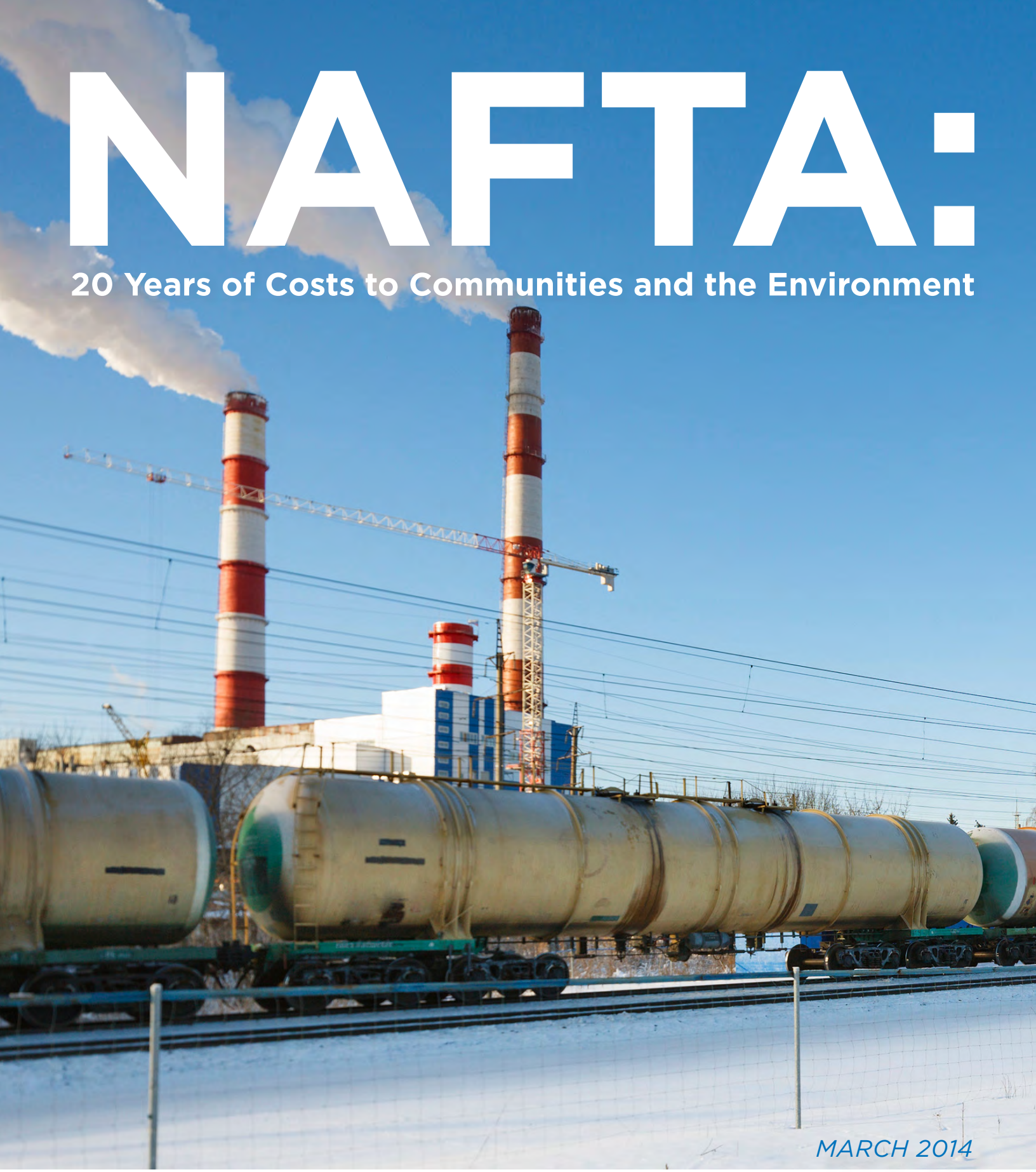
NAFTA:

20 Years of Costs to Communities and the Environment



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EXECUTIVE SUMMARY

January 1, 1994 marked the first day of the implementation of the North American Free Trade Agreement (NAFTA). The pact ushered in a new era of trade agreements that went significantly beyond core trade issues to include regulations and public interest policies related to agriculture, investment, energy, food and consumer safety standards, labor, the environment, and more.

