of abandoned oil and gas assets in Alberta, which is useful in providing a sense of the scope of the practical problem underlying the *Redwater* case. The article also puts forward policy recommendations for addressing the issue of who bears the cost of reclaiming those assets, which will be of great help in formulating the recommendations and conclusions section of my paper.

UNIVERSITY OF CALGARY
FACULTY OF LAW

LAW 703 - GRADUATE SEMINAR IN LEGAL RESEARCH AND METHODOLOGY

PROPOSAL AND ANNOTATED BIBLIOGRAPHY

THE INFLUENCE OF SOCIAL LICENSE ON THE APPROVAL PROCESS OF ENERGY
INFRASTRUCTURE DEVELOPMENT PROJECTS IN CANADA: A CASE STUDY OF
LNG CANADA PROJECT AND TRANS MOUNTAIN EXPANSION PROJECT

BY

CHRISTABELLA I. UMAHI

5 DECEMBER 2018

Abstract

In the face of oppositions and counter oppositions to the development of these oil and gas infrastructures, the question then arises, what influences a project to move from conception to construction and what prevents another project from progressing at the same pace. This may be answered by looking at issues that influences the project approval process.

For an oil and gas project to get to the construction stage after the project has been conceived, certain approvals must be acquired, the approvals are not just the processes and license embodied in regulations but there are approvals which are not codified but which must be acquired. One such facet of this type of approval is called the social license.

Social license is a concept that has become quite topical with regards to the energy sector. This paper seeks to review social license with respect to the engagement with host community by a project proponent in order to get the buy in of a community for the approval process of a project so as to commence a project. The goal is to analyse the influence of social license on the initial approval phase of a project and not the influence of social licensee after the project has commenced or for the continued operation of the project.

From my analysis, if social license does have an impact, I hope to point my readers to the need to get social license, in tandem with getting governmental approval so as to ensure the development of energy infrastructure projects.

Annotated Bibliography of Some Secondary Sources

This annotated bibliography was prepared as part of the graded component for Law 703, it does not in any way contain the full bibliography of the research that will go into the major paper on: “The Influence of Social License on the Approval Process of Energy Infrastructure Development in Canada: A Case Study of LNG Canada Project and Trans Mountain Expansion Project”.

SECONDARY MATERIAL: BOOKS

Booth, Wayne C et al, *The Craft of Research*, 4th ed (Chicago: University of Chicago Press, 2016).

The authors of this book are either professors of English or professors of English and Literature.

The central theme of this book is how to carry out a research, how to ask question and find answers, how to plan the argument to be written and how to write the argument in research.

This book is relevant to my research because as a novice researcher in writing a paper of publishable quality, it is a good starting point in learning how to carry out a research. The book was especially useful as a guide for evaluating sources for their relevance and reliability and also for the methodology in engaging sources.

SECONDARY MATERIAL: ARTICLES

Argyrou, Aikaterini, “Making the Case for Case Studies in Empirical Legal Research” (2017) 13:3 Utrecht L. Rev. 95, DOI: < [org/10.18352/ur1.409](https://doi.org/10.18352/ur1.409)>.

Baba, Sofiane & Emmanuela Raufflet, “Managing Relational Legacies: Lessons from British Columbia, Canada” (2014) 4:1 Administrative Sciences 15. DOI: <dx.doi.org.ezproxy.lib.ucalgary.ca/10.3390/admsci4010015>

Bankes, Nigel, “The Social License to Operate: Mind the Gap” (June 24, 2015) online: ABlawg, <ablawg.ca/2015/06/24/the-social-licence-to-operate-mind-the-gap> [perma.cc/H5G7-86QT].

Nigel Bankes is a Professor of Law at the University of Calgary Faculty of Law.

This article among other issues reflects on the normative context of the concept of the social licence arguing that social license might be more useful if it is framed as a

principle and not rule. The paper further reflects on the influence of social license if it is allowed to veto the approval already granted by a legal license.

This gives an understanding of how far is too far in using social license and the best way social license can be used. It gives a deeper understanding of the impact of social license in the energy industry.

Bruecker, Martin & Marian Eabrasu, “Pinning down the Social License to Operate (SLO): The Problem of Normative Complexity” (2018) 59 Resources Policy 217.

