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REGULATORY CAPTURE AND THE ROLE OF ACADEMICS IN PUBLIC POLICYMAKING: LESSONS FROM CANADA'S ENVIRONMENTAL REGULATORY REVIEW PROCESS

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Sustainability in Canada, as elsewhere, will likely only arise if people are prepared to choose fundamentally different goals for their society, including a fundamentally different economic model in which maintenance of ecological integrity is a precondition to all development. Environmental law is a means to an end, not an end in itself.¹

What we need now are more concrete proposals for reform rather than suggestions that someone else should do something. I believe that the responsibility for making these proposals is very largely that of academics.²

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¹ Stepan Wood, Georgia Tanner & Benjamin J Richardson, "Whatever Happened to Canadian Environmental Law?" (2010) 37:4 Ecology LQ 981 at 1039–40.

² John Swan, "Consideration and the Reasons for Enforcing Contracts" (1976) UW Ontario L Rev 83 at 121.

I. INTRODUCTION: REGULATORY CAPTURE'S FIFTEEN MINUTES OF FAME

A. CLIMATE POLICY, REGULATORY CAPTURE, AND ACADEMIC EXPERTISE

There is no greater obstacle to achieving Canada's greenhouse gas (GHG) emissions reduction targets under the UN Paris Agreement and contributing to the accomplishment of the UN's Sustainable Development Goals (SDGs) than the phenomenon of regulatory capture. Regulatory capture is at once the process and effect of regulated entities or entire industries systematically redirecting regulation away from the public interest and toward the private, special interests of regulated parties themselves.³ Although it has been characterized as the root problem of Canadian environmental law,⁴ not only does regulatory capture continue to receive far less scholarly attention than it deserves,⁵ it is also rarely made the focus of environmental advocacy in Canada.⁶ Not

³ Daniel Carpenter & David A Moss, "Introduction" in Daniel Carpenter & David A Moss, eds, *Preventing Regulatory Capture: Special Interest Influence and How to Limit It* (New York: Cambridge University Press, 2014) at 13. See also Brink Lindsey & Steven M Teles, *The Captured Economy: How the Powerful Enrich Themselves, Slow Down Growth, and Increase Inequality* (New York: Oxford University Press, 2017).

⁴ See e.g. Jason MacLean, "Striking at the Root Problem of Canadian Environmental Law: Identifying and Escaping Regulatory Capture" (2016) 29 J Envtl L & Prac 111.

⁵ As Masur and Posner observe in their recent review of the literature on regulatory theory, "[a] strand of the literature focuses on political influences on [regulatory] agencies": Jonathan S Masur & Eric A Posner, "Norming in Administrative Law" (2018) University of Chicago Coase-Sandor Institute for Law & Economics Working Paper No 840 at 2, online: <papers.ssrn.com/sol3/papers.cfm?abstract_id=3132881>. There is some evidence, however, suggesting that the Canadian public is becoming increasingly aware of the problem of regulatory capture. The National Energy Board, for instance, has widely become perceived as a "captured regulator." See e.g. Marc Eliesen, "National Energy Board is a Captured Regulator in Urgent Need of Overhaul", *The Narwhal* (9 September 2016), online: <thenarwhal.ca/national-energy-board-captured-regulator-urgent-need-overhaul>.

⁶ A promising exception is the ongoing investigative reporting of the *National Observer*, a Canadian news website focused on investigative reporting and daily news

unlike climate change itself,⁷ regulatory capture can be difficult to discern directly,⁸ although as our analytic methods evolve and the evidence of each continues to accumulate, detection is rapidly improving. And not unlike climate change, it is not enough to merely identify regulatory capture and its effects, analytically challenging and complex a task as that is. Both call out for not only critiques of “business as usual”—an unusually apt term in this context⁹—but also constructive public policy alternatives to the status quo. Both, moreover, call out for broad-based, countervailing democratic movements in support of such policy alternatives. Indeed, these issues intersect in the increasing understanding that the nature of the challenge of mitigating climate change and catalyzing a just transition to sustainability is neither primarily scientific nor technical, but social and political.¹⁰

The aim of this article is to better understand how regulatory capture pre-empts effective government action on climate change and

on energy, climate, politics, and social issues that has “a special focus on highlighting how governments and industry make decisions as well as the factors that influence their policies”: “About”, *National Observer*, online: <www.nationalobserver.com/about>. See also Emma Gilchrist, “Welcome to the Narwhal” (14 May 2018), online: *The Narwhal* <thenarwhal.ca/welcome-to-the-narwhal/>.

- ⁷ Climate change, for example, has been characterized as a “catastrophe in slow motion”: see e.g. Bruce Lindsay, “Climate of Exception: What Might a ‘Climate Emergency’ Mean in Law?” (2010) 38:2 *Federal L Rev* 255 at 269.
- ⁸ As George Stigler concluded his foundational analysis of regulatory capture, “[u]ntil the basic logic of political life is developed, reformers will be ill-equipped to use the state for their reforms, and victims of the pervasive use of the state’s support of special groups will be helpless to protect themselves”: George J Stigler, “The Theory of Economic Regulation” (1971) 2:1 *Bell J Economics & Management Science* 3 at 18 [Stigler, “Economic Regulation”]. See also George J Stigler, “Supplementary Note on Economic Theories of Regulation,” in George J Stigler, *The Citizen and the State: Essays on Regulation* (Chicago: University of Chicago Press, 1975) 137 at 140 [Stigler, “Supplementary Note”].
- ⁹ See e.g. Jeffrey D Sachs, *The Age of Sustainable Development* (New York: Columbia University Press, 2015) at 3–4.
- ¹⁰ See e.g. Daniel Rosenbloom et al, “Transition Experiments: Opening Up Low-Carbon Transition Pathways for Canada through Innovation and Learning” (2018) 44:4 *Can Pub Pol’y* 368.

sustainability, and how such capture can be countered. Specifically, this paper argues that academics are at once ideally positioned and ethically obligated to assist in countering capture by generating socially and politically transformative regulatory alternatives capable of attracting broad popular appeal.¹¹ Broad social and political movements do not just happen all of a sudden or on their own. Their dynamics are complex, so much so that they tend to elude the movements' participants themselves. This creates a gap between the equally critical ingredients of movement participation and the understanding of movements. How do we expose the entrenched economic interests reproducing our reliance on fossil fuels while building a broad coalition in support of transitioning to renewable energy, all the while ensuring that this transition is socially and politically just? These are the questions that must be answered to counter the regulatory capture of climate change and sustainability law and policy, and academics are uniquely well positioned to propose answers and alternatives for broader, democratic debate. In order to demonstrate this argument, this article proposes an academic law reform model capable of generating viable climate and sustainability policy proposals having the potential to attract broad popular appeal.

B. REGULATORY CAPTURE APPEARS ON *THE DAILY SHOW*

By way of introduction to regulatory capture's little-understood processes and the peculiar challenges it poses to public interest policymaking, it is useful to begin by momentarily revisiting regulatory capture's brief and unlikely moment of popular attention. In February 2014 US political scientists Martin Gilens and Benjamin Page appeared on Comedy Central's *The Daily Show*,¹² then hosted by popular political

¹¹ On the need for a more activist academy with respect to climate change, see e.g. Jessica F Green, "Why We Need a More Activist Academy" (15 July 2018), online: *The Chronicle of Higher Education* <www.chronicle.com/article/Why-We-Need-a-More-Activist/243924>.

¹² Comedy Central, "The Daily Show with Jon Stewart: Martin Gilens & Benjamin Page" (30 April 2014), online (video): Comedy <www.cc.com/video-clips/kj9zai/the-daily-show-with-jon-stewart-martin-gilens---benjamin-page>.

comedian Jon Stewart, to discuss their recently published paper, “Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens.”¹³ It is not every day, of course, that academics of any stripe appear on television, much less on a show as popular as *The Daily Show*. But Gilens and Page’s article raised questions of fundamental importance: Who governs? Who *really* rules? Are citizens sovereign, or largely powerless? Gilens and Page’s findings—based on a longitudinal and multivariate analysis of public policy preferences cross-referenced against their actual legislative outcomes—reveal that economic elites and their lobbyists have significantly shaped US government policy, while broader public interest groups and average citizens have enjoyed “little or no independent influence.”¹⁴ Putting an even finer point on their findings, they concluded that in the United States the familiar democratic notion of majority rule does not hold in respect of the determination of public policy.¹⁵ In a wry turn of phrase, Gilens and Page conceded “this does not mean that ordinary citizens always lose out; they fairly often get the policies they favor, but only because those policies happen also to be preferred by the economically elite citizens who wield the actual influence.”¹⁶ Perhaps it was these professors’ penchant for sardonic political interpretation that attracted the attention of *The Daily Show’s* producers. Or perhaps it was the professors’ stark conclusion that “if policymaking is dominated by powerful business organizations and a small number of affluent Americans” as their findings strongly suggest, then America’s claim to being a democracy is in serious question.¹⁷

The findings of Gilens and Page reflect—and stem from—the phenomenon of regulatory capture. This form of capture is characterized by US law scholar Lawrence Lessig as systemic corruption, which he

¹³ Martin Gilens & Benjamin I Page, “Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens” (2014) 12:3 *Perspectives on Politics* 564.

¹⁴ *Ibid* at 565.

¹⁵ See *ibid* at 576 [emphasis in original].

¹⁶ *Ibid*.

¹⁷ *Ibid* at 577.

identifies not as the most important issue facing democracy, but rather the *first*. Take any public policy issue, Lessig argues, be it climate change or excessive regulation, financial reform or healthcare, a complex and invasive tax system or growing income inequality, debt, or education—whatever the policy issue may be, regulatory capture is likely at play. That is what makes it the first, logically prior issue. Regulatory capture is the issue that must be solved before we can address any other more specific public policy issue and enact sensible reform.¹⁸

And thus does the surprising appearance of Gilens and Page on *The Daily Show* gesture simultaneously towards both the solution to the scourge of regulatory capture as well as that solution's primary obstacle: the inherent difficulty of establishing a compelling countervailing democratic movement aimed at redirecting regulation back to its proper public interest.

Both the importance and the difficulty of founding such a movement is underscored in a recent paper by the noted political economist Thomas Piketty.¹⁹ By analyzing postelectoral surveys from France, Britain, and the United States covering the period of 1948–2017, Piketty observed a long-run evolution in the structure of political cleavages. Specifically, Piketty shows that while the vote in the 1950s–1960s for “left wing” (i.e. socialist-labour-democratic) parties was strongly associated with lower-education and lower-income voters, left wing electoral support has gradually become associated with higher-education voters. The result in all three countries is the

¹⁸ See Lawrence Lessig, *The USA is Lesterland* (CC-BY-NC (4.0), 2013) at 30. See also Lawrence Lessig, *Republic, Lost: How Money Corrupts Congress—and a Plan to Stop It* (New York: Twelve, 2011); Zephyr Teachout, *Corruption in America: From Benjamin Franklin's Snuff Box to Citizens United* (Cambridge, MA: Harvard University Press, 2014).

¹⁹ Thomas Piketty, “Brahmin Left vs Merchant Right: Rising Inequality & the Changing Structure of Political Conflict (Evidence from France, Britain, and the US, 1948–2017)” (March 2018) WID.world Working Paper Series No 2018/7, online: <wid.world/wid-publications/#library-working-papers> [Piketty, “Brahmin Left vs Merchant Right”]. See also Thomas Piketty, *Capital in the Twenty-First Century* (Cambridge, MA: Harvard University Press, 2014).

replacement of a class-based party system with what Piketty describes as a multiple-elite party system: higher-education elites vote for the left while high-income and high-wealth elites still vote for the right. Meanwhile, all three countries witnessed a significant increase in voter abstention between the 1950s–1960s and the 2000s–2010s. Not unsurprisingly, this abstention arose largely within lower-education and lower-income groups. A natural interpretation, Piketty argues, is that lower-education and lower-income voters do not feel well represented in a “multiple-elite” party system.²⁰ Overall, Piketty argues, this shifting structure of political cleavages helps explain both “rising inequality and the lack of democratic response to it”,²¹

But how to explain this structural evolution itself? Piketty’s account points both to the limits of universal suffrage and the processes of regulatory capture. Elite capture of politics, according to Piketty, is hardly new. One of the oldest political party divisions in the world, the Conservatives versus the Whigs in eighteenth-century Britain, was largely a conflict of and among elites (i.e. the landed elite versus the urban-commercial elite).²² Throughout this period, only the approximate top one percent of the population was eligible to vote, so electoral politics was naturally predominated by elite concerns and conflicts.²³ It would be naive, however, to suppose that the advent of universal suffrage occasioned a new and permanent political balance. Rather, Piketty argues that economic elites influence and effectively control electoral politics through their disproportionate access to political financing, corporate, mainstream mass media, and political decision-makers themselves.²⁴ And here Piketty arrives at the same conclusion reached by

²⁰ Piketty, “Brahmin Left vs Merchant Right”, *supra* note 19 at 7. This particular interpretation warrants further research. For example, in the United States, phenomena such as redistricting and voter suppression might also contribute to observed voter abstention.

²¹ *Ibid* at 61.

²² See *ibid* at 62.

²³ See *ibid*.

²⁴ *Ibid*.

Lessig and Gilens and Page: Overcoming the difficulty of uniting low-education and low-income voters who otherwise have little in common in terms of origins and values requires the formation of an attractive and viable political platform based on broad socioeconomic equality.²⁵ And yet Piketty's analysis has no more to say with respect to the critical question of *how* to overcome this inherent difficulty and establish an attractive and viable democratic platform.²⁶

So crucially important and yet so fragile are the prospects of such a countervailing democratic movement that economist Paul Krugman warned against over-emphasizing the otherwise inarguable evidence of elite political dominance. Referring specifically to Gilens and Page's important insight²⁷ that when elite preferences and popular preferences diverge, the elites almost always win,²⁸ Krugman cautioned that "there is a danger . . . of going too far [by] imagining that electoral politics is irrelevant. Why bother getting involved in campaigns," Krugman asks rhetorically, "when the [economic elite] rules whichever party is in power?"²⁹

²⁵ *Ibid.*

²⁶ But see Piketty's most recent set of public policy proposals to help democratize Europe: Thomas Piketty, "Manifesto for the Democratization of Europe" (10 December 2018), online (blog): *Le Blog de Thomas Piketty* <piketty.blog.lemonde.fr/2018/12/10/manifesto-for-the-democratisation-of-europe/>.

²⁷ Paul Krugman, "Class, Oligarchy, and the Limits of Cynicism", *The New York Times* (21 April 2014), online: <krugman.blogs.nytimes.com/2014/04/21/class-oligarchy-and-the-limits-of-cynicism/>.

²⁸ See *ibid.*

²⁹ *Ibid.* It is worth adding here that the same concern is frequently raised in respect of climate change itself as a public issue. Many commentators caution that placing too much emphasis on the seriousness of climate change can have the unintended effect of causing fatalism and apathy. See e.g. John Schwartz, "William T. Vollmann Would Like a Word or Two About Climate Change. Or 1,200 Pages", *The New York Times* (6 August 2018), online: <www.nytimes.com/2018/08/06/books/review/william-t-vollmann-carbon-ideologies-no-immediate-danger-no-good-alternative.html> (in which Schwartz quotes the influential climate scientist and advocate Katherine Hayhoe as warning that "[d]oomsday messaging just doesn't work").

In Gilens and Page's appearance on *The Daily Show*, host Jon Stewart raised this very issue with the authors, asking them what can be done about elite regulatory capture. Responding directly to Krugman's warning, Page argued that it is a solvable problem, but one that requires a very big social movement.³⁰ Pressed by Stewart for an actual example of such a movement, Page offered the Progressive Period of the United States at the beginning of the twentieth century as having lessons to teach twenty-first-century democracy advocates.³¹

Of course, very big social movements do not just all of a sudden come into being. Nor are their dynamics, past or present, self-evident. On the contrary, past social movements were the products of complex causal processes, the nature of which participants in contemporary movements may not understand well, if at all.³² There are profound gaps, in other words, between public political knowledge and awareness, on-the-ground social movement practices, and academic analyses.

Stewart's ironic introduction of Gilens and Page's paper further (and humorously) illustrates this disjuncture. After reading aloud the paper's title, Stewart clowned in a rapid, staccato cadence: "if you read but one empirically-based post-survey quantitative multivariate analysis of . . . umm . . . ah . . . oh #%\$! it. Let's just talk about net neutrality."³³ Later, in response to a smattering of applause as the authors appeared on stage, Stewart quipped "the people love a quantitative analysis."³⁴ Stewart's deadpan irony aside, his not-unintentional point is instructive. Pressing the authors by pointing out the absence of any such very big social movement on the horizon, Page countered that "it's still true a little academic article [caused] a whole bunch of fuss on the Internet, [and]

³⁰ *The Daily Show*, *supra* note 12.

³¹ *Ibid.*

³² See Charles Tilly & Lesley J Wood, *Social Movements: 1768–2012*, 3rd ed (Boulder, CO: Paradigm, 2013) at 15.

³³ *The Daily Show*, *supra* note 12.