The 20th anniversary of NAFTA is a moment to reflect upon the agreement's harmful effect on North American communities and the environment. Although identifying all the causal effects of a single trade pact on the environment is difficult, the evidence documented in this report demonstrates that NAFTA has reduced the ability of governments to respond to environmental issues and it has empowered multinational corporations to challenge important environmental policies. In particular, this report finds that NAFTA:

- Facilitated the expansion of large-scale, export-oriented farming that relies heavily on fossil fuels, pesticides, and genetically modified organisms;
- Encouraged a boom in environmentally destructive mining activities in Mexico;
- Undermined Canada's ability to regulate its tar sands industry and locked the country into shipping large quantities of fossil fuels to the United States;
- Catalyzed economic growth in North American industries and manufacturing sectors while simultaneously failing to safeguard against the increase in air and water pollution associated with this growth; and
- Weakened domestic environmental safeguards by providing corporations with new legal avenues to challenge environmental policymaking.

These are not unfortunate side-effects, but rather the inevitable results of a model of trade that favors corporate profits over the interests of communities and the environment. Despite containing a non-binding environmental side agreement, NAFTA's so-called "environmental safeguards" were never given the funding or legal mandate needed to prevent environmental damage.

The evidence is clear but rarely recognized by North American policymakers who would rather expand NAFTA's most destructive trade rules through transpacific and transatlantic negotiations that will make environmental protection even more difficult. Trade agreements must protect communities and the environment—NAFTA clearly does not. Governments must remember the legacy of NAFTA.

INTRODUCTION

January 1, 1994 marked the first day of the implementation of the North American Free Trade Agreement (NAFTA). The pact ushered in a new era of trade agreements that went significantly beyond core trade issues, such as tariffs, to include binding rules covering regulatory and public interest policies related to agriculture, investment, energy, food and consumer safety standards, labor, the environment, and more.

The 20th anniversary of NAFTA is a moment to reflect upon the agreement's harmful effect on North American communities and the environment. Identifying all the causal effects of a single trade pact on the environment is difficult. However, the evidence documented in this report demonstrates that NAFTA has reduced the ability of governments to respond to environmental issues while empowering multinational corporations to challenge environmental policies. It is important to come to terms with this reality as the United States, Canada, and Mexico seek to expand the environmentally harmful NAFTA-model through even larger and more imposing agreements such as the Trans-Pacific Partnership (TPP), respective U.S. and Canadian negotiations with the European Union, and Mexico's involvement in the Pacific Alliance.

The goal of this report is to explain some of NAFTA's more significant impacts on the environment. These include:

- An increase in export-oriented agriculture that relies heavily on fossil fuels, chemicals, genetically modified organisms, and water;
- The expansion of environmentally destructive mining activities in Mexico;
- The integration of North American energy markets based on the development and trade in fossil fuels, including rapid expansion of Canadian tar sands;
- Higher levels of air and water pollution associated with the growth of maquiladora factories; and
- The progressive weakening of domestic environmental safeguards and the expansion of corporate power to challenge environmental policies.

These are not unfortunate side-effects but the inevitable result of a model of trade that is designed to protect the interests of corporations instead of the interests of communities and the environment.

The report is split into three sections. First, we assess the environmental effects of carbon- and resource-intensive industrial growth across the NAFTA region. Next, we look at how the agreement has weakened the capacity of governments to regulate this growth. Finally, we examine NAFTA's environmental side agreement and show that it is incapable of mitigating environmental damage. It is time to recognize that the NAFTA model of trade is failing communities across the North American region and harming our shared environment.

NAFTA AND THE ENVIRONMENT: THE CASUALTIES OF GROWTH IN RESOURCE-INTENSIVE SECTORS

Many of the environmental impacts of NAFTA arose from the transformation of resource-intensive industries across North America, including those related to agriculture, mining, energy, and the growth of maquiladora factories in Northern Mexico.

AGRICULTURAL TRADE LIBERALIZATION UNDER NAFTA

NAFTA helped solidify and accelerate the privatization, deregulation, and liberalization of Mexico's rural economy. These structural changes began in Mexico in the early 1980s in exchange for credit and debt relief from the International Monetary Fund and the World Bank and included: (1) the privatization and elimination of major state-owned agriculture enterprises; (2) reductions in consumer subsidies for basic food commodities like wheat; (3) drastic cutbacks in agriculture subsidies, loans, and insurance to peasant farmers; and (4) the reduction of trade barriers to products including basic grains.[1] These dramatic reforms dismantled the public support systems that had previously helped Mexico's many poor subsistence farmers. They also favored large-scale export-oriented agribusiness over small-scale farming.

