



School of
Public Policy



UNIVERSITY OF
CALGARY

RESEARCH PAPER

Volume 17:18

October 2024

Building Collaborative Governance in the Extractive Sector

Pablo Policzer



TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
POLICY RECOMMENDATIONS.....	2
THE PROBLEM	2
HOW COLLABORATIVE GOVERNANCE CAN WORK	4
EMERGING PRACTICES IN THE EXTRACTIVE SECTOR	7
KEY CHALLENGES.....	8
REFERENCES	10
ABOUT THE AUTHOR	16
ABOUT THE SCHOOL OF PUBLIC POLICY	17

Building Collaborative Governance in the Extractive Sector

By Pablo Policzer, PhD

EXECUTIVE SUMMARY

The extractive sector faces wicked problems — so-called because they are complex, ambiguous, dynamic and evolving. They usually lack one root cause and their solutions often create unintended consequences. However, collaborative governance offers a way to address the sector's complex challenges. By studying examples of collaboration in other areas — environmental conservation, health care, education, urban planning and disaster response — the extractive sector can adopt best practices for its own purposes.

Rather than a top-down, siloed approach, collaborative governance involves working with a variety of stakeholders, such as local communities, government, industry and civil society groups. Collaborative governance is a pragmatic and effective approach to problem-solving and fosters transparency, inclusivity and adaptability by integrating a range of perspectives and expertise, culminating in effective and equitable policy-making.

Environmental impacts, social conflicts and a broad range of stakeholder interests are just a few of the challenges the extractive sector faces, making traditional top-down decision-making inadequate. The sector could incorporate collaborative governance in decision-making processes by adopting principles from Complex Adaptive Systems (CAS) theory. These principles include adaptability, use of local knowledge and decentralization to aid in balancing hard and fast regulations with on-the-ground realities, including playing a valuable role in conflict prevention.

Among the problems the sector faces are economic dependence on finite, depleting resources, evolving technology, social conflict, a shifting regulatory environment, uncertain global markets and the imperative to respect cultural and Indigenous rights. Thus, a key part of collaborative governance would be training local community leaders to advocate for their interests and to manage their resources responsibly.

Many other sectors offer valuable lessons in collaborative governance. For example, inclusive and shared decision-making in health care has produced better, more effective and tailored patient outcomes. Urban planning's focus on sustainability can guide the extractive sector in managing environmental impacts and promoting community resilience.

Stakeholders in conservation and natural resource management, including government, organizations and Indigenous communities, already collaborate to establish protected areas, engage in wildlife management and work on sustainable land use. Collaboration in education encompasses school boards, parent councils and other stakeholders.

Disaster management and emergency response also have much to teach about collaborative governance. With NGOs, government, first responders and communities co-ordinating disaster preparedness, response and recovery efforts, disaster management has become much more effective.

International development is another field that successfully uses collaborative governance. Collaboration between governments, NGOs, donors and communities helps address poverty, infrastructure development and local social issues, with a focus on local ownership, capacity building and sustainable development.

The need for more collaborative approaches in the extractive sector is increasingly evident. New global standards demand collaboration, consultation and even consent from local communities, especially where Indigenous peoples are involved. Impact assessments, community consultations and benefit-sharing agreements are now the norm.

Collaborative governance is expanding in the extractive sector; thus it is essential to critically assess current practices, learning from collaboration in other sectors in order to adapt key methods to specific contexts in the extractive sector. A blueprint for future collaboration requires thoughtful reflection on what has worked, what has not and why.

POLICY RECOMMENDATIONS

1. **Need for Collaborative Governance:** The extractive sector faces complex challenges, including environmental impacts, social conflicts and diverse stakeholder interests. Traditional top-down decision-making is inadequate, necessitating collaborative and adaptive approaches that effectively engage a broad range of stakeholders.
2. **Learning from Other Sectors:** In recent decades, the extractive industry has increasingly embraced broad stakeholder engagement to mitigate its negative externalities. However, the industry could benefit from adopting more pragmatic, problem-solving approaches to collaborative governance seen in sectors like education, health care and environmental conservation. These approaches emphasize inclusivity, transparency and adaptability, focusing not just on reducing negative externalities but on effectively resolving common problems.
3. **Complex Adaptive Systems (CAS) Theory:** Collaborative governance in the extractive sector could incorporate principles from CAS theory, such as adaptability, local knowledge and decentralization, to better navigate the sector's interconnected and unpredictable challenges. While multiple regulations aim to mitigate the industry's negative externalities, they can lead to moral hazards if not pragmatically adapted to local contexts. Balancing regulations with local realities is crucial for effective collaboration and conflict prevention.
4. **Building Local Capacity:** Strengthening local governance and administrative capacity is essential for effective collaboration. This involves training local community leaders to advocate for their interests and manage resources responsibly, ensuring meaningful participation in decision-making.

THE PROBLEM

A suite of complex and difficult challenges bedevils us today. Often referred to as “wicked” problems, these issues are multifaceted and deeply interconnected, defying straightforward solutions and rendering traditional approaches ineffective (Rittel and Webber 1973).¹ Wicked problems are complex, ambiguous, dynamic and constantly evolving. They typically lack a single root cause and their solutions frequently produce unintended consequences.²

¹ In a classic formulation, Rittel and Webber (1973) argue that “[t]he professionalized cognitive and occupational styles that were refined in the first half of [the 20th] century, based in Newtonian mechanistic physics, are not readily adapted to contemporary conceptions of interacting open systems and to contemporary concerns with equity.”

² See Head (2022); Yankelovich (2015); Brown, Harris and Russell (2010); and Vaitheeswaran (2012).

