



NAFTA 2.0: FOR PEOPLE OR POLLUTERS?

A Climate Denier's Trade Deal versus a Clean Energy Economy

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EXECUTIVE SUMMARY

Communities across North America are enduring falling wages and rising climate threats. Instead of reducing these problems, the North American Free Trade Agreement (NAFTA) is exacerbating them. NAFTA was written before broad awareness of climate change, and negotiated with input from fossil fuel executives, not workers, climate scientists, or climate-impacted communities. Predictably, the negotiation prioritized the profits of multinational firms, not the well-being of working families who face increasing climate hazards. As a result, NAFTA includes an array of little-known rules that bind North America to fossil fuel dependency rather than supporting a just transition to a clean energy economy. It is an obstacle to climate progress.

After more than two decades of NAFTA, the deal is finally being renegotiated, offering an opportunity to invert its backwards priorities. Civil society organizations, academics, and legislators across North America have offered a litany of specific ideas for a more equitable, climate-compatible deal. This time around, will negotiators prioritize the workers and communities that have been hardest hit by the fossil fuel economy, or the CEOs who profit from it?

The track record so far is not encouraging. While some important proposals for change reportedly sit on the negotiating table, many of NAFTA's handouts to corporate polluters remain untouched. Even worse, negotiators are entertaining new corporate-backed rules

for NAFTA 2.0 that would pose additional barriers to the bold climate action that science and justice demand. Such terms, if accepted, would be an exercise in climate denial, with long-lasting consequences for workers and communities across North America. We cannot shift to a clean energy future if a corporate trade deal tethers us to the fossil fuel past.

In this report, leading economists from each of the three NAFTA countries present original research and analyses on the climate implications of NAFTA, the new climate threats that NAFTA 2.0 could pose, and concrete alternatives for replacing NAFTA with a climate-friendly trade agreement. Here are some of the key findings:

NAFTA'S OBSTACLES TO CLIMATE PROGRESS

- NAFTA includes a “proportionality” rule that locks in tar sands oil extraction and fracking in Canada, while giving corporate polluters a permanent green light to build tar sands oil pipelines into the U.S. The rule essentially requires Canada to export to the U.S. three-quarters of its oil production

and over half of its natural gas. If Canada tries to meet its climate goals but remains bound by this NAFTA rule, the country will produce nearly 1,500 metric megatons more climate pollution by 2050 than if it ditched the rule. This cumulative NAFTA climate pollution “penalty” is twice as large

as Canada's current annual emissions and more than 12 times greater than its 2050 climate pollution target. Negotiators must eliminate NAFTA's proportionality rule if Canada is to have a chance at meeting its climate goals.

- NAFTA encourages Mexico's dependency on fossil fuels, particularly natural gas, which has contributed far more than any other fuel type to Mexico's recent increase in climate pollution. NAFTA bars the U.S. Department of Energy from determining if gas exports to Mexico are in the public interest, facilitating a five-fold increase in U.S. gas exports to Mexico since 2010. This surge in gas exports has fueled increased fracking in the U.S., expansion of cross-border gas pipelines, and a crowding out of solar and wind power growth in Mexico. Half of Mexico's electricity now comes from gas, while only 1 percent comes from solar and wind. NAFTA also has incentivized increased foreign investment in Mexico's offshore drilling and oil and gas pipelines, reinforcing the country's fossil fuel dependency.
- NAFTA could prolong the climate damage from the Trump administration's regulatory rollbacks if NAFTA's private legal system for corporate polluters remains intact. NAFTA's controversial "investor-state dispute settlement" (ISDS) mechanism has allowed corporations to sue the U.S., Canada, and Mexico in unaccountable

tribunals over restrictions on fracking, denials of tar sands oil pipelines, and other climate and community protections. Governments cannot "win" ISDS cases, but they can and have lost them, resulting in millions of tax dollars paid out to corporations. The threat of such losses has deterred governments from enacting environmental policies. If this threat remains in NAFTA, it could delay or weaken the re-establishment of U.S. climate policies after the Trump administration leaves, prolonging Trump's polluting legacy.

- NAFTA allows corporations to evade climate policies by offshoring their production, pollution, and jobs to countries with weaker climate standards. The deal offers protections to corporations that cross borders, without requiring cross-border protection of workers and the environment. This fundamental inequity already has resulted in the offshoring of pollution from lead and other toxins. As North America's governments begin to enact bolder climate policies at an uneven pace, corporations could take advantage of NAFTA to shift their emissions and jobs from climate leaders to climate laggards. This climate pollution loophole discourages climate leadership. Policymakers across North America regularly cite it as a reason not to enact stronger climate policies, for fear that doing so would spell job loss and a mere exporting of emissions.

NEW CLIMATE THREATS IN NAFTA 2.0?

- NAFTA negotiators have explicitly stated that a goal for NAFTA 2.0 is to lock in the recent deregulation of oil and

gas in Mexico—a key demand of fossil fuel corporations. The deregulation is encouraging increased offshore drilling,

fracking, and other fossil fuel extraction in Mexico. A future Mexican government may want to restrict such activities to reduce climate emissions and air and water pollution. However, NAFTA 2.0 could bar such changes with a “standstill” rule that requires the current deregulation of oil and gas to persist indefinitely, even as governments change, the climate crisis worsens, and demands for climate action crescendo.

- NAFTA 2.0 could newly expose Mexico’s climate policies to costly and unpredictable legal threats by stating that Mexico’s energy sector is subject to ISDS. If oil and gas corporations are granted the right to sue Mexico in private NAFTA tribunals for policy changes that restrict their business, it could make future governments in Mexico think twice before taking bold climate action.
- NAFTA negotiators have suggested that NAFTA 2.0 could expand the proportionality rule—which already locks in

climate pollution in Canada—so that it also is binding on Mexico. This new requirement to export oil and gas could make it more difficult for Mexico to cut climate pollution while satisfying domestic energy demand.

- NAFTA 2.0 reportedly already includes a set of expansive rules concerning “regulatory cooperation.” Past trade deals suggest that these rules could require Canada, the U.S., and Mexico to use burdensome and industry-dominated procedures for forming new regulations, which could delay, weaken, or halt new climate policies. In addition, the rules could lead to requirements for the three countries to align, or “harmonize,” regulations, which in the past has meant downward harmonization to the cheapest and weakest regulatory option. For example, Canada and Mexico could be pressured to adopt climate standards weakened by the Trump administration, making it harder to resume climate progress in the post-Trump era.

A CLIMATE-FRIENDLY NAFTA REPLACEMENT

- A new North American trade deal should close NAFTA’s climate pollution loophole that allows corporations to evade climate policies by offshoring jobs and emissions. If a trade deal allows corporations to cross borders, it also must ensure cross-border protections for workers and communities. Each participating country should be required to enforce robust policies to reduce climate and other pollution, protect workers, and guarantee human rights, in line with international agreements. That includes a requirement to fulfill the Paris

climate agreement. A new, independent and binding process should enforce these requirements—one that empowers impacted communities to confront any violations. To further deter pollution offshoring, the deal also should penalize imported goods made with significant climate pollution.

- To prevent climate and other public interest policies from being challenged in private tribunals, NAFTA’s replacement must eliminate ISDS. Corporations can use domestic courts, just like everyone else.

Instead of ISDS, a deal should encourage investments that are compatible with the public interest (e.g., not fossil fuels) by offering investors basic protections in exchange for meeting basic legal obligations. To also shield climate and other public interest policies from trade challenges brought by other governments, NAFTA's overreaching rules must be curtailed and a broad "carve-out" should be included that exempts such policies from challenge.

- The deal that replaces NAFTA should allow the governments of North America to swiftly phase out fossil fuel exports as they pursue a just transition to a clean energy economy. That means deleting NAFTA's proportionality rule that locks in

fossil fuel exports, climate pollution, and toxic practices like fracking and tar sands oil extraction. It also means protecting the autonomy of each government—including the U.S. Department of Energy—to determine whether gas and other fossil fuel exports are in the public interest, rather than requiring that those exports be automatically approved.

NAFTA's renegotiation is long overdue. But we cannot afford to lock North America's communities into another multi-decade pact that ignores climate change. To replace NAFTA with a deal that protects people, today's negotiators should listen to the workers and communities on the front lines of climate change, not the corporations fueling it.

INTRODUCTION

The climate crisis is all too real for communities across North America. In just the last year, back-to-back hurricanes flooded Houston and knocked out power in San Juan; massive fires ravaged California and British Columbia; a water crisis threatened Mexico City; record-breaking droughts afflicted Saskatchewan and Oaxaca; and Louisiana lost more wetlands to the sea.

Amid the turmoil, a group of government officials and corporate advisors gathered on a hot August day in a hotel in Washington, D.C., to start renegotiating the North American Free Trade Agreement (NAFTA). It marked the first real attempt to revisit the controversial pact since it was negotiated over two decades ago—before awareness of the climate crisis was widespread. Since the negotiations are

conducted in secret, we are left to wonder: Did the negotiators discuss how a rewritten deal should address climate change? Or are these talks as climate-ignorant as the ones that produced NAFTA itself?



A woman holds a child after being rescued from the widespread flooding in August 2017 caused by Hurricane Harvey, one of the costliest U.S. natural disasters to date. The hurricane formed while negotiators were meeting in Washington, D.C. for the first round of NAFTA renegotiation talks. Given the talks are held in secret, we do not know if they discussed climate change. Photo: Johanna Strickland

Written under the guidance of corporate CEOs, NAFTA was never intended to prioritize workers' rights, public health, or climate justice—its goal was to boost the profits of multinational corporations. How it might affect workers, health, or our planet was an afterthought. Climate change did not even register as an afterthought. It is no surprise then that NAFTA includes a host of provisions that support the profits of fossil fuel corporations at the expense of climate progress.

The renegotiation of NAFTA offers an opportunity to invert the priorities of the original deal. It is an opportunity to prioritize people—centering those hit hardest by the fossil fuel economy: working families, immigrants, women, people of color, Indigenous groups, and climate-impacted communities. What would a North American trade deal look like if it prioritized the needs and aspirations of our communities, not the profit margins of CEOs?

For one, the deal would not ignore climate change. We cannot transition to a more equitable, clean energy economy if corporate trade deals tether us to the exploitative fossil fuel economy of the past. To produce a climate-compatible deal, the officials renegotiating NAFTA should leave their hotel,

solicit the guidance of frontline communities from the Yukon to the Yucatan, and reject the requests of corporate polluters for further handouts.

Unfortunately, that is not where the current NAFTA renegotiation appears to be headed. Instead, proposals are on the table that would deepen fossil fuel dependency and pose new barriers to a clean energy economy that supports workers and communities across North America.

To correct course, we must address three important questions:

1. How does NAFTA affect climate progress?
2. What new climate threats are in the NAFTA 2.0 talks?
3. What would a climate-friendly NAFTA replacement look like?

This report addresses each of these questions in turn, featuring original analyses from leading economists in each of the three NAFTA countries. The answers spotlight the importance of the current NAFTA talks for future climate progress. Because this time around, we cannot claim we did not know. A NAFTA renegotiation that fails to address climate change would be a costly exercise in climate denial.

CHAPTER 1: NAFTA'S OBSTACLES TO CLIMATE PROGRESS

NAFTA was negotiated with input from fossil fuel executives, not climate scientists or climate-impacted communities. The end result was a deal that reinforces North America's fossil fuel dependency. The text is full of provisions that protect corporate

polluters—protections that allow them to undermine or directly challenge hard-fought climate policies. The analyses that follow offer concrete examples of NAFTA provisions that pose barriers to climate progress.

CANADA: THOU SHALL EXPORT FOSSIL FUELS¹

Does NAFTA hamstring Canada's transition to a low-carbon future? Due to NAFTA's energy "proportionality" rule, a rule like no other in the world, Canada must make available for export to the U.S. three quarters of its oil production and over half of its natural gas.¹ Not only that. Ottawa also must not alter the proportion of tar sands oil in its export mix, nor the fraction of exports from hydraulically fractured (fracked) oil and natural gas.² This means that although tar sands oil is one of the most carbon-intensive and locally damaging fuels on the planet and fracked gas can be a worse emitter of greenhouse gases (GHGs) than coal, Canada is not allowed to phase them out faster than conventional oil and gas.³

Rather than encouraging a rapid phase-out of the most polluting fossil fuels, NAFTA's proportionality rule perpetuates their use. We have constructed two scenarios to test whether Canada can meet its climate commitments. In one scenario, Canada remains bound by proportionality. In the other, it is freed from it. In both scenarios, Canada is aggressively striving to reduce GHG emissions in line with its climate goals. Our findings

show that if Canada tries to meet these goals but remains bound by proportionality, it will produce 1,488 more metric megatons (Mt) of GHG emissions than if it goes proportionality-free between now and 2050. The cumulative climate pollution "penalty" is sizeable. It is twice Canada's current annual GHG emissions and more than 12 times greater than its 2050 GHG emissions target.

Negotiators in the current NAFTA talks must end the proportionality rule if Canada is to have a chance at meeting its international climate targets.



Indigenous groups participate in a Tar Sands Healing Walk in Alberta, Canada in 2013 to raise awareness of the devastation in their communities caused by the extraction of tar sands oil. NAFTA's proportionality rule restricts Canada's ability to swiftly phase out tar sands oil production. Photo: Laura Whitney

An Obstacle to Canada's Climate Goals

At the G8 meetings in Italy in 2009, Canada and the other member countries promised to cut GHG emissions 80 percent by 2050.⁴ In the Paris climate agreement, Canada committed to reduce its GHG emissions by 30 percent by 2030. This is a feeble target, considering that Canada ranks 38th in population, but is the world's ninth-greatest carbon polluter.⁵ To do its part to help achieve

the global goal of reaching net zero emissions by mid-century, Canada must make more far-reaching changes than most countries.

But will Canada be able to meet its Paris climate goal, feeble though it is? Can it meet its G8 goal of an 80 percent reduction in emissions by mid-century? Not without tackling the production of oil and natural gas,

¹ Written by Dr. Gordon Laxer, researched by Dr. Laxer and Ben Beachy

Canada's greatest and fastest growing source of emissions. Indeed, Canada's Ministry of Environment and Climate Change forecasts that Canada will fail to meet its Paris climate commitment and singles out Alberta's oil sands as the main problem. "The growth in emissions to 2030 is driven largely by growth in the upstream oil and gas sector and, in particular, from the oil sands."⁶ In fact, if Canada fails to curb emissions from oil and natural gas production, including from tar sands oil, it will account for almost half of Canada's total emissions by 2030.⁷

Canada's oil and gas emissions are driven by exports. Oil is produced mainly for export to the U.S. All of Canada's natural gas exports and 99 percent of its oil exports head south of the border. It's the production of oil and natural gas, mainly for export, not autos and trucks used by Canadians, that is Canada's biggest single emissions source. Canada can't meet its Paris promises if it is locked into being America's gas tank.

