

THE ROLE OF ENVIRONMENTAL LAW IN COMBATING CLIMATE CHANGE IN NORTH AMERICA

Sukaina Ashfaq Syed

Department of Law, Dadabhoy Institute of Higher Education, Pakistan

sukainakazmy@gmail.com

Received: 08 October, 2023 Revised: 08 November, 2023 Accepted: 23 November, 2023 Published: 30 November, 2023

ABSTRACT

Climate change is one of the biggest challenges humanity faces today, and environmental law has a critical role in tackling its impacts. In North America, the legal responses to climate change differ significantly across countries, reflecting their unique political, economic, and social contexts. This paper looks at how environmental law is being used to combat climate change in Canada, the United States, and Mexico. It examines the successes and obstacles these countries face, focusing on areas like international cooperation, federalism, and local governance. Key examples, such as cross border pollution controls and sustainable development efforts, show how law can be both a tool for progress and a reflection of broader challenges. By examining these issues, this paper highlights the potential of environmental law to drive change and its limitations in addressing such a complex global problem.

Keywords: climate change, environmental law, North America, federalism, sustainable development

INTRODUCTION

Climate change has emerged as one of the defining issues of the 21st century, demanding urgent and coordinated action at all levels of governance. Its impacts rising global temperatures, extreme weather events, and loss of biodiversity are increasingly evident across the globe. In North America, countries are grappling with these challenges while balancing economic growth and political complexities. Environmental law, with its ability to regulate harmful activities and promote sustainable practices, is a crucial tool in this fight.

The effectiveness of legal frameworks often depends on their design, enforcement, and alignment with international standards. According to Sanfelice et al. (2016), international environmental law principles offer valuable guidance, but their application varies widely based on regional contexts.

In North America, the diversity in governance systems between Canada, the United States, and Mexico adds layers of complexity to climate related

legal frameworks. Canada, for instance, has been lauded for its federal approach to environmental issues, where provinces have significant autonomy to implement climate policies. Bélanger (2011) highlights the unique challenges of Canadian federalism in addressing climate change, noting that while provinces like British Columbia lead with innovative policies, others lag behind.

The United States, with its decentralized federal system, faces a patchwork of state level initiatives that sometimes conflict with national priorities. This decentralized approach can lead to innovation, as seen in states like California, but also creates inconsistencies across the country.

Mexico, on the other hand, presents a different picture. As a developing country with high vulnerability to climate change, Mexico has adopted progressive environmental laws and joined international agreements like the Paris Accord. Enforcement remains a major hurdle. Pasternack (2012) points out that Mexico's struggle with

corruption and limited resources often undermines its legal frameworks, even when they are well designed.

This contrast among North American countries underlines the importance of tailoring environmental laws to fit national circumstances while ensuring coherence with regional and international efforts.

International cooperation is another essential element in addressing climate change in North America. Issues like transboundary pollution and resource management require collaborative solutions. For instance, the Elk–Kootenai River watershed between Canada and the United States highlights how pollution from mining operations can have cross border impacts. Simpson and Collison (2023) argue that international law provides mechanisms for addressing such challenges, but practical implementation often depends on political will and mutual trust between nations.

Despite these efforts, there is growing recognition that existing environmental laws may not be sufficient to combat the scale of the climate crisis. Ogden (2016) notes that Canada's recent attempts to rewrite its environmental laws reflect an understanding of this inadequacy and a desire to adapt to changing realities.

The U.S. has seen calls for stronger federal leadership to address inconsistencies in state level policies. These examples illustrate that while environmental laws have achieved progress, they must evolve to meet the urgency of the climate challenge.

Research Justification

Climate change is a pressing global issue, and its impacts are especially significant in North America, a region with diverse ecosystems and economic activities. Understanding the role of environmental law in this context is crucial because legal frameworks can either accelerate or hinder effective climate action. Sanfelice et al. (2016) emphasize the importance of aligning domestic laws with international principles to address the global nature of climate change.