Wicked problems are pervasive and encompass issues such as climate change, resource depletion, pandemics, urbanization, food security, energy transition and international security. Climate change involves interconnected issues, such as rising temperatures and biodiversity loss, which require difficult trade-offs among a wide range of stakeholders.³ Resource depletion demands similar trade-offs between effective sustainable practices and equitable distribution among sectors with widely different stakes in resource production (Nikolakis and Innes 2020). Global health pandemics, exemplified by COVID-19, require co-ordinated responses to balance the containment of an outbreak that might grow exponentially out of control with economic stability and long-term effects on social and mental health (Milsom, Smith and Walls 2019). Rapid urbanization poses challenges like congestion and pollution (Fork, Hopkins, Chappell, Hawley, Kaushal, Murphy et al. 2022; Duivenvoorden, Hartmann, Brinkhuijsen and Hesselmanns 2021) while food security involves ensuring adequate, environmentally sustainable food production and distribution (Koc, MacRae, Mougeot and Welsh 1999; Stringer 2000; Pasko and Staurskaya 2020). The transition from fossil fuels to renewables involves economic, political and technological complexities (Thollander and Palm 2023; Jakimowicz 2022; Radtke and Wurster 2023). International security issues, particularly in weak states, involve co-ordinating with multiple stakeholders – who may be outside the law – to provide services and even uphold security amid institutional fragility.⁴

This conceptual paper explores the notion that extractive resource governance exemplifies a wicked problem, characterized by its complexity and the interplay of numerous issues without easy solutions. Challenges include environmental impact, economic dependence on finite and depleting resources, diverse stakeholder interests across various territories, potential social conflict, evolving technology, shifting regulatory landscapes, uncertain global markets and the importance of respecting cultural and Indigenous rights. Traditional top-down, siloed decision-making, effective in stable and predictable conditions, falls short in addressing these multifaceted challenges in volatile and unpredictable contexts (Blyth 2006). Instead, collaborative and adaptive approaches, which engage a broad range of stakeholders, promote transparency and adapt to evolving circumstances, offer more promise (Poteete, Janssen and Ostrom 2010; Bua and Bussu 2023). This requires not just public engagement or consultation but true stakeholder involvement in problem-solving to ensure equitable benefits.

Collaborative governance in the extractive industries, including mining, oil and gas, began to take shape in the 1990s, driven by increasing environmental and social concerns, the rise of corporate social responsibility and pressures from local communities and governments (Mejia Acosta 2013; Maak 2022; Hilson 2012). This development coincided with the emergence of collaborative governance in other sectors, such as education, urban planning and health care, where the need for more inclusive and participatory decision-making processes was becoming increasingly apparent. While the extractive sector focused especially on addressing the negative impacts of its activities and ensuring more sustainable practices, other sectors sought to improve efficiency, inclusivity and outcomes by engaging a broader range of stakeholders.

The extractive industry can draw valuable lessons from the problem-solving approaches in other sectors where collaborative governance has been implemented with notable success. For instance, the emphasis on inclusive decision-making in education and health care has led to

³ See Karl (2013); Walls (2018); and Thollander, Palm and Hedbrant (2019).

⁴ Weak states are conventionally understood to lack the monopoly of coercive force and the capacity to provide basic services and guarantees such as the rule of law. The literature on weak states is extensive, but some exemplary works include Migdal (1988); O'Donnell (1994, 1999); Rotberg (2004); Fukuyama (2004); and Centeno (2002). Some key recent works include Mazzuca (2021); Blattman, Duncan, Lessing and Tobón (2023); Chowdhury (2018); Collaborative Research Center (SFB) 700 (2014); Draude, Börzel and Risse (2018); and Feldmann and Luna (2022).

more effective and tailored outcomes, suggesting that a similar approach could benefit the extractive sector by better addressing the needs of local communities through collaboration with them. Also, the focus on sustainability in urban planning provides insights into how the extractive industry can manage environmental impacts and promote long-term community resilience. By integrating these lessons, the extractive sector can enhance its collaborative governance practices, leading to more sustainable, inclusive and equitable outcomes for stakeholders involved.

The diverse nature of wicked problems in different sectors highlights the need to move beyond approaches that depend on the assumption of a stable and predictable (mechanistic or Newtonian) world and embracing the inherent open-endedness and unpredictability of the world we live in (Taleb 2012; Blyth 2006).⁵ Established top-down, siloed decision-making might work where the background conditions are stable. Under conditions of uncertainty and flux, those established models need to give way to more experimental lateral thinking, which requires collaboration among various stakeholders, including governments, private enterprises, civil society and local communities. Collaborative governance can allow for diverse perspectives and expertise to inform decision-making and better navigate the inherent uncertainty wicked problems pose. Collaboration in this sense is not an end but a means that presupposes that no single actor or perspective possesses all the knowledge and resources needed to tackle these issues comprehensively, and that the posing of problems and seeking solutions must continuously evolve (Fung, Wright and Abers 20023; Fung 2004, 2006; Ansell and Gash 2008).⁶

The next section shows how collaborative governance in the extractive industry can draw inspiration from experiences in how it has emerged in different sectors, from education and health care to security, grappling with comparable wicked problems that require thinking outside traditional hierarchies and silos. Section 3 considers the impetus for collaboration in the extractive sector, stemming from a range of stringent new global standards in the extractive sector that mandate collaboration, consultation and even consent from local communities, especially in areas that include Indigenous peoples. Finally, the last section considers some of the key challenges associated with building meaningful local capacity required for collaboration.

HOW COLLABORATIVE GOVERNANCE CAN WORK

In recent decades, collaborative governance and decision-making have emerged in various sectors. These models promote transparency and involvement of diverse stakeholders in key decisions.

- a. **Environmental Conservation and Natural Resource Management:** Many environmental initiatives have embraced collaborative governance to address conservation challenges. Conservation organizations, governments, Indigenous communities and local stakeholders often collaborate to establish protected areas, manage wildlife and promote sustainable land and resource use. These efforts emphasize the importance of inclusivity, shared decision-making and adaptive management in achieving conservation goals (Bodin 2017; Murota and Takeshita 2013; Baird, Schultz, Plummer, Armitage and Bodin 2019; Ojha, Hall and Sulaiman 2013).

⁵ Following Taleb (2012), this means embracing disorder to build resilience.

⁶ Much of this literature is inspired by a kind of pragmatism, expressed by John Dewey (1927) in noting that “the man who wears the shoe, not the shoemaker, knows best where it pinches.”