To realize its climate goals, Canada must quickly phase out all carbon-fuel exports including those of fracked oil and gas and synthetic tar sands oil. Because tar sands oil

must be separated from massive amounts of sand to produce synthetic crude, tar sands emissions are irreducibly higher than from conventional oil—21.5 percent higher for drilled tar sands oil and 57.5 percent higher for mined tar sands oil.⁸ The tar sands must cease production entirely by 2030. Fracking of natural gas also leads to about 50 percent higher emissions than by conventional methods.⁹ Fracked oil might not emit more GHGs, but the many toxic chemicals used cause other environmental harms. Seventy percent of Canadians support a moratorium on fracking until it's shown to be safe.¹⁰ Like tar sands oil production, fracking should quickly halt across Canada. A longer period will be necessary to transition off oil and natural gas production from the least carbon-intensive sources—domestic conventional oil and natural gas. Canadians will need these fuels, albeit at steadily diminishing levels, until at least mid-century.

Unfortunately, NAFTA contains an outdated obstacle to the rapid fossil fuel phase-out required to meet Canada's climate commitments. That obstacle is called the proportionality rule.

NAFTA's Proportionality Rule

The proportionality rule was drafted in the 1980s before there was widespread recognition that humans were causing disastrous climate change. The proportionality clause appears twice in the 1989 Canada-US Free Trade Agreement (CUFTA). Five years later, NAFTA's negotiators simply imported the proportionality rules from CUFTA almost word for word, and exempted Mexico from it.¹¹

The proportionality rule states that if any government (federal, provincial, or state) takes measures that reduce the availability of an energy good or a basic petrochemical for export to another NAFTA country, it must make available for export the same proportion of the total supply of that energy good as it has in the past three years.¹² The exporting country is allowed to reduce energy exports to another NAFTA country, but it must cut

such supplies to its own people in equal proportions. The NAFTA rule effectively prevents the exporting country from reducing energy exports in order to redirect those supplies to its own residents.

Proportionality is based on total “supply,” not “production.” The distinction matters and illustrates the rule’s bizarre logic. Supply includes oil and natural gas imports as well as domestically produced supplies.¹³ Currently, Canada is obliged to make available for export to the U.S. 74 percent of its oil production. But when oil imports are included in Canadian “supply,” the proportional obligation falls to 65 percent.¹⁴ It is strange to add oil imports to Canadian “supply,” because during international oil supply crises, oil imports would almost certainly drop considerably. Proportionality’s rule imposes a similar obligation on Canada’s export of natural gas

to the United States. Canada’s natural gas exports are declining because the U.S. is becoming a net exporter of gas, but Canada currently exports 52 percent of its natural gas production to the U.S. It is obliged to make that proportion available for export to the U.S.¹⁵

Governments of NAFTA countries not only must not alter the amount of energy available for export to another member country, but face even greater restrictions. Article 605 of NAFTA includes Clause C, which specifies that an exporter cannot disrupt “normal channels of supply” or “normal proportions among specific energy ... goods” by, for example, substituting a heavy grade of crude for a lighter variety. Under the proportionality rule, then, Ottawa cannot lower tar sands oil exports to the U.S. more than conventional oil exports.

A PERMANENT GREEN LIGHT FOR TAR SANDS OIL PIPELINES

Just as NAFTA’s proportionality rule limits Canada’s ability to phase out tar sands oil, it also undercuts the efforts of communities on both sides of the Canada-U.S. border to halt tar sands oil pipelines. From Keystone XL to Enbridge’s Line 3 pipeline, the fight against such pipelines, led by Indigenous groups, has been a major front in today’s environmental movement. But the corporations and banks behind those pipelines are served by the proportionality rule.

NAFTA’s proportionality rule offers a guarantee to the Wall Street firms that finance cross-border tar sands oil pipelines: If they invest in a costly pipeline project, they can rest assured that the government of Canada will not do anything to interrupt the flow of tar sands oil. That guarantee sits in a legally-binding, multi-decade trade pact that is more difficult to change than federal law. For risk-averse financiers worried about rising opposition to tar sands oil, such an ironclad guarantee of unfettered flows of oil and revenue may make it easier to look past the opposition and invest in tar sands oil pipelines. The fight to halt those pipelines is thus intertwined with the fight to replace NAFTA.

Under proportionality, corporations are allowed to make decisions that cut energy exports, but governments are restricted from doing so, even though they are the ones that are democratically elected. If, for example, the TransCanada or Enbridge pipeline company decided to ship more western Canadian crude oil to eastern Canadians instead of to the U.S., it would not violate proportionality. But if Ottawa ordered the pipeline corporations to do so on any grounds—environmental or energy security—it would almost certainly violate proportionality.¹⁶ Although it has never been invoked, the very existence of NAFTA’s proportionality rule prevents policymakers from conceiving of sensible ways to cut emissions. Governments in Canada need to think outside the “business as usual” box to achieve a low-carbon future.



Machines in Alberta, Canada mine tar sands oil—one of the world’s most climate-polluting fuels. NAFTA’s proportionality rule restricts Canada’s ability to replace tar sands oil production with conventional oil. Photo: Dan Prat

The proportionality rule is written in generic language as if it applies to all three NAFTA countries, but it effectively applies only to Canada. Mexico resisted strong U.S. pressure to sign on to proportionality in the original NAFTA talks in the early 1990s. Thus Mexico, although a full NAFTA member, is exempt from proportionality’s energy export requirements.

For practical purposes, proportionality has not really applied to the United States, either, because the U.S. has historically imported lots of oil and natural gas and exported little of either. That has changed, however, with the recent surge in U.S. natural gas and oil production. By 2016, U.S. oil exports to Canada had grown to 410,000 barrels of oil a day (one-seventh the level of Canadian oil exports flowing the other way), accounting for a little more than half of Canada’s oil imports. Meanwhile, U.S. gas exports to Canada have also grown significantly. Currently, these exports are still a small percentage of the overall U.S. oil and gas “supply.” But if the percentage grows, the U.S. could find it increasingly problematic to be bound by the proportionality rule to continue oil and gas exports to Canada, even in the event of domestic shortages.

Freedom from Proportionality

Justin Trudeau has acknowledged that phasing out the oil sands is urgent but will take time. How much time? Can Canada meet its 2030 Paris climate targets if it doesn’t phase out the sands by then? In a recent report, Danny Harvey and Lika Miao calculate

that “only with a complete phase-out of oil production from the oil sands, elimination of coal for electricity generation, significant replacement of natural-gas-fuelled electricity generation with electricity from carbon-free sources, and stringent efficiency measures in

all other sectors of the economy could Canada plausibly meet its 30 percent target.”⁷ Those emission numbers concur with the analysis in this report, but Harvey and Miao don’t link their policy options with the end of NAFTA’s proportionality rule. This report does.

Let’s assume that Canada tries to meet its G8 pledge of an 80 percent reduction in GHG emissions by 2050. What would the path between here and there look like if Canada remained bound by proportionality? How much of a difference would it make if Canada were freed from proportionality?

To answer these questions, we compare two scenarios: one bound by proportionality, the other freed from it. In both scenarios, we assume an identical 80 percent reduction of Canada’s consumption of oil and gas, paralleling Canada’s G8 goal.¹⁸ In both scenarios, we assume that this domestic demand must be met—along with any exports—by production and imports.¹⁹ The difference between the two scenarios

emerges in the amount and types of oil and gas that Canada must export (and thus produce), due to proportionality’s rule. (For detailed findings, see Appendix A at the end of Chapter 1; for assumptions and methodology, see Appendix B.)



A protestor in New York City targets TD Bank in 2013 for financially backing the dangerous Keystone XL pipeline, which would transport tar sands oil from Canada to the U.S. NAFTA’s proportionality rule gives investors like TD Bank a green light to finance such pipelines by guaranteeing that Canada will not interrupt the flow of tar sands oil into the U.S. Photo: Michael Fleshman

Locking in High Oil and Gas Production to Satisfy Exports

In the proportionality-free scenario, Canada can adopt a 2030 timetable to eliminate all oil and gas exports. From 2030 to 2050, Canada then would produce only what is needed to meet falling domestic demand. In addition, Canada could eliminate all oil and gas imports by 2030 to enhance Canadians’ energy and ecological security.

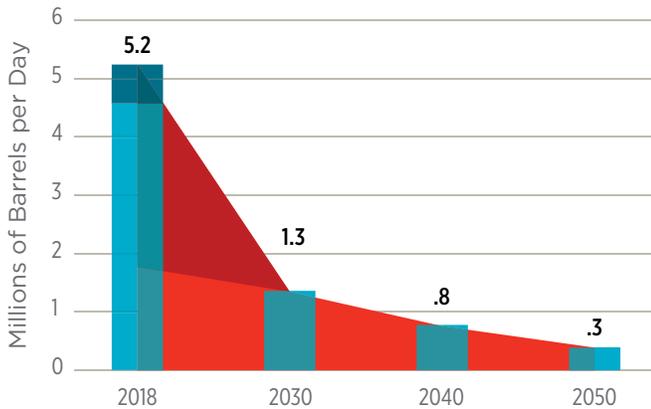
In the scenario of NAFTA’s proportionality rule, we plot out the fastest emission reductions possible under its constraints. The result is a slow and steady reduction—not a rapid phaseout—of oil and gas production.

Exports fall in tandem with domestic demand and cannot (mathematically) fall more rapidly. To feed these exports, overall production of oil and gas is significantly higher than in the proportionality-free scenario.

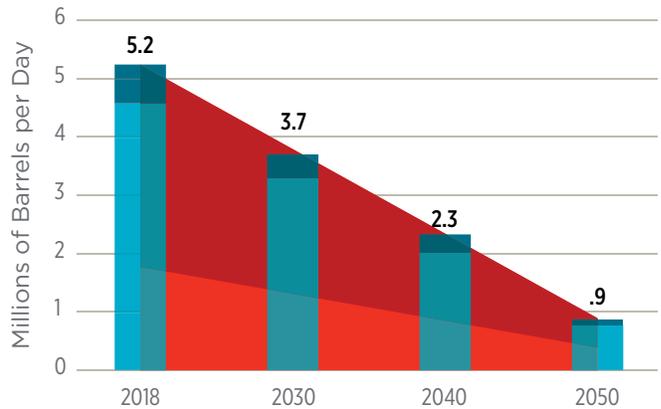
The differences between these two scenarios can be seen in the graphs below. Graphs 1 and 2 show the difference in oil production, without and with proportionality, while Graphs 3 and 4 show the same for natural gas production.

LEGEND: Consumption Exports Production Imports

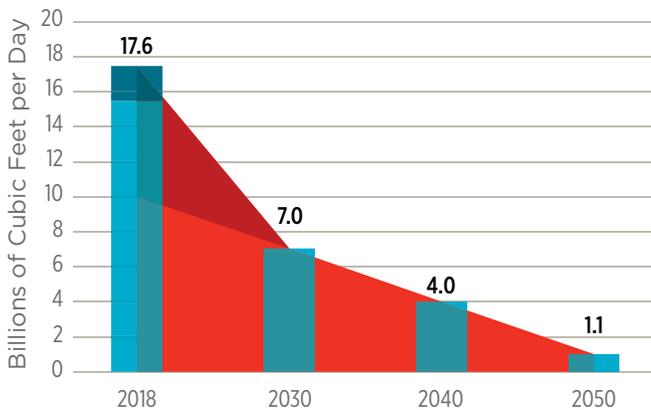
Graph 1: Canada's Oil, Free of Proportionality



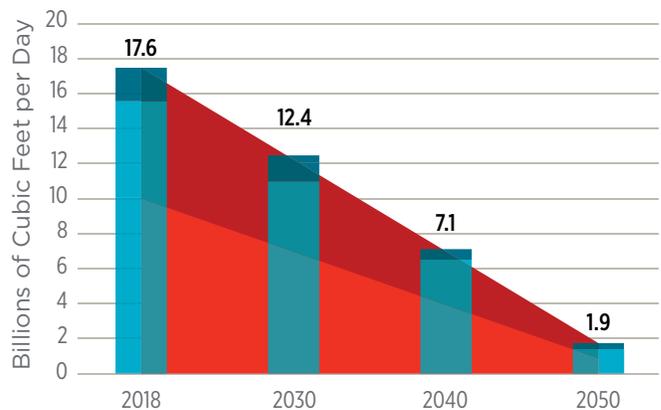
Graph 2: Canada's Oil, under Proportionality



Graph 3: Canada's Gas, Free of Proportionality



Graph 4: Canada's Gas, under Proportionality



Locking in Tar Sands Oil and Fracking

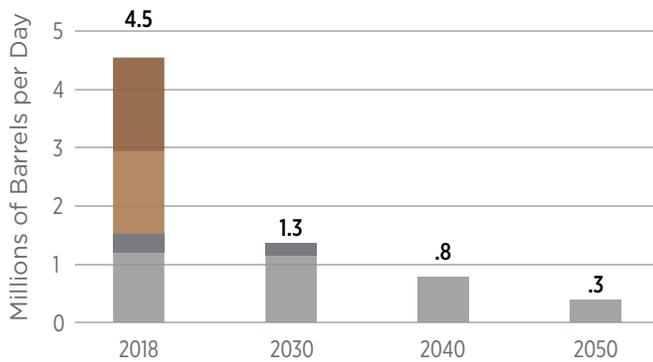
The proportionality rule not only locks in a higher amount of overall oil and gas production (to feed exports). It also locks in the most polluting types of oil and gas production—tar sands oil and fracked gas and oil. To meet the requirement for a “proportional” export mix, the production and export of tar sands oil, fracked gas, and fracked oil would persist for decades, slowly and steadily falling in tandem with declining domestic demand. In contrast, without proportionality, Canada would be free to

eliminate all exports, and thus production, of these highly polluting fuels by 2030. From 2030 through 2050, Canada could meet domestic demand with conventional oil and gas alone.

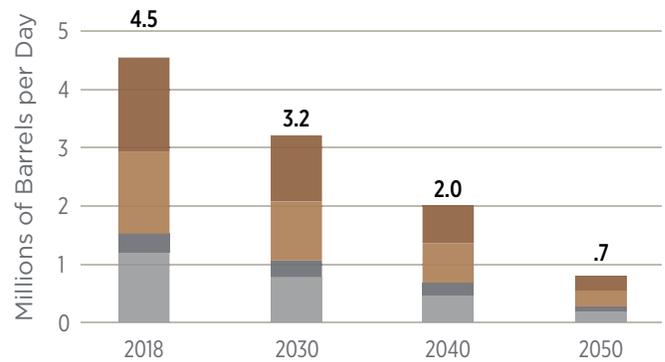
Below, Graphs 5 and 6 show the difference in types of oil produced in the proportionality-free and proportionality-constrained scenarios, while Graphs 7 and 8 show the same for gas production.