³⁴ *Ibid.*

that only happens because it hits a nerve, there are a lot of people who are really upset.”³⁵

That was 2014. One looks in vain for evidence of a movement since, let alone a very big movement aimed at countering elite regulatory capture. Merely calling attention to capture—notwithstanding the considerable analytic effort required to do so—is insufficient to counter it. And yet identifying capture remains the predominant aim of scholarly work in this area.³⁶

Worse still, the operation of regulatory capture—let alone proposals for countering it—remains understudied in relation to mitigating climate change and transitioning towards greater sustainability. As Wood, Tanner, and Richardson *concluded* their sobering analysis of the manifold shortcomings of Canadian environmental law, “[s]ustainability in Canada . . . will likely only arise if people are prepared to choose fundamentally different goals for their society, including a fundamentally different economic model in which maintenance of ecological integrity is a precondition to all development. Environmental law is a means to an end, not an end in itself.”³⁷ Doubtless, they are correct to de-emphasize the importance of environmental law and re-emphasize the importance of a broad social movement supportive of sustainability. But who will propose such fundamentally different goals? From where will a fundamentally different economic model emerge?

³⁵ *Ibid.*

³⁶ In fairness to Page and Gilens, they have subsequently proposed reforms in response to the specter of capture. Their work, however, does not escape the Catch-22 of proposed reforms of capture, whereby the prospects of reform are contingent on the agency and capacity of institutions that are already captured. As Page and Gilens argue, for example, “[w]ell-designed government policies could help deal with these problems”: Benjamin I Page & Martin Gilens, *Democracy in America? What Has Gone Wrong and What We Can Do About It* (Chicago, IL: University of Chicago Press, 2017) at 3. No doubt. But the very problem to be solved is one that corrupts the very design of policies in the first place. This “Catch-22” of reforming capture is explored in further detail in Part III, *below*.

³⁷ *Supra* note 1 at 1039–40.

Writing earlier and in respect of a different law reform context—that is, the need to reform Canadian contract law—John Swan observed (rightly)³⁸ that the time had come for concrete and actionable reform proposals, and not merely further suggestions and exhortations that someone ought to do something. According to Swan, academics bear the responsibility for providing those proposals.³⁹ Swan’s call to academic arms applies as much to regulatory capture and climate change policy today as it did to the contract law doctrine of consideration in the 1970s. Proposals concerning Canada’s climate change and sustainability policies, if they are to be effective, must squarely confront and counter those policies’ regulatory capture by carbon-intensive industries, including the petroleum, automotive, cement, steel, lime, and nitrogen industries.⁴⁰ To date, however, Canadian environmental law scholarship and advocacy has been largely reticent in this regard, tending instead to take a technocratic approach aimed at encouraging incremental improvements.⁴¹

C. PLAN OF THE ARTICLE

The purpose of this article is to propose an academic law reform model capable of generating viable climate and sustainability policy proposals capable of attracting broad popular appeal. The rest of the article will proceed as follows. Part II further unpacks the concept of regulatory capture and the processes by which capture is accomplished, using the

³⁸ See e.g. Margaret Jane Radin, *Boilerplate: The Fine Print, Vanishing Rights, and the Rule of Law* (Princeton, NJ: Princeton University Press, 2012). In the Canadian context, see Jason MacLean, “The Death of Contract, Redux: Boilerplate and the End of Interpretation” (2016) 58:3 Can Bus LJ 289.

³⁹ *Supra* note 2 at 121.

⁴⁰ See e.g. Konrad Yakabuski, “Balancing Carbon Emissions with the Economy Proves to be Difficult Task for Ottawa” *The Globe and Mail* (7 August 2018), online: <www.theglobeandmail.com/business/commentary/article-balancing-carbon-emissions-with-economy-proves-to-be-difficult-task/>.

⁴¹ See the discussion in Jason MacLean, Meinhard Doelle & Chris Tollefson, “The Past, Present, and Future of Canadian Environmental Law: A Critical Dialogue” (2015–16) 1:1 *Lakhead LJ* 19 at 99–104.

Canadian petroleum industry's capture of environmental law and policy to illustrate how capture works in practice and to ground the novel academic law reform model that is the central contribution of this article. Part III further establishes the need for a novel academic approach to countering capture by briefly examining what this article calls the "Catch-22" of regulatory capture reform, and again draws on recent evidence from Canadian environmental law reform efforts as illustration. Part IV, the core of the article, examines Canada's recent environmental regulatory review process—which concerned the reform of the critically important federal environmental assessment regime and culminated in Bill C-69—to advocate for a novel and iterative model of academic law reform capable of countering regulatory capture and generating effective and politically durable climate and sustainability policies in the public interest. Part V concludes by discussing the limitations of the model proposed here and areas in need of further research.

II. CONCEPTUALIZING CAPTURE

The year 1971 was a fateful one for the theory of regulation. In 1971 economist George Stigler published a paradigm-shifting paper entitled "The Theory of Economic Regulation"⁴² and corporate lawyer (and future US Supreme Court Justice) Lewis Powell drafted a memorandum to his friend Eugene Sydnor, Jr., the Director of the US Chamber of Commerce, arguing that the Chamber could better advance the interests of the corporate sector by taking a more active role in the political process.⁴³ These publications provided, respectively, a formal, theoretical

⁴² *Supra* note 8. The significance of Stigler's novel theory of regulation cannot be overstated. In 1982 Stigler was awarded the Nobel Prize in Economics "for his seminal studies of industrial structures, functioning of markets and causes and effects of public regulation": The Royal Swedish Academy of Sciences, Press Release, "The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 1982" (20 October 1982), online: *The Nobel Prize* <www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1982/press.html>.

⁴³ Lewis F Powell, Jr., "Confidential Memorandum: Attack of American Free Enterprise System" (23 August 1971), online: *Moyers* <billmoyers.com/content/the-powell-memo-a-call-to-arms-for-corporations/2/>. Powell wrote the memo—known

model of regulatory capture (Stigler), and a series of practical, programmatic approaches to obtaining regulations more favourable to US industry interests (Powell). Revisiting each publication in turn will assist in unpacking the processes underlying regulatory capture, and how capture can be countered.

A. THE THEORY OF REGULATORY CAPTURE

Stigler proposed a new theory of regulation opposed to what he identified as the then predominant competing accounts: (1) that regulation was instituted primarily for the protection and benefit of the public at large (or some large subclass of the public), versus (2) the null hypothesis that the political process defies rational explanation—“politics” as an “imponderable” (essentially irrational).⁴⁴ By contrast, Stigler argued that the purpose of the theory of regulation is “to explain who will receive the benefits or burdens of regulation, [and] what form regulation will take”.⁴⁵ Stigler hypothesized that “regulation is acquired by the industry, and is designed and operated primarily for its benefit.”⁴⁶ Regulatory theory and analysis, Stigler argued, must determine how putatively regulated entities and other interest groups are able to redirect and redeploy the state’s regulatory powers and processes for their own special purposes.⁴⁷ And that task is accomplished,

subsequently as “The Powell Memo”—which he submitted to the US Chamber of Commerce at the request of Sydnor, the Chamber’s Education Committee’s Chairman.

⁴⁴ Stigler, “Economic Regulation”, *supra* note 8 at 3. For an assessment of the legacy of Stigler’s work on regulation, see e.g. Sam Peltzman, “George Stigler’s Contribution to the Economic Analysis of Regulation” (1993) 101:5 J Political Economy 818; Christopher Carrigan & Cary Coglianese, “George J. Stigler, ‘The Theory of Economic Regulation’” in Steven J Balla, Martin Lodge & Edward C Page, eds, *The Oxford Handbook of Classics in Public Policy and Administration* (Oxford: Oxford University Press, 2015) 287.

⁴⁵ Stigler, “Economic Regulation”, *supra* note 8 at 3.

⁴⁶ *Ibid.*

⁴⁷ See *ibid* at 4.

according to Stigler, by “examin[ing] the nature of the political process in a democracy.”⁴⁸

Specifically, industries seeking favourable regulation must provide, directly or indirectly, one or both of a governing political party’s primary needs: votes and resources.⁴⁹ Such resources include, among others, campaign contributions and contributed services (Stigler gives the example of a businessperson heading a fundraising committee), along with more indirect contributions (e.g. the employment of political party members).⁵⁰ Such contributions go a long way toward explaining the systemic and institutional—as opposed to criminal or outwardly corrupt—nature of regulatory capture:

Why are so many politicians lawyers?—because everyone employs lawyers, so the congressman’s firm is a suitable avenue of compensation, whereas a physician [politician] would have to be given bribes rather than patronage. Most enterprises patronize insurance companies and banks, so we may expect that legislators commonly have financial affiliations with such enterprises.⁵¹

Industries also provide useful services (e.g. specialized knowledge and expertise) to legislators and regulators, typically through industry lobbying organizations.⁵² Stigler explains that the costs of comprehensive information in the political arena are high (and higher than in markets) because the information sought often concerns issues of little or no direct interest to individuals or, for that matter, most legislators and administrative agencies. Accordingly, Stigler described the channels of political decision making as gross, filtered, or noisy.⁵³ Industry lobbying

⁴⁸ *Ibid* at 10.

⁴⁹ *See ibid* at 12.

⁵⁰ *See ibid*.

⁵¹ *Ibid* at 13.

⁵² *See ibid*. This theory has subsequently received considerable empirical support. *See e.g.* Lee Drutman, *The Business of America is Lobbying: How Corporations Became Politicized and Politics Became More Corporate* (New York: Oxford University Press, 2015).

⁵³ Stigler, “Economic Regulation”, *supra* note 8 at 12.

lowers legislators' and regulators' organizational as well as electoral costs, both of which extend beyond elections and continue throughout the governing life of parties and (unelected) administrative agencies. A political party attempts to maintain its organization and *electoral appeal* by performing costly services for the voter at all times, not just before elections.⁵⁴

This does not mean, however, that regulation captured by these processes is in the public interest. As Stigler explained, were this to be the case, the idealistic protection-of-the-public theory of regulation would have to argue, for instance, that oil import quotas are dictated by the concern of the federal government for an adequate domestic supply of petroleum in the event of war. Stigler characterized this argument as "a remark calculated for elicit uproarious laughter at the Petroleum Club."⁵⁵ Instead, Stigler demonstrated that when an industry receives a grant of power from the state, such as protectionist oil import quotas, the private benefit to the industry will fail to compensate for the damage caused to the public (e.g. higher consumer prices due to lessened competition).⁵⁶ Even though a regulation designed to favour one or more industries may be characterized as being in the public interest, Stigler showed that what matters for regulatory theory are the comparative costs and benefits as between regulated industries and society more generally.

And yet, Stigler observed in 1971 that the idealistic view of public regulation is deeply embedded in professional economic thinking. Economists of the day reflexively denounced the Interstate Commerce Commission (ICC) for its biased, pro-railroad policies, so much so that the ICC's bias became a cliché in the literature.⁵⁷ But because of the hegemony of the idealistic theory of regulation, economists critical of the ICC failed to inquire further into the root causes of the ICC's policymaking record. The only way to effectively reform a regulatory

⁵⁴ See *ibid* at 12. This is a crucial point to which this article will return and further develop in Part IV, *below*.

⁵⁵ *Ibid* at 4.

⁵⁶ *Ibid* at 10.

⁵⁷ See *ibid* at 17.

agency such as the ICC, Stigler argued, was to alter the basis of the agency's political support, and reward its officials and staff members on a basis unrelated to their services to the railroad carriers.⁵⁸ Merely calling attention to capture—even repeatedly, to the point of making it a cliché—is insufficient to counter it.⁵⁹ This is a critical lesson of Stigler's theory of regulatory capture, and is further developed in Part IV of the analysis below.

B. THE PRACTICE OF REGULATORY CAPTURE: THE POWELL MEMO

A striking aspect of Stigler's groundbreaking paper is its ahistorical nature, although that was and remains far from uncommon for a formal economic model.⁶⁰ Reading Stigler's paper outside of its historical context would give the reader the impression that the concentrated corporate capture of government regulation was complete and absolute. From 1969 to 1972, however, the American business community as a whole suffered a series of setbacks unprecedented in the postwar period.⁶¹ During this period, the US federal government significantly expanded its regulatory reach by enacting extensive and stringent requirements and restrictions applicable to corporations in respect of issues ranging from consumer rights to occupational safety to environmental protection.⁶²

⁵⁸ *Ibid* at 17–18.

⁵⁹ Stigler was otherwise silent on how to counter capture. His implicit argument was that reformers could draw upon “the basic logic of political life” (*ibid* at 18) to do so. But Stigler's analysis, as groundbreaking as it was, did not suggest any reforms capable of changing the political support or incentives of a given regulatory body. Stigler's analysis of the comparative costs of information, however, is suggestive of a promising approach, which is developed in Part IV of this article, *below*.

⁶⁰ For a trenchant discussion of the limits of formal economic models, see e.g. Dani Rodrik, *Economics Rules: The Rights and Wrongs of the Dismal Science* (New York: WW Norton & Company, 2015).

⁶¹ See David Vogel, *Fluctuating Fortunes: The Political Power of Business in America* (New York: Basic Books, 1989) at 59.

⁶² See *ibid*.

This pronounced change in the federal government’s regulatory approach was met in corporate circles with a mix of disbelief and alarm.⁶³ It was in this specific and shifting context that future Supreme Court Justice Lewis Powell drafted a memorandum at the request of the US Chamber of Commerce.⁶⁴ Starting from the premise that the American economic system was under a broad attack,⁶⁵ and observing “the stampedes by politicians to support almost any legislation related to ‘consumerism’ or to the ‘environment,’”⁶⁶ Powell proceeded to set out a programmatic strategy for the US corporate sector to regain and redouble its previous political power. According to Powell, this would involve much more than merely redoubling the American corporate sector’s reliance on the standard practices of public relations and governmental affairs—two areas in which corporations had already long and substantially invested.⁶⁷ Powell noted that independent and uncoordinated activity by individual corporations, while important, would not be sufficient.⁶⁸ Instead, Powell counseled that strength resided in organization, careful long-range planning and implementation, and consistency of action over an indefinite period of years at a level of financing available only through joint and coordinated effort at a national level.⁶⁹

The Powell Memo proceeds by articulating a multi-pronged strategy focused on universities (including their faculty and staff, the speakers they invite, the textbooks assigned in relevant business administration and social sciences courses, and their publications in scholarly journals);⁷⁰

⁶³ Jacob S Hacker & Paul Pierson, *Winner-Take-All Politics: How Washington Made the Rich Richer—and Turned its Back on the Middle Class* (New York: Simon & Schuster, 2011) at 117.

⁶⁴ Powell, “Powell Memo”, *supra* note 43.

⁶⁵ *Ibid* at 1.

⁶⁶ *Ibid* at 25.

⁶⁷ *Ibid* at 10.

⁶⁸ *Ibid* at 11.

⁶⁹ *Ibid*.

⁷⁰ *Ibid* at 15–20, 22.

secondary education action programs;⁷¹ monitoring television coverage of business affairs (including launching complaints in respect of unfair coverage to the Federal Communication Commission) and demanding equal time for pro-business perspectives on news programs;⁷² devoting part of businesses' advertising budgets to advertisements, not for specific products but in favour of the overall economic system;⁷³ increasing direct political action;⁷⁴ strategic litigation; and enhancing shareholder power.⁷⁵

The strategy, broadly conceived, was a considerable success. On every dimension of corporate political activity, the numbers portray a dramatic, rapid mobilization of business resources by the late-1970s and early-1980s.⁷⁶ The number of corporations with public affairs offices in Washington grew from 100 in 1968 to over 500 in 1978.⁷⁷ In 1971, only 175 firms had registered lobbyists in Washington; by 1982, the number grew to approximately 2,500.⁷⁸ The number of corporate political action committees (commonly referred to as PACs) increased from under 300 in 1976 to over 1,200 by the middle of 1980.⁷⁹ These numbers demonstrate that the US business community implemented with considerable alacrity the programmatic recommendations set out in the Powell Memo. These numbers also align closely, not coincidentally, with the observed trends toward elite-favoured legislative outcomes and a

⁷¹ *Ibid* at 20.

⁷² *Ibid* at 21–22. It is worth noting here that the tactic of demanding equal time and “balance” is also a stock technique of climate change denial. See e.g. Michael Brüggermann & Sven Engesser, “Beyond False Balance: How Interpretative Journalism Shapes Media Coverage of Climate Change” (2017) 42 *Global Environmental Change* 58.

⁷³ Powell, “Powell Memo”, *supra* note 43 at 23–24.

⁷⁴ *Ibid* at 26.

⁷⁵ *Ibid*.

⁷⁶ See Hacker & Pierson, *supra* note 63 at 239.

⁷⁷ See Vogel, *supra* note 61 at 197.

⁷⁸ See *ibid*.

⁷⁹ See *ibid* at 207.

multi-elite political party system identified respectively by Gilens and Page⁸⁰ and Piketty⁸¹ (discussed in Part I, *above*).

But even more important than these numbers themselves was the new capacity they generated for US corporations to collaborate on common political goals. A mere decade after the publication of the Powell Memo, corporations could now mobilize more proactively and on a much broader front as members of a very big special-interest-based coalition in search of beneficial regulation.⁸²

C. THE PETROLEUM INDUSTRY'S CAPTURE OF CANADA'S ENVIRONMENTAL REGULATIONS

1. OIL AFFECTS EVERYONE AND EVERYTHING

“That political juggernaut, the petroleum industry, is an immense consumer of political benefits”.⁸³ That the petroleum industry was Stigler’s example par excellence of regulatory capture is hardly surprising given that industry’s power to shape regulations in its favour. Stigler’s more specific analysis of US oil import quotas obtained by the petroleum industry showed that such quotas would be rejected if a direct and *informed* vote on the regulation were ever held, even in the absence of deadweight losses of consumer and producer surpluses arising from the acquired regulation.⁸⁴

Neither is Stigler’s example dated. The industrial sectors of the petroleum industry—e.g. fossil energy extraction, fossil electricity production, fuel refining, concrete and cement production, and energy-intensive manufacturing—have succeeded in mounting effective

⁸⁰ Gilens & Page, “Testing Theories of American Politics”, *supra* note 13.