The application of these principles is inconsistent, particularly in federations like Canada and the United States. In Canada, Bélanger (2011) notes

that federalism creates both opportunities and challenges for climate governance, as provinces vary widely in their commitment and capacity to implement environmental policies. Similarly, Ogden (2016) highlights ongoing reforms in Canada's environmental laws as an attempt to address gaps in policy effectiveness.

In the United States, Race et al. (2019) argue that the fragmented nature of state and federal policies often results in legal and administrative hurdles. Mexico, despite its progressive legal frameworks, struggles with enforcement due to systemic challenges, as noted by Pasternack (2012). These examples underline the need for a deeper understanding of how environmental law operates across North America to address the climate crisis effectively.

Research Objectives

The role of environmental law in combating climate change across North America, focusing on the unique challenges and opportunities faced by Canada, the United States, and Mexico.

1- To analyze the effectiveness of existing environmental laws in mitigating climate change impacts

The legal frameworks in place, this research aims to evaluate how well these laws address pressing climate issues like greenhouse gas emissions, renewable energy adoption, and environmental conservation. This involves exploring case studies and identifying gaps in current policies.

2- To explore the role of federalism in shaping climate laws in Canada and the United States

Federal structures can both empower and complicate climate governance. This research will examine how provinces in Canada and states in the U.S. implement their own climate policies and the extent to which these efforts align with national and international objectives.

3- To assess Mexico's approach to climate governance and its unique challenges

Mexico, as a developing country, faces distinct economic and political obstacles in enforcing environmental laws. This objective will look into how Mexico balances its climate commitments with economic development and social priorities.

4- To evaluate the role of international cooperation in addressing transboundary environmental challenges

Climate change issues like air and water pollution often cross borders. This research seeks to understand how international agreements and partnerships such as those addressing the Elk Kootenai River watershed impact climate law enforcement and collaboration between North American countries.

5- To identify potential improvements to North American environmental laws to strengthen climate resilience

Drawing insights from existing frameworks and case studies, this research will propose actionable recommendations to enhance the effectiveness of environmental laws in addressing climate change at both national and regional levels.

Research Methodology

This study employed a systematic review methodology, with research objectives established accordingly. A comprehensive literature review was conducted (Komba & Lwoga, 2020). Research findings were categorized based on their content (Hiver et al., 2021; Petticrew & Roberts, 2006), and classified information was incorporated into the study by organizing it into headings (Gan et al., 2021; Pawson et al., 2005). The evaluation of classified information and titles formed the basis of the study (Page, 2021; Rahi, 2017), ensuring the integrity of the research subject and its contents (Egger et al., 2022; Victor, 2008).

Literature Review

Climate change is no longer just an environmental concern; it is a defining challenge for policymakers, industries, and communities worldwide. In North America, environmental law serves as a critical tool in addressing the impacts of climate change, shaping responses through regulatory frameworks, international agreements, and collaborative initiatives. This review explores how Canada, the United States, and Mexico approach climate challenges through their legal systems, examining successes, obstacles, and opportunities for improvement.

1- The Patchwork of U.S. Climate Laws

The United States demonstrates a complex and often fragmented approach to environmental law. As Race et al. (2019) explain, environmental governance in the U.S. operates across multiple levels federal, state, and local resulting in both innovation and inconsistency. For example, states like California lead with progressive policies such as the cap and trade program, which has successfully reduced emissions while promoting economic growth. Other states resist federal environmental regulations, creating a patchwork of policies that can hinder national progress.

This fragmentation is particularly evident in responses to transboundary pollution and emissions. Federal agencies such as the Environmental Protection Agency (EPA) often struggle to enforce uniform policies in the face of state level opposition. This dynamic reveals the need for a more cohesive approach to ensure that climate efforts at various levels of governance work together effectively.