LEGEND: Conventional Oil Fracked Oil Tar Sands Oil - Mined Tar Sands Oil - Drilled

Graph 5: Canada's Oil Production, Free of Proportionality

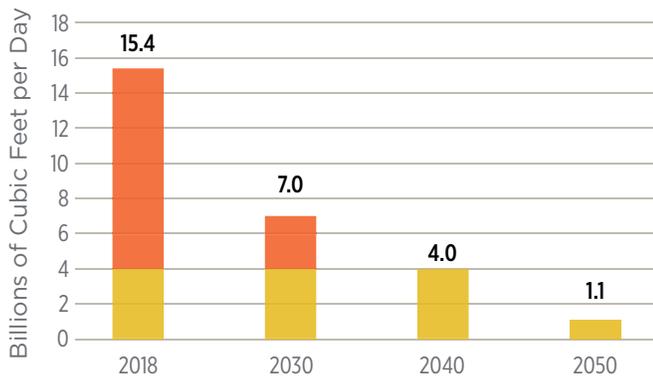


Graph 6: Canada's Oil Production, under Proportionality

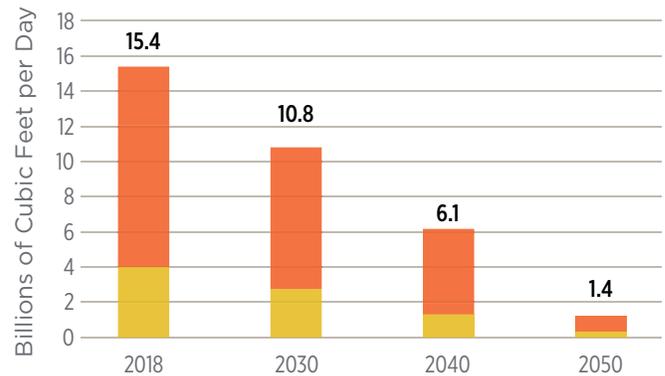


LEGEND: Conventional Gas Fracked Gas

Graph 7: Canada's Gas Production, Free of Proportionality



Graph 8: Canada's Gas Production, under Proportionality



Locking in Climate Pollution

What is the overall impact on Canada's GHG emissions of the proportionality rule's lock-in of high oil and gas production—specifically from tar sands oil and fracking? If Canada tries to meet its climate goals while remaining constrained by proportionality between now and 2050, it will emit an additional 1,488 Mt of GHGs, compared to going proportionality-free.

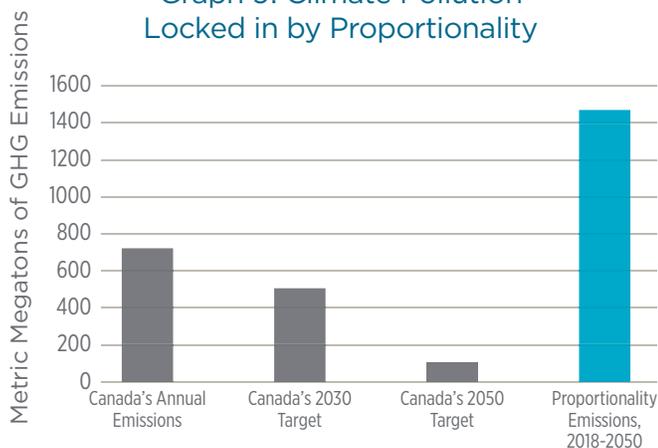
For perspective, this cumulative GHG “penalty” from proportionality is more than

12 times Canada's target emissions in 2050 of 122 Mt, as pledged in its G8 commitment. The penalty is nearly three times Canada's target emissions in 2030 of 523 Mt, as pledged in its Paris climate commitment. And the penalty is twice as large as Canada's current annual emissions (722 Mt in 2015). Graph 9 depicts these comparisons. In short, the inflexibility of proportionality locks in sizeable amounts of GHG emissions even amid aggressive demand reduction.

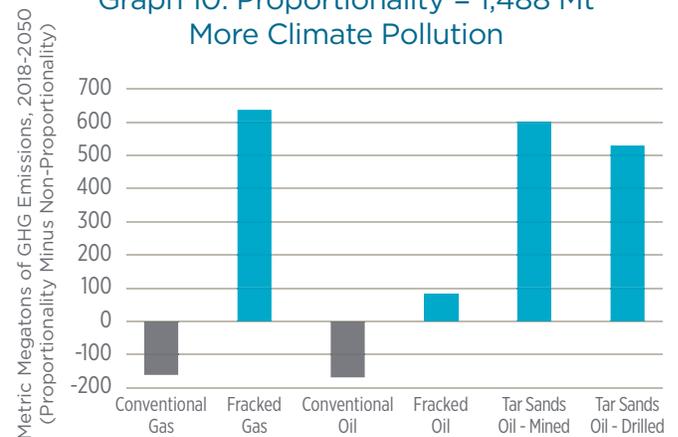
What accounts for the bulk of the proportionality rule's climate pollution penalty? As described above, the penalty stems both from the requirement to produce more oil and gas overall and to continue producing the most polluting forms of oil and gas (tar sands oil and fracked oil and gas) in order to satisfy stable export ratios. The graphs below depict these sources of raised GHG emissions. Graph 10 disaggregates the GHG emissions penalty by type of production, showing that the largest source of greater emissions under proportionality is the persistence of tar sands oil (both mined

and drilled). The second-largest source of additional emissions under proportionality is the persistence of fracked gas. The only area where the proportionality-free scenario produces somewhat higher GHG emissions is in conventional oil and gas, since production of these comparably less-polluting fuel sources displaces tar sands oil and fracking. Graph 11 further shows that proportionality compels much higher production of the most polluting forms of oil. Graph 12 illustrates the lock-in of fracked gas.

Graph 9: Climate Pollution Locked in by Proportionality

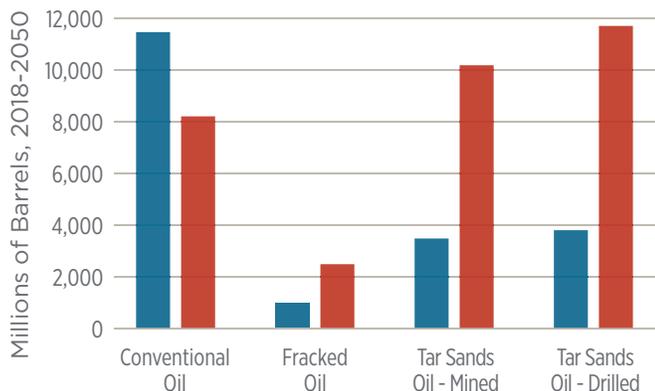


Graph 10: Proportionality = 1,488 Mt More Climate Pollution

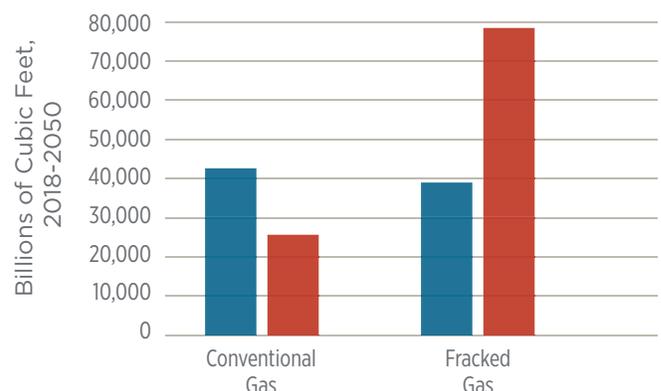


LEGEND: ■ Free of Proportionality ■ Under Proportionality

Graph 11: Proportionality = More Tar Sands Oil



Graph 12: Proportionality = More Fracking



Locking in Import Dependency

One additional difference between the two scenarios is that Canada ends oil and gas imports by 2030 under the proportionality-free scenario, while oil and gas imports continue for decades in the proportionality-constrained scenario, falling in tandem with domestic demand and exports. Theoretically, Canada could determine how much of its oil and gas “supply” comes from domestic production versus imports while still adhering to NAFTA’s proportionality rule. But that is mainly a mirage.

In reality, the rule constrains Canada from ending oil and gas imports. If domestic oil production is flat, Canada cannot eliminate oil imports while meeting domestic demand because it would reduce the share of oil for export. If oil output rises, Canada could slowly displace imports under proportionality’s rule, but not quickly enough to supply eastern Canadians in an international oil supply crisis.

It’s important to note that if we did not assume ongoing oil and gas imports in the proportionality-constrained scenario, the GHG penalty of the proportionality rule would be even greater. That is because imports actually reduce the GHG emissions attributable to Canada since they displace emissions from oil and gas that would otherwise be produced in Canada. International standards count only GHGs associated with a country’s production, not its consumption. The continued oil and gas imports though would do nothing to lower global GHG emissions—it just would make Canada look better. However, persistent reliance on imports also would imperil Canadians’ energy security. Thus, in the proportionality-free option, we eliminate oil and gas imports by 2030.

In short, NAFTA’s proportionality rule is a relic of the fossil fuel past. For Canada to escape that past and rapidly transition to a clean energy economy, the rule must be eliminated.

MEXICO: WELCOME TO YOUR FOSSIL FUEL FUTURE²

Under the Paris climate agreement, Mexico has committed to a 22 percent reduction in GHG emissions by 2030 (Table 1). The country is currently not on track to meet that target.²⁰ According to Mexico’s National Emissions Inventory of Greenhouse Gases, the country’s GHG emissions grew 85.8 percent from 1990 to 2013. Transportation and electricity generation were the key sources of emissions (Table 2).²¹

As Mexico strives to meet its climate goals by transitioning to renewable energy, NAFTA offers more obstacles than assistance. The deal continues to facilitate a counterproductive

dependency on fossil fuels, particularly natural gas. Natural gas was responsible for 45 percent of the rise in Mexico’s fuel-related GHG emissions between 1990 and 2012—far more than any other fuel type.²² NAFTA expedited Mexico’s natural gas imports, contributing to increasing GHG emissions from gas-fired power plants. Since the 2013 deregulation of Mexico’s oil and gas sector, NAFTA also has facilitated increased foreign investment in offshore drilling, oil and gas pipelines, and other fossil fuel sectors—further reinforcing Mexico’s fossil fuel dependency.

² Written and researched by Dr. Alejandro Álvarez Béjar, with support from Ben Beachy, Nora Lina Montes, Gabriel Mendoza Pichardo, and Mario Villanueva

Table 1: Mexico's Climate Goals

Sector	2030 EMISSIONS		Reduction (Percent)
	TREND	GOAL	
Transport	266	218	-18
Electricity	202	139	-31
Residential-Commercial	29	23	-21
HC	137	118	-14
Industry	165	157	-5
Agriculture	93	86	-8
Waste	49	35	-29
Sub-total	941	776	-18
LULUCF	32	-14	
Total	973	762	-22

Unit for emissions: Metric megatons of CO2 equivalent.
 Source: Mexico's First Biennial Update Report to the United Nations Framework Convention on Climate Change, 2015

Table 2: Mexico's Climate Pollution by Sector

Emissions	PERCENT	Sector
174.16	26.2	Transport
126.61	19.0	Electricity
25.64	3.8	Residential-Commercial
80.46	12.1	HC
114.95	17.3	Industry
80.17	12.0	Agriculture
30.90	4.6	Waste
32.42	4.9	LULUCF
665.30	100.0	Total

Year: 2013. Unit for emissions: Metric megatons of CO2 equivalent.
 Source: Mexico's First Biennial Update Report to the United Nations Framework Convention on Climate Change, 2015

Natural Gas: A Detour in Mexico's Energy Transition

Under the past decade of NAFTA, Mexico's oil exports to the U.S. have diminished, while its imports of natural gas and petroleum products from the U.S. have increased (Graph 13). Oil exports have fallen because Mexico has practically depleted its conventional oil reserves. Mexico went from having about 24 years' worth of reserves in 1999 (based on production and reserves levels at that time) to having just 12 years' worth of reserves in 2017.²³ Mexico's low level of oil reserves is due to massive oil exports to the U.S., which increased during NAFTA's first decade, and to the government's desire to maintain oil income as a key source of public revenue.

As its oil reserves have diminished, Mexico has become increasingly dependent on imports of natural gas from the U.S., much of which comes from the dangerous process of fracking. From 2010 to 2017, Mexico's pipeline

imports of natural gas from the U.S. nearly quintupled,²⁴ fueling increased fracking in the U.S. Imports now account for over 80 percent of Mexico's natural gas consumption.²⁵ These imports have fed Mexico's growing demand for natural gas, which has surged as gas power plants have replaced fuel oil power plants, and industries and households have started consuming natural gas (Graph 14).

Today, half of Mexico's electricity is produced with natural gas, a climate-polluting fossil fuel. While the switch from oil-based power plants to gas-based plants may lower GHG emissions, Mexico's large and growing reliance on gas imports poses challenges to switching to clean, renewable sources of energy like wind and solar power. Currently, less than 1 percent of Mexico's electricity comes from solar or wind production.²⁶

NAFTA: Fueling Fossil Fuel Dependency

What role has NAFTA played in Mexico's increasing dependency on natural gas? NAFTA expedited and incentivized Mexico's imports of natural gas from the U.S., thanks to a mandate in U.S. law for the U.S. Department of Energy to automatically approve all natural gas exports to free trade agreement countries. With NAFTA in effect, the U.S. Department of Energy is required to forego an analysis of whether natural gas exports to Mexico are in the public interest, which means that gas corporations have a permanent green light to expand gas pipelines from the U.S. to Mexico.²⁷ Indeed, a representative for the U.S. American Petroleum Institute recently cited this NAFTA assurance as critical to the expansion of U.S. gas exports to Mexico.²⁸

Such cross-border gas pipelines are proliferating as both the demand and infrastructure for natural gas grow in Mexico. This year, gas pipeline capacity from the U.S. to Mexico is expected to double the level from just two years ago, according to the U.S. Energy Information Administration.²⁹ Meanwhile, in what industry analysts are calling a "building spree," Mexico is constructing at least 16 new gas pipelines to handle the increased imports.³⁰ The 2017 construction launch for a Texas-to-Veracruz underwater natural gas pipeline testifies to Mexico's increasing dependence on natural gas imports from the U.S.³¹

In addition to facilitating U.S. natural gas exports to Mexico, NAFTA includes an array of protections for foreign investments, which oil and gas corporations have cited as incentives to invest in the extraction and transport of oil and gas in Mexico. The U.S. American Petroleum Institute states that

these protections "provide a level of security for companies."³² Recently, oil and gas corporations have indicated that removal of such NAFTA protections would make them think twice about investing in offshore drilling, oil and gas pipelines, and related projects in Mexico.³³ While there actually is legal ambiguity on how much NAFTA's investor protections cover foreign investments in oil and gas, as spelled out below, U.S. oil and gas corporations apparently see the protections as an incentive to pump money into extracting Mexico's fossil fuels.