This article opines that because social license is not a legal license codified by law, it is a difficult concept to understand and fraught with ambiguity. The article nevertheless goes ahead to contextualize the concept of social license by proposing a widening, approximation and standardization of the social license in order to be able to transfer case study analysis.

This article is relevant for my research because of the proposed methodology in suggesting transferability of case study analysis of the practical application of social license.

Cooney, Jim, “Reflections on the 20th Anniversary of the Term ‘Social Licence’” (2017) 35:2, J Energy & Natural Resources L 197, DOI: <10.1080/02646811.2016.1269472>.

Jim Cooney retired from Pacer Dome Inc in 2006 as Vice President, International Government Affairs. Since then, Cooney has been active as a consultant to international mining companies, regarding issues of social and political risk.

Jim Cooney is credited for coining the term social license, with regard to the challenges that is faced by mining companies in the operation of their projects. This Article written 20 years after the term was coined gives an insight as to the reason and how the term social license was coined. This article will be relevant as an insight into the historical perspective of the concept of the term social license and I intend to rely on it as one of my sources for the part of my paper on the historical development of the concept of social license.

Costanza Jennifer Noel, “Mining Conflict and the Politics of Obtaining a Social License: Insight from Guatemala” (2016) 79 World Development 97.

Dare, (Lain) Melanie, Jacki Schirmer & Frank Vanclay, “Community Engagement and Social Licence to Operate” (2014) 32:3 Impact Assessment and Project Appraisal, 188, DOI: <10.1080/14615517.2014.927108>.

Demuijnck, Geert & Björn FASTERLING. “The Social License to Operate,” (2016) 136:4 Journal of Business Ethics 675, DOI: < 10.1007/s10551-015-2976-7 >.

This article explores how concepts such as legitimacy and stakeholder management have a tendency to provide business case for securing a social license.

From an analytical perspective, this article gives a broader understanding of the normative determinant of legitimacy for securing social license for a project.

Ednie, Heather, “Sustainable Development Toward A Social License to Operate” (2002) 95:1063 CIM Bulletin11.

Forrester, Peter, Kent Howie & Alan Ross, “Energy Superpower in Waiting: New Pipeline Development in Canada, Social Licence, and Recent Federal Energy Reforms” (2015) 53:2 Alta L Rev 419.

Peter Forrester is a Senior Director, Legal & Aboriginal Affairs, Kinder Morgan Canada Inc. While Kent Howie and Alan Ross are partners at the Calgary office of Borden Ladner Gervais LLP.

This article explores the concept of social licence in the context of the role of the Canadian government in the social license debate and explains how social licence has become intertwined with the regulatory scheme in Canada. The authors further explore how recent federal amendments have altered the social licence and regulatory landscape in Canada.

This article is relevant to my research because it explores the concept of social license with respect to current proposals for pipeline projects in Canada. It gives a basic understanding of social license and would be a good source for other secondary sources on the concept of social license. Although this Article covers recent energy projects, it is however limited to Pipeline projects, does not include LNG projects and also contextualizes social license with respect to the role of the government.

Hall, Nina et al, “Social Licence to Operate: Understanding how a Concept has been Translated into Practice in Energy Industries” (2015) 86 Journal of Cleaner Production 301, DOI: <[.org/10.1016/j.jclepro.2014.08.020](https://doi.org/10.1016/j.jclepro.2014.08.020)>.

This article carries out a research on the practical application of social license to the energy industries in Australia. The tendency was for social license to be applied to the mining sector, but this article shows the breadth this concept has been applied. The findings identified shared expectations of increasing stakeholder engagement in

energy project development, and a view that a social licence to operate could guide this engagement. This research provides evidence of how the meaning and application of social licence to operate does vary between industries.

This article is relevant to my research because it shows that social license has expanded farther than its initial meaning and it buttressed the need for community engagement for an energy project to be develop.

Hamilton, Robert, “Uncertainty and Indigenous Consent: What the Trans-mountain decision tells us about the current state of the Duty to Consult.” (September 10, 2018), online: (ABlawg) <ablawg.ca/wpcontent/uploads/2018/09/Blog_RH_TMX_Sept2018.pdf> [perma.cc/63KQ-RE6F].

Hefron, Raphael J et al, “The Emergence of the ‘Social Licence to Operate’ in the Extractive Industries?” (2018) *Resources Policy*, Resources Policy, DOI: <[10.1016/j.resourpol.2018.09.012](https://doi.org/10.1016/j.resourpol.2018.09.012)>.