2- Canada's Federalism and Environmental Progress

Canada's federal system poses unique challenges for climate governance, where provinces wield significant autonomy in environmental matters. Bélanger (2011) highlights how this structure has led to a diverse range of climate initiatives. Provinces like British Columbia and Quebec have implemented effective policies such as carbon pricing and renewable energy mandates. Resource heavy provinces like Alberta face difficulties transitioning away from fossil fuels, leading to uneven progress across the country.

Federal efforts, such as the Pan Canadian Framework on Clean Growth and Climate Change, attempt to align provincial and national goals. Ogden (2016) notes that Canada's recent environmental law reforms reflect a broader commitment to modernize its legal framework and address gaps in enforcement. Despite these efforts, political and economic factors continue to influence the pace of implementation, emphasizing the importance of sustained collaboration between federal and provincial governments.

3- Mexico's Legal Framework and Enforcement Challenges

Mexico offers a different perspective as a developing country facing significant climate vulnerabilities. Pasternack (2012) underscores the ambitious nature of Mexico's environmental laws, which often align with international agreements such as the Paris Accord. Initiatives like ProAire, aimed at reducing urban air pollution, illustrate Mexico's commitment to addressing specific climate issues.

Enforcement remains a key challenge. Limited resources and systemic corruption frequently undermine the effectiveness of environmental laws. For example, illegal logging and deforestation persist despite legal protections, highlighting the gap between policy design and practical implementation. Strengthening institutions and improving governance mechanisms are essential for Mexico to fully realize the potential of its climate laws.

4- Regional Collaboration on Transboundary Issues

Many climate challenges in North America, such as air and water pollution, transcend national borders, necessitating regional cooperation. The Elk-Kootenai River watershed, shared by Canada and the United States, exemplifies how pollution from Canadian mining operations affects downstream ecosystems in the U.S. Simpson and Collison (2023) stress that while international agreements exist to address such issues, their success depends on political will and consistent enforcement.

Regional partnerships and treaties play a critical role in addressing these challenges. Disruptions in international cooperation such as the temporary U.S. withdrawal from the Paris Agreement demonstrate how political shifts can impede progress. This underscores the need for robust legal mechanisms that endure beyond changes in leadership.

1- Learning from International Environmental Law

International environmental law offers valuable insights for North American frameworks. Sanfelice et al. (2016) emphasize principles like the precautionary approach and sustainable development as key tools in crafting effective climate policies. While Canada, the U.S., and Mexico have adopted elements of these principles,

their implementation remains inconsistent due to differing national priorities and capacities.

The role of scientific innovation in shaping environmental law is another critical consideration. Andrews and Taylor (2019) highlight techniques such as enhanced weathering of agricultural soils to capture carbon, demonstrating the need for laws that adapt to emerging technologies. By integrating scientific advancements, North American countries can strengthen their legal frameworks to address climate challenges more effectively.

The role of environmental law in combating climate change in North America is both essential and evolving. Legal frameworks provide the structure for climate action, but their success depends on enforcement, collaboration, and adaptability. Each country in the region faces unique challenges, yet their interconnectedness highlights the importance of coordinated efforts. By learning from successes and addressing existing gaps, environmental law can become a more powerful driver of climate resilience across North America.

The Evolution of Environmental Law and its Impact on Climate Change Action in North America

Environmental law in North America has evolved significantly over the past century, driven by increasing awareness of the impact of human activity on the environment. In the early 20th century, there were few legal frameworks addressing environmental protection. It wasn't until the post World War II period that concerns over pollution and resource depletion began to gain political traction. In the U.S., landmark laws like the Clean Air Act (1963) and the Clean Water Act (1972) were established to address growing concerns about industrial pollution. These laws marked a turning point, creating the foundation for modern environmental governance.