⁸¹ Piketty, “Brahmin Left vs Merchant Right”, *supra* note 19.

⁸² See Hacker & Pierson, *supra* note 63 at 240.

⁸³ Stigler, “Economic Regulation”, *supra* note 8 at 3.

⁸⁴ *Ibid* at 10.

opposition to climate change policies.⁸⁵ In a recent special report on the future of oil, the newspaper *The Economist* posed the question of whether the industry will respond to climate change by investing in the transition to renewable energy, or by doubling down on its current investments in a future based on fossil fuels.⁸⁶ Thus far, the industry has embraced the latter option.

Nor is the petroleum industry's immense consumption of regulation limited to the United States. Along with mining, the petroleum industry has significantly influenced the development and application of environmental regulations in Canada. From the very beginning of the development of regulatory frameworks and institutions for the management of the environment and natural resources in the late nineteenth century, environmental regulation in Canada has been defined by a governance paradigm of bipartite bargaining.⁸⁷ Participation in natural resources and environmental decision making was limited in practice to the relevant government agencies and affected private sector economic interests.⁸⁸ There were no formal opportunities for the public

⁸⁵ See e.g. Jesse D Jenkins & Valerie J Karplus, "Carbon Pricing under Binding Political Constraints" (2016) United Nations University WIDER Working Paper 2016/44, online: <www.wider.unu.edu/publication/carbon-pricing-under-binding-political-constraints> [Jenkins & Karplus, "Carbon Pricing"]; Jesse D Jenkins, "Political Economy Constraints on Carbon Pricing Policies: What are the Implications for Economic Efficiency, Environmental Efficacy, and Climate Policy Design?" (2014) 69 *Energy Policy* 467 [Jenkins, "Political Economy Constraints"]; Dale D Murphy, "The Business Dynamics of Global Regulatory Competition" in David Vogel & Robert A Kagan, eds, *Dynamics of Regulatory Change: How Globalization Affects National Regulatory Policies* (Los Angeles, CA: University of California Press, 2004) at 94–99.

⁸⁶ "Special Report: Oil: Breaking the Habit", *The Economist* (26 November 2016) at 3 [*The Economist*, "Breaking the Habit"].

⁸⁷ See George Hoberg, "Environmental Policy: Alternative Styles" in Michael Atkinson, ed, *Governing Canada: Institutions and Public Policy* (Toronto: Harcourt Brace Javanovich, 1993) at 307.

⁸⁸ See Mark Winfield, "A New Era of Environmental Governance in Canada: Better Discussions Regarding Infrastructure and Resource Development Projects" (May 2016), Metcalf Foundation Green Prosperity Papers at 9, online (pdf):

to learn about or comment on proposed projects; even informal opportunities were rare.⁸⁹ Even after the advent of environmental assessment legislation in the early 1970s, the extractive industries of mining, oil, and gas continued to shape environmental regulations to their own ends.⁹⁰ Meanwhile, industry lobbyists soon succeeded in indicting environmental assessment processes as “green tape” barriers to economic development,⁹¹ a characterization that continues to enjoy considerable bipartisan acceptance.⁹² For instance, a report recently prepared by the Canadian petroleum industry’s chief lobbying group, the Canadian Association of Petroleum Producers (CAPP), claimed that the industry continues to face mounting costs and barriers to growth due to changes in provincial and federal government policies and regulations such as methane emissions, carbon pricing, municipal and corporate tax increases, wetland policy, well liability and closure, and caribou

<metcalffoundation.com/stories/publications/a-new-era-of-environmental-governance-in-canada/> [Winfield, “A New Era of Environmental Governance”].

⁸⁹ See *ibid.*

⁹⁰ See e.g. David W Schindler, “The Impact Statement Boondoggle” (1976) 192:1 *Science* 509.

⁹¹ See e.g. Brendan Haley, “From Staples Trap to Carbon Trap: Canada’s Peculiar Form of Carbon Lock-In” (2011) 88:1 *Studies in Political Economy* 97 [Haley, “Staples Trap to Carbon Trap”]. For a more general discussion of the structural, political economy elements of the relationship between the state and various business interests in Canada in respect of environmental policy, see William Coleman & Grace Skogstad, eds, *Policy Communities and Public Policy in Canada: A Structural Approach* (Mississauga, ON: Copp Clark Pitman, 1990); Melody Hessing, Michael Howlett & Tracy Summerville, eds, *Canadian Natural Resource and Environmental Policy: Political Economy and Public Policy*, 2nd ed (Vancouver, BC: UBC Press, 2005), especially ch 2; Douglas Macdonald, *Business and Environmental Politics in Canada* (Toronto, ON: University of Toronto Press Higher Education, 2007).

⁹² See e.g. Shawn McCarthy, “Canadian Energy Industry Slams Liberal’s Environmental Assessment Rules”, *The Globe and Mail* (2 April 2018), online: <www.theglobeandmail.com/business/article-canadian-energy-industry-slams-liberals-environmental-assessment/>.

management.⁹³ In order to remove these so-called barriers to growth, CAPP proposed to streamline provincial and federal policies and regulations in order to achieve regulatory efficiencies, eliminate duplication, and create a framework for what it calls “shared sustainable prosperity in Canada.”⁹⁴ It is unclear how much—if any—room is left for policies and regulations designed to mitigate climate change, conserve biodiversity, and promote environmental protection in CAPP’s narrow conception of shared sustainable prosperity.

Canadian governments—federal and provincial—have largely internalized CAPP’s industry-specific view of efficient environmental regulation. They continue to act, not as neutral arbiters guarding the public interest, but as champions and cheerleaders of particular projects and technologies, a role consistent with the historical bipartite bargaining governance model.⁹⁵

How has the petroleum industry in particular succeeded in capturing public regulation? The world’s leading industrialized states—including Canada—are also oil states, whose citizens’ ways of living and working require substantial amounts of energy from oil and other fossil fuels.⁹⁶ This dependence shapes states’ economies and political dynamics. Economic and political policy options in such oil states are channeled by

⁹³ Canadian Association of Petroleum Producers, “Collaboration Between Industry and Government Key to Enhancing the Competitiveness of Alberta’s Oil and Natural Gas Sector Internationally: CAPP” (5 July 2017), online: <www.capp.ca/media/news-releases/economic-competitiveness-report-media-release>.

⁹⁴ *Ibid.* For CAPP’s full report, see Canadian Association of Petroleum Producers, “A Competitive Policy and Regulatory Framework for Alberta’s Upstream Oil and Natural Gas Industry”, (July 2017), online: <www.capp.ca/publications-and-statistics/publications/304673>.

⁹⁵ See Winfield, “A New Era of Environmental Governance”, *supra* note 88 at 18–19.

⁹⁶ See Timothy Mitchell, “Carbon Democracy” (2009) 38:3 *Economy and Society* 399 at 400 [Mitchell, “Carbon Democracy”]. See also Timothy Mitchell, *Carbon Democracy: Political Power in the Age of Oil* (New York: Verso, 2011) at 206, 250–53. For a similar analysis applicable to the Albertan political context, see Laurie E Adkin, ed, *First World Petro-Politics: The Political Ecology and Governance of Alberta* (Toronto: University of Toronto Press, 2016).

different modes of organizing the extraction, production, transport, and consumption of energy. These modes are effected not only by arrangements of people, finance, and technical, scientific, and legal expertise, but also violence.⁹⁷ In particular, the international oil industry has played a significant role in shaping economic and political priorities and policies in oil states, including the range of potential policies for environmental protection. The industry as a whole has, moreover, shaped the recent history of much of the world. Oil is still the largest and most valuable product of the energy industry, and is the highest-traded commodity in the world.⁹⁸ The Global *Fortune* 500's top ten listed companies includes both oil producers and companies both dependent on and invested in oil, while the state-owned Saudi Aramco is larger still.⁹⁹ Oil fuels democracies and dictatorships alike, and oil products fuel over 90% of the world's transport.¹⁰⁰

2. OIL AND GAS CAPTURES CANADA

This relationship between the oil and gas industry and politics continues unabated today.¹⁰¹ As a former Canadian environment minister once remarked, “[t]here is no minister of the environment on Earth who can stop (the oil sands) from going forward, because there is too much money in it.”¹⁰² But money, while significant, is only part of the regulatory capture equation. In Canada, the petroleum industry's “ability to define the nature of policy problems and to promote particular

⁹⁷ See Mitchell, “Carbon Democracy”, *supra* note 96 at 401.

⁹⁸ See *The Economist*, “Breaking the Habit”, *supra* note 86 at 2.

⁹⁹ See *ibid.*

¹⁰⁰ See *ibid.*

¹⁰¹ Jason MacLean, “Paris and Pipelines? Canada's Climate Policy Puzzle” (2018) 32:1 *J Envtl L & Prac* 47 at 54 [MacLean, “Paris”].

¹⁰² Stéphane Dion, quoted in Haley, “Staples Trap to Carbon Trap”, *supra* note 91 at 97, citing Robert Collier, “Fueling America: Oil's Dirty Future”, *San Francisco Chronicle* (22 May 2005), online: <www.sfgate.com/green/article/fueling-america-oil-s-dirty-future-Canadian-2668998.php>.

solutions is remarkable.”¹⁰³ Regarding environmental assessment, for example, the industry has not only lobbied “successfully for its chosen reforms, it has also played and continues to play a leading role in drafting its preferred amendments to existing environmental legislation.”¹⁰⁴ Accordingly, Canada’s climate policies are largely about climate in name only. They are designed, instead, to further the special interests in continued oil and gas extraction and export. As a result, Canada is presently not on course to meet either its climate mitigation or sustainability commitments.¹⁰⁵ Worse still, Canada does not have a meaningful plan to do so. These are the consequences of capture.

Recent and ongoing examples of the petroleum industry’s political influence in Canada abound. Consider the federal government’s recent accession to the industry’s objections to new regulations calling for reductions in methane emissions, which were the only regulations in Canada’s climate policy regulating the emissions of this highly potent GHG.¹⁰⁶ The oil and gas industry convinced the federal government to

¹⁰³ MacLean, “Paris and Pipelines”, *supra* note 101 at 54.

¹⁰⁴ *Ibid.* See e.g. Jason MacLean, “Like Oil and Water? Canada’s Administrative and Legal Framework for Oil Sands Pipeline Development and Climate Change Mitigation” (2015) 2 *Extractive Industries & Society* 785. For a classic but still relevant historical account, including a discussion of oil and gas development as a continuation of the staples theory of Canadian economic production, see John Richards & Larry Pratt, *Prairie Capitalism: Power and Influence in the New West* (Toronto: McClelland and Stewart Limited, 1979) at 11–12.

¹⁰⁵ See Commissioner of the Environment and Sustainable Development, *Perspectives on Climate Change Action in Canada—A Collaborative Report from Auditors General—March 2018* (27 March 2018), online: <www.oag-bvg.gc.ca/internet/English/parl_otp_201803_e_42883.html#hd2b> [Commissioner of the Environment and Sustainable Development, “A Collaborative Report”]; Commissioner of the Environment and Sustainable Development, “Report 2—Canada’s Preparedness to Implement the United Nations Sustainable Development Goals” in *2018 Spring Reports of the Commissioner of the Environment and Sustainable Development* (24 April 2018), online: <www.oag-bvg.gc.ca/internet/English/att__e_43001.html> [Commissioner of the Environment and Sustainable Development, “Preparedness to Implement the SDGs”].

¹⁰⁶ Government of Canada, “About Methane Emissions” (last modified 01 April 2019), online: *Global Methane Initiative* <www.canada.ca/en/environment-climate-change/>

delay the date of compliance. As a result, they effectively obtained at least three additional years of unregulated—and therefore, legally limitless—pollution. Moreover, the industry continues to push for higher emission limits and less frequent inspections. Each of these concessions would undercut the public interest purpose of the regulations.¹⁰⁷ Meanwhile, the Alberta provincial government is reportedly underestimating total methane emissions levels from the upstream oil and gas sector by 25% to 50%, clearly suggesting the need for stronger, not weaker, federal and provincial emissions caps and monitoring.¹⁰⁸

The federal government also recently weakened its regulations concerning the Laurentian Channel Marine Protected Area by reducing the size of the protected area by more than 33% of its original plotting in 2007, and by carving out a number of exceptions for offshore oil and gas exploration and drilling. The government conceded that it changed these regulations after fossil fuels lobbyists raised concerns with respect to limitations on potential future activities.¹⁰⁹ According to the World

services/climate-change/global-methane-initiative/about-methane-emissions.html>.

¹⁰⁷ See Ed Whittingham & Diane Regas, “Trudeau Must Hold the Line on New Methane Rules”, *The Globe and Mail* (11 June 2017), online: <www.theglobeandmail.com/report-on-business/rob-commentary/trudeau-must-hold-the-line-on-canadas-new-methane-rules/article35280646/>. As of this writing, the petroleum industry is also arguing against site-specific inspections while advocating in favour of indirect, satellite-based monitoring and self-regulated self-inspections, both of which would significantly weaken the enforcement of Canada’s proposed regulations when and if they ultimately come into force: Carl Meyer, “Trudeau Government Says Canada will avoid Billions of Dollars in Losses from New Crackdown on Oilpatch Pollution”, *National Observer* (26 April 2018), online: <www.nationalobserver.com/2018/04/26/news/trudeau-government-says-canada-will-recover-billions-dollars-new-crackdown-oilpatch>.

¹⁰⁸ See Matthew R Johnson et al, “Comparisons of Airborne Measurements and Inventory Estimates of Methane Emissions in the Alberta Upstream Oil and Gas Sector” (2017) 51:21 *Environ Sci Technol* 13008 at 13015.

¹⁰⁹ See Sigrid Kuehnemund quoted in James Wilt, “Industry Sways Feds to Allow Offshore Drilling in Laurentian Channel Marine Protected Area”, *The Narwhal* (22 July 2017), online: <thenarwhal.ca/industry-sways-feds-allow-offshore-drilling-laurentian-channel-marine-protected-area>.

Wildlife Fund's lead specialist for oceans, the federal government has been much more willing to concede to industry interests and concerns than to listen to the scientists who are making the evidence-based recommendations about the standards of protection that are needed for the site.¹¹⁰ It is hardly surprising, then, that Canada is failing to meet its international commitments under the UN Convention on Biodiversity.¹¹¹ This, in turn, undermines Canada's capacity to meaningfully contribute to the achievement of the UN's SDGs (goals 14 and 15 in particular, which concern, respectively, the conservation of oceans, seas, and marine resources, and terrestrial biodiversity).¹¹²

The most recent example of industry's political influence is the federal government's decision to scale back its planned national carbon price to appease particular carbon-intensive industries' competitiveness

¹¹⁰ *Ibid.* This example is by no means an outlier. See generally David Schindler, "Facts Don't Matter: Harper is Gone, but Pro-Development Governments Continue to Ignore Science", *Alberta Views* (10 July 2017), online: <albertaviews.ca/facts-dont-matter>.

¹¹¹ See Gloria Galloway, "Canada Lags in Conservation Efforts", *The Globe and Mail* (24 July 2017), online: <www.theglobeandmail.com/news/politics/canada-lagging-behind-on-commitment-to-protect-lands-and-fresh-water-reportsays/article35779173>.

¹¹² United Nations Department of Economic and Social Affairs, *Sustainable Development Goals*, online: <sustainabledevelopment.un.org/?menu=1300>. In a recent development, however, the federal government announced an ostensible ban on deep-sea mining and oil-and-gas drilling within marine protected areas. At the same time, concessions to industry remain. For example, existing oil and gas licenses will not be cancelled, and may be renewed in the future, effectively grandfathering currently active industry entities. Moreover, the government's ban does not prohibit drilling or other industrial activities in marine refuge areas. Rather, applications to drill and otherwise operate in such areas will be determined on a case-by-case impact assessment basis, which may allow detrimental development to occur notwithstanding the government's ban. See James Wilt, "Canada Bans Deep-Sea Mining, Oil and Gas Drilling in Marine Protected Areas", *The Narwhal* (26 April 2019), online: <www.thenarwhal.ca/canada-bans-deep-sea-mining-oil-and-gas-drilling-in-marine-protected-areas>.

concerns.¹¹³ Following what was described in the media as “a closed-door meeting with industry officials”,¹¹⁴ Environment and Climate Change Canada issued new regulatory guidelines lowering the percentage of emissions on which the largest emitters will have to pay a carbon price of \$20 per tonne as of the already-delayed date of January 2019.¹¹⁵ Under the government’s initially proposed scheme, which it developed after consultations with a comparatively broader array of stakeholders (including academics), heavy-emitting companies (i.e. whose facilities emit at least 50 kilotonnes of GHG equivalent per year) would pay the carbon price on approximately 30% of their emissions after receiving credits on emissions up to 70% of their specific industry average. Following further consultations with affected industries (but with no other stakeholders), that figure was reduced to 20% (meaning credits on emissions will now be allocated for up to 80% of the relevant industry average, including the mining, potash, pulp and paper, and oil refining industries). This rule change was accompanied by a further reduction to 10% of the industry average for so-called energy-intensive trade-sensitive

¹¹³ See Shawn McCarthy, “Ottawa to Dramatically Scale Back Carbon Tax on Competitiveness Concerns”, *The Globe and Mail* (1 August 2018), online: <www.theglobeandmail.com/business/industry-news/energy-and-resources/article-ottawa-to-dramatically-scale-back-carbon-tax-on-competitiveness>.

