

Natural Resource Regulation in Alberta

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Executive Summary

Alberta's economy has been sorely afflicted in recent years. A major factor in that affliction was, of course, the slump in world oil prices which began their plummet in 2014. Limited pipeline capacity, which leads to Canadian oil producers getting a depressed price for Canadian oil, exacerbated Alberta's economic woes.

A number of metrics reveal that oil and gas investment in Alberta is in steep decline. According to a report by the Canadian Association of Petroleum Producers, capital investment in Canada's oil and natural gas in 2017 was \$45 billion, which was down 44 percent from its \$81 billion level in 2014, before oil prices collapsed.

But many other factors are affecting investment in Alberta besides the world oil price. For example, Alberta's fiscal terms (the regime of lease payments, royalties, production taxes and gross revenue charges, but not corporate or personal taxes) were only considered a deterrent to investment by 14 percent of survey respondents to the Fraser Institute's Global Petroleum Survey in 2013. That deterrence perception reached 50 percent in 2017. Respondents saying that Alberta's fiscal terms were attractive to investment dropped by 22 percent over that same period. With regard to Alberta taxation in general, there was a similar decline in investment attractiveness from only 16 percent of respondents registering deterrence due to this factor in 2013, rising to 52 percent of respondents registering deterrence to investment in 2017.

The same is true for mining investment in Alberta. In 2013, regulatory uncertainty in Alberta was only considered a deterrent by 11 percent of respondents to the Fraser Institute's Annual Survey of Mining Companies. After peaking at 38 percent in 2016, the percentage expressing deterrence fell to 25 percent in 2017, still more than double that from four years before.

Key factors that survey respondents perceive as deterrents to investment are all regulatory: respondents in both surveys point to uncertainty about environmental regulations and their enforcement, and the cost of regulatory compliance. This was particularly true in the oil and gas sector, where 32 percent of respondents registered compliance costs as a deter-

rent to investment in 2013, whereas 70 percent registered deterrence due to this factor in 2017.

There are many potential reasons for Alberta's declining perceptions of investment attractiveness with many causal elements. Care must be taken in attributing the decline to any specific action. But sequential injections of uncertainty almost certainly played a role. Since 2014, there have been a steady stream of announcements (both provincially and federally) that have shaken the confidence investors have in their ability to both be able to invest and see to a profitable return on that investment in Alberta. The Alberta government broadened and raised the carbon tax, threw doubt on Alberta's oil and gas royalty regime, imposed a 100Mt cap on greenhouse gas emissions from oil sands, and enacted a far-reaching Climate Leadership Plan that reaches into virtually every sector of Alberta's economy.

This study offers several recommendations to address this regulatory cascade, including rolling back some of the recently implemented regulations and taxes. At the same time, the province should also institute regulatory reform projects like those that have been successfully implemented elsewhere in Canada. British Columbia, for instance, implemented a Regulatory Reform Initiative in 2001, with a goal of reducing regulations by requiring that any new ones must be accompanied by cutting another. New Brunswick implemented Smart Regulation, a three-point plan to reform the province's regulatory system by reducing regulation by 20 percent overall and instituting a rule that any new regulation must displace an obsolete regulation.

Canada's largest trading partner (and increasingly economic competitor) is leaping ahead on this front. In his first week in office, Donald Trump enacted an executive order requiring that for every new regulation issued, two must be eliminated. He also instituted what has been called a "regulator's budget," evaluating regulations to be replaced based on the costs and benefits of new regulations.

Alberta's economy is reeling from a combination of lower oil and gas prices combined with a barrage of regulations and taxes on the province's entire extractive sector. Easing the double burdens of carbon taxes and excessive regulation should be a top priority for the government of Alberta.

Introduction

Alberta has undergone some hard times in the four years since 2014 when the world oil price plummeted. As Harvard economist Kenneth Rogoff observed in 2016, “The stunning fall in oil prices, from a peak of \$115 per barrel in June 2014 to under \$35 at the end of February 2016,” was one of the “most important global macroeconomic developments of the past 20 months” (Rogoff, 2016). Alberta’s oil producers were hit particularly hard. Even in a somewhat higher price environment, Alberta’s oil faces several challenges: the quality of the oil draws a lower price, and long transport distances add to the cost of the product (Stedman and Aliakbari, 2018). Adding to the challenge of a depressed oil price, in 2015 Albertans voted in a new government that emphasized addressing climate change with a range of fiscal and regulatory measures that would unfold in ensuing years (Maclean, 2015; Alberta, 2018a). This study will focus on the impact of these rules and regulations on investment attractiveness in Alberta. It concludes by offering recommendations that could help to turn back Alberta’s declining investment attractiveness. In a companion study, *Strategies for Deregulation: Concepts and Evidence*, Fraser Institute Senior Fellow Steve Globerman details how regulatory reform in Canada should be structured based on successful examples from jurisdictions in Canada and beyond.