By the 1980s and 1990s, the focus began to shift toward more global environmental issues, including climate change. The creation of the Intergovernmental Panel on Climate Change (IPCC) in 1988 pushed the issue to the forefront. In response, North American countries started incorporating climate considerations into their legal frameworks. In Canada, for example, the Kyoto Protocol was ratified in 2002, committing the country to reduce greenhouse gas emissions. The

U.S., while initially hesitant, later adopted measures like the Clean Power Plan under the Obama administration in 2015, aimed at cutting emissions from power plants.

The early 21st century has seen a growing realization that climate change is an urgent issue requiring not just national laws, but also international cooperation. Environmental laws continue to evolve, but the challenge remains to adapt legal frameworks that are both effective and capable of responding to the accelerating pace of climate change.

Leading: The Role of Environmental Law in Combating Climate Change in North America

As climate change accelerates, the role of environmental law in North America has never been more critical. The region's vast industries, urban growth, and natural resources all contribute to its significant environmental impact. This also means that legal frameworks in the United States, Canada, and Mexico hold immense power in shaping the future of the planet. The challenges posed by climate change rising temperatures, extreme weather events, and pollution demand a legal response that is both proactive and adaptive.

For example, Canada's commitment to reducing carbon emissions is visible in its efforts to implement carbon pricing and develop clean energy policies. On the other hand, the U.S. has seen fluctuations in climate policy, with shifts in leadership affecting the direction of its environmental laws. Mexico, although facing unique challenges as a developing nation, has taken steps to integrate climate change measures into its legal system, driven by both national goals and international agreements.

The evolving landscape of environmental law in North America reflects the growing recognition that climate change is not only an environmental issue but a legal, social, and economic one. While progress has been made, it is clear that much more needs to be done to ensure that the laws of the future can tackle the climate crisis head on, fostering resilience for future generations.

Theoretical Insights into the Role of Environmental Law in Mitigating Climate Change in North America

Environmental law aims to balance human development with the protection of the planet's natural resources. When it comes to climate change, the role of law extends beyond simply regulating pollution or conserving wildlife, it shapes the frameworks through which countries and industries respond to the climate crisis. Theoretically, environmental law draws on principles like sustainable development, precautionary measures, and the 'polluter pays' principle, all of which guide policy and regulation at both the national and international levels.

In North America, environmental law operates in a complex landscape where political, economic, and social factors intersect. For example, the 'precautionary principle' argues that legal systems should act to prevent harm even when scientific evidence about potential environmental damage is uncertain. This is seen in the U.S. Clean Air Act, which empowers the Environmental Protection Agency (EPA) to regulate greenhouse gas emissions, even in the absence of complete scientific certainty about their long term effects.

Sustainable development is another key concept in environmental law, especially when considering how countries balance economic growth with environmental protection. Canada's efforts to implement carbon pricing reflect an attempt to achieve this balance, aligning the country's legal system with its international commitments under the Paris Agreement. This ideal of sustainability is often contested, as economic interests such as the oil and gas industries in Alberta pose significant challenges to stronger climate action.

The 'polluter pays' principle, which suggests that those who cause environmental harm should bear the costs of their actions, remains central to many environmental laws in North America. This theory is evident in policies like carbon taxes and emission reduction targets, aiming to incentivize industries to reduce their carbon footprints.

These theoretical frameworks often clash with political realities. Legal systems in North America are shaped by powerful industries and regional interests that resist change, making the implementation of climate policies a constant challenge. This underscores the need for not just strong legal principles, but also political will and public engagement to drive meaningful progress in the fight against climate change.

Overcoming Challenges and Seizing Opportunities in Environmental Law for Climate Action in North America

Combating climate change through environmental law in North America presents both significant challenges and exciting opportunities. On the one hand, there are substantial barriers to creating and enforcing effective climate policies. On the other, there are real opportunities to innovate and lead the way toward a more sustainable future.