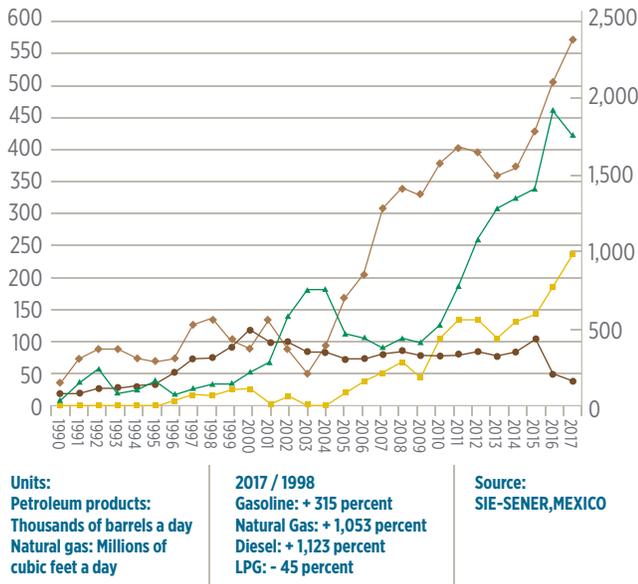
These NAFTA incentives, coupled with the 2013 privatization and deregulation of Mexico's oil and gas industry, are driving increased U.S. investment in Mexico's fossil fuels. That includes investments in offshore drilling in the Gulf of Mexico. In 2017, U.S. companies like ExxonMobil and Chevron won rights to deepwater offshore drilling in Mexico's portion of the Gulf.³⁴ In late 2017, energy giants with U.S. refining capacity (BP, Chevron, Royal Dutch Shell, ExxonMobil, and Andeavor) started opening retail motor fuel



Protestors with the American Indian Movement march in 2016 against the Trans-Pecos Pipeline, built through Texas to export fracked gas to Mexico. Protestors said the pipeline would threaten their communities and encourage fracking and fossil fuel dependency. U.S. pipeline exports of gas to Mexico have nearly quintupled since 2010, contributing to the dominance of gas over solar and wind power in Mexico. NAFTA requires the U.S. Department of Energy to automatically approve such gas exports to Mexico rather than determine if they are in the public interest. Photo: Nicol Ragland

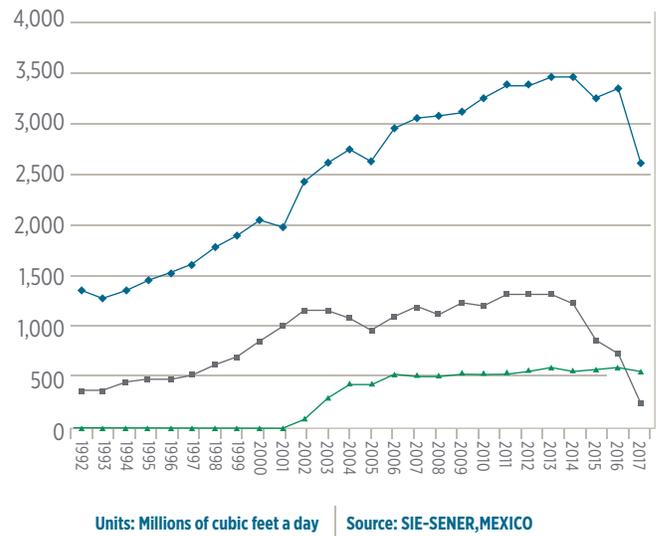
LEGEND: ◆ Gasoline ■ Diesel ● LPG ▲ Natural Gas

Graph 13: Mexico's Imports of Natural Gas and Petroleum Products



LEGEND: ◆ Total ▲ IEP ■ CFE-LFC

Graph 14: Mexico's Natural Gas Demand, 1992-2017



stations in the central north region of Mexico and revealed plans to develop new refined-product pipelines, new oil and gas loading transport facilities for railways, and new storage capacity for petroleum products in Mexico.³⁵

U.S. investments under NAFTA could also soon fuel shale gas production in Mexico, which is likely to use fracking, a process that uses more than 750 chemicals and causes significant harm to air, water, and human health.³⁶ Although reserves of shale gas are not fully proven in Mexico, U.S. and Mexican corporations interested in replicating the U.S. shale gas boom are gearing up for potential gas investments in northeastern Mexico and in

the Gulf of Mexico.³⁷ Indigenous communities in the Sierra Norte de Puebla region have reported more than 1,440 shale gas wells already opened—though not yet exploited by large corporations. This is an area inhabited by Indigenous peoples and full of minerals, water resources, and biodiversity.³⁸ In March 2018, the government of Mexico announced the first auction, open to foreign investment, for exploiting Mexico’s “unconventional” gas reserves—where production will likely involve fracking,³⁹ prompting protests from environmental groups.⁴⁰ By facilitating such dangerous fossil fuel investments, NAFTA is undercutting Mexico’s efforts to transition to renewable energy and tackle climate change.

ISDS: A PRIVATE LEGAL SYSTEM FOR CORPORATE POLLUTERS³

United States: Prolonging the Climate Damage of Trump’s Policies?

NAFTA’s future impact on U.S. greenhouse gas emissions may be significant and long-

lasting, due to its interaction with the Trump administration’s anti-environmental policies.

³ Written and researched by Dr. Frank Ackerman, Dr. Alejandro Álvarez Béjar, Dr. Gordon Laxer, and Ben Beachy

While chaotic and sometimes ineffective in other areas, the Trump team seems focused and relentless in its attacks on carbon reduction and other environmental policies. In its first year the Trump administration proposed, among other measures:

- repealing the Clean Power Plan (an emissions reduction standard that would have led to increased coal plant retirements),
- reversing new regulations limiting methane emissions from the oil and gas industry,
- drastically reducing the size of national monuments in the west (allowing mining in formerly protected areas), and
- allowing offshore oil drilling almost everywhere along the U.S. coastline.

If the Trump administration succeeds in rolling back federal rules, it will reduce the overall level of environmental protection and allow more discretion for states to set their own policies. The U.S., or at least those regions with lax state policies, could attract investment in industries and practices that profit from a lack of regulation, such as expanded offshore oil drilling or mining in formerly protected areas. The legacy of Trump's policies and the resulting investments in climate-polluting industries could then undermine future climate progress in the U.S., thanks to a little-known, undemocratic feature of NAFTA.

NAFTA was one of the first major trade agreements to include a mechanism known as investor-state dispute settlement (ISDS). ISDS gives foreign corporations and investors the right to sue national governments when they enact laws, regulations, and administrative

actions. A panel of three people, usually pro-corporate trade lawyers, operating outside the country's legal and political system, hears the case and can then order the government to pay the corporation if they think a new policy violates NAFTA's broad rights for investors. National courts and legislatures cannot reverse these decisions. A losing government typically must pay for the future profits the corporation could have made without the new policy, and multi-million-dollar payments are not rare. Even if the government "wins," it may still be required to pay expensive legal costs. The threat of such judgments has forced governments to reverse the policies in question, or to avoid enacting them in the first place.⁴¹

According to a United Nations database,⁴² corporations and investors have launched:

- 27 ISDS cases against Canada—26 of them (96 percent) under NAFTA
- 27 cases against Mexico—19 of them (70 percent) under NAFTA
- 16 cases against the U.S.—all of them under NAFTA

Under NAFTA, Mexico and Canada have reportedly been required to pay more than \$370 million in judgments, while tens of billions of dollars of outstanding NAFTA claims have not yet been settled.⁴³

Corporations frequently use ISDS to target environmental policies. In one NAFTA case, an American firm named Metalclad won a judgment of \$16 million against Mexico when a Mexican municipality refused to give the firm a permit to expand a hazardous waste dump. In the Lone Pine case, filed in 2013 and still pending, an oil and gas company filed a claim

for more than \$100 million against Canada, claiming that Quebec's limits on fracking beneath the St. Lawrence River reduced the profits that the company had expected to make there (see box below).

And although the U.S. has never yet lost an ISDS case, it faced a \$15 billion claim from TransCanada for lost profits from the Obama-era refusal to build the Keystone XL pipeline. Keystone XL was designed to carry crude oil from Alberta's tar sands into the United States. Indigenous groups, climate advocates, and others mounted a massive, multi-year campaign for rejection of the pipeline. The campaign's importance was both practical—Keystone XL was designed to carry large amounts of dirtier-than-average oil—and strategic, as a leading example of effective grassroots opposition to the fossil fuel industry. After years of reviewing the issue, the Obama administration ultimately endorsed the anti-pipeline position.

Two months later, TransCanada announced it would use NAFTA to launch a \$15 billion ISDS claim against the U.S. government. TransCanada's claim for compensation would have dragged on for years and knowledgeable observers believed there was a good chance that the U.S. could lose this time.⁴⁴ In early 2017, when the Trump administration approved the pipeline and stopped insisting on building it with U.S. steel, TransCanada withdrew its ISDS case—less than an hour after the U.S. announcement.⁴⁵

As the Lone Pine and TransCanada cases demonstrate, ISDS cases and their settlements can have a major impact on energy policy and carbon emissions. Although they stand outside national political and legal systems, ISDS cases can interact with, and generally

worsen, U.S. environmental policies in two ways. First, in the context of the Trump team's anti-regulatory policies, the U.S. could simply stop contesting ISDS claims and instead roll back the challenged regulations, as in the TransCanada case.

The second effect may be even more ominous in the long run, preventing a post-Trump administration from undoing his deregulatory damages. If foreign investors enter the U.S. market during the Trump "pollution haven" era, they could later claim that post-Trump restoration of normal environmental regulations and climate policies would "expropriate" fossil fuel investments that were made under Trump's (lack of) rules. They also could claim, as corporations have successfully done in numerous ISDS cases, that the change in regulations violated their NAFTA-protected right to a "minimum standard of treatment." There is no guarantee that the perfect record of the U.S. in winning or settling ISDS cases will continue. Especially if post-Trump environmental policies seem to challenge corporate prerogatives, the U.S. may face future ISDS cases with less sympathetic judges who could impose sizeable penalties. The threat of such costly cases could keep Trump policies in place long after he departs.

Note that this unfortunate outcome does not require backing from either the Canadian or Mexican governments. Sweden has famously pro-environmental national policies, but Swedish corporations and investors have filed and won ISDS cases, under other treaties, against other European countries' environmental regulations. All it takes are a few retrograde investors, whether corporate or individual, to exercise their option to attack national regulations via ISDS.

There are no hard numbers attached to this threat, no way to predict the precise impacts of ISDS decisions on future emissions. But this anti-democratic feature of NAFTA, if it

remains in the agreement, could be a major obstacle to future efforts to cut U.S. carbon emissions.

Canada: The Most-Sued Developed Country

While the proportionality rule is NAFTA's main impediment to Canada reaching a low carbon future, NAFTA erects other barriers as well. ISDS is a major one. Canada holds the dubious distinction of being the world's most ISDS-sued, developed country.⁴⁶

The original justification for adding ISDS to NAFTA was to bypass Mexican courts that were said to be corrupt and open to political interference.⁴⁷ But that's not how they've mainly been used. Only a few suits have concerned the administration of Mexican courts. Instead, ISDS has been used within NAFTA and other similar trade agreements mainly as a tool for transnational corporations to prevent governments from protecting the environment, managing their resources, or forcing corporations to invest in local economies. ISDS is a one-way instrument whereby governments may get sued, while foreign investors can escape responsibility for contaminating sites, releasing carbon pollution into humanity's common biosphere, or not paying pensions to laid-off workers.

Corporations have used NAFTA to sue Canada more than either the U.S. or Mexico. The pace of ISDS suits against Canada is rising. Since 2010, 15 out of the 22 investor claims among the three NAFTA countries were made against Canada.⁴⁸ That's more than two-thirds. Ottawa's ideological commitment to ISDS as a way to lure foreign investment and ownership to Canada, along with its record of settling

claims and paying compensation, has spurred investor-state claims against it. ISDS has emboldened foreign investors to roll the dice and launch suits. For little cost, and with good odds of winning, they can and have gained major monetary prizes. Claimants succeeded in 8 of 17 concluded NAFTA suits (47 percent) against Canada. The consequences for government policy makers are only negative. Governments can lose ISDS cases, but can never win them. So far, Canada has paid out more than \$314 million in ISDS cases (\$219 to investors, and \$95 million in legal costs).⁴⁹

The majority of investor-state claims have challenged Canada's environmental protection and resource management policies and regulations. It is difficult to determine which government environmental policies have been curtailed, because we cannot document a road not taken. But the very existence of



An Indigenous woman blocks the road in New Brunswick, Canada in 2014 to prevent fracking tests. In neighboring Quebec, anti-fracking activists successfully secured a moratorium on the toxic practice. In retaliation, an oil and gas corporation named Lone Pine is using NAFTA to sue Canada for \$119 million U.S. in a private tribunal, arguing that NAFTA protects its "valuable right" to frack. Photo: Ossie Michelin

ISDS and the threat of financial penalties can and does inhibit policymakers from following

citizens' wishes to protect the environment.⁵⁰

DOES NAFTA PROTECT CORPORATIONS' RIGHT TO FRACK?

A number of NAFTA ISDS suits have pertained to the environment. One claim with big implications for GHG emissions and other ecological damages was launched by Lone Pine Resources after Quebec passed Bill 18: An Act to Limit Oil and Gas Activities. The 2011 bill revoked exploration licenses for oil and natural gas development under the St. Lawrence River, the main river flowing through the province. Part of the intent was to prevent fracking underneath the river. Fracking is a GHG-intensive process and also causes local environmental damage.

After much government study, exploration permits under the river were suspended for all companies. But only Lone Pine initiated an ISDS suit. Although it is Alberta-based, Lone Pine is incorporated in Delaware and is classified as a "foreign" investor. Domestically-designated companies cannot launch ISDS claims against their own governments.