¹¹⁴ *Ibid.*

¹¹⁵ For further background information regarding the design of the national carbon price, including its initial implementation schedule, see Environment and Climate Change Canada, News Release, “Government of Canada Announces Pan-Canadian Pricing on Carbon Pollution” (3 October 2016), online: <www.canada.ca/en/environment-climate-change/news/2016/10/government-canada-announces-canadian-pricing-carbon-pollution.html>. For technical details, see Government of Canada, “Technical Paper: Federal Carbon Pricing Backstop” (June 2017), online: <www.canada.ca/en/services/environment/weather/climatechange/technical-paper-federal-carbon-pricing-backstop.html>. Regarding the delay of the plan’s implementation, see The Canadian Press, “Provinces Have until the End of 2018 to Submit Carbon Price Plans: McKenna”, *CBC News* (15 December 2017), online: <www.cbc.ca/news/politics/carbon-price-2018-mckenna-1.4450739>.

industries, including cement, steel, iron, lime, and nitrogen.¹¹⁶ As a result, the government has by way of these negative subsidies provided more relief to industry than any credible, independent analysis has deemed justified by the competitiveness concerns of carbon leakage (i.e. emitters moving to other jurisdictions with comparatively weaker carbon regulations).¹¹⁷ This is yet another example *par excellence* of Stigler's theory of regulatory capture.

Such examples of regulatory capture are “disquieting, and disquietingly typical, in Canada.”¹¹⁸ They help illustrate the social and political dynamics of carbon democracies and reflect “an emerging—if not already firmly established—consensus view of the way that carbon-intensive industries effectively shift energy and environmental regulations away from the broader public interest in climate change mitigation”¹¹⁹ and environmental stewardship more generally towards their own special interests.¹²⁰

Not only are these examples of capture consistent with Stigler's theory of regulatory capture, these examples of capture are achieved through the very tactics first described and advocated by the Powell Memo. The “mechanisms by which carbon democracies are created and reproduced . . . extend far beyond the by-now familiar tactics” of mere lobbying, “the revolving door circulating” petroleum and other carbon-intensive industry representatives “in and out of government

¹¹⁶ See Yakabuski, *supra* note 40. For further details, see Canada, “Update on the Output-Based Pricing System: Technical Backgrounder” (27 July 2018), online: <www.canada.ca/en/services/environment/weather/climatechange/climate-action/pricing-carbon-pollution/output-based-pricing-system-technical-backgrounder.html>.

¹¹⁷ See Isabelle Turcotte, “We Need to Hold the Line on Carbon Pricing: Digging into the Federal Government's Response to Industry Concerns” (7 August 2018), online (blog): *Pembina Institute* <www.pembina.org/blog/we-need-to-hold-line-carbon-pricing>.

¹¹⁸ MacLean, “Paris and Pipelines”, *supra* note 101 at 55.

¹¹⁹ *Ibid.*

¹²⁰ See e.g. Jenkins, “Political Economy Constraints” *supra* note 85; Murphy, *supra* note 85 at 94–99.

regulatory agencies” (for example, the National Energy Board, and the Alberta Energy Regulator), and political campaign financing.¹²¹ As Adkin and her collaborators illustrate in their comprehensive account of Alberta’s “first world petro-state”,¹²² a carbon democracy is “achieved and sustained through the coordinated operation of very particular and highly stylized governance practices, including:”¹²³

- *Media campaigns* that emphasize and normalize the employment and economic benefits of oil and gas production. In 2014, for example, CAPP launched a social media campaign in support of the Northern Gateway oil pipeline proposal (among others) called “Canada’s Energy Citizens.” The campaign urged Canadians to identify as “energy citizens,” and to “join the team” and become an “industry advocate”.¹²⁴ A more recent example of this practice is an online campaign called “Keep Canada Working,” which appears to be a seamless public-private partnership between the federal government, the provincial governments of Alberta and Nova Scotia, and corporate interests invested in the completion of the Trans Mountain pipeline expansion.¹²⁵
- *Industry “grassroots community engagement”* projects whereby the petroleum industry players form and/or fund not-for-profit organizations to promote their interests in local communities, such as “Synergy Alberta,” whose mission was one of “fostering

¹²¹ MacLean, “Paris and Pipelines”, *supra* note 101 at 55.

¹²² Adkin, *supra* note 96 at 14. These tactics are further discussed in MacLean, “Paris and Pipelines”, *supra* note 101 at 55–56.

¹²³ MacLean, “Paris and Pipelines”, *supra* note 101 at 55. The examples that follow below are drawn from *ibid.*

¹²⁴ Angela V Carter, “The Petro-Politics of Environmental Regulation in the Tar Sands” in Adkin, *supra* note 96 at 169 [Carter, “Environmental Regulation in the Tar Sands”].

¹²⁵ See Keep Canada Working, “About Keep Canada Working”, online: <keepcanadaworking.ca/about>.

and supporting mutually satisfactory outcomes in Alberta communities.”¹²⁶ One critic of “Synergy Alberta” characterized it as a “civil peacekeeping organization” that measures success by pipelines built, oil wells dug, and profits reaped.¹²⁷ Enbridge, a major pipeline proponent, similarly created a coalition of local councillors and business owners called the “Northern Gateway Alliance” to promote the Northern Gateway pipeline.¹²⁸

- *Community philanthropy.* Suncor, for instance, has made significant financial donations (that is, in the millions of dollars) to help establish and develop the Northern Lights Regional Health Foundation’s programs, the Suncor Energy Centre for the Performing Arts, and the Suncor Community Leisure Centre in Fort McMurray.¹²⁹
- *Industry funding for postsecondary educational institutions,* including the funding of targeted programs or facilities in colleges and universities to generate a skilled labour force and scientific research useful to industry, both of which are substantially subsidized by general tax revenues.¹³⁰ A case in point is the University of Calgary’s Institute for Sustainable Energy, Environment and Economy (ISEEE), which was funded by the petroleum industry in 2003 to increase conventional and unconventional oil recovery rates.¹³¹ In 2004, Imperial Oil Limited similarly gave \$10 million to the

¹²⁶ Carter, “Environmental Regulation in the Tar Sands”, *supra* note 124 at 169.

¹²⁷ Gordon Jaremko, “Disaster Relief Now Means Healing Relations”, *Edmonton Journal* (20 November 2006) at A16.

¹²⁸ See Carter, “Environmental Regulation in the Tar Sands”, *supra* note 124 at 170.

¹²⁹ See *ibid.*

¹³⁰ See *ibid.*

¹³¹ See *ibid.*

University of Alberta for its Imperial Oil Centre for Oil Sands Innovation.¹³²

Regulatory capture is thus an “ongoing accomplishment.”¹³³ In the illustrative case of Alberta, the “tar sands industry works to protect billions of dollars of investments and profits” through political lobbying, political funding, public relations campaigns, local engagement activities, and collaborating with (and in some instances co-opting) the public education system.¹³⁴ “Captured by these strategies, and chronically dependent”¹³⁵ on petroleum development revenues and jobs for its citizens,¹³⁶ successive Alberta governments have “legitimized and protected tar sands projects.”¹³⁷ The “result—besides an ineffective environmental regulatory regime—is the ideological identification” of the petroleum industry’s private interest with the broader public interest.¹³⁸ This identification is reflected and further reproduced by popular slogans such as “Alberta *is* energy”,¹³⁹ “what’s good for oil is good

¹³² See *ibid.* See also Raffy Boudjikian, “How TransAlta Used a University-Sanctioned Research Project to Lobby for the Coal Industry”, *CBC News* (24 July 2018), online: <www.cbc.ca/news/canada/edmonton/transalta-coal-report-1.4752314>.

¹³³ MacLean, “Paris *and* Pipelines”, *supra* note 101 at 55.

¹³⁴ See Carter, “Environmental Regulation in the Tar Sands”, *supra* note 124 at 168–170.

¹³⁵ MacLean, “Paris *and* Pipelines”, *supra* note 101 at 56.

¹³⁶ This dependence neatly exemplifies Stigler’s argument (discussed above) that governing political parties are vulnerable to industry capture because of their continuous need to maintain their organizational and electoral appeal. See Stigler, “Economic Regulation”, *supra* note 8 at 12.

¹³⁷ See Carter, “Environmental Regulation in the Tar Sands”, *supra* note 124 at 168–170.

¹³⁸ MacLean, “Paris *and* Pipelines”, *supra* note 101 at 56.

¹³⁹ Randolph Haluza-DeLay & Angela V Carter, “Social Movements Scaling Up: Strategies and Opportunities in Opposing the Oil Sands Status Quo” in Adkin, *supra* note 96 at 484 [emphasis in original].

for Alberta”,¹⁴⁰ and “Alberta’s oil sands are the lifeblood of our economy.”¹⁴¹

This rhetorical strategy also operates at the federal level in Canada. It is repeatedly reflected and reproduced by the current Liberal government’s oft-repeated slogan that the “environment and the economy go hand in hand”. In announcing the approval of the controversial Trans Mountain pipeline expansion, which will arguably expand oil sands production and Canada’s GHG emissions,¹⁴² Prime Minister Justin Trudeau remarked that “responsible resource development can go hand in hand with strong environmental protection.”¹⁴³

¹⁴⁰ Kevin Taft, *Oil’s Deep State: How the Petroleum Industry Undermines Democracy and Stops Action on Global Warming—in Alberta, and in Ottawa* (Toronto, ON: James Lorimer & Company Ltd, Publishers, 2017) at 205.

¹⁴¹ As Adkin notes, this identification is not unique to Alberta, *supra* note 96 at 21:

That identification of the interests of oil producers with the interests of the citizenry as a whole—one both actively promoted by governments and (the same) corporations and passively internalized by citizens as consumers of downstream products and as automobile owners—operates as powerfully in Alberta as it does in most parts of the USA.

The same identification holds for Canada writ large. As Prime Minister Justin Trudeau told an applauding audience of Houston oil industry executives: “No country would find 173 billion barrels of oil and just leave them”: Jeremy Berke, “No Country Would Find 173 Billion Barrels of Oil and Just Leave Them”, *Business Insider* (10 March 2017), online: <www.businessinsider.com/trudeau-gets-a-standing-ovation-at-energy-industry-conference-oil-gas-2017-3>.

¹⁴² See Mark Jaccard, “Trudeau’s Orwellian Logic: We Reduce Emissions by Increasing Them”, *The Globe and Mail* (20 February 2018), online: <www.theglobeandmail.com/opinion/trudeaus-orwellian-logic-reduce-emissions-by-increasing-them/article38021585/> [Jaccard, “Trudeau’s Orwellian Logic”].

¹⁴³ Office of the Prime Minister of Canada, “Prime Minister Justin Trudeau’s Pipeline Announcement” (29 November 2016), online: <pm.gc.ca/eng/news/2016/11/30/prime-minister-justin-trudeaus-pipeline-announcement> [Office of the Prime Minister of Canada, “Pipeline Announcement”].

3. THE CONSEQUENCES OF CAPTURE

The government's approval of an expanded oil sands pipeline as part and parcel of its climate change policy was characterized by one experienced energy economist as "Orwellian"—the curious logic that Canada can only reduce its GHG emissions by approving the construction of new oil pipelines and thereby expanding production from Alberta's oil sands, the fastest growing source of Canada's GHG emissions and the primary reason why Canada is not on track to meeting its emissions reduction target for 2030 under the UN Paris Agreement.¹⁴⁴ Unsurprisingly, the Commissioner of the Environment and Sustainable Development's 2018 Report on Climate Action in Canada reached the following conclusion:

Canada's auditors general found that most governments in Canada were not on track to meet their commitments to reducing greenhouse gas emissions and were not ready for the impacts of a changing climate. On the basis of current federal, provincial, and territorial policies and actions, Canada is not expected to meet its 2020 target for reducing greenhouse gas emissions. Meeting Canada's 2030 target will require substantial effort and actions beyond those currently planned or in place. Most Canadian governments have not assessed and, therefore, do

¹⁴⁴ Jaccard, "Trudeau's Orwellian Logic", *supra* note 142. For further discussion of the contradictions of Canada's climate plan, see e.g. Jason MacLean, "Will We Ever Have Paris? Canada's Climate Change Policy and Federalism 3.0" (2018) 55:4 *Atla L Rev* 889; Jason MacLean, "Alberta's Support of the National Climate Plan is Nice, but Hardly Necessary", *Maclean's* (24 February 2018), online: <www.macleans.ca/news/canada/albertas-support-of-the-national-climate-plan-is-nice-but-hardly-necessary>; Jason MacLean, "The Trans Mountain Saga as a Public Policy Failure", *Policy Options* (13 April 2018), online: <policyoptions.irpp.org/magazines/april-2018/trans-mountain-saga-public-policy-failure/>. See also *Paris Agreement*, being an Annex to the *Report of the Conference of the Parties on its Twenty-First Session, Held in Parties from 30 November to 13 December 2015 — Addendum Part Two: Actions Taken by the Conference of the Parties at its Twenty-First session, 29 January 2016*, Decision 1/CP.21, CP, 21st Sess, FCCC/CP/2015/10/Add.1 at 21-36, online (pdf): UNFCCC <unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf>.

not fully understand what risks they face and what actions they should take to adapt to a changing climate.¹⁴⁵

The Commissioner of the Environment and Sustainable Development recently reached a substantially similar—and equally unsurprising—conclusion with respect to Canada’s progress towards implementing the UN SDGs.¹⁴⁶ In September 2015, the 193 member states of the General Assembly of the United Nations, including Canada, unanimously adopted the resolution “Transforming our world: the 2030 Agenda for Sustainable Development.”¹⁴⁷ The 2030 Agenda contains 17 aspirational goals (SDGs) for achieving socially, economically, and environmentally sustainable development worldwide. The Commissioner’s Spring 2018 audit focused on whether the federal government was prepared to implement the United Nations’ 2030 Agenda for Sustainable Development. The Commissioner concluded that the government has “not adequately prepared to implement the United Nations’ 2030 Agenda for Sustainable Development.”¹⁴⁸ At the conclusion of the Commissioner’s audit, she found that “there was no governance structure and limited national consultation and engagement on the 2030 Agenda. There was no implementation plan with a system to measure, monitor, and report on progress nationally.”¹⁴⁹

This stark conclusion ought to be startling, but in light of the oil and gas industry’s capture of Canadian climate and sustainability policies (and environmental law more generally still), it follows rather logically. Economic concerns—and privatized special interests in particular—consistently trump environmental aspirations. The result is a body of ineffective environmental laws and policies.

¹⁴⁵ Commissioner of the Environment and Sustainable Development, “A Collaborative Report”, *supra* note 105 [emphasis added].

¹⁴⁶ Commissioner of the Environment and Sustainable Development, “Preparedness to Implement the SDGs”, *supra* note 105.

¹⁴⁷ *Ibid.*

¹⁴⁸ *Ibid.*

¹⁴⁹ *Ibid.*

The problem the oil and gas industry poses for democracy “is not limited, then, to the already difficult fact that the ways that citizens of states like Canada have become accustomed to eating, travelling, housing, and consuming other goods and services are dependent on very large amounts of energy derived from oil and other fossil fuels, and are therefore unsustainable.”¹⁵⁰ Yet more problematic is the possibility that the regulatory regime that aided and abetted the development of the fossil fuels era may not be adaptable to the urgent and unprecedented challenge of transitioning toward a new, sustainable era based on renewable and otherwise carbon-neutral energy.¹⁵¹

The root problem, the primary obstacle standing in the way of Canada meeting its climate change commitments under the UN Paris Agreement and contributing to the UN’s SDGs, therefore, is the oil and gas industry’s capture, not only of Canada’s environmental laws, regulations, and policies, but also its capture of Canada’s *collective imagination* of what its climate and sustainable policy options should and *could* be. Commenting on Canada’s recent decision to reduce the stringency of its carbon price, one mainstream media commentator effectively apologized for the government’s backsliding by asserting that “Canada’s short- and medium-term competitiveness cannot be overlooked” while making no further mention of Canada’s climate commitments.¹⁵² But still the best illustration of Canada’s oil-infused environmental imagination belongs to Prime Minister Justin Trudeau, who added in his announcement approving the Trans Mountain pipeline expansion that “I have said many times that there isn’t a country in the world that would find billions of barrels of oil and leave it in the ground while there is a market for it.”¹⁵³

Canadian environmental law scholars have long lamented this lack of policy imagination. As Wood, Tanner, and Richardson observed, Canada

¹⁵⁰ MacLean, “Paris *and* Pipelines”, *supra* note 101 at 57.

¹⁵¹ See Mitchell, “Carbon Democracy”, *supra* note 96 at 400–01.

¹⁵² Yakabuski, *supra* note 40.

¹⁵³ Office of the Prime Minister of Canada, “Pipeline Announcement”, *supra* note 143.

has not only consistently failed to imagine new and innovative environmental policies, but it has also failed to import innovative ideas from other jurisdictions. “The real problem therefore is not the lack of legal tools but a domestic failure of policy imagination.”¹⁵⁴ But it is not so much that Canada lacks imagination as it is that Canada’s imagination for innovative environmental laws and policies has been captured and co-opted by the special interests of “[t]hat political juggernaut, the petroleum industry”.¹⁵⁵

Merely calling attention to this kind of capture, however, will do little to change Canada’s current regulatory trajectory. The petroleum industry’s capture of Canadian environmental law and policy must be countered. This calls for a new model of law reform, a model that, to begin with, must avoid the “Catch-22” of capture, which is addressed next.