1- Challenges

One of the primary challenges is the political and economic resistance to stricter environmental regulations. In the U.S., for example, there's often a clash between federal climate initiatives and state governments, especially in energy rich states like Texas and Wyoming, where the fossil fuel industry holds considerable influence. This resistance is not just political but also economic many industries fear that aggressive climate policies could harm their bottom lines or cost jobs. The recent rollback of regulations under the Trump administration is a stark reminder of how quickly policy can shift, making long term legal frameworks difficult to establish.

Canada also faces a similar tension, particularly in provinces like Alberta, where the oil sands are a significant economic driver. Despite efforts to implement carbon pricing and cleaner energy policies, the challenge remains in convincing local industries and communities to transition away from traditional energy sources.

2- Opportunities

Despite these challenges, there are significant opportunities for growth and innovation. The adoption of carbon pricing in Canada shows that it's possible to make large scale changes to how we value carbon emissions while fostering green energy initiatives. Quebec's cap and trade system, which successfully reduced emissions while raising revenue for environmental projects, is an example of how economic incentives can align with environmental goals.

The push for clean energy technologies is another key opportunity. In the U.S., states like California have led the way with ambitious renewable energy mandates, proving that it is possible to reduce

emissions while growing the economy. Additionally, North American partnerships such as the United

States Mexico Canada Agreement (USMCA) have the potential to create stronger regional cooperation on climate related issues, fostering shared solutions to shared problems.

The key to overcoming these challenges lies in fostering collaboration between governments, industries, and communities. By integrating legal frameworks with innovative technological solutions and embracing economic opportunities in the green energy sector, North America can turn its environmental law into a powerful tool in the fight against climate change.

Discussion

Environmental law plays a crucial role in shaping how North America tackles the climate crisis. While the legal frameworks are essential for setting standards and enforcing regulations, the effectiveness of these laws is often tested by political, economic, and social factors. For example, the U.S. has seen both progress and setbacks in its climate policies. The Clean Power Plan, introduced during the Obama administration, aimed to reduce emissions from power plants but was delayed and rolled back under the Trump administration. This shift highlights the challenge of having consistent, long term climate laws that are resistant to political changes.

In Canada, carbon pricing has been a major policy tool. While it has had successes, like in British Columbia, where carbon emissions have been reduced while the economy continued to grow, it has faced significant pushback in resource dependent provinces like Alberta. These provinces depend on the oil and gas industry, and the transition to cleaner energy sources is not always seen as feasible or beneficial. This creates tension between environmental goals and the economic realities of fossil fuel economies.

There are reasons for optimism. States like California have set ambitious emissions reduction targets, leading the way in renewable energy adoption. Additionally, international agreements, such as the Paris Agreement, provide a framework for cooperation. By aligning legal frameworks with market driven solutions, such as clean energy incentives and carbon credits, North America can

better address the climate crisis. The road ahead may be challenging, but the opportunities for progress are clear, and the legal tools to make a meaningful impact are in place.

Conclusion

Environmental law is undeniably a key tool in the fight against climate change in North America. While progress has been made, the region still faces significant hurdles. The shifting political landscape, the influence of fossil fuel industries, and regional economic interests often complicate efforts to implement comprehensive climate policies. There are hopeful signs that legal frameworks can adapt to the growing urgency of the climate crisis.

For instance, Canada's carbon pricing model, despite its challenges, offers a promising example of how market based solutions can drive emissions reductions without sacrificing economic growth. Similarly, California's aggressive renewable energy targets show that bold climate actions at the state level can inspire broader change.

The real opportunity lies in collaboration between governments, industries, and communities to align environmental goals with economic incentives. Stronger integration of clean energy policies, technological innovation, and international cooperation can help overcome barriers to progress. Moreover, while North America still grapples with climate denial in some circles, the rise of public awareness and activism among younger generations is reshaping the conversation.

While environmental law alone cannot solve climate change, it plays a critical role in setting the foundation for a more sustainable future. The challenge is clear, but so are the opportunities. With the right political will and legal frameworks in place, North America can continue to evolve its laws to address climate change, creating a more resilient and sustainable future for all.