When Quebec's Bill 18 was passed, Lone Pine had not yet received full authorization from Quebec's Ministries of Natural Resources and the Environment to start fracking in the St. Lawrence River basin. Yet Lone Pine filed an ISDS suit anyway and is claiming \$118.9 million U.S. in damages. The suit is still before a NAFTA tribunal. The case has sent a chill into other Canadian governments considering restrictions on fracking, whether the provinces or Ottawa. It is imperative that governments in Canada, provincial or federal, have the policy flexibility to ban fracking without fear of running into ISDS suits.

Mexico: An Exception to Prevent Attacks on Energy Policies?

Of the 19 times that the Mexican government has been sued in ISDS tribunals under NAFTA, none of the cases have targeted Mexico's energy policies.⁵¹ That may be due to legal ambiguity on whether NAFTA permits ISDS cases to be brought against Mexico on the basis of energy policies. Mexico obtained a broad exemption in NAFTA for its state-owned oil and gas sector. The text of the agreement leaves it unclear whether this exemption still precludes all ISDS claims against Mexico's energy policies, or only a limited type of claims, now that Mexico's oil and gas sector

has been opened to foreign investment.⁵² In either case, the ambiguity may be helping to deter ISDS cases against Mexico's energy policies. The multiple ISDS challenges to energy policies in Canada under NAFTA show the potential importance of such deterrence.⁵³ Were NAFTA 2.0 to state definitively that Mexico's energy policies are subject to ISDS claims, a host of energy regulations in Mexico could be exposed to ISDS challenges, with potentially significant consequences for GHG emissions, as explained in Chapter 2.

OFFSHORING: A CLIMATE POLLUTION LOOPHOLE⁴

NAFTA gives corporate polluters another way—beyond the controversial ISDS system—to undermine climate policies. In addition to challenging such policies in unaccountable ISDS tribunals, corporations can evade climate policies by shifting their production—and pollution, and jobs—to countries with weaker climate standards. NAFTA makes such pollution offshoring easier and cheaper for corporations, without requiring compliance with climate standards on the other side of the border.

As governments in North America begin to enact bolder climate policies at an uneven pace, corporations could be tempted to take advantage of NAFTA to offshore their emissions from climate leaders to climate laggards. This climate pollution loophole creates a disincentive for any of the three countries to be a climate leader, as stronger climate policies could spur the loss of jobs while merely shifting GHG emissions from one country to another. Indeed, government studies have found that such “carbon leakage”

is a real concern,⁵⁴ and policymakers across North America regularly cite it as a barrier to bolder climate action.

This offshoring problem is caused by a fundamental inequity at the heart of NAFTA: The deal protects corporations that cross borders, but doesn’t require cross-border protection for workers and the environment. If a corporation wants to move its production across the border, NAFTA offers it special protections as a foreign investor and ensures that its goods will not be taxed as they cross between the two countries. Yet, NAFTA does not require that corporation to pay workers fairly on the other side of the border, or to respect their labor rights. Nor does NAFTA prevent that corporation from dumping toxins that threaten a community’s water and air, or from spewing emissions that exacerbate climate change. NAFTA’s labor and environmental standards—besides being relegated to “side” agreements—are toothless. They are narrow in scope—the deal makes no mention of climate change, for example. They are weak in substance—the environmental standards state, for example, that countries should merely “consider” stronger pollution limits.⁵⁵ And they are utterly unenforceable—countries face no real penalties if they simply ignore the standards.

NAFTA thus incentivizes corporations to cut costs by moving to whatever country offers the cheapest deal—the lowest wages and weakest labor and environmental standards. This threat is not hypothetical. In addition to the well-documented lead track record of U.S. and Canadian corporations moving production to



Children in Mexico hoist a sign reading “No more air pollution! No more lead! We want clean air!” NAFTA enabled corporations to evade new U.S. limits on lead pollution by freely exporting their lead waste to be processed in Mexico, where lead standards are weak. As a result, communities in northern Mexico are now enduring increased air pollution and a spike in lead poisoning among children and infants. Photo: Romel Jacinto

⁴ Written and researched by Ben Beachy

Mexico to exploit lower wages and working standards, the NAFTA era has produced

alarming examples of corporations bypassing domestic environmental policies by offshoring

ENVIRONMENTAL OFFSHORING UNDER NAFTA: THE CASE OF LEAD POLLUTION

A NAFTA-facilitated race to the bottom in environmental standards is unfortunately not hypothetical. Take, for example, the track record with lead regulations, which offers a cautionary tale for how NAFTA could undercut new climate standards.

For years, U.S. factories recycled used car batteries, which contain lead—a neurotoxin that can cause learning problems for children and heart disease in adults. In 2009, the U.S. Environmental Protection Agency increased U.S. air quality standards to protect communities from toxic exposure to lead.⁵⁹

Instead of complying with the new, hard-fought protections and limiting their pollution, corporations started exporting used car batteries—and the associated pollution—to Mexico, where lead standards are one-tenth as strong and poorly enforced.⁶⁰ Immediately after enactment of the new U.S. regulation, lead battery exports to Mexico spiked. Over the next six years, they quadrupled.⁶¹ NAFTA ensured the corporations could export their polluting batteries to Mexico free of charge.⁶²

For the U.S., this effort to evade domestic lead standards spelled a loss of jobs as U.S. battery-recycling factories shut their doors. Today no more than eight such companies remain in the U.S.⁶³

For Mexico, it meant an influx of imported lead pollution. In 2010, more than six metric tons of lead were reportedly released into the air at just one of the plants in northern Mexico that processed the flood of imported lead batteries. By comparison, that is 33 times the amount of lead that a battery-processing plant in South Carolina—owned by the same company—was expected to emit.⁶⁴

In the Mexican communities that now process used lead batteries from the U.S., reports of learning disabilities, kidney damage, and other symptoms of lead poisoning have become all too common.⁶⁵ One recent academic study finds that the boom in lead battery imports is causing babies in such communities to be born underweight, with high lead levels in their blood. The authors conclude, “unbalanced stringency in environmental standards may spur flows of pollution intensive activities to countries with lax environmental standards.”⁶⁶

That conclusion begs the question: If corporations can take advantage of NAFTA to offshore their lead pollution in response to new lead standards, what is to stop them from offshoring their GHG emissions to evade new climate standards?

pollution. See the adjacent box for one such example, where U.S. corporations evaded U.S. lead pollution standards by using NAFTA to export toxic lead waste to communities in Mexico.

Throughout North America, policymakers have expressed fears that we could see a similar NAFTA-enabled offshoring of climate pollution if they were to enact stronger climate policies. This fear alone is an obstacle to climate progress. Legislators are unlikely to enact bold limits on GHG emissions if they believe it will mean job losses for their constituents while simply shifting climate pollution across the border.

In the U.S., such concerns “have been central to debates on whether the United States should enact greenhouse gas legislation,”

according to the Congressional Research Service.⁵⁶ Even as the Trump administration tries to roll back climate standards at the federal level, the threat of offshored jobs and emissions continues to bedevil U.S. state-level efforts to cut GHG emissions.⁵⁷ Meanwhile, the Trump administration’s efforts to repeal U.S. climate policies have inflamed concerns in Canada that new climate policies there might lead corporations to take advantage of NAFTA and move their jobs and climate pollution to the United States. Fossil fuel executives have seized on these legitimate fears of carbon leakage to argue against stronger climate policies in Canada.⁵⁸ Until NAFTA’s climate offshoring loophole is closed, the fear of job loss and carbon leakage will likely persist as a barrier to climate action in legislative halls throughout North America.

Appendices on NAFTA’s Proportionality Rule

Appendix A: Detailed Findings on the Impacts of NAFTA’s Proportionality Rule

The tables below show the emissions impacts of the proportionality and proportionality-free scenarios. The GHG benefit of going proportionality-free is most pronounced regarding oil, but there are large emission declines in natural gas, too.

Ending tar sands oil production by 2030 results in the biggest emissions cuts. In the proportionality scenario (Table 4), mined tar sands oil falls from 1.413 million barrels a day (mb/d) in 2018 to a still very substantial one million barrels a day by 2030. It’s similar for in-situ or drilled tar sands oil which declines from 1.603 mb/d to more than one million barrels a day in 2030. Even in 2050, tar sands production would still be significant

under proportionality. In contrast, going proportionality-free (Table 3) quickly and steadily lowers emissions from tar sands oil each year from 2018 to 2030. It’s zero emissions from tar sands oil after that.

The year-by year gains of going proportionality-free really add up: a total of 598 Mt fewer emissions from mined tar sands oil, 524 Mt from drilled tar sands oil, and 76 Mt from fracked oil from now until mid-century. Meeting domestic demand only requires a comparably small 172 Mt increase in GHG emissions from conventional oil. The net emissions cuts from going proportionality-free in oil are equivalent to about two years’ worth of Canada’s 2030 Paris climate emissions target and more than eight years’ worth of Canada’s 2050 emissions target.

Table 3: Oil—No Proportionality	2018	2030	2040	2050
Production: Total	4.5	1.3	0.8	0.3
Conventional Oil	1.126	1.224	0.805	0.313
Fracked Oil	0.344	0.074	0	0
Tar Sands Oil - Mined	1.413	0	0	0
Tar Sands Oil—Drilled	1.603	0	0	0
Imports	0.759	0	0	0
Consumption	1.79	1.298	0.805	0.313
Exports	3.455	0	0	0
Exports to the U.S.	3.42	0	0	0

Unit: Million barrels a day

Table 4: Oil—Proportionality	2018	2030	2040	2050
Production: Total	4.5	3.2	2.0	0.7
Conventional Oil	1.126	0.803	0.495	0.188
Fracked Oil	0.344	0.245	0.151	0.057
Tar Sands Oil - Mined	1.413	1.008	0.622	0.236
Tar Sands Oil - Drilled	1.603	1.143	0.705	0.267
Imports	0.759	0.531	0.340	0.152
Consumption	1.790	1.298	0.805	0.313
Exports	3.455	2.432	1.509	0.587
Exports to the U.S. (65 percent of supply)	3.420	2.432	1.509	0.587

Unit: Million barrels a day

The decrease in emissions from the early wind up of the tar sands also spurs a reduction in gas production emissions (Table 5). Almost 30 percent of Canadian natural gas production is used up to make diluted and synthetic tar sands oil. Ending tar sands oil production in the proportionality-free option also ends those gas emissions. Gas emissions also fall in the proportionality-free scenario thanks to the swift reduction of fracked natural gas for export. By 2030 fracked gas production falls 76 percent from current levels, whereas it falls only 30 percent under proportionality (Table 6). In

the proportionality-free scenario, conventional gas is reserved for domestic use, albeit at steadily falling levels throughout the 2040s.

By 2040, fracked gas production ends entirely under the proportionality-free option, but still is a substantial 4.58 billion cubic feet a day (bcf/d) under proportionality. Quickly cutting fracked gas production not only would help local areas contaminated by toxic chemicals, but also would reduce GHG emissions. Emissions cuts from going proportionality-free for natural gas are a substantial 463 Mt between now and 2050.

Table 5: Gas—No Proportionality	2018	2030	2040	2050
Production: Total	15.4	7.0	4.0	1.1
Conventional Gas	3.85	4.02	4.01	1.05
Fracked Gas	11.55	2.96	0	0
Imports	2.2	0	0	0
Consumption	9.94	6.98	4.01	1.05
Exports	7.66	0	0	0
Exports to the U.S.	7.66	0	0	0

Unit: Billion cubic feet a day

Table 6: Gas—Proportionality	2018	2030	2040	2050
Production: Total	15.4	10.8	6.1	1.4
Conventional Gas	3.85	2.71	1.53	0.36
Fracked Gas	11.55	8.12	4.58	1.07
Imports	2.20	1.54	0.99	0.44
Consumption	9.94	6.98	4.01	1.05
Exports	7.66	5.38	3.09	0.81
Exports to the U.S. (44 percent of supply)	7.66	5.38	3.09	0.81

Unit: Billion cubic feet a day

Appendix B: Assumptions and Methodology in the Scenario Comparisons

In our calculations, we have made the following assumptions:

- In both scenarios, we assume that supply (production + imports) must equal exports + consumption. We assume an identical, straight-line reduction in Canada’s domestic demand for oil and gas from today through 2050. In both scenarios, the 2050 demand level is 80 percent of the 1990 level, in order to comply with Canada’s G8 commitment to cut GHG emissions 80 percent by 2050.
- The NAFTA text does not mandate an exactly constant proportion of oil and

gas exports but rather one that does not fall below the average proportion of the previous three years. For calculation purposes, we assume that exports to the U.S. as a share of “supply” (production + imports) are constant in the proportionality scenario. Simultaneously meeting this condition and the one above (supply must match exports + demand) requires a straight-line descent in production and export levels, in tandem with the straight-line descent in domestic demand.

- For simplicity’s sake, we keep the import-to-production ratio constant in the proportionality scenario. The exact proportion could vary, as the proportionality rule states that exports

must be stable as a portion of NAFTA's peculiar definition of "supply" (production + imports), but it says nothing about the level of imports versus production. As mentioned, proportionality's export requirement puts pressure on Canada to import oil and gas, but the exact quantity and ratio are not dictated by the rule.

- As mentioned, proportionality mandates that all types of oil and gas exports decline at the same rate. The NAFTA text states that policy changes must not result in disruption of "normal proportions among specific energy or basic petrochemical goods supplied to that other Party." For calculation purposes, we use constant production ratios as a proxy for constant export ratios. This serves as a rough proxy for the proportionality rule.

- These scenarios assume that the U.S. will continue to be the only important destination for Canada's oil and gas exports. Of course, Canada could export large volumes of oil and gas to other countries if it completes one or more oil or gas pipelines to a coast. At the time of writing though, that outcome was uncertain. It is not part of the calculations in this report.
- To calculate GHG emissions under the two scenarios, each fuel source's current GHG emissions factor is held constant, though emissions factors might change in the future.
- Our calculations are based on emissions from production only, not on life cycle emissions.

CHAPTER 2: NEW CLIMATE THREATS IN NAFTA 2.0?

NAFTA's renegotiation is unfortunately proceeding under the same veil of secrecy that produced the original deal. Official proposals for NAFTA 2.0 are kept hidden from the public but are made available to bodies of mostly corporate "advisors." It is thus difficult to know with precision the climate-relevant provisions that are on the negotiating table. Based on insider accounts and news reports, it

appears that negotiators are not only ignoring many of the climate impacts of the existing NAFTA—but also discussing new provisions that could make the deal an even greater barrier to climate progress. This chapter outlines a few such provisions, and the climate threats they would pose if included in a final deal. (For a broader assessment of the NAFTA 2.0 talks, see the box in Chapter 3.)