- b. **Education:** Collaborative governance has been employed in education to involve parents, teachers, administrators and community members in school decision-making. School boards, parent-teacher associations and community-based organizations often work together to improve educational outcomes, enhance school facilities and develop inclusive curricula. These efforts underscore the benefits of involving diverse stakeholders to shape educational policies and practices (Sengupta, Blessinger and Nezaami 2022; Elken 2023).
- c. **Health Care:** Collaborative governance is used in the health-care sector to enhance patient care and health system performance. Health organizations, policy-makers, medical professionals and patient advocacy groups collaborate to develop health-care policies, improve patient safety and advance research. The involvement of multiple stakeholders ensures that health-care decisions are informed through a broad range of perspectives and expertise (Sitienei, Manderson and Nangami 2021; Scott 2011; Short and McDonald 2012; Frankowski 2019).
- d. **Urban Planning and Development:** Collaborative governance is integral to urban planning and development projects. Local governments, urban planners, developers, community organizations and residents often collaborate to create sustainable and livable urban environments. This approach encourages community engagement, participatory design processes and integration of local knowledge into urban planning decisions (Healey 2006, 2007, 2009; Follador, Tremblay-Racicot, Duarte and Carrier 2020; Innes and Rongerude 2006; Sartorio, Aelbrecht, Kamalipour and Frank 2021; Sagaris 2014; Fung 2004).
- e. **Natural Disasters and Emergency Response:** Collaborative governance is crucial during natural disasters and emergencies. Government agencies, first responders, NGOs and affected communities work together to co-ordinate disaster preparedness, response and recovery efforts. Collaborative approaches enhance the efficiency and effectiveness of disaster management (Bodin, Örjan and Nohrstedt 2016; Miller and Rivera 2011; Warganegara and Samson 2021).
- f. **International Development:** International development projects often involve collaboration between governments, NGOs, donors and local communities to address poverty, infrastructure development and social issues. Collaborative governance in this context emphasizes local ownership, capacity building and sustainable development (Florini and Pauli 2018; Brink and Wamsler 2017; Cepiku, So and Jesuit 2019).
- g. **Security Sector:** Collaborative governance in the security sector within weak states presents intricate challenges, particularly concerning the selection of appropriate partners as some actors operate outside legal frameworks. Engaging with non-state actors, such as militias or vigilante groups, to address security concerns risks legitimizing or empowering them, highlighting the importance of rigorous vetting and oversight mechanisms. Nevertheless, various governance approaches are being experimented with in different contexts, reflecting ongoing efforts to find innovative solutions to complex security challenges in weak states.⁷

These examples show that collaborative governance has emerged or might potentially emerge in different sectors grappling with comparable problems that require thinking outside traditional hierarchies and silos. This approach acknowledges that complex problems require multifaceted solutions and it leverages the collective wisdom of crowds along with the resources of diverse stakeholders to achieve better solutions for common goals (Surowiecki 2004). Collaboration

⁷ See Migdal (1988); O'Donnell (1994, 1999); Rotberg (2004); Fukuyama (2004); and Centeno (2002). See also Draude, Börzel and Risse (2018); Feldmann and Luna (2022); Blattman, Duncan, Lessing and Tobón (2023).

fosters co-operation, transparency and shared responsibility among stakeholders with the promise of better solutions and more inclusive and sustainable outcomes.

Building collaborative governance in the extractive industry can draw inspiration from these experiences. Extractive resource governance is a textbook example of a wicked problem. The complexity arises from the interplay of many issues with no easy answers, such as:

- The sector's environmental impact and significant economic dependence on resource revenue;
- The finite and depleting nature of mineral resources;
- Diverse stakeholder interests across a wide range of territories and conditions;
- The potential for social conflict and injustice over environmental depletion and resource revenue;
- Rapidly evolving technology;
- Shifting and sometimes contradictory regulatory challenges;
- Uncertain global market dynamics;
- The growing importance of respecting cultural and Indigenous rights; and
- The need for long-term planning amid high volatility and uncertainty.

Top-down, siloed decision-making may be appropriate in situations where the background conditions are reasonably stable and predictable, but it is ill-suited to addressing these multifaceted challenges in highly volatile and unpredictable contexts (Blyth 2006). More promising are collaborative adaptive approaches that engage a broad range of stakeholders, encourage transparency and adapt to evolving circumstances. Collaboration presupposes engaging local communities, governments, industry players and civil society organizations to collectively address the complex challenges associated with resource extraction (Poteete, Janssen and Ostrom 2010). This kind of participation and inclusion is not only an end but also a means to ensure equitable benefits. By learning from these models in other sectors, the extractive industry can develop more effective and inclusive approaches to decision-making and project implementation.

Collaborative governance also draws on complex adaptive systems (CAS) theory through principles such as adaptability, diversity and inclusivity, feedback loops, self-organization, nonlinearity, resilience, local knowledge and decentralization (Miller and Page 2007; Axelrod and Cohen 2000; Page 2011). CAS theory emphasizes the importance of adapting to changing circumstances and incorporating diverse stakeholder perspectives to foster innovation. Feedback loops facilitate continuous learning and improvement, whereas self-organization encourages organic problem-solving. Recognizing nonlinearity prepares governance for unexpected outcomes and resilience enables the system to absorb shocks (Taleb 2012). Embracing decentralization and local knowledge empowers communities not only as agents of their own destiny, but also as holders of critical insights to resolve problems as they affect them (Ostrom 1990, 2010). By applying CAS principles, collaborative governance can better tackle complex, interconnected and wicked problems in a rapidly changing world (Sapir 2019; Goldstein 2012; Espinosa Salazar 2023; De Búrca, Scott and Çali 2014; Sabel and Zeitlin 2012; Ostrom, Walker and Gardner 1992; Juarrero 1999).

EMERGING PRACTICES IN THE EXTRACTIVE SECTOR

The need for more collaborative approaches in the extractive sector is becoming increasingly evident. In recent decades, a range of stringent new global standards mandates collaboration, consultation and even consent from local communities, especially in areas that include Indigenous peoples (Aylwin and Policzer 2020; O’Faircheallaigh 2013).⁸ In response, practices such as impact assessments, community consultations and benefit-sharing agreements have become commonplace. While collaborative governance in the extractive sector is evolving, and these efforts depart significantly from traditional top-down approaches, it is essential to critically assess these practices, learn from past experiences and from collaboration in other sectors and adapt them to specific contexts. This requires thoughtful reflection on what has worked, what has not and why.

Building collaborative governance requires drawing lessons from ongoing initiatives and experience in the extractive industry and elsewhere. This involves understanding that collaborative governance in the extractive sector is inherently transdisciplinary. It requires integrating knowledge from diverse disciplines, including but not limited to geology, environmental sciences, engineering, economics, sociology, anthropology and political science.⁹ More importantly, it requires transcending, going beyond disciplines and integrating local knowledge as a valuable resource in decision-making processes. While it is possible and even important to think big and develop general approaches and frameworks, solutions must also be tailored to the place and circumstance. What works in one place may not be suited to another. While this is a big challenge, this approach is not unique to the extractive sector. It is also increasingly present in other sectors, including health care, education and development. This provides opportunities for lateral thinking and mutual learning across sectors.