This article addresses the legal basis for requiring a social license, the legal nature of social license and also gives an analysis of the relationship social license has with other energy concept such as energy justice and environmental impact.

This article is relevant to my research because it gives a better understanding of social license concept and what social license does not include. This article also gives support to analysing social license from a legal perspective and would be a good source for other secondary materials in the course of my research.

Jijelava, David & Frank Vanclay, “Legitimacy, Credibility and Trust as The Key Components of a Social Licence to Operate: An analysis of BP's Projects in Georgia, *Journal of Cleaner Production*, 140:3 (2017) 1077 ISSN 0959-6526, DOI: <[org/10.1016/j.jclepro.2016.10.070](https://doi.org/10.1016/j.jclepro.2016.10.070)>.

This article argues that social license is based on the extent of legitimacy, credibility and trust accorded by local people to a project.

This article further argues that applying the social license in assessing the work of private sector projects is useful.

This article uses the normative social license determinants of legitimacy, credibility and trust to analyse an oil and gas project in Georgia. This article is relevant for my research because I am interested in the methodology used in analysing the project for a possible application of the same methodology in my research.

Jijelava, David & Frank Vanclay, “How a Large Project was Halted by the Lack of a Social Licence to Operate: Testing the Applicability of the Thomson and Boutilier Model” (2018) 73 *Environmental Impact Assessment Review* 31, DOI: <[.org/10.1016/j.eiar.2018.07.001](https://doi.org/10.1016/j.eiar.2018.07.001)>.

This article argues that in order to earn social license, there is the need for considered effort and commitment from project proponents. The article further argues that the lack of a social license can halt a project

This article uses the normative social license determinants of legitimacy, credibility and trust to analyse if the lack of these determinants halted the project. This article is relevant for my research because I am interested in the methodology used in analysing the project for a possible application of the same methodology in my research for a possible practical application to the argument that the lack of a social license could prevent a project from construction even commencing.

This article would further give an understanding of the normative determinants of social license and would be a useful source to other secondary materials that conceptualizes social license.

Koivurova, Timo et al, “Social license to Operate’: A Relevant Term in Northern European Mining?” (2015) 38:3 *Polar Geography* 194, DOI: <[10.1080/1088937X.2015.1056859](https://doi.org/10.1080/1088937X.2015.1056859)>.

Luke Hanabeth, Martin Brueckner & Nia Emmanouil, “Unconventional Gas Development in Australia: A critical review of its social license” (2018) 5:4 *The Extractive Industries and Society* 648, DOI: <[.org/10.1016/j.exis.2018.10.006](https://doi.org/10.1016/j.exis.2018.10.006)>

This paper provides an overview of unconventional gas developments in Australia and public attitude to them through the concept of social license. The article analysis some academic literature to gain insights into how social license is understood, conceptualised and operationalised across Australian states and territories, situations and the heterogeneity of social license outcomes. These insights suggest that social infrastructure can play an important role in social license negotiations.

This article provides insight to the practical element of getting a social license. In my analysis of if there is social license for the projects I will be analysing, this article suggests the elements of project proponents providing infrastructure for a community in order to get a social license and this can serve as one of the practical elements to look for in the course of the case study analysis in my research.

Neil, Gunningham et al, “Social License and Environmental Protection: Why Businesses Go Beyond Compliance” (2004) 29:2 *Law & Social Inquiry* 307.

This article examines the concept “social license,” as it relates to the pulp and paper manufacturing. It posits that social license is important explains how social license interacts with the regulatory and economic licenses. It argues that social license cannot be viewed form only instrumental threats and moral obligations to comply with the law, and that the increasing incidence of companies going beyond just compliance with the law corporate can be explained in terms of the interplay between social pressures and economic constraints.

This paper supports a subset of my argument on the need to get social license so as to ensure the development of energy projects it also buttresses my argument on the need for social license.

Prno, Jason & Scott Slocombe D, “Exploring the Origins of ‘social license to Operate’ in the Mining Sector: Perspectives from Governance and Sustainability Theories,” (2012) 37:3 Resources Policy 346, DOI: <10.1016/j.resourpol.2012.04.002>.

This article highlights that conventional approaches to mineral development no longer suffice for communities.