NAFTA 2.0: HANDOUTS TO OIL AND GAS CORPORATIONS⁵

Among the provisions that negotiators have suggested might be on the table for NAFTA 2.0, three stand out as posing particular threats to climate policies in Mexico. If

included in a final deal, these provisions could go even further than the original agreement in cementing Mexico's fossil fuel dependency. First, NAFTA 2.0 could contain a provision

⁵ Written and researched by Dr. Alejandro Álvarez Béjar, with support from Ben Beachy

to lock in Mexico's recent deregulation of oil and gas, making it more difficult to regulate or restrict polluting corporations for decades to come. Second, if NAFTA 2.0 enables oil and gas corporations to sue Mexico in ISDS tribunals over changes in energy policies, it could deter future governments from acting to phase out fossil fuels. Third, if NAFTA's existing proportionality rule were expanded

Locking in Deregulation of Oil and Gas

Since 2013, Mexico has enacted a sweeping deregulation of its state-controlled oil and gas sector, as mentioned in Chapter 1. The deregulation has allowed national and foreign corporations to increasingly engage in offshore drilling, fracking, and other oil and gas production; build fossil fuel pipelines; open gas stations; and invest in gas-fired power plants. It also has ended an array of energy-related price controls.⁶⁷ The opening of Mexico's energy sector has had the predictable effect of encouraging increased production of fossil fuels. When the reform was first announced, analysts projected it could nearly double Mexico's oil production and more than double its natural gas production.⁶⁸ In addition to deepening Mexico's fossil fuel dependency, the post-2013 deregulation has been broadly unpopular in Mexico, as it has spurred a spike in gas and electricity prices,⁶⁹ while threatening the rights of Indigenous communities to preserve their lands and territories.⁷⁰

The oil and gas industry—particularly in the U.S.—has made clear that one of its top priorities for NAFTA 2.0 is to lock in the deregulation of Mexico's oil and gas industry so that no future Mexican government could re-regulate the sector.⁷¹ Even the NAFTA

to Mexico, it could restrict Mexico's ability to swiftly eliminate oil and gas exports so as to reduce GHG emissions while still meeting domestic demand. NAFTA's renegotiation must exclude each of these three handouts to oil and gas corporations if the resulting deal is to help—not hinder—Mexico's transition to a clean energy economy.

negotiators have bluntly stated this as a goal of the deal's renegotiation. In February 2018, Kelly Craft, the U.S. ambassador to Canada, told a room of oil and gas executives, "we will ensure that NAFTA 2.0...locks in Mexico's 2013 energy market reforms."⁷² Luz Maria de la Mora, a former trade negotiator and Foreign Affairs official for the Mexican government, stated in August 2017, "NAFTA 2.0 gives Mexico an important chance to lock in its energy market reforms."⁷³ Indeed, Kenneth Smith Ramos, Mexico's chief NAFTA negotiator, has said that Mexico is "analyzing all of the elements of the energy reform that should be included" in the negotiations.⁷⁴



U.S. Ambassador to Canada Kelly Craft poses with Andrew Scheer, leader of Canada's Conservative Party. Craft recently told a room of oil and gas executives, "we will ensure that NAFTA 2.0...locks in Mexico's 2013 energy market reforms," referring to Mexico's sweeping deregulation of the oil and gas sector.

How exactly could NAFTA 2.0 lock in Mexico's deregulation of oil and gas? Given that the negotiations are being conducted in secret, with no public access to negotiating texts, the exact provision under discussion is not yet known. However, analysts have suggested several ways that negotiators could achieve a deregulatory "lock-in." For example, negotiators could insert a "standstill" provision that applies to energy, or expand an existing provision known as a "ratchet" clause.⁷⁵ "Standstill" provisions freeze existing levels of deregulation, and "ratchet" provisions lock in future deregulation. Such clauses have been used in past trade agreements to bar

governments from enacting new regulations that conflict with the agreements' broad protections for foreign investment.⁷⁶

If such a provision were to be included in NAFTA 2.0, locking in the post-2013 deregulation of oil and gas in Mexico, it would threaten several policy tools that the Mexican government could use to tackle GHG emissions. Deregulation has allowed increased private investment—including investment from U.S. and Canadian firms—in Mexico's oil and gas pipelines, fracking wells, and offshore drilling rigs. To reduce GHG emissions and spare communities from air and water

TO TACKLE CLIMATE CHANGE, POLICIES CANNOT "STAND STILL"

The inclusion of a "standstill" or "ratchet" clause in NAFTA 2.0 could pose a threat to increased regulation of fossil fuels not just in Mexico, but throughout North America. The Organization of American States describes a "standstill" clause as when the countries in a trade agreement "commit themselves to the imposition of the status quo."⁷⁷ That is, they "commit themselves not to introduce new legislation that would violate" an agreement's broad protections for foreign investment—even if those investments are in fracking, offshore drilling, or another sector that may warrant increased legislation.⁷⁸ If "imposition of the status quo" sounds inadvisable for Mexico's deregulated oil and gas sector, or for Canada's permissive approach to tar sands oil, consider the climate threat of a "standstill" clause that locked in the Trump administration's attempts to gut U.S. climate policies.

If inserted into NAFTA 2.0, this threat to climate action would remain indefinitely, even as governments change, the climate crisis worsens, and popular demands for action grow louder. "Standstill" and "ratchet" provisions have no end date. From the moment that a deal takes effect, they impose restrictions on new regulations that any current or future government might want to enact.

Such restrictions, inserted into multi-decade trade pacts that have been negotiated in secret, are fundamentally undemocratic. They limit the ability of current and future governments to take action to tackle major emerging problems in response to rising public concern. That includes the massive problem of climate change—a problem that demands broad policy flexibility, not deregulatory strictures.

pollution, a future Mexican government might want to restrict fracking, oil and gas pipelines, or drilling in the Gulf of Mexico. However, NAFTA 2.0 could bar such protections with a provision that requires the current deregulation of these sectors to persist indefinitely. Even if a future government were

to enact oil and gas restrictions that applied equally to domestic and foreign companies, it could run afoul of a “standstill” or “ratchet” provision that locks in the current ability for U.S. and Canadian corporations to invest in oil and gas in Mexico without such restrictions.

Exposing Energy Regulations to ISDS Challenges

The controversial system of ISDS could have the same effect of locking in Mexico’s oil and gas deregulation if NAFTA 2.0 maintains ISDS and exposes Mexico’s energy policies to ISDS challenges. As mentioned in Chapter 1, the existing NAFTA seems to exempt Mexico’s energy sector from ISDS challenges, though the legal wording is ambiguous.⁷⁹ If new language were to expose Mexico’s energy sector to ISDS, oil and gas corporations from the U.S. or Canada could retaliate against new Mexican fossil fuel restrictions by suing Mexico’s government in private tribunals. Indeed, U.S. and Canadian oil corporations are aggressively lobbying for the inclusion of ISDS in NAFTA 2.0, and citing Mexico’s deregulation of oil and gas as a key reason. Chevron’s official comments on the NAFTA renegotiation note that ISDS “has taken on added significance” in the wake of Mexico’s energy deregulation, calling it a “vital” tool to “protect current and future U.S. oil and gas investment.”⁸⁰

How could this tool be used to lock in Mexico’s oil and gas deregulation? As described in Chapter 1, ISDS threats can deter governments from enacting new regulations, given the broad rights that NAFTA grants to foreign investors. Take, for example, NAFTA’s vague guarantee that foreign investors shall be granted a “minimum standard of treatment.”

Corporations have repeatedly used this nebulous right to demand compensation from governments that changed their regulations in ways that frustrated the corporations’ “expectations” and restricted business, even if it was to protect the environment or public health. Some ISDS tribunals have agreed with this broad interpretation and have ordered governments to pay corporations for altering their policies in response to emerging challenges or public demands.⁸¹

If NAFTA 2.0 were to explicitly grant this and other broad rights to oil and gas corporations operating in Mexico, it could make future governments think twice before taking bold climate action.⁸² Say, for example, that a



Activists drop a banner near a Chevron refinery in California in 2011 to urge the oil corporation to honor an Ecuador court order to pay for the cleanup of widespread oil pollution in the Amazon. Instead of doing so, Chevron has sued Ecuador in a private ISDS tribunal in attempt to evade payment. Chevron has stated that it sees ISDS as “vital” for NAFTA 2.0, particularly in the wake of Mexico’s oil and gas deregulation. Photo: Eric Slomanson

future government in Mexico—whether at the local, state, or federal level—contemplated a fracking ban to limit GHG emissions, reduce air pollution, or protect scarce water resources. Policymakers would have to reckon with the possibility that a Canadian or U.S. fracking firm could sue the government for millions or billions of dollars in an unaccountable ISDS

tribunal, arguing that the new fracking ban frustrated its NAFTA-protected expectations of regulatory stability. This threat is not hypothetical, as shown by the Lone Pine corporation’s current \$119 million NAFTA suit against Quebec’s fracking moratorium, which is described in Chapter 1.

Expanding Proportionality

NAFTA’s proportionality rule, as detailed in Chapter 1, essentially states that a NAFTA country can only take action to reduce energy exports to another NAFTA country if it cuts such supplies to its own people, in equal proportion. This rule currently does not apply to Mexico, as Mexico exempted its oil and gas sector from such terms in the original NAFTA negotiation.

However, that may change in the current NAFTA renegotiation. In December 2017, Canada’s lead NAFTA negotiator, Steve Verheul, spoke to Canada’s Parliament about the proportionality rule and stated, “We’re also looking at bringing Mexico into the energy chapter, because they were not part of it in the original NAFTA when it was negotiated.”⁸³ Even the current administration in Mexico, according to some observers, might view signing on to the proportionality rule as another way to lock in its recent deregulation of the oil and gas sector.⁸⁴ Such statements raise the prospect that NAFTA 2.0 could eliminate Mexico’s exemption from the proportionality rule.

If Mexico were to become bound by the proportionality rule, how would it affect the country’s ability to meet its climate goals? As mentioned in Chapter 1, Mexico’s exports of

oil and gas to the U.S. have declined in recent years. However, exports to the U.S. could rise in the future as foreign corporations take advantage of the deregulation of Mexico’s oil and gas and begin investing in fracking, offshore drilling, and oil and gas pipelines in Mexico.⁸⁵ In a future scenario of rising oil and gas exports to the U.S., a NAFTA 2.0 proportionality rule that applied to Mexico could present an obstacle to Mexico’s climate progress. The rule would bar a sensible government approach to GHG emissions reduction: cutting oil and gas exports faster than domestic consumption so as to reduce climate pollution while still satisfying domestic demand. The rule also could restrict Mexico’s energy security, as the government might want to curb energy exports so as to meet domestic demand when national production slumps, as it did in Mexico after 2004.⁸⁶

If NAFTA 2.0 includes any one of these three revisions, it could hamper Mexico’s efforts to meet its climate targets by transitioning away from fossil fuel dependency and toward a clean energy economy. This transition already faces plenty of political and economic obstacles—a trade deal should not add to the list.

NAFTA 2.0: A BACKDOOR TO DEREGULATION?⁶

“Regulatory cooperation” is the focus of a NAFTA 2.0 chapter that already has been negotiated in the current talks. In other trade pacts, “regulatory cooperation” provisions have sought to “harmonize” trading partners’ regulations or regulatory processes. According to Kenneth Smith Ramos, Mexico’s chief NAFTA negotiator, the NAFTA 2.0 approach is even more expansive than past deals and “establishes standards never before embodied” in a trade pact.⁸⁷

Differences in national regulations can, in some cases, impose needless cost increases on international commerce. One obvious example, the U.S. failure to join the world in using the metric system, greatly limits standardization and raises costs in manufacturing. It requires two incompatible

versions of many products, one in inches and ounces for the United States, and one in centimeters and grams for everywhere else. Oddly, however, calls for international harmonization of regulations typically overlook this important opportunity.⁸⁸

Proponents of harmonization, while claiming to attack inefficiencies of the metric-standards variety, are in fact proposing business-friendly mechanisms to rewrite, halt, or reverse national regulations. New regulatory review bodies are created, with ample participation from affected industries but token, if any, involvement of environmental, consumer, or labor organizations. Take, for example, the chemical risk assessment committee of the U.S.-Canada Regulatory Cooperation Council, which has 21 industry representatives (e.g.,

COULD NAFTA 2.0 “STREAMLINE” COAL EXPORTS?

Beyond the “regulatory cooperation” chapter, NAFTA 2.0’s novel threats to climate regulations could also come from a chapter on “competitiveness.” In March 2018, three U.S. Senators proposed such a chapter in a letter to President Trump, saying that it should be used “to lock into law” elements of Trump’s policy agenda.⁹¹ That would appear to include a “lock-in” of Trump’s efforts to gut climate and other environmental protections. A Bloomberg exposé reveals that the Senators’ proposal stems from the strategy of a fossil fuel lobbyist.⁹²

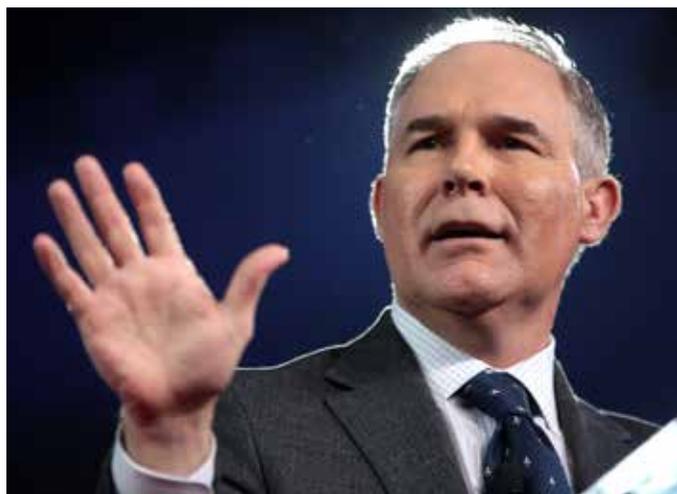
In their letter, the Senators call for NAFTA 2.0 to require a “streamlined” system for government permitting that “expedites” the approval of certain projects.⁹³ The Bloomberg article suggests that such NAFTA 2.0 provisions could expedite U.S. approvals of coal export terminals, for example, by restricting environmental reviews that can delay or halt such polluting projects. Indeed, advocates of the Senators’ proposal have made clear that the purpose is to roll back such U.S. regulations. David McIntosh, president of the Club for Growth, summarizes the NAFTA 2.0 “competitiveness” proposal as saying “as part of this free trade agreement, we’re going to strip back to the necessary—but no more than the necessary—regulations.”⁹⁴

⁶ Written and researched by Dr. Frank Ackerman, with support from Ben Beachy

Chevron, Dow Chemical) and just three representatives from non-governmental organizations.⁸⁹ In the early years of NAFTA, harmonization efforts often focused on pesticide regulations, through bilateral U.S.-Canada and U.S.-Mexico committees. In practice, Canada has much stronger pesticide rules than the U.S. or Mexico, and harmonization to U.S. or Mexican standards would mean a weakening of health and environmental protection in Canada.⁹⁰

While attempts to harmonize regulations under the original NAFTA agreement have been only partially successful, newer trade agreements have proposed more detailed and prescriptive approaches. They include two significant threats to climate policies: 1) burdensome and industry-dominated “regulatory cooperation” procedures that could delay or halt new climate regulations, and 2) downward “harmonization” or “mutual recognition” efforts that could weaken existing climate regulations.