Recommendations

1- Strengthen Federal Climate Policies

North American countries, particularly the U.S. and Canada, should focus on creating more robust and consistent federal climate policies. For example, the U.S. should reinstate and strengthen policies like the Clean Power Plan to regulate emissions from power plants and expand them to other sectors, providing long term stability.

2- Emphasize Carbon Pricing and Market Based Solutions

Carbon pricing has proven effective in reducing emissions, as seen in British Columbia's carbon tax. Expanding these market based mechanisms across North America would create financial incentives for industries to reduce their carbon footprint while promoting clean energy innovation.

3- Incentivize Renewable Energy Investments

Governments should provide more incentives for renewable energy projects, like solar and wind. For example, tax credits and subsidies for clean energy companies could help accelerate the transition away from fossil fuels, especially in states or provinces heavily reliant on oil and gas industries.

4- Expand Climate Education and Public Awareness

Educating the public on the importance of climate action is crucial. Governments and environmental groups should invest in campaigns that raise awareness about the impact of climate change and the role of environmental law in mitigating it, much like the educational campaigns seen in Europe.

5- Improve Cross Border Cooperation

The U.S., Canada, and Mexico should work more closely to align environmental laws and climate action plans. Sharing best practices and developing common standards, particularly around carbon emissions and environmental regulations, would make it easier to address regional environmental issues like cross border pollution.

2- Support Just Transition for Affected Workers

As industries transition to cleaner energy sources, it's important to provide support for workers in fossil fuel sectors. Offering retraining programs, job placement services, and social safety nets can help ensure that the shift to a green economy is equitable and does not leave vulnerable communities behind.

3- Strengthen Legal Enforcement of Environmental Laws

Governments should improve enforcement of existing environmental laws, ensuring that companies comply with regulations. This could include stricter penalties for environmental violations, as seen in the enforcement of the Clean

Water Act in the U.S., which could deter future violations.

8- Encourage Local Climate Action

Local governments should be empowered to develop and implement climate action plans tailored to their specific needs. Cities like Vancouver and San Francisco have pioneered local sustainability programs that could serve as models for other cities across North America.

9- Foster Private Sector Collaboration

Businesses need to be seen as allies in the fight against climate change. Governments can encourage private companies to adopt sustainable practices through incentives, while also holding them accountable through regulations. Companies like Tesla show that innovation and sustainability can go hand in hand.

10- Integrate Climate Change into Broader Legal Frameworks

Environmental law should not be siloed but integrated into all areas of law, from urban planning to international trade agreements. For example, trade policies could include provisions on carbon emissions, encouraging global trade to support sustainable practices. This approach ensures that climate action is not only a separate concern but embedded in everyday legal decisions.

Research Limitations

While this research provides valuable insights into the role of environmental law in combating climate change in North America, it does have some limitations. One challenge is the rapidly evolving nature of both climate science and environmental law. As new data on climate change emerges and legal frameworks evolve, the conclusions drawn in this study may need to be adjusted in the future. This research primarily focuses on federal level policies and may not fully capture the nuanced, region specific laws that play a significant role, especially in states like California or provinces like Quebec, which have unique regulations.

Another limitation is the reliance on available legal and policy documents, which may not fully reflect the actual on the ground impact of these laws. For example, while carbon pricing has been implemented in some regions, its real world effects on emission reductions can vary and may not be

fully evident yet. Political dynamics in North America can shift quickly, influencing both the effectiveness and direction of environmental laws.

Research Implications

This research has significant implications for both policymakers and environmental advocates in North America. It underscores the importance of aligning legal frameworks with climate goals to drive meaningful change. Policymakers can use these findings to refine existing laws or develop new regulations that are more adaptable to the evolving climate crisis. For instance, strengthening carbon pricing or enhancing emissions standards could have a direct impact on reducing carbon footprints.