Although it is important for the extractive sector to learn from how other sectors have moved toward more collaboration to integrate knowledge from a wider range of stakeholders, the stakes in the extractive sector are unique. The scale of resources involved and the disparities between the extractive industry and local communities can be enormous. A core challenge for more collaborative governance in the extractive sector lies in strengthening or even building local capacity from the ground up, which is the cornerstone for effective engagement and decision-making. Robust local capacity is essential for integrating diverse perspectives and local knowledge, tailoring solutions to unique contexts and fostering meaningful participation.

The extractive industry mostly operates in rural areas where local communities lack capacity in at least two critical but somewhat counterintuitive and contradictory ways:

- Rural communities sometimes have less power to advocate for their interests, including participating in decisions that directly affect them but are taken far away in the public and private sectors; and
- Rural communities tend to lack the capacity to manage the often substantial resources involved in compensation for the impact of the extractive industry in their territory (Freudenburg 2010; Damonte and Glave 2016; Vermeulen and Cotula 2010).

⁸ Some standards are mandatory, such as ILO Convention 169. Others, such as the UN’s Declaration on the Rights of Indigenous Peoples or Sustainable Development Goals, are voluntary. Yet even “soft law” voluntary standards nevertheless influence the evolution of stricter standards adopted by an increasingly wider range of actors.

⁹ For example, Yeboah-Assiamah, Muller and Domfeh (2018) argue that a transdisciplinary approach, including experts and local stakeholders, is ““tailor-made ...” to solving complex societal issues and [should be adopted] in natural resource governance studies.”

The amount of money involved in the extractive industry is substantial. While new international standards have mandated more consultation, participation, compensation and consent, the capacity of local communities to manage sometimes substantial payouts remains an open question.

KEY CHALLENGES

A compounding difficulty is that international standards aiming to improve conditions, mandate consultation and in some cases consent, can also have unintended consequences or moral hazards by creating incentives for more conflict and less collaboration at the local level.¹⁰ While well-intentioned, these standards can sometimes lead local actors to prioritize short-term gains over long-term collaboration and sustainability, especially when the disparity between local poverty and extractive industry wealth is large. For instance, the promise of significant financial compensation may encourage local leaders or groups to exaggerate their grievances or compete aggressively with each other to be recognized as primary stakeholders (Conde and Le Billon 2017; Menton and Le Billon 2021; Brunet and Longboat 2023; Franks, Davis, Bebbington and Scurrah 2014; Franks 2015; Hoelscher and Rustad 2019). This can produce tensions and rivalries within communities, undermining the social cohesion required for collective action and sustainable development. Furthermore, the focus on securing immediate benefits might detract from efforts to build lasting infrastructure or institutional capacities crucial for enduring prosperity. A core challenge is ensuring that such local conflicts and divisions, including decisions about who should get what, are appropriately resolved at the local level, in some cases, as a precondition for local communities to engage with the industry. Decisions regarding distribution are inherently political, which the private sector does not have the mandate or capacity to manage. Such conflicts can become especially acute in places where the public sector has receded or been deliberately weakened in favour of market efficiency (Gentes and Policzer 2022).

Moreover, international standards can sometimes impose one-size-fits-all solutions that do not align with local realities. This misalignment can be pronounced in areas such as labour, human rights or environmental standards. For instance, stringent labour regulations designed in developed countries may not account for the economic constraints faced by businesses in developing regions. These businesses might struggle to comply with high labour costs or advanced worker safety requirements, leading to either non-compliance or adverse economic impacts such as layoffs or business closures.¹¹

Similarly, human rights standards, while crucial, may clash with local cultural practices and legal frameworks. Imposing universal human rights mandates without considering local contexts can lead to resistance from local populations, who may perceive these standards as foreign impositions that disregard their cultural and social norms. This can foster a sense of disenfranchisement among local communities and exacerbate tensions between international bodies and local actors.¹²

Environmental standards illustrate this challenge. For example, regulations aimed at reducing carbon emissions might not consider the developmental needs of countries that rely heavily on industries, such as oil and gas, mining or agriculture, which are significant sources of emissions. These countries may find it economically unfeasible to meet such standards without significant support and flexibility from the international community.¹³

¹⁰ For a discussion of comparable moral hazards in security, see Policzer (2012).

¹¹ See Betcherman (2014).

¹² See Rajagopal (2003) and Gregg (2011).

¹³ See Collier (2020) and Collier and Venables (2014).

When local actors feel that their unique circumstances and needs are overlooked in these critical areas, they may become frustrated and unwilling to co-operate. This disconnection can foster a sense of disenfranchisement and result in conflict, instead of meaningful collaboration. Building international standards “from below” (Rajagopal 2003) can better adapt to local contexts through inclusive dialogue and flexible frameworks.

This approach is not only a matter of justice, but also pragmatic problem-solving. From a justice perspective, it may be ethically imperative to include previously marginalized communities to correct historical injustices and ensure equity. Without discounting the importance of correcting past injustices, a more pragmatic argument underscores the effectiveness and sustainability of the solutions that arise from local engagement. By involving local actors in the creation and implementation of standards, the resulting policies are more likely to be practical, acceptable and successful in solving local concrete problems.

For example, when local businesses and workers are part of the dialogue on labour standards, the policies developed are more likely to reflect the economic realities and capacities of these businesses, leading to higher compliance rates and better overall outcomes. Similarly, human rights standards informed by local cultural contexts are more likely to gain community support and achieve meaningful impact without cultural resistance. Incorporating local knowledge and practices in the realm of environmental standards can produce innovative solutions that are both sustainable and economically viable. Local communities often have a deep understanding of their natural ecosystems and can provide valuable insights into sustainable practices that international bodies with a more universal and less locally attuned set of perspectives may overlook.

Ultimately, a pragmatic problem-solving approach strengthens the effectiveness of international standards by ensuring that they are realistic and contextually appropriate. It transforms potential conflict into co-operation, as local actors see their input values and needs addressed.

This inclusive process not only fosters a sense of ownership and accountability among local communities but also enhances the legitimacy and durability of the standards. Therefore, while justice is an important consideration, the pragmatic benefits of this approach make it a compelling argument for building international standards from the ground up.

One area where this challenge could be addressed is through capacity-building programs. Historically, many of these have been directed at executive elites in the public and private sectors, aiming to educate them on the practices involved in stakeholder engagement according to leading international standards, such as sustainable development or free, prior and informed consent. Without denying the value of such programs, it would also be beneficial to train more local community leaders not only to better advocate for their own interests, but also to manage resources with accountability and probity. At the same time, it cannot be emphasized strongly enough that this involves not only technical issues regarding how to manage resources or respect standards, but also fundamentally political questions regarding who should get what. These challenges remain at the forefront of the involvement of a more collaborative extractive sector governance.