III. THE CATCH-22 OF CAPTURE

Posing the question of what can be done about lobbying in the United States, one commentator creatively suggested that the “House and Senate offices could officially partner with local universities, particularly public policy and law schools. Professors could serve as expert advisers” to elected officials.¹⁵⁶ This reform would attempt to push policymaking in a smarter, more evidence-based direction. Practically, it would provide policymakers with the expertise to stand up to industry experts.¹⁵⁷

¹⁵⁴ Wood, Tanner & Richardson, *supra* note 1 at 1039. See also Mark S Winfield, “An Unimaginative People: Instrument Choice in Canadian Environmental Law and Policy” (2008) 71 Sask L Rev 79 at 80–81.

¹⁵⁵ Stigler, “Economic Regulation”, *supra* note 8 at 3.

¹⁵⁶ Drutman, *supra* note 52 at 233–34.

¹⁵⁷ See *ibid* at 236. For a substantially similar reform proposal, see Lindsey & Teles, *supra* note 3 at 161–64. They recommend increasing regulatory agency staff sizes and remuneration rates in order to assemble and retain in-house regulatory expertise capable of countering industry lobbyists informational advantage. As promising as these proposals are, they are contingent (at least initially) on the agency of already captured regulatory bodies, which plainly accounts for why such rather obvious reforms are rarely proposed or implemented.

This proposal is compelling on its face. Its principle strength, as compared to many other reform programs, is that it seeks to directly embrace the otherwise-captured political process, rather than circumvent the political process because that process has become subject to special interest capture.¹⁵⁸ And that would be true if this proposal *fully* embraced politics. But like so many other policy reforms, it hinges on the political agency of institutions—in this model, the US House and Senate—that are already subject to varying levels of capture, meaning their political agency is already constrained. This often precludes the very possibility of actually enacting the proposed reforms in the first place. This, what may be characterized as the “Catch-22” of reforming regulatory capture, similarly limits otherwise creative reform proposals, including the proposal that the (again, already captured) US Congress hire independent experts to advocate for and against a range of viewpoints on proposed legislative and regulatory proposals, at a fraction of the cost commanded by industry lobbyists, and stage debates among them.¹⁵⁹ As one observer of such proposals to escape capture and reform the regulatory process in the American congressional context explains, to try to enact such reforms is to run up directly against an already captured and deeply entrenched political regime, a regime which serves its incumbents—if not their constituents—very well. Consequently, the cynics greatly outnumber the genuine supporters of meaningful regulatory reform in Washington.¹⁶⁰ Put another way, if a reform proposal hinges on the free and voluntary initiative of otherwise captured legislators and administrative officials, the proposal is unlikely to succeed. If they had resources and independence from their industry captors sufficient to launch the reform and effectively escape, there would be no need for the reform, they would already have freed

¹⁵⁸ See Drutman, *supra* note 52 at 236.

¹⁵⁹ See Zephyr Teachout, “Original Intent: How the Founding Fathers Would Clean Up K Street”, (2009) 11 *Democracy Journal*, online: <democracyjournal.org/magazine/11/original-intent/>.

¹⁶⁰ See Robert G Kaiser, *So Much Damn Money: The Triumph of Lobbying and the Corrosion of American Government* (New York: Knopf, 2009) at 358.

themselves or avoided capture in the first place.¹⁶¹ This is the Catch-22 of regulatory capture reform.

The Canadian legislative and regulatory context has been characterized in substantially similar terms. An experienced commentator and practitioner of public affairs in Canada argues that representative government:

has given way to a world in which the prime minister's courtiers talk to a handful of senior Cabinet ministers, a few carefully selected deputy ministers, lobbyists, former public servants turned consultants, heads of friendly associations, and some CEOs of larger private firms. *This permeates all aspects of government—even regulation.*¹⁶²

The interesting but flawed reform proposals briefly canvassed above do rightly concentrate, however, on the significant informational advantage possessed and wielded by industry groups. Industries' superior financial resources (especially industries as concentrated as the petroleum industry) allow them to significantly shape what counts as relevant and useful evidence in the policymaking process (including the ability to complicate otherwise straightforward issues affecting the public interest).¹⁶³ While strict limits (or even an outright ban) on

¹⁶¹ A historical example may help to clarify this Catch-22 logic. In 1873, Friedrich Engels rejected the idea of a general workers' strike as a political instrument by likening it to ineffectual plans for the "holy month," a nationwide suspension of work proposed by the Chartist movement in the 1840s. In Engels' estimation, workers lacked the resources and organization to carry out a general strike. If they actually possessed such resources and organization, a general strike would be unnecessary in the first place, as they would already be powerful enough to overthrow the state. See Friedrich Engels, "The Bakuninists at Work" in Karl Marx & Friedrich Engels, eds, *Revolution in Spain* (London, UK: Lawrence & Wishart, 1939) (originally published in *Der Volkstaat*, 31 October and 5 November 1873).

¹⁶² Donald J Savoie, *What Is Government Good At? A Canadian Answer* (Montreal, QC: McGill-Queens University Press, 2015) at 266 [emphasis added]. As a case in point, see Mike De Souza, "High-Ranking Federal Officials Sped Up Trans Mountain Review after Phone Call from Kinder Morgan's Ian Anderson", *National Observer* (18 April 2018), online: <www.nationalobserver.com/2018/04/18/news/high-ranking-federal-officials-spied-trans-mountain-review-after-phone-call-kinder>.

¹⁶³ See Lindsey & Teles, *supra* note 3 at 133.

corporate contributions to electoral campaigns would be a welcome development, this alone would not diminish industries' and their lobbyists' capacity to use their informational advantage to influence policymaking and regulatory decision-making.¹⁶⁴ This is because the political environment in most policy and regulatory areas is "profoundly biased toward those with the resources to invest" in useful, practicable public policy information.¹⁶⁵

This bias, in turn, produces not only particular policies and regulations tailored to the special interests of industry sectors, but just as importantly, it also produces an *absence* of viable public interest policy and regulatory alternatives in those sectors. As one observer argues in respect of the 2008 financial crisis:

No coherent alternative model had been developed, and no effort had been made to build a constituency for financial reform. While we [in the United States] had think tanks keeping tabs on various aspects of the economy, from the federal budget to the labor market, no one was systematically watching the development of super-complicated financial institutions, noting the risk posed by financial derivatives and *promoting alternatives*.¹⁶⁶

Substitute the terms "environment" and "climate change" for the terms "economy" and "financial derivatives," and the result yields an apt account of the lack of policy imagination displayed by Canada discussed above in Part II. The absence of compelling environmental law and policy alternatives, particularly alternatives capable of attracting broad appeal, is patent in Canada today.

By way of anecdotal illustration, consider the following account of an environmentalist's "quandary on pipelines",¹⁶⁷ relating in the following

¹⁶⁴ See *ibid.*

¹⁶⁵ *Ibid* at 139.

¹⁶⁶ Mark Schmitt, "Machinery of Progress", *The American Prospect* (18 December 2009), cited in Lindsey & Teles, *supra* note 3 at 135 [emphasis added].

¹⁶⁷ Adrienne Tanner, "The Environmentalist's Quandary on Pipelines", *The Globe and Mail* (27 April 2018), online: <www.theglobeandmail.com/canada/british-columbia/article-the-environmentalists-quandary-on-pipelines/>.

terms an environmentalist's change of mind about his opposition to the Trans Mountain pipeline expansion: "I know this sounds traitorous, but I think progressive activists should back off action against the Trans Mountain pipeline if it threatens the establishment of a national carbon tax."¹⁶⁸ This environmentalist's difficult conversion to the cause of approving new oil pipelines and long-term fossil fuels infrastructure in order to *reduce* GHG emissions was "governed by fears that killing the pipeline will spell the return of less environmentally conscious provincial and federal conservative governments."¹⁶⁹ Better, this fearful environmentalist concluded, "to mitigate the risk of [oil pipeline] spills as best we can, say yes to the pipeline and support a nationwide carbon tax, which will go further to reduce greenhouse gasses."¹⁷⁰ This is tortured logic, to be sure, but a logic understandably borne of the lack of a credible environmental law and policy framework capable of generating, deliberating on, and choosing among credible alternatives in the public interest.¹⁷¹ So paradoxically captured is Canada's environmental law and policy imagination that a climate change policy that does not somehow appease the oil and gas industry appears, not only impracticable, but *unthinkable*.

An additional piece of recent anecdotal evidence from the United States further illustrates this paradox. Two former US senators turned oil and gas industry lobbyists proposed a federal carbon tax of US\$40 per

¹⁶⁸ *Ibid.*

¹⁶⁹ *Ibid.*

¹⁷⁰ *Ibid.* This imagined compromise, of course, was arrived at prior to the federal government's decision to reduce the stringency (and therefore the effectiveness) of its national carbon price. The compromise is now an even worse bargain from a climate-mitigation perspective.

¹⁷¹ For an insightful treatment of the interrelationships among energy, culture, and discourse, see Imre Szeman, Jennifer Wenzel & Patricia Yaeger, eds, *Fueling Culture: 101 Words for Energy and Environment* (New York: Fordham University Press, 2017).

tonne.¹⁷² On its own, this price point would be insufficient to reduce GHG emissions in line with the United States' GHG-reduction commitments under the UN Paris Agreement (from which the United States has indicated that it is withdrawing),¹⁷³ but it would still be considered a good start, and far better than no price at all. But the Senators-turned-lobbyists did not simply propose a carbon tax. Rather, they proposed a compromise: a federal carbon tax in exchange for (1) the outright repeal of the Obama-era Clean Power Plan, which would allow the federal Environmental Protection Agency to regulate and reduce carbon emissions;¹⁷⁴ and (2) a grant of federal- and state-level immunity to emitters from tort liability for their contributions to climate change and its costs. This would effectively reverse the polluter-pays principle and shift the financial burden of adapting to climate change (the costs of

¹⁷² See Trent Lott & John Breaux, "Here's How to Break the Impasse on Climate", *The New York Times* (20 June 2018), online: <www.nytimes.com/2018/06/20/opinion/climate-change-fee-carbon-dioxide.html>.

¹⁷³ For a comprehensive analysis of carbon pricing levels in relation to GHG emissions reduction targets, see Carbon Pricing Leadership Coalition, *Report of the High-Level Commission on Carbon Pricing* (29 May 2017) at 3, online: <www.carbonpricingleadership.org/report-of-the-highlevel-commission-on-carbon-prices/>. See also Richard S Tol, "The Social Cost of Carbon" (2011) 3:1 Annual Review of Economics 419 (recommending a carbon price of US\$70); Jeffrey Ball, "Why Carbon Pricing Isn't Working: Good Idea in Theory, Failing in Practice", *Foreign Affairs* (July/August 2018), online: <www.foreignaffairs.com/articles/world/2018-06-14/why-carbon-pricing-isnt-working>. The ideal carbon price may vary to some extent depending on a country's particular suite of climate policies and regulations, and where the cost is subject to politically binding constraints, other second-best carbon abatement strategies must also be pursued in addition to a continuously increasing carbon price. On this latter point, see Mark Jaccard, Mikela Hein & Tiffany Vass, "Is Win-Win Possible? Canada's Government Achieve Its Paris Commitment . . . and Get Re-Elected?" (20 September 2016) School of Resource and Environmental Management, Simon Fraser University, online (pdf): <<http://rem-main.rem.sfu.ca/papers/jaccard/Jaccard-Hein-Vass%20CdnClimatePol%20EMRG-REM-SFU%20Sep%2020%202016.pdf>>.

¹⁷⁴ See Natural Resources Defense Council, "What Is the Clean Power Plan?" (29 September 2017), online: *National Resources Defense Council* <www.nrdc.org/stories/how-clean-power-plan-works-and-why-it-matters>.

which are estimated as being in the trillions of dollars) from private emitters to the public.

In response to environmentalists' criticisms,¹⁷⁵ particularly the counterargument that there is no necessary connection between a carbon tax and a waiver of liability for fossil fuels companies,¹⁷⁶ a US Congressman spoke out in favour of the proposed deal. The congressman's rhetoric is instructive. First, in an attempt to diminish criticism of oil companies, he stated that "[b]eating up on [them]" makes for "cheap applause."¹⁷⁷ He also characterized tort liability lawsuits against oil companies (which are presently being filed in courts across the United States) as unlikely to succeed or have any effect on carbon emissions.¹⁷⁸ Most tellingly, the congressman argued that convincing oil companies to "acquiesce" to a carbon tax would go a long way toward successfully enacting the tax. If that means passing on what the congressman characterizes as a few "long-shot lawsuits," then the congressional calculus favours the trade-off.¹⁷⁹ Not unlike the environmentalist conflicted about pipelines described above, it does not occur to this congressman to challenge the regulatory power wielded by the fossil fuels industry; rather, he treats the industry almost as if it were sovereign. As such, no climate policy without its acceptance is even thinkable. However, no climate policy acceptable to today's fossil fuels industry is even worth the trouble.

That said, unlike our conflicted environmentalist, there are good reasons to surmise that the congressman is not arguing in good faith. For

¹⁷⁵ See e.g. Lee Wasserman & David Kaiser, "Beware of Oil Companies Bearing Gifts", *The New York Times* (25 July 2018), online: <www.nytimes.com/2018/07/25/opinion/carbon-tax-lott-breaux.html>.

¹⁷⁶ See *ibid.*

¹⁷⁷ Scott Peters, "Time for a Carbon Tax", Letter to the Editor, *The New York Times* (3 August 2018), online: <www.nytimes.com/2018/08/03/opinion/letters/carbon-tax-litigation-oil-companies.html>. Peters, a California Democrat, is as of this writing a member of the US House Energy and Commerce Committee's Subcommittee on Energy, and of the bipartisan Climate Solutions Caucus.

¹⁷⁸ See *ibid.*

¹⁷⁹ *Ibid.*

one, if tort lawsuits against emitters are such long shots, why worry about them at all, much less make immunity from them a condition precedent for support of a carbon tax? Second, and more importantly, the congressman uncritically accepts and represents that a carbon tax of US \$40 per tonne would constitute an effective GHG-reduction policy. This ignores the fact that Exxon, at the same time that it was supporting this proposal, was also publicly announcing its plans to produce 25% more oil by the year 2025.¹⁸⁰ It is safe to surmise that Exxon, like many other major GHG emitters, is utilizing an internal (or “shadow”) price on carbon for its own cost accounting purposes,¹⁸¹ and that the shadow price at which Exxon can remain profitable is well above US \$40 per tonne. On closer inspection, the proposal proffered by the oil and gas industry’s lobbyists and its captured supporters in the US Congress is plainly contrary to the public interest. The information presented to the public in its support is incomplete and misleading at best.

The best response to such biased, partial, and misleading information and expertise is better, independent, transparent, and tested information and expertise. Such information and expertise, however, tends not to be generated internally by policymaking and regulatory bodies. Neither can such bodies already subject to industry influence and capture be reasonably relied on to reform their own internal incentives and processes (recall Stigler’s analysis of the captured Interstate Commerce Commission). In order to avoid the “Catch-22” of regulatory capture and counter industries’ substantial informational advantage, academics in relevant fields of expertise (and in collaboration across disciplines) should take it upon themselves to actively assist regulators in pushing

¹⁸⁰ See Kevin Crowley, “Exxon Doubles Down on Oil: As Rivals Embrace Renewables, the Energy Giant is Betting on Continued Crude Demand”, *Bloomberg Businessweek* (15 June 2018), online: <www.bloomberg.com/news/articles/2018-06-15/exxon-doubles-down-on-oil>.

¹⁸¹ For an analysis of internal or “shadow” carbon prices, see e.g. Jason MacLean, “Trudeau’s Carbon Price Clever Politics, Not Credible Climate Policy”, *Policy Options* (14 October 2016), online: <policyoptions.irpp.org/magazines/october-2016/trudeaus-carbon-price-clever-politics-not-credible-climate-policy> [MacLean, “Trudeau’s Carbon Price”].

back against industry experts and thereby pushing regulation in a smarter direction in the public interest. The critical question is how best to do so? What mode of academic knowledge production and dissemination is best suited to contributing to this democratic mandate? Drawing on lessons learned from Canada's recent environmental regulatory review process, the article proceeds in the next Part below to canvass existing approaches and then argue for an emerging model of knowledge production and mobilization capable of generating viable policy and regulatory alternatives that can attract broad popular appeal. This last point—the necessity of attracting broad popular appeal—is critical. The argument advanced below is *not* that academic expertise alone is capable of countering regulatory capture. As discussed in Part I above, only a broad, countervailing democratic movement will be capable of countering the enormous economic and political power of the fossil fuels industry (along with its tributary carbon-intensive industries).¹⁸² The argument pursued below focuses on how academics can best assist in catalyzing such a movement.