Declining Investment Attractiveness

A number of metrics reveal that oil and gas investment in Alberta is in steep decline. According to a report by the Canadian Association of Petroleum Producers (CAPP), capital investment in Canada's oil and natural gas in 2017 was \$45 billion, which was down 44 percent from the \$81 billion invested in 2014, before oil prices collapsed (CAPP, 2018).

A report by ARC Financial Corporation in 2016 noted that investment spending had been reduced to “legacy spending”—that is, spending on already producing facilities or nearly complete projects that were expected to be completed by 2018 (Tertzakian and Jakeman, 2016). With nominal capital expenditures by the conventional oil producers as low as it was in the mid-1990s, capital expenditures in the oil sand sector are driven by several late-stage oil sands projects that were expected to be completed by 2018.

Statistics Canada also has some gloomy news about investment in the oil and gas sector, reporting that capital spending is expected to decline by 12 percent in 2018, following a four-year decline from 2014 (Statistics Canada, 2017). Because of its heavy reliance on the oil and gas sector, the largest impact of that decline in investment spending is expected to be in Alberta, where it is also expected to decline by 12 percent.

The government of Alberta has hard news for more general investment spending in Alberta, which is also in broad decline (Government of Alberta, 2017). In 2016 sectors with the largest decline in investment spending relative to 2015 were:

- Oil and gas services (down 54.8% to \$978 million);
- Oil and gas extraction (down 35.0% to \$24.7 billion);
- Accommodation and food services (down 34.7% to \$712 million);
- Manufacturing (down 20.6% to \$2.1 billion—about one-half of this goes into the refineries and chemicals sub-sectors); and
- Health care and social assistance (down 15.2% to \$1.0 billion).

A Less Inviting Regulatory Regime

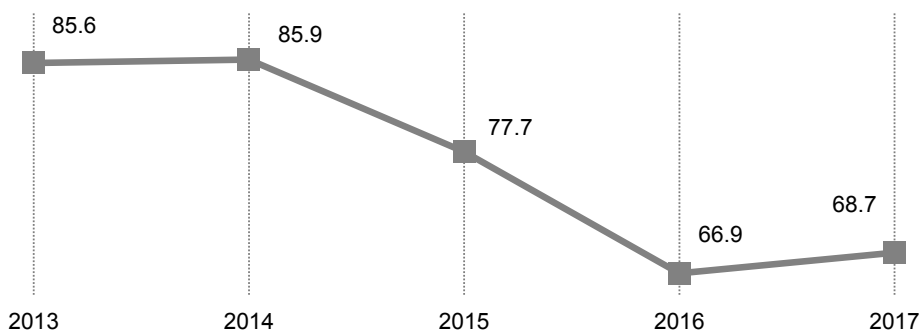
Investment trends in the oil and gas sector are influenced by several different factors. Some of these, such as future projections of energy prices, are largely outside of government control. However, forces firmly within the control of governments, specifically, the public policy environment that they create within which firms operate, such as tax regimes, royalty regimes, regulation, and governmental project approval processes, also play an important role. Unfortunately, there is good reason to believe that Alberta's policy choices in recent years have undermined rather than promoted Alberta's competitiveness and attractiveness as a destination for business in this sector.

Specifically, two surveys conducted by the Fraser Institute delve into the question of which aspects of public policy in Alberta would attract investment both in mining and in petroleum exploration and development. The two surveys ask senior executives in the mining and oil and gas sectors to assess how a variety of policy dimensions (15 for mining, 16 for petroleum) would influence their investment decisions, either attracting them as investors, or deterring them from investing. These surveys are perception surveys; they capture a snapshot of how executives responsible for guiding capital feel about the investment attractiveness of given policies. For that reason, we cannot assign causality to changes in rankings.