REFERENCES

- Ansell, Chris, and Alison Gash. 2008. "Collaborative Governance in Theory and Practice." *Journal of Public Administration Research and Theory* 18, no. 4: 543-71. <https://doi.org/10.1093/jopart/mum032>.
- Axelrod, Robert, and Michael D. Cohen. 2000. *Harnessing Complexity: Organizational Implications of a Scientific Frontier*. New York: Basic Books.
- Aylwin, José, and Pablo Policzer. 2020. "No Going Back: The Impact of ILO Convention 169 on Latin America in Comparative Perspective." School of Public Policy and Latin American Research Centre, University of Calgary. <http://dx.doi.org/10.11575/sppp.v13i0.69081>.
- Baird, Julia, Lisen Schultz, Ryan Plummer, Derek Armitage, and Örjan Bodin. 2019. "Emergence of Collaborative Environmental Governance: What Are the Causal Mechanisms?" *Environmental Management* 63, no. 1: 16-31. DOI: [10.1007/s00267-018-1105-7](https://doi.org/10.1007/s00267-018-1105-7).
- Betcherman, Gordon. 2014. "Labor Market Regulations: What Do We Know About Their Impacts in Developing Countries?" World Bank Policy Research Working Paper Series. <https://doi.org/10.1093/wbro/lku005>.
- Blattman, Christopher, Gustavo Duncan, Benjamin Lessing, and Santiago Tobón. 2023. "Gang Rule: Understanding and Countering Criminal Governance." National Bureau of Economic Research Working Paper. <https://www.nber.org/papers/w28458>.
- Blyth, M. 2006. "Great Punctuations: Prediction, Randomness, and the Evolution of Comparative Political Science." *American Political Science Review* 100, no. 4: 493-498.
- Bodin, Örjan. 2017. "Collaborative Environmental Governance: Achieving Collective Action in Social-Ecological Systems." *Science* 357, no. 6352: 659-59. <https://www.science.org/doi/10.1126/science.aan1114>.
- Bodin, Örjan, and Daniel Nohrstedt. 2016. "Formation and Performance of Collaborative Disaster Management Networks: Evidence from a Swedish Wildfire Response." *Global Environmental Change* 4: 183-94. <https://doi.org/10.1016/j.gloenvcha.2016.10.004>.
- Brink, Ebba, and Christine Wamsler. 2017. "Collaborative Governance for Climate Change Adaptation: Mapping Citizen-Municipality Interactions." *Environmental Policy and Governance* 28, no. 2: 82-97. <https://doi.org/10.1002/eet.1795>.
- Brown, Valerie A., John A. Harris, and Jacqueline Y. Russell. 2010. *Tackling Wicked Problems through the Transdisciplinary Imagination*. London: Earthscan
- Brunet, Nicolas D., and Sheri Longboat. 2023. *Local Communities and the Mining Industry: Economic Potential and Social and Environmental Responsibilities*, 1st ed. Abingdon, U.K.: Routledge.
- Bua, Adrian, and Sonia Bussu. 2023. *Reclaiming Participatory Governance: Social Movements and the Reinvention of Democratic Innovation*. Abingdon, U.K.: Routledge.
- Centeno, Miguel A. 2002. *Blood and Debt: War and the Nation-State in Latin America*. University Park, PA: Penn State University Press.
- Cepiku, Denita, So Hee Jeon, and David K. Jesuit, eds. 2019. *Collaborative Governance for Local Economic Development: Lessons from Countries Around the World*. Abingdon, U.K.: Routledge.
- Chowdhury, Arjun. 2018. *The Myth of International Order: Why Weak States Persist and Alternatives to the State Fade Away*. Oxford: Oxford University Press.

- Collaborative Research Center (SFB) 700. 2014. "Governance in Areas of Limited Statehood: New Modes of Governance?" https://www.sfb-governance.de/ueber_uns/booklet_SFB-Introduction.pdf.
- Collier, Paul. 2020. *The Plundered Planet: Why We Must, and How We Can, Manage Nature for Global Prosperity*. Oxford: Oxford University Press.
- Collier, Paul, and Anthony J. Venables. 2014. "Closing Coal: Economic and Moral Incentives." *Oxford Review of Economic Policy* 30, no. 3: 492-512. <https://www.lse.ac.uk/granthaminstitute/publication/closing-coal-economic-and-moral-incentives/>.
- Conde, Marta, and Philippe Le Billon. 2017. "Why Do Some Communities Resist Mining Projects While Others Do Not?" *The Extractive Industries and Society* 4, no. 3: 681-97. DOI: [10.1016/j.exis.2017.04.009](https://doi.org/10.1016/j.exis.2017.04.009).
- Damonte, Gonzalo, and María Glave, eds. 2016. *Industrias Extractivas y Desarrollo Rural Territorial en los Andes Peruanos: Los Dilemas de la Representación Política y la Capacidad de Gestión para la Descentralización*. Lima: GRADE Group for the Analysis of Development. <https://www.ssoar.info/ssoar/handle/document/52047>.
- De Búrca, Gráinne, Joanne Scott, and Basak Çali. 2014. "Global Experimentalist Governance." *British Journal of Political Science* 44, no. 3: 477-86. <https://doi.org/10.1017/S0007123414000076>.
- Dewey, John. 1927. *The Public and Its Problems*. Vol. 2 of *The Later Works of John Dewey, 1925-1953*, Jo Ann Boydston, ed. Carbondale, IL: Southern Illinois University Press, 1981-90.
- Draude, Anke, Tanja A. Börzel, and Thomas Risse, eds. 2018. *The Oxford Handbook of Governance and Limited Statehood*. Oxford: Oxford University Press.
- Duivenvoorden, Eva, Thomas Hartmann, Marlies Brinkhuijsen, and Ton Hesselmanns. 2021. "Managing Public Space: A Blind Spot of Urban Planning and Design." *Cities*, vol. 109. February. <https://www.sciencedirect.com/science/article/pii/S0264275120313809>.
- Elken, Mari. 2023. "Collaborative Design of Governance Instruments in Higher Education." *Studies in Higher Education* (Dorchester-on-Thames): 1-12. <https://doi.org/10.1080/03075079.2023.2258905>.
- Espinosa Salazar, Angela María. 2023. *Sustainable Self-Governance in Businesses and Society: The Viable System Model in Action*. Abingdon, U.K.: Routledge.
- Feldmann, Andreas E., and Juan Pablo Luna. 2022. "Criminal Governance and the Crisis of Contemporary Latin American States." *Annual Review of Sociology* 48, no. 1: 441-61.
- Florini, Ann, and Markus Pauli. 2018. "Collaborative Governance for the Sustainable Development Goals." *Asia & the Pacific Policy Studies* 5, no. 3: 585-98. <https://doi.org/10.1002/app5.252>.
- Follador, Débora, Fanny Tremblay-Racicot, Fábio Duarte, and Mario Carrier. 2020. "Collaborative Governance in Urban Planning: Patterns of Interaction in Curitiba and Montreal." *Journal of Urban Planning and Development* 147, no. 1. [https://doi.org/10.1061/\(ASCE\)UP.1943-5444.000006](https://doi.org/10.1061/(ASCE)UP.1943-5444.000006).
- Fork, Megan L., Kristina G. Hopkins, Jessica Chappell, Robert J. Hawley, Sujay S. Kaushal, Brian M. Murphy et al. 2022. "Urbanization and Stream Ecology: Moving the Bar on Multidisciplinary Solutions to Wicked Urban Stream Problems." *Freshwater Science* 41, no. 3: 398-403
- Frankowski, Andrea. 2019. "Collaborative Governance as a Policy Strategy in Healthcare." *Journal of Health Organization and Management* 33, no. 7/8: 791-808. <https://www.emerald.com/insight/content/doi/10.1108/JHOM-10-2018-0313/full/html>.