IV. COUNTERING CAPTURE: LESSONS FROM CANADA'S ENVIRONMENTAL REGULATORY REVIEW PROCESS

A. SOLUTIONS FROM CANADIAN SCHOLARS 1.0

From an environmental protection and sustainability perspective, the era of Prime Minister Stephen Harper has been characterized as a “lost

¹⁸² Writing in *The New York Times* about how to counter California's continued subservience to the oil and gas industry, the noted environmental advocate and organizer Bill McKibben rightly observed that “in the end, it's up to the rest of us to ensure that he [California Governor Jerry Brown], and the California Legislature and leaders everywhere, do the right thing. *A large movement of citizens is the only power that can match the financial majesty of the oil industry*”: See Bill McKibben, “Free California of Fossil Fuels” *The New York Times* (8 August 2018), online: <www.nytimes.com/2018/08/08/opinion/fires-california-fossil-fuels.html> [emphasis added].

decade.”¹⁸³ Toward the end of the Harper government’s tenure, an audit performed by the Commissioner of the Environment and Sustainable Development concluded that in many key areas, the government lacked a clear plan to resolve the environmental issues likely to arise out of future economic development.¹⁸⁴ Regarding the government’s longstanding promise to regulate Canada’s petroleum industry, the Commissioner further observed that the government had only consulted on such regulations privately, through a small working group including one province (Alberta) and selected oil and gas industry representatives.¹⁸⁵

In response to this regulatory lacuna, over 60 Canadian scholars mobilized to collaboratively propose a pathway to a low-carbon economy. This new network, called Sustainable Canada Dialogues (SCD),¹⁸⁶ explained in its first report, “Acting on Climate Change: Solutions from Canadian Scholars”, that a thoughtful and systematic discussion of policy options was long overdue in Canada. SCD’s initial goal was to inspire and inform ambitious GHG emissions reductions before December 2015 and the 2015 Paris Climate Conference.¹⁸⁷ The collective made a number of policy and regulatory recommendations

¹⁸³ Winfield, “A New Era of Environmental Governance”, *supra* note 88 at 36; Jason MacLean, Meinhard Doelle & Chris Tollefson, “Polyjural and Polycentric Sustainability Assessment: A Once-in-a-Generation Law Reform Opportunity” (2016) 30:1 J Envtl L & Prac 35 at 36.

¹⁸⁴ See Canada, Officer of the Auditor General of Canada, *Commissioner of the Environment and Sustainable Development Releases Fall 2014 Report* (7 October 2014), online: <oag-bvg.gc.ca/internet/English/mr_20141007_e_39911.html> [Officer of the Auditor General of Canada, “Fall 2014 Report”].

¹⁸⁵ See *ibid.* Incidentally, in respect of the Harper government’s approach to environmental assessment, the Commissioner also expressed her concern that “some significant projects may not be assessed” (*ibid.*). This concern was then and remains telling; its significance is discussed below in the conclusion to this paper.

¹⁸⁶ Sustainable Canada Dialogues, “About Sustainable Canada Dialogues” (2019), online: <www.sustainablecanadialogues.ca/en/scd>.

¹⁸⁷ Sustainable Canada Dialogues, “Acting on Climate Change: Solutions from Canadian Scholars” (18 March 2015) at 8, online (pdf): <www.sustainablecanadialogues.ca/files/PDF_DOCS/SDC_EN_30march1r.pdf> [SCD, “Acting on Climate Change”].

based on the peer-reviewed scholarship of its members. The recommendations SCD provided ranged from pricing carbon to making low-carbon electricity production part of federal and provincial climate action plans, to rapidly adopting low-carbon transportation strategies throughout Canada, to integrating land use and energy infrastructure planning in climate mitigation policies, to encouraging the a low-carbon transformation of the building sector, to safeguarding biodiversity and water quality, to supporting sustainable fisheries, forestry, and agricultural practices, to implementing more participatory and open governance institutions.¹⁸⁸

However, there was little to no apparent take-up of these thoroughly researched evidence-based policy proposals by the (outgoing) Harper government. The Trudeau government, for its part, has begun to price carbon (see the discussion in Part III above) and has proposed reforms to the national building code, but neither policy reaches the level of ambition recommended by SCD.

There are a number of possible explanations for this, including perhaps the most obvious that, despite the brief national media attention paid to SCD's first report following its public launch in the spring of 2015, neither the Harper government nor the federal Liberal Party was sufficiently aware of SCD's recommendations.

There are, however, at least two other possible reasons why SCD's recommendations did not achieve the traction they deserve. The first is that the recommendations, despite being clearly and cogently crafted as well as accessibly communicated, assumed the form of policy aspirations rather than concrete policy proposals (the carbon price proposal being a partial exception). These were not so much concrete alternatives to the policies then in place as they were more general strategic directions and policymaking guidelines. These are instructive, but perhaps not as readily useful or amenable (without more detail) to short- to medium-term implementation, particularly in the context of a captured policy domain.

¹⁸⁸ See *ibid* at 28, 30, 33–34, 36–37, 45–46, 50.

The second possible explanation for the lack of traction achieved by SCD's recommendations is acknowledged—although not in so many words—in SCD's own discussion of oil and gas production in Canada. Working with 2012 figures, SCD's report noted that oil and gas production was responsible for more than three times the GHG emissions of the rest of Canada's industry.¹⁸⁹ Naturally, SCD recommended that Canada integrate the oil and gas production sector into the government's climate policies.¹⁹⁰ More specifically, SCD recommended the elimination of all direct and indirect subsidies to the petroleum industry¹⁹¹ (Canada first promised to do just that in 2009, but not only has it yet failed to do so, in 2016 the federal government locked-in subsidies to the liquefied natural gas (LNG) industry until (at least) 2025).¹⁹² In the short- to medium-term, SCD recommended that Canada develop a clear regulatory framework coherent with the transition to a low-carbon society and economy.¹⁹³ To help achieve these goals, SCD's report suggested that the federal and provincial governments *could orient the oil and gas industry*.¹⁹⁴

Would that it were so easy! Reasonable—urgent, even¹⁹⁵—as these recommendations are, their articulation alone is insufficient to ensure their implementation, especially in the Canadian context, where the petroleum industry has oriented the government (not vice versa), and such recommendations are thus caught up in the Catch-22 of regulatory capture reform discussed above. Nevertheless, the independent establishment of SCD as an arm's length academic network capable of generating the evidentiary basis for alternative policies and regulations in

¹⁸⁹ See *ibid* at 33.

¹⁹⁰ See *ibid* at 7, 33, 40.

¹⁹¹ See *ibid*.

¹⁹² See MacLean, "Trudeau's Carbon Price", *supra* note 181.

¹⁹³ See SCD, "Acting on Climate Change", *supra* note 187 at 33.

¹⁹⁴ See *ibid*.

¹⁹⁵ See e.g. Christiana Figueres, "Three Years to Safeguard Our Climate" (2017) 546 Nature 593.

the public interest of mitigating climate change and facilitating the transition to sustainability represents a *necessary first step* in developing an academic law reform model capable of countering capture.

To better understand how this academic law reform model can be developed further, it is useful to examine academics' participation in Canada's recent environmental regulatory review process. The level of academic (along with civil society) participation in this post-2015 environmental regulatory review process has been enormous, quite possibly the highest level of such participation over the past 25 years in Canada.¹⁹⁶ And yet, this perhaps unprecedented level of engagement yielded little if any enhancement of Canada's environmental regulatory processes. The significant public interest importance of this regulatory review and its ultimate failure merits a close analysis in its own right, and the analysis to follow will seek to clarify the reasons for its failure. In doing so, this analysis will also help to illustrate the comparative strengths and weaknesses of different modes of academic participation in public policymaking, and will serve as the basis of this article's proposal of a novel, iterative approach capable of contributing to a countervailing democratic response to regulatory capture.

B. BUILDING COMMON GROUND: A NEW VISION FOR ENVIRONMENTAL ASSESSMENT IN CANADA

Following its election in 2015, the federal Liberal government commenced a review of a number of environmental regulatory processes, foremost among them its environmental assessment processes.¹⁹⁷ The

¹⁹⁶ I am grateful to one of this article's peer reviewers for making this observation based on that reviewer's own lengthy experience in the field.

¹⁹⁷ The government also commenced reviews intended to modernize the National Energy Board and restore lost protections to the *Fisheries Act*, RSC 1985, c F-14 and the *Navigation Protection Act*, RSC 1985, c N-22. See Government of Canada, "Environmental and Regulatory Reviews: Discussion Paper" (June 2017), online (pdf): <www.canada.ca/content/dam/themes/environment/conservation/environmental-reviews/share-your-views/proposed-approach/discussion-paper-june-2017-eng.pdf> [Government of Canada, "Discussion Paper"].

government's particular focus on environmental assessment aligns with the critical governance role that regulatory process has played and continues to play in Canada as a forum to resolve conflicts surrounding energy development, environmental protection, and quite often the intersecting rights and interests of Indigenous peoples.¹⁹⁸ Reflecting this importance, in 2016 the Minister of the Environment and Climate Change established an expert panel to review and make recommendations to strengthen Canada's environmental assessment processes. After conducting extensive public hearings across the country and consulting broadly with affected stakeholders, including Indigenous groups, industry representatives, environmental assessment consultants, environmental non-governmental organizations (ENGOs), and concerned citizens, the expert panel released its final report, *Building Common Ground: A New Vision for Impact Assessment in Canada*,¹⁹⁹ in the spring of 2017.

The expert panel made a number of important, considered recommendations. In particular, the panel concluded that environmental assessments (or "impact assessments" in the panel's parlance) can and should play a pivotal role in supporting Canada's efforts to mitigate climate change.²⁰⁰ The panel further recommended that environmental assessment processes should base recommendations about whether a given economic activity or project ought to proceed on that activity's or project's contribution to sustainability. As the panel explained, its proposed sustainability-based impact assessment framework was designed to yield outcomes that integrate and promote (on balance) the environmental, health, social, cultural, and economic pillars of sustainability.²⁰¹ Moreover, the panel placed considerable emphasis on

¹⁹⁸ See Winfield, "A New Era of Environmental Governance", *supra* note 88 at 11.

¹⁹⁹ Expert Panel for the Review of Environmental Assessment Processes, "Building Common Ground: A New Vision for Impact Assessment in Canada" (2017), online: <www.canada.ca/en/services/environment/conservation/assessments/environmental-reviews/environmental-assessment-processes/building-common-ground.html>.

²⁰⁰ See *ibid* at 7.

²⁰¹ See *ibid* at 4–5.

ensuring that such climate- and sustainability-based assessments translate into transparent, evidence-based decisions.²⁰²

While the expert panel's sustainability-based approach was widely supported by academics and scientists, its approach was met with skepticism and pointed criticism by industry representatives and supporters.²⁰³ These industry critics declaimed that a sustainability-based approach to energy projects would "have the effect of 'ensur[ing] that nothing will get built'"²⁰⁴ and that such sweeping decisions ought to be made transparently.²⁰⁵

The governance processes recommended by the expert panel, however, would have been remarkably transparent, had they been implemented. In fact, the panel's championing of transparency was a direct response to submissions made by members of the public and other stakeholders throughout the panel's public hearings and consultations across Canada.²⁰⁶ An analysis of the written submissions made to the panel shows that the government and industry were the only two stakeholder constituencies that did not support a more transparent environmental assessment process; industry representatives were also opposed to increased independence as between industrial proponents and government regulators in respect of decision making.²⁰⁷ All other stakeholders—that is, Indigenous groups, the general public, academics and scientists, and ENGOs—were virtually unanimous in their support of a more transparent and scientific evidence-based environmental decision-making process. The analysis of the submissions concluded that reforming federal environmental assessment is both politically and

²⁰² See *ibid* at 5.

²⁰³ See Jason MacLean et al, "A Plan that Promotes Environmental Sustainability", *Policy Options* (30 May 2017), online: <policyoptions.irpp.org/magazines/may-2017/plan-promotes-environmental-sustainability/>.

²⁰⁴ *Ibid*.

²⁰⁵ See *ibid*.

²⁰⁶ See *ibid*.

²⁰⁷ See Aerin L Jacob et al, "Cross-Sectoral Input for the Potential Role of Science in Canada's Environmental Assessment" (2018) 3 FACETS 512.

scientifically defensible.²⁰⁸ Thus, the expert panel's recommendations reflected the strong public interest in greater transparency and use of independent science in environmental decision making. Had those recommendations been implemented, they would have simultaneously shone a light on and substantially improved how these critically important decisions are made.

C. CONSULTATION, CAPTURED

But it was not to be. In June 2017, almost immediately following the release of the expert panel's final report and its critical reception by industry and mainstream media, the federal government released its "Environmental and Regulatory Reviews" discussion paper.²⁰⁹ While the government's new discussion paper made cursory and generic reference to the expert panels and parliamentary committees that heard submissions from a broad range of stakeholders across Canada, including industry representatives, Indigenous peoples, provincial and territorial authorities, academics and scientists, and concerned citizens,²¹⁰ it failed to mention, let alone discuss, the detailed recommendations made by the environmental assessment expert panel. Rather, the government's discussion paper set out a number of broad principles and aspirations absent real detail or direction, at least insofar as climate change mitigation and sustainability were concerned. By seeking feedback on the newly proposed approach²¹¹ ostensibly set out in the discussion paper, despite the discussion paper having set out no discernable approach to speak of, the government effectively resiled from the sustainability-based recommendations made by the expert panel. This unexpected move prompted considerable concern among academics, scientists, and environmental advocates that the government was no longer committed to serious action on climate change and sustainability. Moreover, and

²⁰⁸ See *ibid* at 525.

²⁰⁹ Government of Canada, "Discussion Paper", *supra* note 197.

²¹⁰ See *ibid* at 4.

²¹¹ See *ibid* at 7.

tellingly, the government's discussion paper highlighted and intimated present and future support for key industry requests for greater certainty and efficiency. The discussion paper's brief treatment of environmental assessment processes concluded with the following statement:

One project—One assessment

Our approach remains committed to building on what is working well, while seeking to attract and grow investment. In support of this objective, we are considering:

- *Maintaining legislated project assessment timelines to provide clarity and predictability*
- *Providing authority to approve exceptions to legislated timelines (e.g. for cooperative assessments with provinces)*
- *A new early engagement and planning phase to identify issues early and provide clarity on requirements for the assessment and regulatory phase*
- *Maintaining a Project List to retain clarity on when a federal assessment is required*
- *A single government agency to deliver process integrity and consistency for major projects*
- *Continued focus on single window for federal coordination (e.g. ensuring alignment of assessment and follow-on permitting)*²¹²

Even if interpreted charitably at face value, it is impossible to make the case that these commitments are compatible with the objectives of promoting environmental protection, climate change mitigation, the transition to sustainability, or any of the other public interests identified

²¹² *Ibid* at 19 [emphasis in original].

as part of the government's environmental regulatory review process. The priorities signaled by a commitment to one project, one assessment include economic growth and investment along with procedural and decision-making predictability, certainty, and efficiency, none of which is meaningfully—if at all—connected to environmental protection and sustainability.²¹³ One of the signal insights of Canadian environmental law scholarship is that *duplication* (e.g. overlapping federal and provincial assessment processes) actually improves environmental and public health

²¹³ Rather, these are precisely the priorities of industry. They track, virtually point by point, the priorities enumerated by the Canadian Energy Pipeline Association (CEPA) in its official response to the expert panel's environmental assessment recommendations. CEPA explained that it recommended (to the expert panel) that environmental assessment processes:

should avoid duplication, outline clear accountabilities, be based on transparent rules and processes, ensure procedural certainty *for project proponents*, allow meaningful participation and balance the need for timeliness and inclusiveness. CEPA *is alarmed at the sweeping recommendations contained in the Expert Panel for Review of Environmental Assessment Processes Final Report, Building Common Ground: A New Vision for Impact Assessment in Canada*.[.]

See Canadian Energy Pipeline Association, "Response to the Expert Panel Review of Environmental Assessment Processes Final Report, Building Common Ground: A New Vision for Impact Assessment in Canada" (5 May 2017), online (pdf): <cepa.com/wp-content/uploads/2017/06/CEPA-response-to-Expert-Panel-Report-Final.pdf> [emphasis added]. The national law firm Osler, Hoskin & Harcourt LLP, which represents companies in the oil and gas and mining sectors, offered a critique of the expert panel's recommendations in substantially similar terms, emphasizing that any reforms to Canada's environmental assessment processes should consider the impacts to the competitiveness of Canada's resource industries: "Ignoring the economic leg of the sustainability stool is not helpful to informed decision-making." Yet the firm makes no mention whatsoever of any other leg—environmental, social, cultural, health—of Canada's sustainability stool. See Shawn Denstedt & Sander Duncanson, "Expert Report on Environmental Assessment Gives Rise to More Uncertainty" (12 April 2017), online (pdf): <www.osler.com/en/resources/regulations/2017/expert-report-on-environmental-assessment-gives-ri>.

outcomes.²¹⁴ This is especially so in respect of major natural resource extraction projects.²¹⁵

But when interpreted through the methodological lens developed by Stigler to detect regulatory capture, to look, as precisely and carefully as possible, at who gains and who loses, and by how much,²¹⁶ it becomes clear that the priorities advanced under the theme of one project, one assessment precisely track the express industry concerns and demands for a speedy approach to project assessment that is even more streamlined than the Harper-era *Canadian Environmental Assessment Act, 2012*.²¹⁷ The focus on broad and inclusive sustainability championed by the federal government's independent expert panel was quickly and quietly replaced by a focus on even tighter timelines to complete environmental assessments, including less time for public input and Crown consultation with Indigenous communities. In order to speed our natural resources to market, the expert panel's recommendations of strategic and regional sustainability-based assessments were replaced with a framework that envisages the much narrower assessment lens of a single regulatory window operated by a single government agency on a project-by-project basis.²¹⁸ Industry had successfully captured the government's environmental regulatory review process.

²¹⁴ See Wood, Tanner & Richardson, *supra* note 1 at 1020.

²¹⁵ As the Federal Court recently recognized, the *Canadian Environmental Assessment Act, 2012* is a regime designed "to 'promote cooperation and coordinated action between federal and provincial governments'" and major resource extraction projects "will likely have impacts on areas of both provincial and federal responsibility." See *Taseko Mines Limited v Canada (Environment)*, 2017 FC 1100 at paras 159–60.

²¹⁶ See Stigler, "Supplementary Note", *supra* note 8 at 140.