For example, in anticipation of the signing of NAFTA, and at the insistence of the United States, President Salinas de Gortari amended the Mexican Constitution in 1991 to allow foreign ownership of land that had previously been owned collectively by Mexico's peasants.[2] This constitutional reform has been used by creditors and corporations to seize the lands of Mexico's poorest farmers, further destabilizing Mexico's agricultural sector and undermining the livelihoods of poor farmers.[3]

The implementation of NAFTA cemented and expanded these structural changes to Mexico's agricultural sector. NAFTA encouraged the growth of large-scale, export-oriented Mexican farms, which significantly destabilized the livelihoods of poor Mexican farmers. By eliminating the tariffs and quotas that had been used to control and manage trade in agricultural products, NAFTA opened Mexico's agricultural sectors to the full demand of U.S. consumers for fresh fruits and vegetables. However, only large-scale agribusinesses had the information, resources, and transportation networks necessary to respond to these changes and shift their farming activities towards the production of these export-oriented food commodities. Small-scale farmers, on the other hand, faced severe capital and knowledge constraints that limited their ability to take advantage of these new trends in demand.[4] Consequently, while Mexican exports of fruits and vegetables more than doubled in the six years following NAFTA's implementation,[5] any benefits from increased trade accumulated primarily in the hands of big Mexican agribusinesses.

The expansion of large-scale export-oriented farming had major environmental implications for Mexico. Large-scale farming is more pesticide- and water-intensive than small-scale or subsistence farming.[6] Mexico's average annual expenditures on pesticide imports rose from approximately $104 million in pre-NAFTA years to over $545 million in 2012.[7] As a result there have been higher levels of groundwater pollution and nitrogen runoff.[8] Making matters worse, these large-scale farms, which also rely heavily on water-intensive irrigation practices, have been concentrated in the water-stressed regions of northern Mexico.[9] In the years following NAFTA, groundwater levels in some parts of northern Mexico declined by as much as 50 percent.[10]

While NAFTA was a boon for large-scale farming in Mexico, it was a devastating blow to the country's subsistence farmers. The elimination of key trade

barriers opened up Mexican consumer markets to a flood of agricultural imports from the U.S. Between 1994 and 2011, for instance, U.S. corn exports to Mexico more than quadrupled.[11] Staple food commodities, however, were (and continue to be) the primary goods produced by small-scale Mexican farmers. Consequently, because the U.S. continued to subsidize American farming by as much as $20 billion per year,[12] this deluge of U.S. exports to Mexico pushed down food prices, undercut the livelihoods of millions of impoverished Mexican farmers,[13] and helped lead to the mass migration of people from Mexico to the U.S.[14]

This NAFTA-induced growth of U.S. agricultural exports to Mexico had three major environmental consequences:

1. It contributed to deforestation in Mexico. Because Mexican smallholder farmers did not have the resources to shift from staple foods to high-demand export-oriented crops, many subsistence farmers attempted to offset plummeting staple crop prices by increasing production.[15] However, as few were able to invest in more efficient farming technology, much of this increase in crop yield has come from clearing forests for new farmland.[16] Post-NAFTA Mexican deforestation rates rose to as much as 1.1 million hectares per year, exacerbating global warming trends and threatening Mexico's unique biodiversity.[17]
2. It threatened the biodiversity of native corn in Mexico. Roughly a quarter of the U.S. corn entering Mexico has been genetically modified (GM),[18] and there have already been cases of U.S.-created GM corn contaminating fields of native Mexican corn, despite the fact that Mexico banned the growing of GM corn in the late 1990s. In light of the fact that Mexico is the genetic birthplace of maize and that GMOs have been known to crowd out their native counterparts, such reports have generated global concern.[19]
3. Because GM crops require large amounts of chemical fertilizers, pesticides, and water, the expansion of U.S. agricultural exports under NAFTA also worsened environmental conditions in the United States.[20] For example, the increase of U.S. corn exports are estimated to have added 77,000 tons of nitrogen, phosphorus, and other chemicals into U.S. waterways, with this pollution affecting the already polluted Mississippi River Delta the most.[21]

The changes to Canada's agricultural sector are also important to note. In Canada, NAFTA and the earlier Canada-U.S. Free Trade Agreement reinforced Canada's role as an exporter of food products to the U.S. Canadian agricultural exports rose from about $15 billion in 1994 to nearly $40 billion in 2008 while the incomes of farmers stagnated.[22] In 1990, 40 percent of all agricultural exports from Canada went to the U.S. By 2006, agricultural exports from Canada to the U.S. rose to 60 percent.[23] There is a high degree of consolidation in Canada's energy- and water-intensive meat sector, with two powerful meat packing companies handling almost all cattle purchases from farmers – a dynamic that benefits processors who are in a position to set low prices in a way that undermines farmers.[24] This same power dynamic in the lucrative processed food industry in Canada is also a primary driver of genetically modified agriculture (e.g., corn, soy, canola and white sugar beet), which creates significant risks of non-GM crop contamination, increases the use of pesticides, and has led to the spread of herbicide-tolerant weeds.[25] For both the meat and grain sector then, the constant downward pressure on farm prices to meet the competitive needs of processors comes with negative social and environmental impacts.