- Franks, Daniel M. 2015. *Mountain Movers: Mining, Sustainability and the Agents of Change*, 1st ed. Abingdon, U.K.: Routledge.
- Franks, Daniel M., Rachel Davis, Anthony J. Bebbington, and Martin Scurrah. 2014. "Conflict Translates Environmental and Social Risk into Business Costs." *Proceedings of the National Academy of Sciences* 111, no. 21: 7576–81. <https://doi.org/10.1073/pnas.1405135111>.
- Freudenburg, William R. 2010. "Addictive Economies: Extractive Industries and Vulnerable Localities in a Changing World Economy." *Rural Sociology* 57: 305–32. <https://eric.ed.gov/?id=EJ456355>.
- Fukuyama, Francis. 2004. *State-Building: Governance and World Order in the 21st Century*. Ithaca, NY: Cornell University Press.
- Fung, Archon. 2004. *Empowered Participation: Reinventing Urban Democracy*. Princeton: Princeton University Press.
- . 2006. "Varieties of Participation in Complex Governance." *Public Administration Review* 66, no. 1: 66–75. <https://doi.org/10.1111/j.1540-6210.2006.00667.x>.
- Fung, Archon, Erik Olin Wright, and Sheila R. Abers. 2003. *Deepening Democracy: Institutional Innovation in Empowered Participatory Governance*. Brooklyn, NY: Verso.
- Gentes, Ingo, and Pablo Policzer. 2022. "Weakness by Design: Neoliberal Governance over Mining and Water in Chile." *Territory, Politics, Governance*: 1–18. <https://doi.org/10.1080/21622671.2022.2134196>.
- Goldstein, Bruce Evan, ed. 2012. *Collaborative Resilience: Moving through Crisis to Opportunity*. Cambridge, MA: MIT Press.
- Gregg, Benjamin. 2011. "Generating Universal Human Rights out of Local Norms." In *Human Rights as Social Construction*. 62–84. Cambridge, U.K.: Cambridge University Press.
- Head, Brian W. 2022. *Wicked Problems in Public Policy: Understanding and Responding to Complex Challenges*. Cham, Switzerland: Springer Nature.
- Healey, Patsy. 2006. *Collaborative Planning: Shaping Places in Fragmented Societies*. 2nd ed. Basingstoke, U.K.: Palgrave Macmillan.
- . 2007. *Urban Complexity and Spatial Strategies: Towards a Relational Planning for Our Times*. London: Routledge.
- . 2009. "The Pragmatic Tradition in Planning Thought." *Journal of Planning Education and Research* 28, no. 3: 277–92. <https://doi.org/10.1177/0739456X08325>.
- Hilson, Gavin. 2012. "Corporate Social Responsibility in the Extractive Industries: Experiences from Developing Countries." *Resources Policy* 37, no. 2: 131–37. <https://doi.org/10.1016/j.resourpol.2012.01.002>.
- Hoelscher, Kristian, and Siri Aas Rustad. 2019. "CSR and Social Conflict in the Brazilian Extractive Sector." *Conflict, Security & Development* 19: 119–39. <https://doi.org/10.1080/14678802.2019.1561633>.
- Innes, Judith Eleanor, and Jane Rongerude. 2006. *Collaborative Regional Initiatives: Civic Entrepreneurs Work to Fill the Governance Gap*. Berkeley, CA: Institute of Urban and Regional Development, University of California at Berkeley.
- Jakimowicz, Aleksander. 2022. "The Energy Transition as a Super Wicked Problem: The Energy Sector in the Era of Prosumer Capitalism." *Energies* (Basel) 15, no. 23. <https://www.mdpi.com/1996-1073/15/23/9109>.