As an example of the first threat, the leaked U.S. “regulatory coherence” proposal for



Scott Pruitt, Administrator of the U.S. Environmental Protection Agency under Donald Trump, has consistently sought to roll back U.S. climate protections. That includes, for example, his effort to delay or halt new limits on emissions of methane, a potent greenhouse gas. If NAFTA 2.0 were to put pressure on Canada and Mexico to “harmonize” their regulations down to the low level sought by the Trump administration, the deal could expand and lock in Trump’s climate rollbacks. Photo: Gage Skidmore

the Trans-Pacific Partnership described at length the structure and authority of regulatory cooperation bodies that would be set up in each country.⁹⁵ According to a legal scholar who has studied that proposal, “This chapter has nothing to do with trade. It targets the institutional and procedural approach to domestic regulation” of individual countries that sign the agreement.⁹⁶ Each country is expected to set up a well-funded body to review (and, if necessary propose modifications to) both existing and new regulations, with annual reports on the state of regulation and the needs for reform. Opportunities to review or appeal decisions of that body are limited. Its membership is not restricted to elected officials; “interested stakeholder input,” such as participation by industry lobbyists, is strongly encouraged. Under this approach, climate policies proposed in any of the three countries could be delayed, perhaps indefinitely, by new requirements for detailed, narrowly defined cost-benefit calculations to justify “regulatory costs.” Will a new NAFTA agreement include a TPP-style approach to regulatory cooperation, empowering unelected bodies to block or rewrite proposed government regulations?

Another danger of a NAFTA 2.0 regulatory cooperation regime is that the deal could pressure NAFTA countries to bring their existing regulations in line with one another. This “harmonization” process has been proposed for other recent trade deals. Despite occasional rhetoric about upward harmonization to meet the strongest standards, harmonization in practice generally means downward pressure to meet the weakest option.⁹⁷ Harmonization could, for example, require Canada or Mexico to adopt climate standards weakened by the Trump

DOWNWARD HARMONIZATION AND CLIMATE POLLUTION: A LOOK AT METHANE REGULATIONS

If a NAFTA 2.0 “regulatory cooperation” process led to an effort to harmonize North America’s environmental standards, what impact could it have on climate pollution? To illustrate, we can use the example of methane standards. These are policies to reduce emissions of methane, a potent greenhouse gas, in the production and transportation of oil and gas. In June 2016, all three NAFTA countries committed to a 40 to 45 percent reduction in methane emissions from oil and gas by 2025.⁹⁸ The Obama administration enacted new U.S. methane regulations in 2016, and Canada and Mexico are taking steps to do the same. However, the Trump administration is trying to delay and roll back the Obama-era methane regulations—an effort currently being challenged in court.

If the Trump administration succeeds in rolling back U.S. methane restrictions, efforts to harmonize North America’s divergent methane standards could compound the climate damage. The harmonization process would invite industry pressure for the three NAFTA countries to coalesce their divergent standards around the cheapest—and thus, weakest—option. Downward harmonization to U.S. methane standards weakened by the Trump administration would be particularly harmful.

Say that the Trump administration were to fully repeal two key Obama-era methane regulations and that this were to be chosen as the harmonized standard.⁹⁹ A requirement to abide by the harmonized standard would make it more difficult for any future U.S. administration to re-regulate methane. In every year between 2021 and 2025 that a potential future administration failed to re-regulate methane, the U.S. would produce an estimated half Mt of GHG emissions more than if the Obama-era methane standards were reinstated, according to the U.S. government’s own estimates.¹⁰⁰

Meanwhile, such downward harmonization could curtail new regulatory efforts in Canada and Mexico. Canada is proposing new regulations for methane that are similar to the Obama-era regulations. If Canada were required, via downward harmonization to the Trump administration’s standard, to forego these new regulations, it could spell more than 16 Mt of additional GHG emissions per year, according to government estimates.¹⁰¹ The story could be similar for Mexico if it were to abandon its plans for new methane regulations.¹⁰²

Regardless of the exact amount of climate pollution created, a NAFTA 2.0 downward harmonization to the deregulatory nadir of the Trump administration would likely make it impossible for the three NAFTA countries to meet their 2025 goal for reducing methane emissions.

administration, reversing the encouraging steps that have been taken north and south of the U.S. borders. As a result, it would be that much harder to resume progress on emissions reduction in all three countries, instead of just

one, in the post-Trump era. See the adjacent box for an example of the damage that downward harmonization could cause if it were applied to methane standards.

CHAPTER 3: A CLIMATE-FRIENDLY NAFTA REPLACEMENT⁷

If NAFTA is already impeding climate progress and NAFTA 2.0 could make matters worse, what would a climate-friendly NAFTA replacement look like? The vision outlined below is for a North American trade deal that is stripped of protections for corporate polluters. In their place, we find protections for people, centering those who have been hardest hit by the fossil fuel economy: working families, immigrants, women, people of color, Indigenous groups, and climate-

impacted communities.

Such a vision for NAFTA's replacement is not merely theoretical, but practical. To push for trade deals that reflect climate science and support climate justice, we must clarify exactly what we are pushing for. A template for a climate-friendly NAFTA replacement can serve as a guidepost for future policy change. In the interim, it serves as a yardstick by which to assess the current NAFTA 2.0 negotiations.

“REPLACE” VERSUS “WITHDRAW”

The vision outlined here is for replacing NAFTA, not merely withdrawing from it, as the Trump administration has repeatedly threatened. A single country's withdrawal from NAFTA would reduce some of the existing deal's climate threats while leaving others intact. For example, if the U.S. were to withdraw from NAFTA, the proportionality rule would remain in effect under the 1989 Canada-U.S. Free Trade Agreement, continuing to lock in Canada's production of tar sands oil, fracked gas, and associated GHG emissions. And while U.S. withdrawal would reduce exposure to ISDS threats for all three governments, Mexican firms could still challenge the Canadian government (and vice versa) in ISDS tribunals under a remaining

NAFTA pact.

Even if all three countries decided to terminate NAFTA, but then failed to replace the pact, it would only reduce—not close—the climate pollution loophole that lets corporations evade climate policies by offshoring their production, jobs, and emissions. While NAFTA's corporate protections and tariff elimination particularly encourage such offshoring, at this point all three North American countries maintain relatively low tariffs under the World Trade Organization, which could enable some degree of offshoring to continue even without NAFTA.

To truly support climate action—and workers' rights, income equity, and public health—

⁷ Written and researched by Ben Beachy

NAFTA withdrawal or termination is not enough. Instead, NAFTA must be replaced with a new, fundamentally different approach to North American trade in which the needs of people and planet are paramount, not an afterthought.

What would such an approach look like? For the purposes of tackling climate change, NAFTA's protections for corporate polluters must be replaced with protections for people, particularly those who have borne the brunt of the fossil fuel economy's economic and environmental damage.

As detailed in Chapter 1, NAFTA gives multinational corporations the right to:

1. Bypass climate policies by offshoring production
2. Challenge climate policies in unaccountable tribunals
3. Lock in unfettered trade in fossil fuels

A climate-compatible NAFTA replacement must eliminate each of these three unfounded rights for corporate polluters. That is the aim of the three NAFTA replacement solutions detailed below.

CLOSE THE POLLUTION OFFSHORING LOOPHOLE

Enforce Strong Climate, Labor, and Human Rights Standards

NAFTA enables corporations to respond to proposed climate policies by threatening to offshore production, jobs, and climate pollution to countries with weaker standards, as described in Chapter 1. The fear of such job loss and carbon leakage has been a consistent obstacle to enacting bolder climate policies. But if corporations faced high standards on both sides of the border, it would help close the pollution offshoring loophole and remove this impediment to climate action. Such standards should be included in trade agreements if the agreements themselves would otherwise encourage corporations to evade domestic policies via offshoring.

That is, if a trade deal allows corporations to cross borders, then that same trade deal must ensure cross-border protections for workers and communities. Specifically, any deal that replaces NAFTA must require each participating country to enforce robust policies to reduce climate, air, and water

pollution; to protect workers' rights and pay fair wages; and to guarantee internationally recognized human rights.

With regard to climate obligations, each participating country should be required to adopt, maintain, and implement policies to meet the country's "nationally determined



Union workers march for climate justice and workers' rights as part of the 2014 People's Climate March. Workers and environmentalists also have common cause in the push to replace NAFTA. Across North America, unions and environmental groups are jointly insisting that any NAFTA replacement must include strong, binding, and enforced labor and environmental standards—including fulfillment of the Paris climate agreement—to halt the offshoring of jobs and pollution. Photo: Joe Brusky

contribution” to the Paris climate agreement. This requirement would respect each country’s autonomy, as it asks each country to adopt the policies of its choosing so as to uphold the commitment that the country itself has made to the Paris climate agreement. This mirrors a requirement in recent U.S. trade agreements to “adopt, maintain, and implement” policies to fulfill obligations under seven other multilateral environmental agreements.¹⁰³ In addition, each country must be required to eliminate fossil fuel subsidies, which encourage climate pollution while distorting trade.

It is, of course, unlikely that the Trump administration would accept a proposal for a trade deal to reinforce the Paris climate agreement, having vowed to pull the U.S. out of the accord. But the anomaly of Donald Trump’s climate denial should not set the agenda for future trade deals. Trump’s attempt to pull the U.S. out of the Paris climate agreement will only take effect in November 2020, one day after the next U.S. presidential election. A future U.S. president could reinsert the U.S. into the agreement in as little as 30 days. A binding, multi-decade trade pact should not be influenced by a fleeting disregard for climate science, such as that which infects the current White House.

These new requirements to cut pollution, protect workers, and guarantee human rights must be included in the core text of NAFTA’s replacement and made enforceable via a new dispute settlement process that is both independent and binding—one that empowers impacted communities to confront violations. To date, no U.S. trade agreement has included an independent and binding process for enforcing the deal’s environmental or labor

provisions. As a result, these provisions have an enforcement track record of zero. Though all U.S. trade deals since 2007 have subjected environmental provisions to state-to-state dispute settlement, this non-independent “enforcement” mechanism has failed to produce a single formal case against documented environmental violations. The few labor cases that have been brought have similarly failed to curb on-the-ground abuses.¹⁰⁴

A new, independent and binding enforcement system should include these elements:

- **Investigation:** An independent body of issue-area experts should continuously monitor governments’ (and foreign investors’) compliance with the NAFTA replacement deal’s environmental, labor, and human rights obligations. Communities protected by those obligations, along with public interest groups, also should be able to petition relevant government ministries to investigate.
- **Disputes:** If a government or foreign investor is not complying with its environmental, labor, or human rights obligations under the deal, the independent investigating body, other participating governments, and potentially affected communities and public interest groups, should be able to challenge the noncompliance in a deciding body.¹⁰⁵
- **Decisions:** The body that decides challenges of governmental or investor noncompliance should be composed of issue-area experts from academic or civil society institutions, bound by strong and enforceable impartiality and transparency rules. Their decisions should follow legal

precedent and be subject to appeal to a body of academic or civil society issue-area experts bound by the same rules.

- **Penalties:** The rulings of the deciding body should be subject to the same sanctions

used to enforce the commercial provisions of the deal. Any resulting tariff or cash revenue should go to the communities most affected by the government or investor infraction.¹⁰⁶

Penalize Imports Made with High Climate Pollution

As an additional way to halt carbon leakage and encourage greater climate action, a NAFTA replacement deal should require each country to impose a duty on imported goods made with significant climate pollution. This climate duty should be imposed on imports of goods whose embodied greenhouse gas content (the emissions associated with producing a given category of good in the country of production) exceeds a stipulated threshold.¹⁰⁷ An independent panel of climate scientists and economists could calculate

the embodied emissions for each category of goods in each participating country, with regular revisions to account for countries' policy and technological changes. This climate duty would incentivize increased climate action throughout North America by expanding export opportunities for goods made with low emissions, while mitigating the job offshoring threat that is commonly cited as an impediment to stronger domestic climate policies.

SHIELD PUBLIC INTEREST POLICIES FROM CHALLENGE

Eliminate Special Rights for Corporate Polluters

Any NAFTA replacement deal must eliminate the broad corporate rights, including ISDS, that allow corporations to sue governments over environmental and health protections in unaccountable tribunals of corporate lawyers. As described in Chapter 1, corporate polluters from ExxonMobil to TransCanada have repeatedly used ISDS tribunals under NAFTA to demand compensation for policies that protect our climate, in addition to public health, clean air and water, and other public interest priorities.

Instead of ISDS, NAFTA's replacement should create an entirely new set of investment rules to incentivize and protect investments that advance the public interest.

These rules should:

- **Use a do-no-harm standard for investment protection.** Not all investments merit encouragement. For example, why should trade deals incentivize foreign investments in tobacco while domestic policies aim to reduce smoking? By the same token, trade deals should not encourage further investments in fossil fuels as governments work to transition to renewable energy. To ensure that NAFTA's replacement coheres with public interest policymaking, protections for foreign investors should be withheld from a short list of investment categories



A worker with a business named Solar Liberty installs solar panels in Buffalo, New York. NAFTA's replacement should encourage investments that create good jobs and clean energy. By contrast, the deal should not offer incentives to invest in fossil fuels or other businesses that are incompatible with a just transition to a clean energy economy. Photo: Stephen Yang

that are incompatible with basic public interest criteria, including the extraction of fossil fuels.