In sum, NAFTA helped to eliminate key support to Mexico's smallholder farmers; facilitate the growth of export-oriented large-scale farming in Mexico, Canada, and the U.S.; and boost U.S. and Canadian exports of GM corn and other staple crops. Among the effects of this new model of agriculture are that NAFTA has boosted the use of pesticides and chemicals in Mexico, Canada, and the U.S.; encouraged deforestation in Mexico; further depleted water resources; and introduced new threats to Mexican biodiversity.

THE EXPANSION OF MINING UNDER NAFTA

NAFTA provided the ingredients for an explosion of dangerous foreign mining activity in Mexico. In anticipation of the agreement, the Mexican government

ratified several national laws that facilitated the entry of Canadian and U.S. mining corporations into Mexico. For example, a constitutional amendment in 1991 allowed Mexican peasants to sell previously communal lands to private owners (including foreign corporations) without significant regulatory oversight or protection against abuse. This gave North American mining companies easy access to Mexico's lands and mineral resources.[26]

As a result, mining activities and foreign mining investments expanded considerably in the post-NAFTA era. For instance, over the past 20 years the Mexican government has granted more than 25,000 mining concessions. Approximately 28 percent of Mexico's land is now devoted to mineral extraction and is largely under control of transnational mining companies based primarily in Canada, U.S., and Mexico.[27] Annual extraction rates have doubled since NAFTA was signed.[28]

While the increase in mining concessions was a boon to Canadian and U.S. mining companies, it was devastating for the environment. Mining requires explosives and toxic substances that are known to contaminate water and land. Thanks to the post-NAFTA increase in mining, Mexico has become the world's leading importer of toxic sodium cyanide, which is both used in mining and is a major source of water contamination. Mining in Mexico has released 43,000 tons of pollutants into the environment between 2004 and 2010, many of them carcinogens.[29]

Finally, as discussed below, the rights of foreign mining corporations were strongly protected under NAFTA's investment chapter, while NAFTA's environmental side-agreement has not required Mexico to better regulate the harmful environmental impacts of runaway extraction.

NAFTA'S "PROPORTIONALITY CLAUSE": FUELING U.S. GAS TANKS SINCE 1994

Just as Mexico gave up control of its mining sector, Canada all but gave up control of its energy sector in the Canada-U.S. Free Trade Agreement and then in NAFTA. The "proportionality clause" in NAFTA's energy chapter, which applies to trade in energy between Canada and the U.S., has facilitated trade in environmentally dangerous fossil fuels by obligating Canada to maintain a fixed share of energy exports, including oil and gas, to the U.S.[30] Currently, these annual energy export requirements—which are based on average Canadian energy exports to the U.S. over the previous three years—stand at more than half of Canada's energy supply.[31] This rule, which was included in NAFTA at the insistence of Canadian oil patch companies, has not only expanded trade in fossil fuels, but has compromised Canada's energy security. The Parkland Institute calculates that even a 10 percent reduction in Canadian energy production would lead to domestic energy shortages due to Canada's trade obligations under the proportionality clause.[32]

More worrisome still, the provision hinders Canada's ability to reduce its greenhouse gas emissions. The Canadian government cannot flexibly shift energy production away from transportable carbon-intensive energy sources, such as oil and natural gas, to non-exportable renewable energy sources, such as wind and solar, without potentially violating the NAFTA proportionality clause. This is because the provision specifically forbids Canada from changing "the normal proportions among specific energy or basic petrochemical goods… such as, for example, between crude oil and refined products and among different categories of crude oil and of refined products."[33]

These constraints are particularly concerning when viewed in the context of Canada's expanding tar sands oil industry, since the proportionality clause might restrict Canada's legal capacity to regulate the extraction of or ban exports of tar sands oil. Greenhouse gas emissions from tar sands extraction and upgrading are between 3.2 to 4.5 times as intensive per barrel as they are for conventional oil,[34] and the process of extracting tar sands accounts for seven percent of Canada's total emissions.[35] Tar sands extraction is also extremely water-intensive, and 90 percent of water extracted for tar sands extraction never returns to the ecosystem.[36]

These facts have led trade scholar Robert Stumberg to warn that the proportional clause "could be a constraint on Canadian federal climate policy."[37]