Global Petroleum Survey

The *Global Petroleum Survey's* Policy Perception Index (PPI) is a broad measure evaluating public policy in 16 policy areas ranging from the attractiveness of the tax regime to the deterrence that would come from uncertainty about environmental policies. In recent years, the PPI has declined sharply due to the perception investors have of Alberta's (and Canada's) policy environment. A score of 100 on the Policy Perception Index indicates the best policy environment for attracting investment; 0 is the worst policy environment. Figure 1 shows Alberta's PPI score from the *Global Petroleum Survey*. It illustrates the decline in respondents' percep-

Figure 1: Global Petroleum Survey Policy Perception Index (PPI) Score, 2013–2017



Source: Stedman and Green, 2017.

tions of that province's public policies surrounding oil and gas exploration and development. Alberta's PPI score dropped from 86/100 in 2013 to 69/100 in 2017.

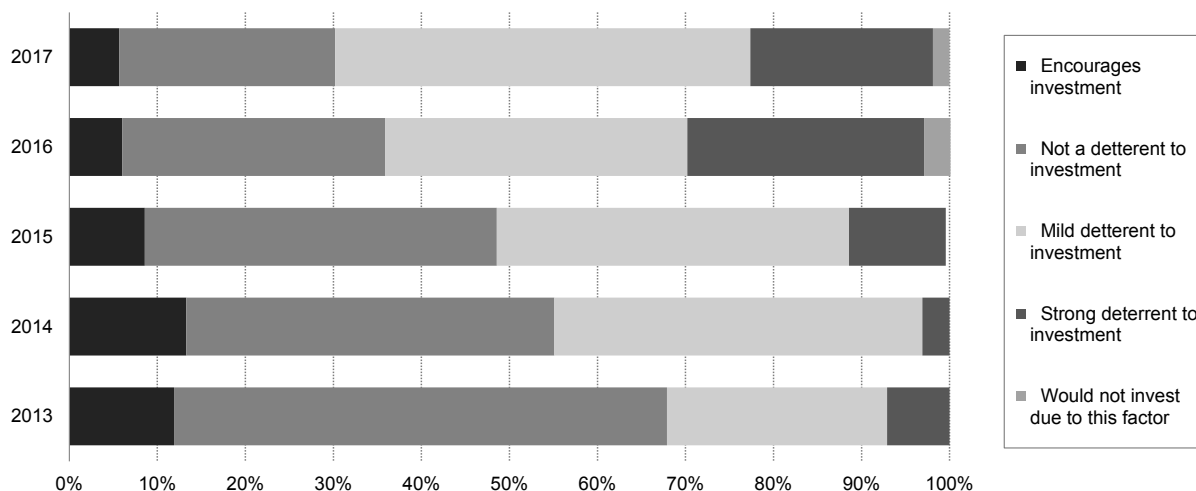
Certain policy areas within the petroleum survey have shown a significant deterrence to investment in the last four years. For example, Alberta's fiscal terms—the regime of lease payments, royalties, production taxes, and gross revenue charges (but not corporate or personal taxes)—were considered a deterrent to investment by only 14 percent of survey respondents in 2013. That deterrence perception reached 50 percent in 2017. Respondents saying that Alberta's fiscal terms were attractive to investment dropped by 22 percent over that same period. With regard to Alberta taxation in general, there was a similar decline in investment attractiveness from only 16 percent of respondents indicating that they were deterred by this factor in 2013, rising to 52 percent registering it as a deterrent to investment in 2017.

But some of the largest shifts can be seen in survey respondents' perceptions of regulatory barriers to investment. The survey asks five questions related to different aspects of regulation in the oil and gas exploration and production space.

When asked whether uncertainty about environmental regulations would attract or deter investment in Alberta, 32 percent of survey respondents registered deterrence in 2013, but 68 percent did so in 2017 (after peaking at 72 percent in 2016).

Similarly, concerns over uncertain regulatory enforcement in Canadian jurisdictions followed the same pattern, with only 20 percent of

Figure 2: Global Petroleum Survey Cost of Regulatory Compliance, 2013–2017



Source: Stedman and Green, 2017.

respondents registering deterrence to investment in 2013, rising to 35 percent in 2017, after a spike of 57 percent in 2016.

The increase in investor concerns about the cost of regulatory compliance is striking. While 32 percent of respondents registered compliance costs as a deterrent to investment in 2013, 70 percent registered deterrence due to this factor in 2017. Figure 2 shows the evolution in the different survey responses to this question over time.

A fourth indicator of the impacts of Alberta's regulations on investment attractiveness is the survey's measurement of the effect of labour regulations and employment agreements on investment attractiveness. In 2013, only 19 percent of respondents said they were somewhat deterred from investment due to these factors. By 2017, the percentage of respondents registering deterrence due to this factor had reached 27 percent.