- Juarrero, Alicia. 1999. *Dynamics in Action: Intentional Behavior as a Complex System*. Cambridge, MA: MIT Press.
- Karl, Herman A. 2013. "Living in Harmony with Nature: Complication of Climate Change and Governance." *Environmental Science*. https://link.springer.com/chapter/10.1007/978-94-007-6016-5_18.
- Koc, M., R. MacRae, L. J. A. Mougeot, and Jennifer Welsh. 1999. "Introduction: Food Security is a Global Concern." In *For Hunger-Proof Cities: Sustainable Urban Food Systems*. Ottawa: International Development Research Centre. <https://idl-bnc-idrc.dspacedirect.org/server/api/core/bitstreams/0c243946-195a-47d8-8d7d-73f104bd3905/content>.
- Maak, Thomas, ed. 2022. *The Routledge Companion to Corporate Social Responsibility*. Abingdon, U.K.: Routledge.
- Mazzuca, Sebastián. 2021. *Latecomer State Formation: Political Geography and Capacity Failure in Latin America*. New Haven: Yale University Press.
- Mejia Acosta, Andres. 2013. "The Impact and Effectiveness of Accountability and Transparency Initiatives: The Governance of Natural Resources." *Development Policy Review* 31, no. 1: 89-105. <https://onlinelibrary.wiley.com/doi/10.1111/dpr.12021>.
- Menton, Mary, and Philippe Le Billon. 2021. *Environmental Defenders: Deadly Struggles for Life and Territory*, 1st ed. Abingdon, U.K.: Routledge.
- Migdal, Joel S. 1988. *Strong Societies and Weak States: State-Society Relations and State Capabilities in the Third World*. Princeton: Princeton University Press.
- Miller, DeMond Shondell, and Jason David Rivera 2011. *Comparative Emergency Management: Examining Global and Regional Responses to Disasters*, 1st ed. Boca Raton, FL: CRC Press.
- Miller, John H., and Scott E. Page. 2007. *Complex Adaptive Systems: An Introduction to Computational Models of Social Life*. Princeton: Princeton University Press.
- Milsom, Penelope, Richard D. Smith, and Helen Walls. 2019. "A Systems Thinking Approach to Inform Coherent Policy Action for NCD Prevention." *International Journal of Health Policy and Management* 9: 212-214. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7306115/>.
- Murota, Takeshi, and Ken Takeshita. 2013. *Local Commons and Democratic Environmental Governance*. Tokyo: United Nations University Press.
- Nikolakis, William, and John L. Innes, eds. 2020. *The Wicked Problem of Forest Policy: A Multidisciplinary Approach to Sustainability in Forest Landscapes*. Cambridge, U.K.: Cambridge University Press.
- O'Donnell, Guillermo. 1994. "Delegative Democracy," *Journal of Democracy* 5, no. 1: 55-69. <https://www.journalofdemocracy.org/articles/delegative-democracy/>.
- . 1999. *Counterpoints: Selected Essays on Authoritarianism and Democratization*. Notre Dame, IN: University of Notre Dame Press.
- O'Faircheallaigh, Ciaran. 2013. "Extractive Industries and Indigenous Peoples: A Changing Dynamic?" *Journal of Rural Studies* 30: 20-30. <https://doi.org/10.1016/j.jrurstud.2012.11.003>.
- Ojha, Hemant R., Andy Hall, and Rasheed Sulaiman V, eds. 2013. *Adaptive Collaborative Approaches in Natural Resource Governance: Rethinking Participation, Learning and Innovation*. Abingdon, Oxon: Routledge. <https://doi.org/10.4324/9780203136294>.
- Ostrom, Elinor. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge, U.K.: Cambridge University Press.

- . 2010. “Beyond Markets and States: Polycentric Governance of Complex Systems.” *The American Economic Review* 100, no. 3: 641–72. <https://doi.org/10.1080/19186444.2010.11658229>.
- Ostrom, Elinor, James Walker, and Roy Gardner. 1992. “Covenants With and Without a Sword: Self-Governance is Possible.” *American Political Science Review* 86, no. 2. June: 404–17. <https://doi.org/10.2307/1964229>.
- Page, Scott E. 2011. *Diversity and Complexity*. Princeton: Princeton University Press.
- Pasko, Olga, and Natalia Staurskaya. 2020. “Food Security-Related Issues and Solutions.” In *Handbook of Research on Globalized Agricultural Trade and New Challenges for Food Security*. 43–62. Hershey, PA: IGI Global.
- Policzer, Pablo. 2012. “A Complex Adaptive State System: Networks, Arms Races, and Moral Hazards.” *Revista de Ciencia Política* 32, no. 3: 673–85. DOI:[10.4067/S0718-090X2012000300010](https://doi.org/10.4067/S0718-090X2012000300010).
- Poteete, Amy R., Marco A. Janssen, and Elinor Ostrom. 2010. *Working Together: Collective Action, the Commons, and Multiple Methods in Practice*. Princeton: Princeton University Press.
- Radtke, Jörg, and Stefan Wurster. 2023. “Multilevel Governance of Energy Transitions in Europe: Addressing Wicked Problems of Coordination, Justice, and Power in Energy Policy.” *Zeitschrift für Politikwissenschaft* 33, no. 2: 139–155. <https://link.springer.com/article/10.1007/s41358-023-00353-7>.
- Rajagopal, Balakrishnan. 2003. *International Law from Below: Development, Social Movements and Third World Resistance*. Cambridge, U.K.: Cambridge University Press.
- Rittel, Horst W. J., and Melvin M. Webber. 1973. “Dilemmas in a General Theory of Planning.” *Policy Sciences* 4, no. 2: 156. https://urbanpolicy.net/wp-content/uploads/2015/06/Rittel-Webber_1973_DilemmasInAGeneralTheoryOfPlanning.pdf.
- Rotberg, Robert I., ed. 2004. *When States Fail: Causes and Consequences*. Princeton: Princeton University Press.
- Sabel, Charles F., and Jonathan Zeitlin. 2012. “Experimentalism in the EU: Common Ground and Persistent Differences.” *Regulation & Governance* 6, no. 3: 410–26. <https://charlessabel.com/papers/experimentalism%20in%20the%20EU.pdf>.
- Sagaris, Lake. 2014. “Citizen Participation for Sustainable Transport: The Case of ‘Living City’ in Santiago, Chile (1997–2012).” *Journal of Transport Geography* 41. <https://doi.org/10.1016/j.jtrangeo.2014.08.011>.
- Sapir, Jonathan. 2019. *Thriving at the Edge of Chaos: Managing Projects as Complex Adaptive Systems*. New York: Productivity Press.
- Sartorio, Francesca S., Patricia Aelbrecht, Hesam Kamalipour, and Andrea Frank. 2021. “Towards an Antifragile Urban Form: A Research Agenda for Advancing Resilience in the Built Environment.” *Urban Design International* 26, no. 2: 135–58. <https://link.springer.com/article/10.1057/s41289-021-00157-7>.
- Scott, Charity. 2011. “A Case Study in Collaborative Governance: Health Care Law Reform in Georgia.” *Conflict Resolution Quarterly* 28, no. 4: 441–63. <https://doi.org/10.1002/crq.20029>.
- Sengupta, Enakshi, Patrick Blessinger, and Nasiruddin Nezaami, eds. 2022. *Governance and Management in Higher Education*. Bingley, UK: Emerald Publishing Limited.
- Short, Stephanie D., and Fiona McDonald. 2012. *Health Workforce Governance: Improved Access, Good Regulatory Practice, Safer Patients*. Farnham, Surrey, U.K.: Ashgate.