Using governance and sustainability as base theories, this article gives a conceptual analysis of the emergence of social license, the article further highlights the implications of the concept of social license to the mining sector and the influence of the non-state actors on the issue of social license and greater impact on continued operations of a project

This article will be relevant for me, in giving a historical analysis of social license and in conceptualizing social license. The paper also has one of the themes of my paper which is the influence of social license.

Randolph, Justus J. “A Guide to Writing the Dissertation Literature Review,” (2009) 14:13 *Practical Assessment, Research & Evaluation 1* online: <pareonline.net/getvn.asp?v=14&n=13> [<https://perma.cc/G2PL-9FTQ>].

This article provides a guide on how to carry out a literature review, from formulating the problem, collecting data, analysing the data, interpreting the data, and presenting the data. The article gives a practical breakdown on how to go about these steps in carrying out a literature review. The article further points out the mistakes commonly made in reviewing literature for research.

I intend to use this source as a guide in carrying out the literature review section of my paper.

Reitz, John C, “How to do Comparative Law” (Autumn 1998) 46:4 *The American Journal of Comparative Law* 617 online: <www.jstor.org/stable/840981> DOI: < 10.2307/840981>.

This article gives insight on the comparative methodology in legal research and argues that legal research would benefit from comparative analysis.

Although this article refers to comparing legal systems, the section on justifying choices for comparison, and the section on the organization of comparative papers have practical relevance for my research and I intend to refer to the paper in the course of writing, with regards to the part of my paper that has elements of comparative analysis.

Shaw, Rob, “LNG Canada Project in Kitimat Given Green Light to Build by Shareholders”, *Vancouver Sun* (2 October 2018), online: <vancouver.sun.com/news/politics/lng-canada-green-light> [perma.cc/GQL6-VG3H].

Vale, Eduardo, “Social License Revisited” (2016) 29:2 *Mineral Economics* 105.

In this article, issues that create constraints in the mining sector in terms of community relations are addressed by the Author. The author argues that the community usually has the last word after much time and money is spent on a project and further evaluates best practices for the concept of social license in order to find a compromise between the community, mining operator and the Government. He argues in this article that these projects that are halted, the opportunity cost is represented by the foregone net benefits that could be generated by the prohibited project.

This article highlights how stalled projects due to the lack of a social license impacts the economies of a Country, although the economic impact from the lack of project development is not the central theme of my research, it is lesser a theme to which one needs to avert one’s mind, in considering the need for the development of energy projects and the greater need to have social license so as to ensure the development of a project.

ENVIRONMENTAL IMPACT ASSESSMENT:
AN END IN ITSELF OR A TOOL FOR SUSTAINABILITY?

FLÁVIA VIEIRA DE CASTRO

DECEMBER 2018

BRIEF DESCRIPTION OF MY RESEARCH

My research project aims to answer why EIAs for oil and gas projects are being ineffective in avoiding or mitigating the environmental impacts of these developments, assessing, under a sustainability perspective, the main gaps in Brazil's and Canada's EIA regulatory frameworks. The research will also consider the proposed reforms for EIAs legislation and the role that sustainability should play in the assessment of the ongoing Canadian and Brazilian oil and gas projects, enhancing environmental protection. I will take a comparative approach between these two jurisdictions addressing whether there are lessons to be shared among Canada and Brazil for the improvement of the federal environmental impact assessment process as a tool for sustainability.

ANNOTATED BIBLIOGRAPHY

Bragagnolo, Chiara et al, "Streamlining or sidestepping? Political pressure to revise environmental licensing and EIA in Brazil" (2017) 65 Environmental Impact Assessment Review 86.

This article evaluates the ineffectiveness of Brazilian EIA, which has had a very limited influence on decision-making process. It also critically discusses environmental reforms in

Brazil and the negative effect of powerful lobbies and conservative legislators on these amendments. It is a contemporary article which analyses the current proposals for reforming the Brazilian EIA system. It will support my analysis related to PEC 65/2012 - a constitutional proposed amendment to alter article 225 of the Brazilian Constitution on environmental rights - which constitutes a drawback of the Brazilian EIA process.

Bratman, Eve & Cristiane Bená Dias, "Development blind spots and environmental impact assessment: Tensions between policy, law and practice in Brazil's Xingu River Basin" (2018) 70 *Environmental Impact Assessment Review* 1.