The fifth regulatory factor that the *Global Petroleum Survey* measures is related to concerns over regulatory duplication and inconsistencies. Thirty-five percent of survey respondents in Alberta expressed concern about or deterrence due to regulatory duplication and inconsistency in 2013. By 2017, that had increased to 48 percent, after a 2016 peak at 53 percent.

In 2016, we focused specifically on the question of what was behind the fall in investor attractiveness in Alberta (McKittrick and Green, 2016).

By analyzing the share prices of firms, we showed that, though investors had already “priced in” many concerns about oil transport, policy decisions were the driving factor in Alberta’s deteriorating score on the Fraser Institute’s *Global Petroleum Survey* Policy Perception Index (where a high score represents high deterrence). Alberta’s score increased from 26.6 in 2014 to 34.2 in 2015, and its global rank as a desirable location for investment fell to 38th (out of 126) in 2015, down from 16th (out of 156) in 2014.

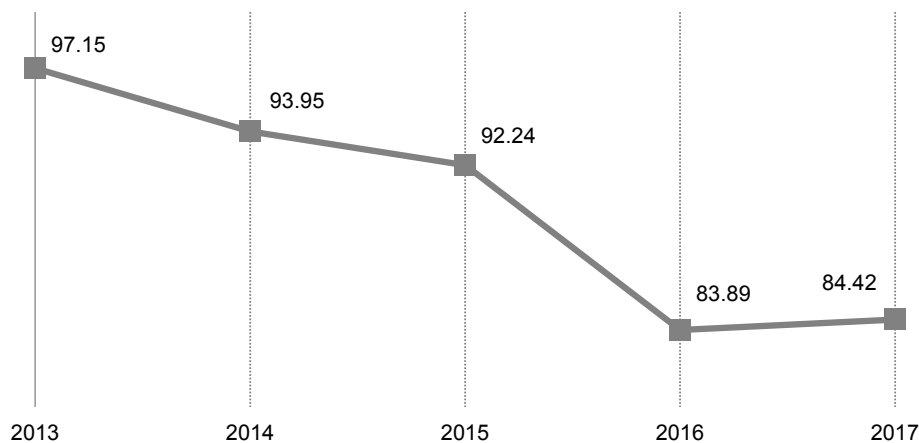
Survey of Mining Companies

A similar decline in investment attractiveness in Alberta has played out in the mining sector. Figure 3 shows the evolution in the overall Policy Perception Index from the Fraser Institute’s *Annual Survey of Mining Companies* from 2013 to 2017.

As with the *Global Petroleum Survey*, the mining survey identifies how certain types of regulation might attract or deter investment in the province. And as with the petroleum survey, the *Annual Survey of Mining Companies* also shows that when policy perceptions and estimates of mineral potential are combined, overall investment attractiveness in Alberta declined by nearly 21 percent from 2013 to 2017.

In 2013, regulatory uncertainty in Alberta was only considered a deterrent by 11 percent of survey respondents. After peaking at 38 percent in

Figure 3: Annual Survey of Mining Companies Policy Perception Index (PPI) score, 2013–2017



Source: Stedman and Green, 2018.

2016, the percentage expressing deterrence fell to 25 percent in 2017, still more than double that from four years before.

Views of the attractiveness of environmental regulations in Alberta fared no better, deterring 21 percent of respondents in 2013, spiking up to deter 48 percent in 2016, before settling down slightly to 37 percent expressing deterrence in 2017.

As with the petroleum survey, a pattern of increased deterrence was also express in response to regulatory duplication and inconsistencies in Alberta. While this was already a significant deterrent in 2013 when 30 percent of respondents registered some level of deterrence, that shot up to 65 percent in 2016, before settling back to 38 percent in 2017.

Labour regulations in the Alberta mining sector are something of a bright spot with regard to regulatory deterrence to investment. Only 13 percent of respondents viewed this factor as some deterrent in 2013, and after a brief spike to 22 percent in 2016, concern about labour regulations in the mining sector lapsed back to the 2013 level of 13 percent.

What's Behind the Decline in Investment Attractiveness?

There are many potential reasons for Alberta's declining investment attractiveness with many causal elements. Care must be taken in attributing the decline to any specific action. But sequential injections of uncertainty almost certainly played a role. Since 2014, there have been a steady stream of announcements (both provincially and federally) that have shaken the confidence of investors to both be able to invest and see a profitable return on that investment in Alberta.