- **Grant only basic substantive protections.**

For investments deemed compatible with the public interest, NAFTA's replacement should grant the same basic protections found in many domestic legal systems: protection against clear discrimination,¹⁰⁸ gross denial of justice, and uncompensated direct expropriation of tangible property.¹⁰⁹ Exceedingly broad rights that go beyond common domestic protections should be excluded. This means eliminating NAFTA's guarantee of a "minimum standard of treatment" and compensation for "indirect expropriation"—overreaching rights on which corporations have relied for most of their successful ISDS claims against public interest policies.¹¹⁰

- **Require use of domestic courts.** NAFTA's replacement should not seek to tweak or reform ISDS—it should eliminate it. There is no coherent rationale for exclusively empowering one of the world's most

powerful set of actors—multinational corporations—to bypass domestic courts and challenge democratically enacted policies in unaccountable tribunals. If investors are wary of investing in a given country, they should purchase risk insurance rather than ask taxpayers to subsidize their risk-taking. If a foreign investor believes one of the basic protections described above has been violated, NAFTA's replacement should require them to go to domestic courts (like everyone else) to advance their claim. If, after exhausting the domestic legal process, the investor wants to continue pursuing the claim, the deal should allow their home government to initiate a state-to-state dispute on their behalf.

- **Ask investors to meet essential standards.**

NAFTA gives foreign investors broad rights but zero obligations. For greater parity, NAFTA's replacement should require foreign investors to meet baseline standards in order to enjoy the rights afforded. That includes requirements to comply with the domestic policies of their home and host countries, in addition to international treaties and conventions regarding the protection of the climate, air and water, workers, public health, Indigenous rights, and other human rights. These obligations should be subject to the same enforcement system used for governments' environmental, labor, and human rights obligations, as described above.

Add a Broad Protection for Climate and Other Public Interest Policies

NAFTA's many overreaching rules restrict the policy tools that governments can use to tackle climate change and pursue other broadly shared priorities. As described in Chapter 2, NAFTA 2.0 could include even broader rules—such as a “standstill” provision or burdensome “regulatory cooperation” requirements—that could further inhibit public interest policymaking.

First, such deregulatory rules need to be narrowed or eliminated. For example, “harmonization” should only be allowed if it results in increased regulatory protections. Procurement and “national treatment” rules should explicitly allow climate-friendly “buy local” policies. “Standstill” and “ratchet” clauses should be abandoned altogether.

Second, NAFTA includes no provision that effectively shields public interest policies from the deal's overreaching rules—only a

weak “exception” that has consistently failed to protect challenged policies.¹¹¹ Instead, any deal that replaces NAFTA must include a broad “carve-out” that exempts public interest policies from all of the deal's rules. Even with the removal of ISDS, this carve-out is needed to shield climate policies from challenges that could be brought by other governments.

The climate portion of the carve-out, for example, could state that none of the pact's terms apply to any policy with respect to greenhouse gas emissions or climate change adaptation. If a government invoked this climate carve-out to defend a challenged policy, the case could not proceed until an independent panel of climate experts decided whether the carve-out applied. If so, the challenge would be dismissed. This carve-out would provide a strong deterrent and an early defense against any challenges to climate policies under the trade pact.

ALLOW GOVERNMENTS TO REDUCE FOSSIL FUELS TRADE

As described in Chapter 1, NAFTA's proportionality rule limits Canada's ability to restrict production of climate-polluting fossil fuels such as tar sands oil and fracked gas, and undermines efforts to halt the proliferation of dangerous tar sands oil pipelines. The provision, which essentially requires Canada to export a specific share of its oil and gas supply, is the opposite of free trade. It is managed trade—managed to benefit oil and gas corporations, while ignoring the climate impacts of continued fossil fuel dependency.

The solution to this problem is simple: NAFTA's proportionality rule must be deleted.

NAFTA's replacement should exclude any provisions that impose rules on governments regarding fossil fuel exports. That includes not only any “proportionality” provisions but also “national treatment” rules for trade in gas. NAFTA's inclusion of this rule means that the U.S. Department of Energy must automatically approve gas exports to Mexico and Canada rather than determine whether they serve the public interest, as described in Chapter 1. The governments of North America must be free to swiftly phase out fossil fuel exports in order to facilitate a just transition to a clean energy economy.

A CLIMATE REPORT CARD FOR THE NAFTA 2.0 TALKS

Does the current NAFTA renegotiation align with this vision for a climate-compatible NAFTA replacement? Not so far. It is difficult to know what exactly is on the negotiating table, given that the public has been denied access to negotiating texts (which hardly inspires confidence that the deal will reflect public calls for change). But based on leaks and inside reporting, here is an assessment of how well the talks are addressing the three climate solutions outlined in this chapter:

1. Close the pollution offshoring loophole: Instead of proposing a requirement for each country to enforce strong climate standards, the Trump administration is reportedly proposing a copy-and-paste of the environmental chapter of the Trans-Pacific Partnership—a deal that failed to even mention climate change. Most of the TPP’s environmental standards were weak, and all were subject to an old, non-independent “enforcement” system that, as mentioned above, has categorically failed. Replicating the TPP’s climate-denying text would not prevent corporations from threatening to offshore jobs and pollution in response to stronger climate policies. To boot, it does not appear that a climate duty on imported goods is on the negotiators’ agenda.

2. Shield public interest policies from challenge: The global movement against ISDS has grown rapidly, persuading governments from South Africa to Belgium to terminate or halt ISDS agreements. As a sign of the movement’s growing influence, even the Trump administration is reportedly proposing – on sovereignty grounds—a way for countries to opt out of ISDS in NAFTA 2.0. If ISDS is discarded, it would spell an important reduction in one type of climate threat embedded in NAFTA. But at the same time, negotiators are considering expanding other threats to climate policies. That includes “standstill” or similar provisions to lock in Mexico’s oil and gas deregulation, in addition to “regulatory cooperation” processes that could cripple public interest regulations, as explained in Chapter 2. Meanwhile, negotiators have given no sign that they are entertaining a robust carve-out to protect climate and other public interest policies from such threats.

3. Allow governments to reduce fossil fuels trade: As mentioned in Chapter 2, there’s a risk that the proportionality rule—instead of being eliminated—could be expanded to include Mexico. Meanwhile, there has been no indication that negotiators are considering terms that would let the U.S. government decide if gas exports are in the public interest.

Thus far, these NAFTA negotiations seem as climate-ignorant as the ones that produced the original deal over two decades ago. For NAFTA to be replaced with a deal that supports climate justice, the current negotiations would need to dramatically change course.

CONCLUSION

We have to fundamentally rethink how we approach trade. This would be true even without the gravity of the climate crisis. To benefit the many, we cannot afford to merely tweak trade deals like NAFTA that were negotiated by and for a select few.

Over two decades after NAFTA was negotiated, it is abundantly clear that benefitting the many includes listening to the workers and communities on the front lines of climate change, not the corporations fueling it. We cannot afford to lock North America's communities into another multi-decade pact that ignores climate change. The fossil fuel CEOs need to leave the NAFTA negotiating room.

Their input should be replaced with the grounded realities of people from the parched fields of Oaxaca to the scorched forests of



A woman cradles a child after being rescued near Houston from Hurricane Harvey floodwaters in August 2017. About 1,200 miles away, negotiators had just concluded the first round of closed-door talks on NAFTA's renegotiation. Photo: Daniel H. Farrell

British Columbia to the flooded streets of Houston. The ongoing negotiations urgently need this dose of climate reality if they are to produce a new, people-centered trade agreement that supports a just transition to a clean energy economy.

ENDNOTES

1. Canada's current proportionality obligation is to make available for export to the U.S.: 74 percent of its oil production; 52 percent of its natural gas production; and 11 percent of its electricity generation. Gordon Laxer, "Escaping Mandatory Oil Exports: Why Canada Needs to Dump NAFTA's Energy Proportionality Rule," Council of Canadians, 2018 (forthcoming), p. 4. Theoretically, Mexico is also part of Canada's energy proportionality obligation, but the latter would not kick in until Canada exports oil and gas to Mexico.
2. NAFTA, [Article 605\(c\)](#): "a Party may adopt or maintain a restriction...with respect to the export of an energy or basic petrochemical good to the territory of another Party, only if... the restriction does not require the disruption of normal channels of supply to that other Party or normal proportions among specific energy or basic petrochemical goods supplied to that other Party, such as, for example, between crude oil and refined products and among different categories of crude oil and of refined products."
3. Robert W. Howarth, "[Methane Emissions and Climatic Warming Risk from Hydraulic Fracturing and Shale Gas Development: Implications for Policy](#)," *Energy and Emission Control Technologies*, 2015:3.
4. The countries squabbled over whether the reductions should be based on their 1990 or 2005 emissions level. Emissions had grown considerably by 2005 in Canada, the U.S. and Japan. Their governments favoured the 2005 start date, while the others wanted to stick with 1990. In this report we chose 1990 as the baseline from which to measure Canada's emissions goals for two reasons. First, 1990 was the date set in the "Climate Change Accountability Act" passed by the House of Commons in 2008, the first elected chamber in the world to approve legislation to cut emissions by 80 percent. (The Act was rejected by the unelected Senate and therefore did not become law). Second, 1990 was the baseline date Canada agreed to in the Kyoto Accord and is currently Ontario's and Quebec's baseline date for emissions reductions.
5. Joint Research Centre (JRC)/PBL Netherlands Environmental Assessment Agency, "[CO2 Time Series 1990-2015 per Region/Country](#)," Emission Database for Global Atmospheric Research (EDGAR), European Commission, October 30, 2017.
6. Environment and Climate Change Canada, "[Trans Mountain Pipeline ULC - Trans Mountain Expansion Project: Review of Related Upstream Greenhouse Gas Emissions Estimate](#)," November 2016, p. 17.
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- 0.04499; in situ: 0.06801; mined plus upgrading 0.10247. We blended the non-upgraded emissions factor with the upgraded mined tar sands oil factor at a 1 to 3 ratio to yield a blended rate of 0.08810.
9. J. David Hughes gives the emission factor for conventional gas per billion cubic feet: 0.01061. This is an average of 2012-2015 based on United Nations National Inventory Report emissions data and National Energy Board production data. The emission factor for fracked gas is assumed to be 50 percent higher, in line with the Howarth findings: 0.015915. Robert W. Howarth, "[Methane Emissions and Climatic Warming Risk from Hydraulic Fracturing and Shale Gas Development: Implications for Policy](#)," *Energy and Emission Control Technologies*, 2015:3.
 10. Daniel Tencer, "[Fracking Moratorium Backed by 70% of Canadians: Poll](#)," *Huffington Post*, October 10, 2014
 11. The proportionality clause appears first in NAFTA [Article 315](#). It says that a NAFTA member may restrict exports to another NAFTA member only "if the restriction does not reduce the proportion of the total export shipments of the specific good made available to that other Party relative to the total supply of that good." Article 315 does not explicitly mention energy but the rule covers the trade of all goods and therefore of energy. [Article 605](#) in NAFTA makes explicit that the rule applies to energy.
 12. For which data is available. Proportionality restricts the range of government actions in Canada much more than the General Agreement on Tariffs and Trade (GATT) that was incorporated into the World Trade Organization (WTO). If Canada wins an exemption from proportionality or NAFTA dies, Canada would revert to WTO rules. Under them, Canada could reduce carbon energy exports under GATT Article XI or Article XX, which covers General Exceptions to GATT rules.
 13. Supply also includes any drawdowns of domestic inventory.
 14. National Energy Board, "[Market Snapshot: Canadian Crude Oil Imports from the U.S. Decline in 2016, Overseas Imports Increase](#)," February 2, 2017. Total oil "supply" was 4.65 million barrels a day while total exports were 3.04 million barrels a day in 2015.
 15. Calculated, using 2016 production numbers, from: National Energy Board, "[Canada's Energy Future 2016: Energy Supply and Demand Projections to 2040](#)," 2016.
 16. We don't know for sure because proportionality has never been tested. It is not clear exactly how it would be interpreted.
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 18. The 2050 consumption levels are calculated as 80 percent below the 1990 levels—see endnote four for explanation. In practice, oil and natural gas consumption would likely fall faster in the resilience paradigm that underlies going proportionality-free than in the neoliberal or market paradigm of NAFTA's proportionality rule. But, to isolate the effects of proportionality, we reduce consumption equally in both scenarios.
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 22. Government of Mexico, [First Biennial Update Report to the United Nations Framework Convention on Climate Change, 2015](#), p. 112.
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 31. "[South Texas-Tuxpan Gas Pipeline, Gulf of Mexico](#)," Offshore Technology, July 11, 2017.
 32. American Petroleum Institute, [Letter to Robert E. Lighthizer](#), June 12, 2017.
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 35. Housley Carr, "[Into the Void - Mexican Market Liberalization, Refinery Setbacks Open Door to U.S. Companies](#)," RBN Energy, December 18, 2017, p. 1-6.
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100. This is an estimate of the average annual combined GHG emissions savings of the BLM and EPA rules that would be foregone between 2021 and 2025. It is based on the projected GHG emissions savings detailed by BLM and EPA when the rules were published in 2016 (BLM: 175,000-185,000 short tons saved per year; EPA: 300,000 short tons saved in 2020, 510,000 short tons saved in 2025). The combined estimate assumes a 10 percent overlap in the rules’ coverage. Bureau of Land Management, [“Waste Prevention, Production Subject to Royalties, and Resource Conservation,”](#) November 18, 2016, p. 83014. Environmental Protection Agency, [“Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources,”](#) June 3, 2016, p. 35827.
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105. If affected communities and public interest groups are allowed to directly bring challenges, they should have access to technical support from the independent body for such challenges. Some may question a proposal to give communities and public interest groups direct access to tribunals to challenge noncompliance with the deal’s public interest obligations, while not giving foreign investors such access to challenge noncompliance with investor protections (given the elimination of ISDS). This privileging of obligations to protect the public interest over obligations to protect individual corporations’ private interests is arguably warranted, given that public interest protections afford benefits that are more broadly shared. In addition, most multinational corporations already have ample tools at their disposal (e.g., risk insurance) to protect their interests.
106. In any case in which the deciding body authorizes trade sanctions against a noncompliant government or investor, but the other signatory governments do not wish to impose sanctions, the governments should publish their reasons for this decision, and the deciding body should order the noncompliant government or investor to instead give cash payments to the affected communities.
107. Such climate duties could be challenged as violations of various World Trade Organization non-discrimination rules, such as this “national treatment” provision: World Trade Organization, [“The General Agreement on Tariffs and Trade \(GATT 1947\),”](#) 1947, Article III:2. To avoid the risk of such disputes, World Trade Organization rules should be altered to make clear that such climate duties are compliant. As an alternative, World Trade Organization members could adopt a “peace clause” that indefinitely bars challenges of such climate duties.
108. “Clear discrimination” should be limited to discrimination that is clear in both intent and effect. This protection would not apply to government measures that inadvertently affect foreign investors more than domestic ones. In addition, it would not apply to buy local policies related to renewable energy.
109. Tangible property should include real property and goods typically classified as tangible personal property in the host state’s domestic legal system.
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