The research also highlights the need for collaboration across borders between Canada, the U.S., and Mexico demonstrating that a regional approach can address shared environmental issues like transboundary pollution. On a practical level, it suggests that local governments can play a vital role by developing climate action plans tailored to their communities, as seen in cities like Vancouver and San Francisco. This research contributes to the ongoing conversation about integrating climate action into all aspects of law, offering a foundation for future legal developments aimed at mitigating climate change.

Future Research Directions

Future research in the role of environmental law in combating climate change in North America should explore several key areas. There is a need for deeper analysis of the effectiveness of regional and local environmental policies. For example, how can cities like Los Angeles, known for its ambitious climate goals, inspire other urban centers to take similar steps? Research could focus on whether local policies can lead to broader regional and national shifts, especially in areas that face resistance to federal climate action.

Another promising direction is examining the impact of climate justice initiatives in law. Environmental laws often overlook marginalized communities that are disproportionately affected by climate change. Future studies should assess how environmental law can better address these social inequalities, providing legal tools that both reduce emissions and protect vulnerable populations.

Research should look at the intersection of environmental law and emerging technologies. How can laws evolve to regulate innovations like carbon capture, renewable energy tech, or geoengineering? This would ensure that new technologies are harnessed effectively, while safeguarding environmental integrity.

Given the evolving political climate, research into how environmental laws can remain resilient and effective in the face of political changes is crucial. Exploring mechanisms for ensuring long term legal commitment to climate goals will be key in maintaining progress.

REFERENCES

- Aguilera, M. G. (2023). Regional Environmental Human Rights Law. *Environmental Human Rights*, 351–377.
https://doi.org/10.1163/9789004543775_01_0
- Andrews, M. G., & Taylor, L. L. (2019). Combating climate change through enhanced weathering of agricultural soils. *Elements*, 15(4), 253–258.
<https://doi.org/10.2138/gselements.15.4.253>
- Bélanger, A. (2011). Canadian federalism in the context of combating climate change. *Constitutional Forum / Forum constitutionnel*, 20(1), 2011.
<https://doi.org/10.21991/C96X04>
- Bell, S., McGillivray, D., Pedersen, O. W., Lees, E., & Stokes, E. (2017). 1. What is environmental law? A brief introduction. *Environmental Law*.
<https://doi.org/10.1093/he/9780198748328.003.0001>
- Egger, M., Higgins, J. P., & Smith, G. D. (Eds.). (2022). *Systematic reviews in healthresearch: Meta-analysis in context*. John Wiley & Sons.
- Gan, J., Xie, L., Peng, G., Xie, J., Chen, Y., & Yu, Q. (2021). Systematic review on modification methods of dietary fiber. *Food Hydrocolloids*, 119, 106872.
<https://doi.org/10.1016/j.foodhyd.2021.106872>
- Hiver, P., Al-Hoorie, A. H., Vitta, J. P., & Wu, J. (2021). Engagement in language learning: A systematic review of 20 years of research methods and definitions. *Language Teaching Research*.
- <https://doi.org/10.1177/13621688211001289>
- Kibel, P. S. (2010). Climate Adaptation Policy at the Continental Level: Natural Resources in North America and Europe. *Pace Environmental Law Review*, 27(2), 473.
<https://doi.org/10.58948/0738-6206.1637>
- Komba, M. M., & Lwoga, E. T. (2020). Systematic review as a research method in library and information science. In *Handbook of Research on Digital Content, Mobile Learning, and Technology Integration Models in Teacher Education* (pp. 114-138). IGI Global.
<https://doi.org/10.4018/978-1-7998-1471-9.ch005>
- Lazarus, R. J. (1999). Thirty Years of Environmental Protection Law in the Supreme Court: Fifth Annual Lloyd K. Garrison Lecture on Environmental Law. *Pace Environmental Law Review*, 17(1), 1.
<https://doi.org/10.58948/0738-6206.1276>
- Mascher, S. (2020). Canada, the US and International Environmental Law. *Routledge Handbook of International Environmental Law*, 248–262.
<https://doi.org/10.4324/9781003137825-21>
- Montenegro Pérez, M. (2018). Review of Climate justice: Case studies in global and regional governance challenges (R. S. Abate, Ed.). *Derecho Animal*, 9(4), 185.
<https://doi.org/10.5565/rev/da.366>
- Ogden, L. E. (2016). Canada aims to rewrite environmental law. *Science (American Association for the Advancement of Science)*, 353(6307), 1480–1480.
<https://doi.org/10.1126/science.353.6307.1480>
- Orts, E. W. (2019). Reflexive Environmental Law. *Environmental Law*, 347–460.
<https://doi.org/10.4324/9781315194288-8>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., & Moher, D. (2021). Updating guidance for reporting systematic reviews: Development