²¹⁷ See *Canadian Environmental Assessment Act, 2012*, SC 2012, c 19, s 52. For an analysis of the changes introduced in this legislation, see Meinhard Doelle, "CEAA 2012: The End of Federal EA as We Know it?" (2012) 24 J Envtl L & Prac 1. See generally Alan Bond et al, "Impact Assessment: Eroding Benefits through Streamlining?" (2014) 45 Impact Assessment Rev 46.

²¹⁸ To gain a fuller understanding how much of a departure the government's discussion paper was from the expert panel's final recommendations, and from a sustainability-based model of assessment more generally, see Anna Johnston,

D. SOLUTIONS FROM CANADIAN SCHOLARS 2.0

Following the release of the government's disquieting discussion paper, a small group of environmental assessment scholars collaborated on an ad hoc response.²¹⁹ Their response, which stemmed from their academic research on environmental assessment processes in particular and Canadian environmental law more generally, was premised on the need to meet the following broad objectives: (1) effectively respond to the endemic ineffectiveness of federal environmental laws; (2) simultaneously promote environmental protection, economic opportunity, and socioeconomic equality; (3) generate credible and reliable evidence capable of supporting governmental decision-making in the public interest; and (4) respect the Rule of Law and thereby counter the long-entrenched bias toward short-term economic and political gain.²²⁰

More specifically, this ad hoc academic response to the government's discussion paper argued that sustainability, operationalized as the achievement of long-lasting and mutually reinforcing benefits arising out of the interaction of environmental, economic, social, cultural, and health considerations,²²¹ must be at the core of the government's approach to assessing and approving economic projects in Canada.²²²

"Imagining EA 2.0: Outcomes of the 2016 Federal Environmental Reform Summit" (2016) 30:1 J Envtl L & Prac.

²¹⁹ See Martin Olszynski et al, "Sustainability in Canada's Environmental Assessment", *Policy Options* (5 September 2017), online: <policyoptions.irpp.org/magazines/september-2017/sustainability-in-canadas-environmental-assessment-and-regulation> [Olszynski et al, "Sustainability in Canada's Environmental Assessment"]. For the authors' full submission to the federal government, see Martin Olszynski et al, "Strengthening Canada's Environmental Assessment and Regulatory Processes: Recommendations and Model Legislation for Sustainability" (18 August 2017), online: <t.co/6WxDKmc1BE> [Olszynski et al, "Model Legislation for Sustainability"].

²²⁰ See Olszynski et al, "Sustainability in Canada's Environmental Assessment", *supra* note 219 at 18.

²²¹ See Olszynski et al, "Model Legislation for Sustainability", *supra* note 219 at 18.

²²² See *ibid* at 16.

In this respect, issuing a report based on thorough academic scholarship advancing arguments about the nature and general direction of public policy, these academics' response to the regulatory lacuna created after the government resiled from the expert panel's recommendations is substantially similar in *form* to the establishment and the first report of SCD, discussed above. But this ad hoc, episodic response to the government goes further, and takes another iterative and necessary step towards an academic law reform model capable of countering capture. Specifically, these academics' ad hoc report drew upon Canadian case studies to demonstrate, contrary to the claims made by some industry representatives, that sustainability is a workable legal concept capable of providing government, industry, Indigenous peoples, and the public with the level of guidance and regulatory certainty required of a modern and efficient regulatory system.²²³ And, more pragmatic still, they provided concrete examples of what new legislative provisions could look like,²²⁴ not only in respect of environmental assessment, but also for the *Fisheries Act*²²⁵ and the *Navigation Protection Act*.²²⁶ Their model legal definition of the sustainability basis of project assessments provides as follows:

Sustainability

The scope of sustainability considerations covers positive and adverse effects in five broad pillar areas—environmental, economic, social, cultural, and health—plus their interactions, with particular emphasis on long-term effects and lasting wellbeing. Progress towards sustainability requires improvements in:

²²³ See *ibid* at 19.

²²⁴ See *ibid* at 18, 20.

²²⁵ See *supra* note 197.

²²⁶ See *ibid*.

- Socio-ecological system integrity;
- Livelihood sufficiency;
- Intragenerational equity;
- Intergenerational equity;
- Resource maintenance and efficiency;
- Transparent and democratic governance;
- Precaution, prevention, and adaptive design and management; and
- Immediate and long-term integration of gains in all these aspects of sustainability.²²⁷

Further, the academics acknowledge that trade-offs among some of these requirements will sometimes be unavoidable—the preferred approach to sustainability in such cases is to seek to minimize trade-offs while maximizing the requirements’ mutually reinforcing benefits.²²⁸ The academics’ report proceeded to provide a precise definition of sustainability trade-offs, establish a sustainability trade-off rule, and apply that rule to environmental assessment processes.²²⁹

These academics’ ad hoc response thus accomplishes two necessary tasks rarely, if ever, attempted by academic work concerned with public interest policy and regulation captured by regulated industry interests: (1) it directly counters criticisms voiced by industry interests in respect of, and in opposition to, public interest regulations—in other words, it directly counters the petroleum industry’s information and expertise advantage with better information and expertise; and (2) it mimics a standard and effective tactic employed by many industry representatives

²²⁷ Olszynski et al, “Model Legislation for Sustainability”, *supra* note 219 at 18.

²²⁸ See *ibid.*

²²⁹ See *ibid* at 20. The authors’ report explains that the significance of a trade-off rule to an assessment regime is “to assist in determining when it may be appropriate to accept negative effects on some aspect of sustainability as a cost of achieving positive effects in another aspect.” For example, “a trade-off may be allowed if there are no practical options for mitigating the negative effects of an economic undertaking, and there is no reasonable alternative that would entail less regrettable trade-offs” (*ibid.*).

by not only suggesting a desired legislative approach, but by also providing alternative legislation in a usable, legal form.

Despite submitting and presenting their report to the federal government, including the Minister of the Environment and Climate Change, the academics' ad hoc contribution, not unlike SCD's first report, appears to have been largely if not entirely ignored. Predominantly tracking the broad principles and guidelines set out in the government's June 2017 discussion paper, the government introduced Bill C-69 in early 2018, which includes a proposed new federal *Impact Assessment Act*.²³⁰ Regrettably, the federal government's proposed impact assessment (i.e. environmental assessment) legislation offers little prospect of meaningful law reform in the public interest.²³¹ In particular, the Bill is silent on the need for independent, peer-reviewed science (as opposed to the traditional reliance on proponent-provided science).²³² The Bill scarcely mentions Canada's commitments under the UN Paris Agreement or the 2030 Sustainable Development Agenda, and provides neither guidance nor binding legal rules about how those commitments ought to factor into the assessment of economic projects.²³³ Ultimate project approvals, rather than being based on a legal sustainability test, are to be determined on a highly discretionary ministerial "public interest" basis,²³⁴ in respect of which the Bill offers no mechanism to appeal or otherwise review either the decision or its basis.²³⁵ Overall, the

²³⁰ Bill C-69, *Impact Assessment Act*, 1st Sess, 42nd Parl, 2018 online: <www.parl.ca/DocumentViewer/en/42-1/bill/C-69/first-reading>.

²³¹ See e.g. Chris Tollefson, "Environmental Assessment Bill is a Lost Opportunity", *Policy Options* (14 February 2018), online: <policyoptions.irpp.org/magazines/february-2018/environmental-assessment-bill-is-a-lost-opportunity/>.

²³² See *ibid.*

²³³ See *ibid.*

²³⁴ See *ibid.*

²³⁵ See Meinhard Doelle, "Bill C-69: The Proposed New Federal Impact Assessment Act (IAA)" (9 February 2018), online (blog): *Environmental Law News* <blogs.dal.ca/melaw/2018/02/09/bill-c-69-the-proposed-new-federal-impact-assessment-act/>.

Bill retains much of the Harper-era (and petroleum-industry-friendly) legislative regime it was designed to replace and remedy, the *Canadian Environmental Assessment Act, 2012*.²³⁶

That Bill C-69 reflects the government's own June 2017 discussion paper, which itself reflects industry criticisms of the expert panel's recommended approach to environmental assessment, should hardly be surprising by this point. Even a group of academics' commendably pragmatic response to industry's attack on the principle of independent, transparent, and sustainability-based assessment was bound to fall on deaf political ears. Recall, tellingly, the second broad objective those scholars identified as a priority of Canadian environmental laws, that those laws must promote lasting and mutually supporting environmental protection, social justice, and *economic opportunities*. Their otherwise laudable proposals were silent—as is most academic work produced in the field of Canadian environmental law—with respect to the latter priority of economic development. But the contest over regulation, as Stigler's foundational theory of regulation illustrated, is not only about ideas, or the substantive merits of competing policy proposals.

²³⁶ See *ibid.* See also the analysis provided by the Canadian Environmental Law Association showing that the *Impact Assessment Act* is substantially the same as the *Canadian Environmental Assessment Act, 2012*, and cannot be said to be an improvement: Richard Lindgren, "Canada's Impact Assessment Act: Myth vs. Fact" (23 July 2018), online (blog): *Canadian Environmental Law Association* <www.cela.ca/LAA-myth-vs-fact>. The Bill has also been severely criticized from an Indigenous rights and interests perspective. See e.g. Sara Mainville, "The Ghost of the Harper OmniBus Legislation Continues on with Bill C-69" (9 February 2018), online (blog): *Olthuis Kleer Townsend—LLP* <www.oktlaw.com/ghost-harper-omnibus-legislation-continues-bill-c-69/>. Indeed, the Bill appears to be roundly despised by all of its stakeholders, including industry, which appears uncomfortable with even the passing but nonetheless non-binding consideration of sustainability. The Bill may well be a unique case of legislation that is the product of both regulatory capture and public-interest-based electoral politics, as well as a failed attempt to please all stakeholders at once. Further exploration of this particular point is beyond the scope of the analysis here, but see Damien Gillis, "Justin Trudeau's Two-Faced Climate Game", *The New York Times* (2 May 2018), online: <www.nytimes.com/2018/05/02/opinion/trudeau-climate-kinder-morgan-pipeline.html>.

Regulatory capture is also facilitated by the maintenance and support of popular electoral appeal—not just during elections, but throughout the political cycle as a matter of workaday governance.

More recently, questioning the electoral-politics nostrum that politicians need new ideas, Nobel economist and *New York Times* columnist Paul Krugman argues that, even in respect of complex regulatory matters like environmental protection, the basic tools (i.e. direct regulation in some cases, taxes or tradable licenses in others) “are well understood and have worked well in many cases.” Krugman emphasized that, “[w]hat we need most is an effective political majority willing to act on what we already know.”²³⁷ This deliberately provocative challenge²³⁸ gestures toward an academic law and policy reform model that has the potential to counter capture by solving for this more nuanced political challenge: the development of laws, policies, and regulations that are not only substantively superior to those preferred and obtained by regulated industries, but are also capable of attracting majoritarian political support. Economic opportunities (e.g. job creation, foreign direct investment and royalties, indirect investments and contributions) will naturally figure predominantly in this equation and must be incorporated into academic responses to regulatory capture of environmental laws and policies. This critical component is discussed next.

E. SOLUTIONS FROM CANADIAN SCHOLARS 3.0

Canadian environmental law scholars’ participation in various aspects of Canada’s environmental regulatory review process reflects both the standard academic response to instances of regulatory capture, effectively naming and shaming it (solutions from Canadian scholars 1.0), along

²³⁷ Paul Krugman, “Politicians Don’t Need New Ideas”, *The New York Times* (2 May 2018), online: <www.nytimes.com/2018/05/02/opinion/politicians-dont-need-new-ideas.html>.

²³⁸ *Ibid.* Krugman, for the record, does not argue that new ideas are irrelevant to policy. His point, rather, is that political coalition-building is even more important, and more difficult, and therefore more of a priority for public policy reformers.

with episodic, ad hoc approaches that attempt to circumvent the Catch-22 of reforming regulatory capture by directly competing with industry interests in the contest to influence public policy and regulations (solutions from Canadian scholars 2.0). Both approaches have generated a number of valuable insights and have improved our understanding of the limitations of Canadian environmental law and policy and the kinds of reforms that are required. Documenting and problematizing capture, and making capture intelligible to the broader public, remain indispensable aspects of generating popular political support for policy reforms in the public interest. Both approaches, moreover, remain relatively rare in environmental law scholarship as compared to the predominant approach of liberal environmentalism (discussed below), and are thus all the more laudable. But neither approach has yet succeeded in resolving the root cause of those limitations, the obstacle precluding reforms in the public interest. Until we do so, our analyses and policy proposals in respect of Canada's climate change commitments under the UN Paris Agreement and in respect of the UN's SDGs will remain "academic" in the worst, most pejorative meaning of the term.

However, a third iterative and potentially paradigm-changing approach (3.0) is emerging. Growing out of the SCD scholarly network is an innovative action research initiative provisionally described as "Low-Carbon Energy Transition Learning Projects".²³⁹ Structured as a transdisciplinary network of Canadian climate scholars, private-sector renewable energy producers, host communities, and Natural Resources Canada (a federal government ministry, colloquially known as NRCan), SCD's low-carbon energy transition research seeks to (1) initiate transformative low-carbon energy transition learning projects, (2) facilitate colearning among experiment participants to broaden and scale up low-carbon energy initiatives in Canada, and (3) promote the codesign of evidence-based climate change and sustainability policies

²³⁹ For more information about the low-energy transition learning projects currently under way by the members of SCD and its partners, see Dialogues on Sustainability, "Work in Progress", online: *Sustainable Canada Dialogues* <www.sustainablecanada.com/dialogues.ca/en/scd/workinprogress>.

capable of enabling Canada to meet its Paris Agreement and SDG commitments.²⁴⁰ Initial participants (in addition to SCD scholars and NRCan) include the Government of Prince Edward Island, XPND Capital (a private investment firm), the City of Toronto Solid Waste Management Services, SaskPower (a Crown-owned electrical utility), Valard Construction, First Nations Power Authority, and a number of remote Indigenous and Northern host communities.²⁴¹

The City of Toronto's waste-to-renewable-natural-gas project, for example, seeks to scale up bio-methane upgrading technology to transform raw biogas (produced from processing green recycling bin organic waste) into renewable natural gas. The City aims to expand this project from one to four waste management sites and produce approximately 65 million cubic metres of renewable natural gas per year—the equivalent GHG emissions reduction of taking 35,000 cars off the road annually. Moreover, once injected back into the natural gas pipeline, renewable natural gas can be used to fuel vehicles and provide electricity or heat to homes and businesses. This is part of what is called a closed-loop approach (e.g. the organic waste collection trucks will ultimately be powered by the waste they collect) and is a part of Toronto's efforts to develop a circular economy.²⁴²

The initial—and still ongoing—phase of this collaboration is instructive. In 2018 NRCan launched its Long-Term Economic and

²⁴⁰ See Rosenbloom et al, "Transition Experiments", *supra* note 10 at 377–80.

²⁴¹ See Catherine Porvin, "Statement of Work (SOW)—NRCan's Long-Term Economic and Policy Research Agenda" (2018) [unpublished, archived at McGill University (on file with the authors)] [Porvin, "NRCan's Long-Term Economic and Policy Research Agenda"]. See also SCD's internal report to Natural Resources Canada: Catherine Porvin et al, "A Framework to Evaluate Low-Carbon Energy Transitions Learning Projects" (September 2018), online (pdf): *Sustainable Canada Dialogues* <www.sustainablecanadadialogues.ca/pdf_2018/SCD_Evaluation_Report_with_appendices.pdf>.

²⁴² See generally City of Toronto, "Backgrounder: City of Toronto's Waste-to-Renewable-Natural-Gas Project" (20 July 2018), online: <toronto.ca/home/media-room/backgrounders-other-resources/backgrounder-waste-to-renewable-natural-gas-project/>.

Policy Research Agenda.²⁴³ The Canadian Federal Budget 2018 expressed an intention to fulfill Canada's commitment under the UN Paris Agreement to reduce GHG emissions and transition to a low-carbon economy.²⁴⁴ This transition will require the implementation of a mix of different clean energy sources to meet national energy demands. What that precise and changing mix will look like in the short, medium, and long term, however, is presently unknown. Informed policy and carefully crafted regulations will be crucial to moving away from the current, business-as-usual trajectory in a way that addresses clean energy goals but also maximizes economic benefits, maintains competitiveness, and considers environmental and social impacts.²⁴⁵ The purpose of NRCan's research agenda is to codevelop with Canadian scholars and stakeholders an analytic framework to systematically select and evaluate a set of low-energy transition projects by field-testing their feasibility.²⁴⁶ The conclusion of this initial phase will inform and potentially influence Budget 2019 and the federal government's policy and regulatory options in the medium term.

Although still in its preliminary stages, SCD's low-carbon energy transition research complements formal economic models of the potential of carbon pricing and other clean-energy regulations under political constraints. Those models suggest (but fall short of empirically demonstrating) that encouraging the near-term deployment of clean energy can yield a number of public policy benefits. Such benefits include potential economies of scale (where scaling up a local experiment

²⁴³ Potvin, "NRCan's Long-Term Economic and Policy Research Agenda", *supra* note 241.

²⁴⁴ See Government of Canada, *Equality + Growth—A Strong Middle Class* (27 February 2018), online (pdf): <www.budget.gc.ca/2018/docs/plan/budget-2018-en.pdf>.

²⁴⁵ See Potvin, "NRCan's Long-Term Economic and Policy Research Agenda", *supra* note 241.