Although the article refers to two specific projects, a large hydroelectric dam and a gold mine, it shows in general the tensions between policy, law and practice in the Brazilian environmental system. Thus, I will use this article to underline the gaps of Brazilian environmental assessment, mainly in the implementation of the rules in a sustainability perspective.

Fluker, Shaun & Nitin Kumar Srivastava, "Public Participation in Federal Environmental Assessment under the Canadian Environmental Assessment Act 2012: Assessing the Impact of "directly affected" (2016) 29 *Journal of Environmental Law and Practice* 65.

In this paper the authors study how review panels under CEAA 2012 have interpreted and applied the "directly affected" test into public participation. The paper critically analyzes the changes introduced by the CEAA 2012 that are limiting public participation in the EA, suggesting that now any participation beyond the submission of written comments seems to be more of a privilege than a right. This work contributes to my research project demonstrating that this amendment represents a diminished level of environmental protection and, consequently, compromises a sustainability approach to current EA processes.

Fonseca Alberto, Luis Enrique Sánchez & José Claudio Junqueira Ribeiro, "Reforming EIA systems: A critical review of proposals in Brazil" (2017) 62 *Environmental Impact Assessment Review* 90.

This paper offers a critical review of the proposed actions to reform the environmental licensing and impact assessment regulations in Brazil. Through a qualitative approach, it shows that the proposals generally agree that the current EIA system, while playing a key role in mitigating impacts and enhancing project design, needs many changes. This work highly contributes to my research project enabling the assessment of the most recent proposals and their role towards sustainability.

Galbraith, Lindsay, Ben Bradshaw & Murray B Rutherford, "Towards a new supraregulatory approach to environmental assessment in Northern Canada" (2007) 25:1 *Impact Assessment and Project Appraisal* 27.

This article explores the reasons for the rise of supraregulatory agreements negotiated by Aboriginal communities and project proponents. It argues that EA deficiencies help explain this phenomenon and suggests further research to assess their effectiveness for achieving positive outcomes. The study of these supraregulatory agreements should assist my research in understanding the failures of the current EAs and in considering these agreements as a way to reach sustainability.

Gibson, Robert et al, "Strengthening Strategic Environmental Assessment in Canada: An Evaluation of Three Basic Options" (2010) 20:3 *Journal of Environmental Law and Practice* 175.

This paper discusses the deficiencies of environmental assessment (SEA) process and examines the three basic options for strengthening federal SEA - a law-based option, a policy-guided option and a combined law and policy approach. SEA integrates environmental and social considerations into the development of policies, plans and programs. In this sense, it deserves to be explored as an important tool for sustainability, along with the EIA. My research will evaluate how SEA could help address some of EIA's shortcomings, enhancing sustainability as a whole.

Glasson, John & Nemesio Neves B. Salvador, "EIA in Brazil: a procedures-practice gap. A comparative study with reference to the European Union, and especially the UK" (2000) 20 *Environmental Impact Assessment Review* 191.

Glasson and Salvador's article traces an interesting comparison between Brazilian and EU/UK EIA systems in order to evaluate the strength and the weakness of the key EIA legislation in Brazil (CONAMA Resolution 01/86). Considering that I will also use a comparative methodology while assessing the differences and similarities between Canadian and Brazilian EIA regulatory framework, this well-articulated comparative work - which covers both civil and common law systems - will be useful to guide my research.

Hazell, Stephen, "Improving the Effectiveness of Environmental Assessment in Addressing Federal Environmental Priorities"(2010) 20:3 *Journal of Environmental Law and Practice* 213.

The article evaluates how the federal environmental assessment could be used more effectively to meet stated environmental priorities. The article focuses on the issue of climate change and greenhouse emissions, but it could be used to discuss the effectiveness of federal

EA to address other controversial issues, such as public participation and species protection, related to the oil and gas projects, which includes the Trans Mountain Expansion Project.

Ho, Anthony & Chris Tollefson, "Sustainability-based Assessment of Project-related Climate Change Impacts: A Next Generation EA Policy Conundrum" (2016) 30:1 *Journal of Environmental Law and Practice* 67.

This paper also considers the capability of a sustainability-based EA to consider the specific issue of a project's climate change impacts from its greenhouse gas emissions. It suggests that any reform to the federal EA regime that tries to incorporate the sustainability framework must be attentive to the weakness within that framework in addressing the complex and global phenomenon of climate change. The article offers an opportunity to consider whether a sustainability approach is feasible in the realm of the oil and gas projects and how it could be achieved.