MANUFACTURING, GREENHOUSE GASES, AND TOXIC WASTE

In the years following NAFTA, the manufacturing sector in Mexico boomed. Between 1994 and 2005, the number of maquiladora plants—export-oriented factories run by foreign companies—increased by about 30 percent.[38] This contributed to a rise in manufactured exports from Mexico, which grew by as much as 24 percent per year during the 1990s.[39] By 2005, maquiladora production accounted for over 40 percent of Mexico's exports.[40] While maquiladora activity eventually began to slow due to growing foreign competition from manufacturing industries in China and the Caribbean,[41] more than 2,800 maquiladoras remained in operation as of 2007—the year before the global economic crisis hit Mexico particularly hard.[42]

The growth of the maquiladora sector did not improve the well-being of the Mexican working class.[43] On the contrary, its expansion has been based on the stagnation of wages in Mexico.[44] It also came at a high cost to the environment, producing significant amounts of pollution. For example it is estimated that while all industries in Mexico generated an estimated 12.7 million tons of hazardous waste in 1997, manufacturing industries generated about 10.5 million tons. The chemical industry and metal products and machinery industries are the leading producers of hazardous waste in Mexico.[45] Much of this environmental degradation was along the U.S.-Mexico border — the region that houses about three quarters of all maquiladora workers in Mexico.[46]

The high concentration of maquiladora factories has not only exacerbated water-shortage problems in an already water-stressed region, but also produced significant amounts of toxic waste. Between 1993 and 2004, toxic pollution from manufacturing more than doubled in a number of Mexico's border states.[47] According to a recent Environmental Protection Agency (EPA) report, the production facilities operating along U.S.-Mexico border that actually reported their toxic releases in 2007 produced more than 70 million pounds of toxic releases, excluding carbon dioxide (CO2) emissions.[48] This estimate does not include the pollution generated by manufacturing companies that did not register with the U.S. Toxics Release Inventory (TRI) and Mexico's Pollutant Release and Transfer Registry (RETC).

Moreover, research suggests that only about 10 percent of Mexico's hazardous waste receives proper treatment, which means that millions of pounds of toxic waste have contaminated the Mexico-U.S. border since the signing of NAFTA.[49]

According to models that simulate the economic and environmental effects of NAFTA, the trade agreement also increased air and water pollution in Canada and the U.S. by boosting economic activity in pollution-intensive manufacturing sectors. For example, in Canada, NAFTA is estimated to have increased sulfur dioxide (SO2) emissions by 66 million pounds, carbon monoxide (CO) emissions by 39 million pounds, and total suspended solids (TSS)—a measure of industrial water pollution—by 138 million pounds.[50] The petroleum and base metal sectors, which expanded under NAFTA, were responsible for most of this new pollution. For the U.S., the damage is predicted to be even worse. By shifting production towards pollution-intensive industries, such as the base metals, chemical, and transportation sectors, NAFTA increased SO2, CO, and TSS levels by 127 million, 104 million, and 386 million pounds respectively. [51] Overall, greenhouse gas emissions for the entire NAFTA region have jumped from about seven billion metric tons in 1990 to roughly 8.3 billion in 2005, with U.S. greenhouse gas emissions growing by 17 percent, Canadian emissions by 26 percent, and Mexican emissions by 37 percent.[52]

NAFTA: TRUCKS AND POLLUTION

Compounding NAFTA's health and environmental impacts on the borderlands, cross-border truck traffic has increased substantially since 1994, contributing to higher pollution levels. In fact, the number of trucks crossing the border via Laredo, Texas jumped from 851,690 in 1993 to 1.3 million trucks in 1999,[53] while roughly 86 percent of personal vehicles and 89 percent of trucks were forced to wait more than an hour to cross from Tijuana into San Diego; wait times were even higher for the Ciudad Jaurez-El Paso cross-over point.[54] Long waits mean more idling vehicles and more noxious

pollutants being emitted into the air.[55] It is not surprising, then, that higher volumes of truck traffic have caused air pollution spikes along the U.S.-Mexican and U.S.-Canadian border.[56]

The health repercussions of air contamination from border traffic have been severe. Studies of U.S.-Canadian border traffic have found that people living within one-third of a mile of a border port of entry were four times more likely to have asthma than people living more than a mile away.[57] Border-related respiratory problems are even more pronounced along the U.S.-Mexico border: Between 1997 and 2001, more than 36,000 were rushed to emergency rooms in the border city of Ciudad Juarez due to breathing problems.[58] During the same time period, one-third of infant deaths in Ciudad Juarez were found to be related to respiratory illness.[59]