²⁴⁶ See *ibid.* For a summary of the budget's provisions relating to the government's climate commitments, see e.g. Isabelle Turcotte, "Budget 2018 Builds on Last Year's Commitment to Climate Change" (28 February 2018), *Pembina Institute* (blog), online: <www.pembina.org/blog/budget-2018-builds-on-last-years-commitment>.

is possible); continuous learning by doing; and, not the least of these, the development of a clean-energy political constituency with a strong interest in its own growth. Taken together, these developments may translate into politically durable climate policies at multiple governance levels.²⁴⁷ The keys to creating climate policy durability will be: (1) to improve economic opportunities for stakeholders from multiple sectors, including communities, businesses, public bodies, and nongovernmental organizations; and (2) to contribute to greater sustainability and widely dispersed low-carbon benefits. Put another way, low-carbon energy experiments will be successful insofar as they contribute to transformative (and not merely incremental) socio-technical change and a just transition to sustainability.²⁴⁸

SCD's low-carbon energy transition research likewise aligns with the applied research agenda of identifying and communicating the tangible "co-benefits" of addressing climate change: economic development and enhanced community resilience. Emerging climate change communication research suggests that climate policies framed as having co-benefits motivate pro-environmental action and commitment to a degree on par with the normative pre-commitment that climate change is important, and does so independently of that normative pre-commitment.²⁴⁹ Thus, individuals "convinced" of the importance of

²⁴⁷ Jenkins & Karpplus, "Carbon Pricing", *supra* note 85 at 32.

²⁴⁸ But see Daniel Rosenbloom, Brendan Haley & James Meadowcroft, "Critical Choices and the Politics of Decarbonization Pathways: Exploring Branching Points Surrounding Low-Carbon Transitions in Canadian Electricity" (2018) 37 *Energy Research & Soc Science* 22 at 33. They argue that low-carbon transition pathways in and of themselves will not resolve perennial tensions surrounding centralization versus decentralization, conservation versus expansion, economic development versus environmental performance, and so on. However, there is no reason why these tensions and trade-offs cannot be continuously renegotiated as a part of low-carbon transition experiments themselves, particularly if the priorities of transformative and just socio-technical change are foregrounded. Of course, this is easier said than done, and will often fall to academics in particular to advocate.

²⁴⁹ See Paul G Bain et al, "Co-Benefits of Addressing Climate Change Can Motivate Action Around the World" (2016) 6 *Nature Climate Change* 154 [Bain et al, "Co-Benefits"]. For a discussion of the potential of the co-benefits approach in the

addressing climate change as well as individuals who are “unconvinced” are equally likely to be motivated to actually act on climate change through citizenship, consumerism, and making financial donations when they learn of the integrated economic and local communitarian co-benefits of climate change policies.²⁵⁰ Those identifying as “unconvinced” about the importance of climate change appear to be especially influenced by the prospect of economic development co-benefits.²⁵¹

As a model of academic law and policy reform, the approach embodied by (but not limited to) SCD’s low-carbon energy transition research also tracks our understanding of the theory and practice of regulated capture. It is capable of meeting and exceeding regulatory industries’ informational and expertise advantage vis-à-vis their public regulators. It is also capable—*potentially*, over time—of meeting and exceeding regulated industries’ ability to provide governments with the means of maintaining electoral appeal and support while governing by co-developing public policies that attract broad democratic appeal. The aim of this academic role in public policymaking is not only to counter regulatory capture, ambitious a task as that is, but also to *supplant* regulated industries and their representatives in the policymaking and regulatory process by attending to the public dimensions of policy and regulation and their broader political attractiveness. Under this model of academic law and policy reform, academics cease attempting merely to *inform* policies and regulations from the outside. Instead, they seek to partner with regulators and proponents whose projects are in the public interest (and who compete with those industries that have captured

Canadian climate policy context, see Jason MacLean, “You Say You Want an Environmental Rights Revolution: Try Changing Canadians’ Minds Instead (of the *Charter*)” (2018) 49:1 Ottawa L Rev 183. See also Jason MacLean, “The Problem with Canada’s Gradual Climate Policy”, *Policy Options* (26 October 2018), online: <policyoptions.irpp.org/magazines/october-2018/the-problem-with-canadas-gradual-climate-policy/>.

²⁵⁰ Bain et al, “Co-Benefits”, *supra* note 249 at 155–56.

²⁵¹ *Ibid.*

regulation), thereby entrenching independent and methodologically robust knowledge production in the public policy and regulatory process itself. In this sense, the approach embodied by SCD's low-carbon energy transition research builds on and adds a new dimension to otherwise "actionable science", or science that targets a specific knowledge gap in a specific decision-making context.²⁵² Even insofar as actionable scientific research seeks to collaborate with government agencies, as well as affected stakeholders, SCD's focus on additionally partnering with industry proponents (e.g. renewable energy proponents) whose dominant competitors have captured regulators is not only novel, but crucial to countering those competitors' regulatory capture.

Of course, no academic model is perfect, and the preliminary model sketched above is no exception. Three caveats in particular merit discussion. First is the stubborn fact of political economy. Academics alone cannot hope to match the massive financial power of the oil and gas industry, or other carbon-intensive industrial sectors. To suggest otherwise would be to understate the gravity of the very problem—regulatory capture—calling for greater academic participation in public policymaking in the first place. Nevertheless, it is important to recall the lessons of Stigler's theory of regulation and the tactics outlined in the Powell Memo. Industries capture regulation not only with money, but also by providing legislators and administrative officials with useful knowledge. While the petroleum industry and its ilk maintain a financial advantage, they hardly have a monopoly over politically useful knowledge. If more academics orient their research programmes towards public policymaking, they can begin to replace one of industry's principal processes of influencing law and policy. While this alone does not guarantee that legislators and administrative officials will choose to collaborate with such policy-minded academics, such academics should not expect to be taken seriously if they continue to merely complain about the perversions of regulatory capture from the sidelines. By

²⁵² See e.g. Margaret A Palmer, "Socioenvironmental Sustainability and Actionable Science" (2012) 62:1 *BioScience* 5; Paul Beier et al, "A How-To Guide for Coproduction of Actionable Science" (2017) 10:3 *Conservation Letters* 288.

approaching policymakers with proposals to help coproduce politically useful knowledge, academics may find themselves increasingly welcome in the precincts of law and policymaking.

The second caveat is that regulatory capture is just as likely to occur within a green economy framework as it has in our current natural resources extractivism economic framework; the very urgency of hastening the transition to a low-carbon economy may even make some form of regulatory capture not only possible, but likely.²⁵³ And of course, co-optation of sustainability discourse is always a possibility—Canadians need only recall the Harper-era discourse of “Responsible Resource Development”²⁵⁴ or, for that matter, the current Trudeau-era mantra of the environment and the economy going hand in hand. The same fate could befall the “co-benefits” climate policy model. Accordingly, the evaluative aspect of academic engagement in public policymaking, the focus of the first phase of SCD’s low-carbon energy transition research discussed above, is critical. Evaluative assessments of public policy pilot projects must continue to focus on ensuring that policy initiatives are directed toward transformative and *just* socio-technical changes, and not the reproduction of entrenched interests, even if those interests turn out to be green.

The third caveat is the still preliminary and relatively untested nature of the proposed model, both conceptually and in the specific form of SCD’s low-carbon energy transition research. How can we know whether this model will work? What makes it better than Solutions from Canadian Scholars 1.0 or 2.0?

The lack of success of models 1.0 and 2.0 is self-evident. Notwithstanding the likely unprecedented level of academic and civil society engagement in the recently concluded federal environmental

²⁵³ See e.g. Michael B Gerrard, “Legal Pathways for a Massive Increase in Utility-Scale Renewable Generation Capacity” (2017) 47 Environmental L Reporter 10591 (arguing for expedited environmental assessments and approvals for renewable energy projects). See also Michaël Aklin & Johannes Urpelainen, *Renewables: The Politics of a Global Energy Transition* (Cambridge, MA: MIT University Press, 2018) at 230–33.

²⁵⁴ Winfield, “A New Era of Environmental Governance”, *supra* note 88 at 13.

regulatory review process, the result was dismal. The legislative proposals arising out the review process make marginal, incremental, and at best technical improvements to a suite of regulatory processes that Canadians already appear not to trust, and not unreasonably.

How to explain this failure? While a comprehensive answer is not possible here, academics' and ENGOs' reticence to directly call out and challenge the federal government's capture by the oil and gas industry and related carbon-intensive sectors surely figures prominently. Most academic and civil society participants in the review process adopted an excessively deferential and diplomatic posture, ostensibly, to preserve their access to and participation in the review process and the (slim) chance that accompanies access and participation of making modest, marginal improvements to the government's approach without challenging the underlying assumptions of the approach itself. Indeed, the comparatively more radical Solutions from Canadian Scholars 1.0 and 2.0 described above hardly registered in the regulatory review process, largely because the review process had already been captured.

The more diplomatic mode of environmental advocacy and scholarship that attended the regulatory review process, however, is hardly novel. It has been described repeatedly as "liberal environmentalism" and held up as one of the principal reasons that environmental law and policy both domestically and internationally has continually failed to contribute to meaningful—*transformative*—environmental outcomes.²⁵⁵ Liberal environmentalism advocates for environmental protection that is predicated on the maintenance of a liberal (or neoliberal) political order and capitalist economy.²⁵⁶

²⁵⁵ See e.g. Steven Bernstein, *The Compromise of Liberal Environmentalism* (New York: Columbia University Press, 2001). For a preliminary application of this concept to Bill C-69 and Canadian environmentalists' otherwise surprising defence of the Bill's proposed legislation, the *Impact Assessment Act*, see Jason MacLean, "Kill Bill C-69—It Undermines Efforts to Tackle Climate Change", *The Conversation* (25 October 2018), online: <theconversation.com/kill-bill-c-69-it-undermines-efforts-to-tackle-climate-change-105118>.

²⁵⁶ See *ibid.*

In this context, “Solutions from Canadian Scholars 3.0” and ideally its subsequent iterations both builds on and advances beyond models 1.0 and 2.0 because of its willingness to take up the underlying challenge of sustainability described in the introduction to this article: to articulate and advocate for fundamentally different goals for our society, including a fundamentally different economic model in which maintenance of ecological integrity is a precondition to—not a predicate of—all economic development.²⁵⁷ By seeking to counter regulatory capture in this foundational manner, model 3.0 also directly addresses the growing structural power of capital and corresponding weakening of countervailing constituencies in Canada.²⁵⁸

Preliminary or not, however, model 3.0 generally and SCD’s low-carbon energy transition research in particular are arguably not only promising, but necessary. Low-carbon energy transition and related policy learning projects are occurring at an increasing rate globally; the literature describing them is already vast and unruly.²⁵⁹ There is an urgent need, as a matter of both scholarship and policy, to identify and link the “best practices” in the realm of climate actions and government policies at multiple governance levels. The model of direct and evaluative academic participation in such policymaking efforts set out in this article is one ideally suited to this critical task.

V. CONCLUSION: CAPTURE, CONTINUED

Regarding the inherent inconsistency of climate policymaking pursuant to the UN Paris Agreement observed at the level of the UN

²⁵⁷ See Wood, Tanner & Richardson, *supra* note 1 at 1039–40.

²⁵⁸ See the scholarly literature cited in *supra* note 91.

²⁵⁹ See e.g. Jochen Markard, Rob Raven & Bernhard Truffer, “Sustainability Transitions: An Emerging Field of Research and its Prospects” (2012) 41:6 *Research Policy* 955; Sander Chan et al, “Reinvigorating International Climate Policy: A Comprehensive Framework for Effective Nonstate Action” (2015) 6:4 *Global Policy* 466; Thomas Hale, “‘All Hands on Deck’: The Paris Agreement and Nonstate Climate Action” (2016) 16:3 *Global Environmental Politics* 12; Jason MacLean, “Rethinking the Role of Non-State Actors in International Climate Governance”, *Loy U Chi Intl L Rev* [forthcoming in spring 2019].

Intergovernmental Panel on Climate Change (IPCC), where climate science and climate politics continue to conflict and diverge,²⁶⁰ one IPCC participant has argued that if climate policy advisors really want to make the world a better place, they will have to deal with the political world as it really is, and not with policymakers' idealized self-representations, let alone the oversimplified assumptions about political action used in so many textbooks and models.²⁶¹

And yet, prevailing understandings of the interface of law, policy, and science continue to labour under what is a functionalist, textbook model of the regulatory cycle.²⁶² In this simplified cycle, a specific policy objective is established (e.g. reduce GHG emissions) to inform decision- and rule-making (e.g. set a carbon price), after which it is implemented. *Ideally*, decisions and their consequences are then evaluated, and the evaluation results cycle back to redesign to improve the original objective and its implementation.²⁶³ Science policy advice, under this simplified and idealized model, proceeds on the assumption that policymakers' and regulators' primary interest resides in improving policy and regulatory performance.²⁶⁴ Whereas in reality, which is far messier, most academics and scientific advisors lack the granular understanding of how policy and regulations are actually (mis)conceived and incompletely and improperly implemented.²⁶⁵ Nor, crucially, as discussed throughout this article, do academics and scientists tend to

²⁶⁰ For a detailed description of the tensions between climate science and its mistranslation by politicians as part of the IPCC reporting process, see Geoff Mann & Joel Wainwright, *Climate Leviathan: A Political Theory of Our Planetary Future* (New York: Verso, 2018) at 61–67.

²⁶¹ See Oliver Geden, “The Paris Agreement and the Inherent Inconsistency of Climate Policymaking” (2016) 7 *Wiley Interdisciplinary Rev Climate Change* 790 at 795 [Geden, “The Inherent Inconsistency of Climate Policymaking”].

²⁶² See e.g. Jonathan Moore et al, “Towards Linking Environmental Law and Science” (2018) 3 *FACETS* 375.

²⁶³ See *ibid.*

²⁶⁴ See Geden, “The Inherent Inconsistency of Climate Policymaking”, *supra* note 261 at 792.

²⁶⁵ See *ibid* at 795.

account for—or respond to—the consideration that policymakers and regulators pay to industry demands and electoral concerns.

Accordingly, in a world of regulatory capture and the incoherent policies and regulations that capture yields—a world, in other words, where simply producing and presenting the best available evidence is far from sufficient—the key task at hand for policy-focused academics is one of critical self-reflection and methodological adaptation.²⁶⁶ This means critically re-evaluating how we analyze laws and policies, including the prospects for their reform, and then iteratively modifying our research methods accordingly. This article represents one such attempt.

And yet, in the current policy and regulatory context in Canada concerning our commitments under the UN Paris Agreement and the UN's 2030 Sustainable Development Agenda, the predominant academic approach to policy analysis is to continue to labour under the simplified conception of the public policy and regulatory cycle, making technocratic recommendations aimed at incremental improvements at the margins of otherwise and already captured legislation. As of this writing, just as Bill C-69 was discussed in detail by academic and ENGO-based witnesses giving evidence about the Bill's deficiencies and proposing marginal, technical improvements before the Parliamentary Standing Committee on Environment and Sustainable Development, the federal government appears to have had already decided that *in situ* oil sands projects that use steam to release deeply deposited bitumen will be exempt from the Bill's proposed *Impact Assessment Act*.²⁶⁷ One environmental advocate characterized this regulatory exemption as "a federal abdication of responsibility"²⁶⁸ and proceeded to explain—as if, by this point, any explanation were needed—that the federal

²⁶⁶ See Bonnie L Keeler et al, "Society is Ready for a New Kind of Science—Is Academia?" (2017) 67:7 BioScience 591.

²⁶⁷ See Mia Rabson, "Selected Oilsands Projects May Avoid New Environmental Assessment Rules", *CBC News* (27 April 2018), online: <www.cbc.ca/news/politics/oil-sands-exempt-assessment-rules-1.4639525> [Rabson, "Selected Oilsands Projects"].

²⁶⁸ *Ibid.*

government's language "is almost identical to a request made by the Canadian Association of Petroleum Producers".²⁶⁹ Here it is helpful to recall the Commissioner of the Environment and Sustainable Development's concern, registered in 2014, that under federal environmental assessment rules amended by the Harper government (in close consultation with the petroleum industry), "some significant projects may not be assessed."²⁷⁰ "It fits a pattern," the ENGO advocate continued in respect of the newly proposed *in situ* exception, "of industry attempting to delay, stall, block or water down regulations and legislation *and they've been fairly successful at it thus far*."²⁷¹

If by "thus far" our understandably frustrated advocate means "throughout much if not the entire history of Canadian environmental law and regulation," then industry has been fairly successful indeed. The critical question is whether and how academics focused on environmental protection and sustainability can critically reflect on their methodologies and fashion new ways of responding to this corrosive form of regulatory capture. This article has attempted to critically assess prevailing (and largely ineffective) academic approaches to capture, and to propose a new model potentially capable of directly countering it. Contrary to the predominant narrative that policy-focused academics should not try to actively influence policymaking and regulatory processes lest they compromise their neutrality,²⁷² if academics do not bring their methodological rigour and integrity to bear on the root causes of the public policy issues they study, they run the risk of producing knowledge that is "academic" in the most pejorative—and perhaps deserved—sense of the term. Given the stakes in the climate

²⁶⁹ *Ibid.*

²⁷⁰ Commissioner of the Environment and Sustainable Development, "Fall 2014 Report", *supra* note 184.

²⁷¹ Rabson, "Selected Oilsands Projects", *supra* note 267 [emphasis added].

²⁷² See e.g. Oliver Geden, "Climate Advisers Must Maintain Integrity" (2015) 521 *Nature* 27. But see David C Rose, "Five Ways to Enhance the Impact of Climate Science" (2014) 4 *Nature Climate Change* 522.

policy context, anything less amounts to an abdication of professional privilege and responsibility.