- Sitienei, Jackline, Lenore Manderson, and Mabel Nangami. 2021. "Community Participation in the Collaborative Governance of Primary Health Care Facilities, Uasin Gishu County, Kenya." *PLOS ONE* 16, no. 3: e0248914. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0248914>.
- Stringer, Randy. 2000. "Food Security in Developing Countries." *Agricultural & Natural Resource Economics*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=231211.
- Surowiecki, James. 2004. *The Wisdom of Crowds: Why the Many Are Smarter Than the Few and How Collective Wisdom Shapes Business, Economies, Societies, and Nations*. New York: Doubleday.
- Taleb, Nassim Nicholas. 2012. *Antifragile: Things That Gain from Disorder*. New York: Random House.
- Thollander, Patrik, and Jenny Palm. 2023. "The Unhinged Paradox - What Does It Mean for the Energy System?" *Advances in Applied Energy*, vol. 10. <https://www.sciencedirect.com/science/article/pii/S2666792423000227#:~:text=An%20unhinged%20paradox%20implies%20that%20introducing%20a%20new,become%20more%20unstable%2C%20or%20less%20resilient%20or%20unhinged>.
- Thollander, Patrik, Jenny Palm, and Johan Hedbrant. 2019. "Energy Efficiency as a Wicked Problem." *Sustainability*. <https://www.mdpi.com/2071-1050/11/6/1569>.
- Vaitheeswaran, Vijay V. 2012. *Need, Speed, and Greed: How the New Rules of Innovation Can Transform Businesses, Propel Nations to Greatness, and Tame the World's Most Wicked Problems*, 1st ed. New York: Harper Business.
- Vermeulen, Sonja J., and Lorenzo Cotula. 2010. "Over the Heads of Local People: Consultation, Consent, and Recompense in Large-Scale Land Deals for Biofuels Projects in Africa." *The Journal of Peasant Studies* 3: 899-916. <https://doi.org/10.1080/03066150.2010.512463>.
- Walls, Helen. 2018. "Wicked Problems and a 'Wicked' Solution." *Globalization and Health* 14. <https://globalizationandhealth.biomedcentral.com/articles/10.1186/s12992-018-0353-x>.
- Warganegara, Arizka, and Maxim G. M. Samson. 2021. "Collaboration and Disaster: Critical Responses after Tsunami Events in Indonesia." *Environmental Hazards* 20, no. 4: 345-62. <https://doi.org/10.1080/17477891.2020.1813680>.
- Yankelovich, Daniel. 2015. *Wicked Problems, Workable Solutions*. Lanham, MD: Rowman & Littlefield.
- Yeboah-Assiamah, Emmanuel, Kobus Muller, and Kwame Ameyaw Domfeh. 2018. "Transdisciplinary Approach to Natural Resource Governance Research: A Conceptual Paper." *Management of Environmental Quality: An International Journal* 29 (2018): 15-33. DOI:[10.1108/MEQ-04-2016-0034](https://doi.org/10.1108/MEQ-04-2016-0034).

About the Author

Pablo Policzer (PhD, Massachusetts Institute of Technology) is an Associate Professor of Political Science at the University of Calgary. He specializes in comparative politics, with a focus on Latin America. His research has examined the evolution of violent conflict - especially among armed actors such as militaries, police forces, and non-state armed groups - in authoritarian and democratic regimes. In recent years he has focused on the possibilities of collaborative governance in extractive industry areas, especially involving Indigenous communities, and through a complex systems lens. He teaches a seminar on Complex Governance, offered through the Department of Political Science. He previously held the Canada Research Chair in Latin American Politics (2005-2015), and was the Director of the University of Calgary's Latin American Research Centre (2015-2021).

About The School of Public Policy

The School of Public Policy has distinguished itself as the leading institution of its kind in Canada, offering a practical, global, and focused approach to the analysis and implementation of public policy across various domains:

1. **Social Policy and Health**
2. **Energy and Environmental Policy**
3. **Fiscal and Economic Policy**
4. **International Policy and Trade**

Our commitment to delivering this unique perspective sets us apart within Canada. The core mission of The School of Public Policy is to bolster Canada's public service, institutions, and economic performance for the betterment of our families, communities, and the nation as a whole. We achieve this by pursuing three key objectives:

- **Building Government Capacity:** We empower public servants through formal training in both degree and non-degree programs. This training equips these individuals, responsible for shaping public policy in Canada, with the practical skills and expertise needed to represent our nation's vital interests, both domestically and internationally.
- **Enhancing Public Policy Discourse:** Beyond government, we foster executive and strategic assessment programs that promote a deeper understanding of effective public policy among those outside the public sector. This effort enables everyday Canadians to make informed decisions regarding the political landscape that will shape their future.
- **Providing a Global Perspective on Public Policy Research:** Through international collaborations, educational initiatives, and community outreach programs, we incorporate global best practices into Canadian public policy. This approach ensures that our decisions benefit the entire populace in the long term, rather than catering to the interests of a select few in the short term.

The School of Public Policy relies on a diverse pool of experts, encompassing industry professionals, practitioners, and academics, to conduct research within their specialized domains. This approach ensures that our research remains highly relevant and directly applicable to real-world challenges. Authors often have personal or professional stakes in their research areas, which is why all Research Papers undergo a rigorous double anonymous peer review process. Following this review, our Scientific Directors conduct a final assessment to uphold the accuracy and validity of the analysis and data presented. This thorough process underscores our commitment to providing credible and actionable insights to inform public policy in Canada.

The School of Public Policy

University of Calgary, Downtown Campus
906 8th Avenue S.W., 5th Floor
Calgary, Alberta T2P 1H9
Phone: 403 210 3802

DISTRIBUTION

For a full list of publications from The School of Public Policy, please visit www.policyschool.ca/publications

DISCLAIMER

The opinions expressed in these publications are the authors' alone and therefore do not necessarily reflect the opinions of the supporters, staff, or boards of The School of Public Policy.

EDITORIAL PRACTICES STATEMENT

This manuscript is a double-blind peer-reviewed contribution to the policy conversation that has been assessed by at least two reviewers external to the authorial team.

COPYRIGHT

Copyright © Policzer, 2024. This is an open-access paper distributed under the terms of the Creative Commons license CC BY-NC 4.0, which allows non-commercial sharing and redistribution so long as the original author and publisher are credited.

ISSN

ISSN 2560-8312
The School of Public Policy Publications (Print)
ISSN 2560-8320
The School of Public Policy Publications (Online)

DATE OF ISSUE

October 2024

MEDIA INQUIRIES AND INFORMATION

For media inquiries, please contact [Gord Der Stepanian](mailto:Gord.Der.Stepanian).

Our web site, www.policyschool.ca, contains more information about The School's events, publications, and staff.