The pollution from NAFTA trucking is not, however, only a problem for Border States. Under the trade agreement's service sector chapter, trucking companies were supposed to have full access to the interior highways of all three countries by 2000. Up until 2011, however, the U.S. had denied the majority of Mexican trucks access to the U.S. interior, citing extensive environmental and safety problems with Mexico's older fleet of commercial vehicles.[60] In 2005, for instance, a quarter of Mexico's fleet consisted of pre-1980 models, which are known to emit high levels of nitrogen oxide and other pollutants.[61]

Moreover, two-thirds of the Mexican fleet consisted of trucks were manufactured prior to 1993 and so did not use electronic fuel injection and computer controls to reduce pollution and improve fuel economy.[62] These findings, as well as research showing that allowing Mexico's trucks full access to U.S. highways would significantly raise air pollution levels in certain U.S. areas,[63] pushed first President Bill Clinton and, later, the U.S. Congress to limit Mexican trucking access to the U.S. interior.[64]

Despite the continued environmental and health hazards posed by Mexico-domiciled trucks, President George W. Bush and now President Barack Obama have, in the face of trade sanction threats from Mexico, pressed to fulfill our trucking obligations under NAFTA.[65] In his second term, President Bush finalized a controversial pilot program that allowed some Mexican commercial vehicles access to the U.S. interior.[66] President Bush implemented the program despite strong objections from Congress, Border States, and a number of labor and environmental organizations. In March 2009, after years of Congressional pressure, President Obama signed a bill that ended Bush's 18-month program.[67] In 2011, however, President Obama buckled to NAFTA pressures and signed a deal allowing Mexico's truck fleet access to the U.S. interior for three years, despite outstanding environmental and safety concerns.[68] The first Mexico-domiciled truck crossed the U.S. interior in 2011. The Sierra Club, International Brotherhood of Teamsters, and Public Citizen filed a lawsuit to block this dangerous new program, but in May 2013, the U.S. Court of Appeals for the D.C. Circuit ruled that the pilot was legal.[69]

NAFTA'S INVESTMENT RULES: PUTTING THE BRAKES ON ENVIRONMENTAL POLICYMAKING

NAFTA's notorious Chapter 11 on investment exacerbated the environmental impacts of the pact by further constraining and undermining environmental policymaking in North America. NAFTA's investment chapter and the investor-state dispute settlement process within it has allowed private investors and corporations to challenge a startling number of non-discriminatory government policies related to the environment and natural resources in all three countries.

NAFTA's investment chapter provided legally binding rules that governed a country's treatment of foreign corporations, investors, and investments from another

country. Among the most harmful components of the investment rules are vaguely worded provisions that guarantee investors a "minimum standard of treatment," "fair and equitable treatment," and the right to claim damages simply when the value of an investment has been reduced. When a corporation feels that its rights have been violated or that the value of its investment has been reduced by the introduction of a new law or policy, NAFTA's investor-state dispute settlement mechanism allows foreign firms to bypass domestic court systems and directly challenge government policies and actions in private trade tribunals, such as the International Centre for Settlement of Investment Disputes (ICSID) at the World Bank and the United Nations Commission on International Trade Law (UNCITRAL).

Since 1994, corporations have used Chapter 11 to challenge land-use, mining, energy, and other socially beneficial laws passed by the governments of all three NAFTA countries. By 2012, more than $350 million USD had been paid by Mexico and Canada to investors in a series of investor-state cases under NAFTA alone,[70] and there are billions more in pending claims.[71] A disproportionate number of challenges are launched against policies related to the extractives industry. As of March 2013, there were 169 cases pending at the most frequently used investment arbitration tribunal, ICSID, of which 60 (35.7 percent) were related to oil, mining, or gas.[72] By contrast, there were only three cases at the ICSID related to oil, mining, or gas in 2000, and there were only seven such cases filed during the 1980s and 1990s.[73]

Some of the more brazen attacks against environmental regulation under NAFTA include:

- In 1997, U.S. landfill management firm Metalclad brought a case against Mexico after the local government denied the firm a permit to build a toxic waste dump.[74] The site under consideration had already been contaminated with 20,000 tons of toxic waste and local community members demanded that the land be cleaned up.[75] The price, however, for protecting communities and the environment was steep: the investment tribunal ruled in favor of Metalclad and ordered the Mexican government to pay nearly $16 million in compensation.[76]
- In 1998, S.D. Myers, a U.S. waste-treatment corporation, filed a Chapter 11 suit against Canada for its temporary ban of PCB-contaminated waste. PCBs are a group of manufactured chemicals that have been found to impair the physiological and neurological development of children, cause cancer, and suppress the immune system.[77] Initiated in 1995, the ban was actually lifted in early 1997 after U.S. firms threatened to sue Canada under NAFTA laws.[78] Abolishing the ban was not enough, however. S.D. Myers demanded $20 million from Canadian taxpayers for profits lost during the 15-month ban.[79] The investor-state tribunal eventually awarded the U.S. company $5 million in compensation.[80]
- On September 6, 2013, Lone Pine Resources, a U.S. oil and gas firm, filed a notice of arbitration to sue Canada for $250 million Canadian dollars under NAFTA.[81] The crime: A bill passed by Quebec's National Assembly that instituted a partial moratorium on shale gas exploration and development, including fracking, under the St. Lawrence River. According to Lone Pine representatives, the Quebec government acted "with no cognizable public purpose," and violated the Enterprise's "valuable right to mine for oil and gas under the St. Lawrence River," despite the fact that (1) fracking fluids contain carcinogens and other toxins that are hazardous to human health, (2) fracking chemicals have been known to contaminate drinking water, and (3) fracking may have caused earthquakes in the past.[82] Lone Pine, however, argued that its loss of a "stable business and legal environment" violated its minimum standard of treatment and should be counted as expropriation.

These and other examples show the types of policies that investors will challenge and have successfully challenged. More difficult to track are policies that will never get implemented for fear of attracting a costly Chapter 11 lawsuit. A recent European report on investor-state dispute settlement quotes a former Canadian government official saying:

> "I've seen the letters from the New York and DC law firms coming up to the Canadian government on virtually every new environmental regulation and proposition in the last five years. They involved dry-cleaning chemicals, pharmaceuticals, pesticides, patent law. Virtually all of the new initiatives were targeted and most of them never saw the light of day."[83]

The logic behind this "chilling effect" on government policy and legislation appears to have been internalized and made completely transparent by NAFTA countries. In Canada, for example, a Cabinet Directive on Streamlining Regulation first introduced in 2005 requires all new environmental, health, and safety regulations to be screened by officials and trade lawyers for compatibility with international trade agreements.[84] The result is inevitably that policies that might be necessary to protect the environment but might raise trade and investment challenges are discouraged at the outset.

Investor protections similar to the ones included in NAFTA have been replicated in hundreds of free trade agreements and bilateral investment treaties since NAFTA.[85] The result has been astonishing. By the end of 2012, corporations launched 514 known cases against 95 governments.[86] Developing countries most often find themselves in the position of defending their policies against transnational corporations: 61 of the 95 countries facing investor-state disputes are from developing countries; 18 from developed countries; and 16 from economies in transition.[87] The effects of these cases are harmful not only to the environment, but also to economies. Dispute-settlement compensations awarded to corporations in 2012 ranged anywhere from U.S. $2 million to nearly U.S. $2.4 billion (including compound interest), with many pending claims totaling in the billions of U.S. dollars.[88]

As a result of the NAFTA investment protection model, corporations have been elevated to the level of nation states, further eroding governments' ability to regulate in the interest of communities and the environment.

ENVIRONMENTAL SIDE AGREEMENT: SIDELINING THE ENVIRONMENT

In theory, NAFTA's effect on the environment could have been contained, or at least potentially mitigated, through strong and legally enforceable environmental rules in the pact. NAFTA, however, did not include binding disciplines for the environment. Instead, the North American Agreement on Environmental Cooperation (NAAEC) was developed with non-binding commitments for each country, including responsibilities to: "periodically prepare and make publicly available reports on the state of the environment;" "promote education in environmental matters;" and to "assess, as appropriate, environmental impacts."[89]

To oversee the implementation of the NAAEC, the side agreement established the North American Commission for Environmental Cooperation (CEC). The Council of the CEC is responsible for overseeing the implementation of the side agreement and developing recommendations for NAFTA on issues including "pollution prevention techniques and strategies" and "approaches and common indicators for reporting on the state of the environment." However, it is important to note that the recommendations of the Council to countries are completely non-binding. The side agreement states: "Each Party shall consider implementing in its law any recommendation developed by the Council. . . ."[90]

The CEC has developed a "citizen submissions" process wherein non-governmental organizations or individuals can flag violations of environmental laws.[91] The Council also collects and disseminates data on pollutant releases and transfers.[92] The CEC highlights its success in the role the Sound Management of Chemicals program played in reducing Mexico's use of DDT and chlordane.[93] However, the potential environmental achievements of the CEC have been circumscribed by its limited mandate, poor

enforceability, its inability or unwillingness to address the scale effects of increased cross-border trade and investment in polluting energy and mining projects, and a meager budget of $9 million.[94] Given that, in 2010 alone Mexico incurred an estimated $120 billion in environmental damages (seven percent of GDP),[95] the CEC has been too institutionally weak and poorly funded to play a meaningful difference in post-NAFTA economic and environmental governance.