The uncertainty cascade started in 2015, when the Alberta government announced a new royalty review process. As we showed at the time, royalty reviews unleash significant uncertainty among investors (Green, 2015). In the 2007 royalty review, as we noted in *Fallout from the 2007 Alberta Royalty Review Panel*, our global petroleum survey recorded a sharp drop in respondents' perceptions of Alberta's policy environment. The 2015 royalty review, once it was completed, was largely unchanged. During the process, concerns about the potential for increased royalties were growing, particularly in an environment where the conversation was framed around the idea that the people of Alberta were not getting their "fair share," of oil and gas sector profits, which raised concerns about potentially increased royalties on oil and gas producers.

Another blow to investor certainty came in the form of a carbon emission cap. The cap introduced a long-term threat to the prospects for significant growth in large oil sands projects when the Alberta government proposed implementation of a 100 megatonne cap on greenhouse gases from oil sands operations. As we wrote in 2016, based upon production assumptions at that time, Alberta oil sand emissions would hit the cap in 2025 when curbs on growth would mean significantly lower profit potential for long term plays (Jackson and Green, 2016). We found, based on 2016 production growth estimates as well as forecast oil prices in a scenario where current emissions intensity levels were applied, that the value of the unproduced oil begins at CA\$1.19 billion (in 2015 dollars) in 2025, increasing to CA\$28.72 billion by 2040. The cumulative losses in

this scenario from 2025 to 2040 total CA\$254.74 billion, or approximately 22 percent of the potential CA\$1.19 trillion of in-situ production that could occur between 2025 and 2040. (Naturally, these dates and values will change as oil prices fluctuate in coming decades). Oil sand investments are long term investments, and a looming cap with uncertain time horizons would serve as a significant injection of uncertainty.

A third blow to Alberta's attractiveness as a place to invest in natural resource extraction was the Alberta government's decision to convert its previously limited carbon tax levy to an economy-wide carbon tax (exempting electricity) without revenue neutrality (Alberta, 2018b). The carbon tax was set at \$30/tonne of CO₂ (equivalents). Premier Rachel Notley later agreed to the federal government's plan to raise the carbon tax to \$50/tonne by 2022, (without specifying when) although this was contingent on Alberta gaining pipeline capacity to move its oil to markets (Morgan, 2016). The carbon tax was one element in a wide ranging Climate Leadership Plan that significantly expanded governmental intervention in energy production and consumption across the province (Alberta, 2018a). Other aspects of the Climate Leadership plan that are likely to deter investment by increasing electricity costs include a commitment to phasing out coal-generated electricity by 2030, tripling renewable energy to supply 30 per cent of generation by 2030, further regulating methane emissions from the oil and gas sector, and creating a new agency to promote energy efficiency in Alberta.

A fourth blow to Alberta's economic attractiveness has been the high profile cancellation of several proposed pipeline projects including the Northern Gateway Pipeline and the Energy East pipeline that were intended to transport Alberta bitumen and upgraded oil to tidewaters and abroad, where the oil might fetch higher prices than they command from our current monopoly buyer, the United States. As the Fraser Institute showed recently, the depressed price that Canada gets for its oil could cost the energy sector as much as \$16 billion dollars in 2018, and in the years ahead if the dearth of pipeline capacity continues (Stedman and Aliakbari, 2018).

Additional blows to Alberta's attractiveness to investment came from expansive regulations. In its report *A Competitive Policy and Regulatory Framework for Alberta's Upstream Oil and Natural Gas Industry*, the Canadian Association of Petroleum Producers (CAPP) observes that Alberta's regulatory regime is one of the most stringent in the world (CAPP, 2017). While saluting the commitment to environmental protection, CAPP observes that stringency comes at a price. CAPP's analysis of the regulatory timeline for getting approval of a mandatory "Statement of Concerns" (which outlines any concerns the regulator may have) varies widely among comparative (or competing) jurisdictions in Canada and

the US. As CAPP's analysis points out, Alberta's regulatory regime could lead to well-licensing delays that are up to 148 days longer than in BC or Saskatchewan, and 190 days longer than is the case in comparable jurisdictions in the US.

The regulatory cascade also comes with a considerable price tag. One estimate (Bickis, 2017) of the cost of a new tranche of carbon regulations enacted in 2017 on large carbon emitters (i.e., power plants) suggests it might impose costs of \$1.2 billion per year in carbon levies by 2020 (Alberta, 2018c).