Hunsberger, Carol, Robert B. Gibson & Susan K. Wismer, "Citizen involvement in sustainability-centred environmental assessment follow-up" (2005) 25 *Environmental Impact Assessment Review* 609.

This article addresses the weakness of environmental assessments especially in the areas of encouraging public participation and integrating social and ecological considerations, focusing on the possibilities for enhancing both citizen involvement and follow-up monitoring. This approach is essential to ensure effective public participation and, therefore, sustainability in the environmental assessment processes related to oil and gas projects, which, as I will demonstrate in my research, generally have an adverse impact on the nearby communities and on the environment.

Judith Marshall, "Tailings Dam Spills at Mount Polley and Mariana: Chronicles of Disaster Foretold" (2018), on line (pdf):<
www.policyalternatives.ca/sites/default/files/uploads/publications/BC%20Office/2018/08/CCPA-BC_TailingsDamSpills.pdf>

Marshall's paper - while comparing the environmental disasters at the Mount Polley mine in British Columbia, Canada, and the Samarco mine in Mariana/MG, Brazil - traces remarkable parallels between Canada and Brazil regarding the exploration of natural resources and the lack of environmental protection reflected in the implementation of the legislation, including the EIA regulatory framework. It explores the context and factors that have led to these two great environmental disasters. This detailed work considerably contributes to my comparative research, especially to understand the differences and similarities between Canada and Brazil in the regulation of oil and gas activities.

Kirchhoff, Denis & Brent Boberstein, "Pipeline risk assessment and risk acceptance criteria in the State of São Paulo, Brazil" "(2006) 24:3 Impact Assessment and Project Appraisal 221.

In order to improve EIA as a preventive tool to avoid environmental impacts of proposed pipeline's projects this paper discusses the use of risk assessment as part of EIAs. In Brazil, risk assessment is scarcely used, and, from a sustainability perspective, it would be extremely useful in advising decision-makers about the significant adverse effects of oil and gas projects. I will consider this work while analyzing and suggesting possible ways forward for enhancing Brazilian EIA process.

Meinhard Doelle, "CEAA 2012: The End of Federal EA as We Know It?" (2012) 24:1 Journal of Environmental Law and Practice 1.

Doelle's article traces a useful comparison between the CEEA 2005 and CEEA 2012 that current regulates the federal environmental impact assessment in Canada, demonstrating the problems with the new regulation. It will be used to assess the recent rollbacks in Canadian environmental law and how sustainability fits in the current Canadian environmental impact assessment framework.

Northey, Rod, "Fading Role of Alternatives in Federal Environmental Assessment" (2016) 29 *Journal of Environmental Law and Practice* 41.

Northey's paper reviews Canada's 40-year history of federal environmental assessment and proposes a new model of federal EA with a novel focus on sustainable development. Under this model, federal EA would seek to select the alternative that maximizes sustainability. This article shows an innovative approach to federal EA and it is an efficient alternative in order to place sustainability in the center of EA process as I argue in my research.

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I will refer to this decision in order to analyze how the concept of sustainability and its subprinciples influenced the Federal Court of Appeal decision in this case related to the Trans Mountain Expansion Project. According to the court decision the environmental impact assessment has not taken into account the significant adverse effects upon the endangered Southern resident killer whales and failed to meaningfully address indigenous concerns. Therefore, I will evaluate how the court addressed environmental and social concerns.

Vilardo, Cristiano & Emilio Lèbre La Rovere, "Multi-project environmental impact assessment: insights from offshore oil and gas development in Brazil" "Multi-project

environmental impact assessment: insights from offshore oil and gas development in Brazil"(2018) 36:4 Impact Assessment and Project Appraisal 358.

Vilardo and Rovere's article presents a case study from offshore petroleum production in Brazil, where the development of the pre-salt giant reserves is being licensed through a multi-project EIA approach. Based on this case study, the paper suggests that the adoption of multi-project environmental impact assessment should be broadened, especially in jurisdictions where strategic assessments are not in place. I will consider this work since this approach, which delivers greater effectiveness and process streamlining while assessing cumulative environmental effects, should enhance sustainability in the Brazilian EIA process related to oil and gas projects.