Even modest promises in the NAAEC requiring that each NAFTA country "shall ensure that its laws and regulations provide for high levels of environmental protection and shall strive to continue to improve those laws and regulations"[96] have been broken.

In Canada, for example, indigenous communities and environmental organizations have challenged the gutting of Canada's environmental laws under the current Conservative government at the NAAEC, arguing that Canada has failed to properly enforce environmental laws and standards.[97] Of particular concern is Canada's Budget Implementation Act (Bill C38)[98] — omnibus legislation that made several controversial changes to Canada's environmental regulations. For example, the Act amended the Fisheries Act so that only fish used for commercial, recreational, or Aboriginal purposes are protected, thereby excluding many fish species and watercourses. The omnibus legislation also weakened the Canadian Environmental Assessment Act by removing the requirement to assess small projects that might still be ecologically harmful, among other changes.[99]

In the end, despite the potential for binding environmental rules to ameliorate the impacts of free trade on the North American environment, it is important to remember that many of the most damaging impacts of the NAFTA on the environment, as discussed above, resulted not necessarily from specific rules that were included or not in the agreement. Rather, the impacts of NAFTA were the result of a model of trade that, at its core, is about removing the ability of governments to put in place policies to protect the environment while protecting the profits of multinational corporations.

EXPANDING NAFTA: THE TRANSATLANTIC AND TRANSPACIFIC NEGOTIATIONS

Despite these and other effects of NAFTA, major new trade negotiations—one transatlantic, another transpacific, and a Pacific Alliance uniting several Latin American countries—may dramatically expand the NAFTA model of corporate-dominated governance.

The Trans-Pacific Partnership (TPP) is a 12-country trade negotiation that will essentially expand the NAFTA model to Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States, and Vietnam. Negotiations have been underway for nearly four years, and governments seek to conclude the agreement in 2014.

In many ways the TPP stands to replicate many of the worst elements of NAFTA, such as the harmful investor-state dispute settlement discussed above. In other ways, the environmental impacts of the TPP could be even more dangerous than the impacts of NAFTA.

For example, in the TPP the U.S. government is proposing to extend intellectual property rights to corporate patents on plant and animal life, including genetically modified organisms.[100] These rights would be expressly recognized as a covered investment in the investment chapter, giving patent owners the right to sue countries that did not recognize (or want to import) their GM products.

The transatlantic negotiations—both the U.S.-EU Transatlantic Trade and Investment Partnership (TTIP) and the Canada-EU Comprehensive Economic and Trade Agreement (CETA)—also expand upon

the NAFTA model. U.S. chemicals and agricultural lobbies hope that the TTIP will weaken toxic chemicals regulation in Europe,[101] and possibly require EU countries to recognize hormones and antibiotics used in North American meat production as safe for human consumption.[102] This pact could also set in place a new process by which governments must consult industry on each side of the Atlantic before putting in place new public interest policies, including those related to the environment.

These agreements could shift even more power from governments to corporations. The investment chapter in the Canada-EU agreement has been called "the most investor-friendly set of corporate rights" ever negotiated in a Canadian trade or investment agreement by one legal expert who has seen a copy of the still secret text.[103] Finally, Mexico is involved in both the TPP and Pacific Alliance negotiations with Chile, Peru, and Colombia. All of these new NAFTA-plus agreements would make it more difficult for communities and governments to meaningfully address the climate and environmental crises of our time.

CONCLUSION

As we explored in this paper, NAFTA ushered in a new model of trade that reduced the ability of governments to regulate in the interest of the public and the environment. NAFTA cemented and expanded changes to Mexico's agricultural sector that impoverished and displaced millions of peasant farmers while increasing North America's reliance on chemical and water-intensive agricultural practices. It increased mining activity and trade in fossil fuels while it decreased the ability of governments to put in place policies to regulate such polluting industries. And, NAFTA's environmental side agreement was far too weak and the commission responsible for enforcing the side agreement far too under-resourced to make any meaningful difference.

The evidence is clear but rarely recognized by North American policymakers who would rather expand NAFTA's most destructive trade rules through transpacific and transatlantic negotiations that will make environmental protection even more difficult. Trade agreements must protect communities and the environment—NAFTA clearly does not. Governments must remember the legacy of NAFTA.

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