- of the PRISMA 2020 statement. *Journal of Clinical Epidemiology*, 134, 103-112.
<https://doi.org/10.1016/j.jclinepi.2021.02.003>
- Pasternack, S. (2012). Local Climate Change Law and Multi-level Governance in North America. *Local Climate Change Law*.
<https://doi.org/10.4337/9780857937483.00013>
- Pawson, R., Greenhalgh, T., Harvey, G., & Walshe, K. (2005). Realist review - A new method of systematic review designed for complex policy interventions. *Journal of Health Services Research & Policy*, 10(1), 21-34.
<https://doi.org/10.1258/1355819054308530>
- Percival, R. (2017). Environmental Law. *Public Health*.
<https://doi.org/10.1093/obo/9780199756797-0169>
- Petticrew, M., & Roberts, H. (2006). Systematic reviews in the social sciences: A practical guide. Blackwell Publishing.
<https://doi.org/10.1002/9780470754887>
- Race, K., Rowe, G., & Sell, S. (2019). Measuring Brief (United States of America). *Pace Environmental Law Review Online Companion*, 10(1), 117.
<https://doi.org/10.58948/2164-9936.1055>
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues, and instruments development. *International Journal of Economics & Management Sciences*, 6(2).
<https://doi.org/10.4172/2162-6359.1000403>
- Rogers, D. T. (2022). Summary of Environmental Regulations of North and South America. *Fundamentals of Environmental Law and Compliance*, 229-254.
<https://doi.org/10.1201/9781003175810-12>
- Sanfelice, V. T., Van Calster, G., & Reins, L. (2016). The application of international environmental law principles in Latin America: A world apart from the EU? *ERA-Forum*, 17(4), 501-520.
<https://doi.org/10.1007/s12027-017-0455-6>
- Schiffman, H. S. (2017). The Law of the Sea and Other Instruments of International Law as a Framework for Environmental Conservation in North American Waters. *Widening the Scope of Environmental Policies in North America*, 57-76.
https://doi.org/10.1007/978-3-319-56236-0_4
- Simpson, K., & Collison, B. R. (2023). International Law Application to Transboundary Pollution: Solutions to Mitigate Mining Contamination in the Elk-Kootenai River Watershed. *Advances in Environmental Law*, 209-244.
<https://doi.org/10.33002/enrlaw-333/c8>
- Slater, A.-M. (2020). Book review: *Environmental Law Essentials*, *Edinburgh Law Essentials*. *Environmental Law Review*, 22(3), 259-260.
<https://doi.org/10.1177/1461452920958204>
- Uribe, N. R., & Urdinola-Rengifo, J. S. (2020). International Environmental Law in Latin America. *Routledge Handbook of International Environmental Law*, 263-278.
<https://doi.org/10.4324/9781003137825-22>
- Victor, L. (2008). Systematic reviewing in the social sciences: Outcomes and explanation. *Enquire*, 1(1), 32-46. Retrieved from
<https://www.nottingham.ac.uk/sociology/documents/enquire/volume-1-issue-1-victor.pdf>