A final injection of uncertainty in Alberta's investment prospects are outside of Alberta's control. Canada's National Energy Board announced in 2017 that the pipeline approval process would expand to consider "upstream and downstream" carbon emissions related to proposed projects (Canada, 2017). The specific processes included as upstream activities will vary by resource and project type, but in general they include extraction, processing, handling, and transportation. Downstream emissions, it explains, include "all activities from the point of the product leaving the project to the final end-use. The processes will include further refining and processing, transportation and end-use combustion" (Canada, 2017).

In other words, the NEB plans to judge a proposed oil carrier's project on the greenhouse gas emissions of the people who produce the oil, as well as those who eventually consume it, theoretically, assessing whether the total emissions of the overall lifecycle align with the government's greenhouse gas-emission reduction targets.

Subsequent to this action, the federal government decided to "modernize" Canada's environmental assessment process for major projects. The update was touted as an improvement that would reduce approval timelines, and improve the "science" of evaluating proposed projects. However, one Fraser Institute author has observed that the revised process injects several new evaluation criteria that are very ill-defined and are likely to lengthen project approval timelines, rather than shorten the process (Pardy, 2014). Such criteria include a requirement for projects to be reviewed with gender-based analysis, incorporate indigenous traditional knowledge, and expand the "standing" of project opponents regardless of whether they would be directly affected by a proposed project. This latter change alone could cause an influx of opposition from jurisdictions far removed from any environmental risk pertaining to the project. There is no question, as we have shown, that while the previous environmental assessment had its flaws and was inherently political, the new process will have still more flaws, while still being inherently political, rather than providing some kind of objective analytical process (Pardy, 2018).

Recommendations

To reverse Alberta's comparative slide in investment attractiveness, the province's regulators should begin by reforming policies that are clearly seen as deterring investment, which our surveys identify are an unattractive tax regime, unattractive fiscal terms; high regulatory costs, and uncertain regulatory processes. Unwinding the regulatory changes that may have caused the decline in investment attractiveness (discussed above), such as removing the carbon emission cap, repealing the expanded carbon tax, removing the additional regulatory burden posed by the Alberta Climate Leadership plan, and removing other sources of uncertainty or unattractiveness to investment would be an excellent place to start.

More generally, Alberta might consider a regulatory reform initiative such as British Columbia's Regulatory Reform Initiative implemented in 2001, with a goal of reducing regulations by requiring that any new regulations must be accompanied by cutting another (British Columbia, 2017). The BC model was noted for its focus on regulatory requirements rather than on proxy measures such as the number of regulations or pages published in governmental gazettes. As reported by Laura Jones in a publication for the Mercatus Center, some 382,139 regulatory requirements were identified by government agencies when the government appointed a minister of deregulation in 2001 (Jones, 2015). In addition, an extensive process was put in place to identify un-needed regulations. In 2017 alone, some 3,300 unnecessary or obsolete regulations were eliminated, and British Columbia's regulatory count fell from 330,812 in 2001 to 170,140 in 2017. That's a reduction in red tape of 48 percent. Alberta no doubt has every bit as much room for red-tape reduction as did British Columbia.

New Brunswick's Smart Regulation approach is a three-point plan to reform the province's regulatory system by reducing regulation by 20 percent overall and by instituting a rule that any new regulations must displace an obsolete regulation (New Brunswick, 2018).

Though Canada is under no obligation to mimic US policy, it should nonetheless recognize that the United States has recently made important strides in regulatory reform. As researchers with the Brookings Institution have noted, during his first week in office, Donald Trump signed an

executive order requiring that for every new regulation issued, two must be eliminated (Gayer, Litan, and Wallach, 2017). He also instituted what has been called a “regulator’s budget,” evaluating regulations to be replaced based on costs and benefits of new regulations. The president claims that in year one, 22 regulations were eliminated for every new one created, saving the US economy US \$8.1 billion.

Alberta’s natural resource regulations are among the most stringent in the world. Many of the regulations now in place were introduced with legitimate policy objectives in mind, but cumulatively they come at a steep price and are increasingly seen as a deterrent to investment in the province.

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Our mission is to improve the quality of life for Canadians, their families, and future generations by studying, measuring, and broadly communicating the effects of government policies, entrepreneurship, and choice on their well-being.

Notre mission consiste à améliorer la qualité de vie des Canadiens et des générations à venir en étudiant, en mesurant et en diffusant les effets des politiques gouvernementales, de l'entrepreneuriat et des choix sur leur bien-être.

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