



NAFTA renegotiation: a stealth attack on food, agriculture, chemicals, and biotechnology safeguards

On July 17, 2017, U.S. Trade Representative Robert Lighthizer released a very general first cut of the Trump Administration’s renegotiating objectives for the North American Free Trade Agreement (NAFTA).ⁱ This document is in many respects vague. Congress, the press, and the public need far more specific information on the Administration’s plan to rewrite NAFTA.

Donald Trump demonized NAFTA during his presidential campaign, calling it “the worst trade deal” and made assurances that he would rework NAFTA and other trade deals to protect the American people.ⁱⁱ Now, it appears that Trump modified his message. His rhetoric, actions, and statement of NAFTA negotiating objectives strongly suggest that he plans to step up his war on the planet in the course of renegotiating NAFTA.ⁱⁱⁱ

NAFTA renegotiation raises a broad range of environmental concerns,^{iv} as well as an even broader range of public interest and economic concerns.^v This note, however, focuses on NAFTA negotiating objectives affecting food, agriculture, chemicals, and biotechnology policies.

The Administration’s statement on July 17 of its NAFTA negotiating objectives only reinforces concerns that Trump plans to use trade agreements to hamstring effective environmental regulation related to food and chemical safety, sustainable family farms, and biotechnology, among many others.^{vi}

The Big Picture

Trump's NAFTA "re-do" is highly likely to reflect many elements of the Trans-Pacific Partnership (TPP),^{vii} along with elements of U.S. proposals in the Transatlantic Trade and Investment Partnership (TTIP)^{viii} and Trade in Services Agreement negotiations.^{ix}

All of these proposed trade deals, like the current NAFTA, would establish international trade tribunals with authorization to impose sanctions such as tariffs or loss of international intellectual property rights to enforce environmental regulations in non-compliant member states. In addition, the original NAFTA, the TPP, and the TTIP included investment chapters to allow global corporations and wealthy investors to sue nation states for millions or billions of dollars in money damages. More often than not, these measures are effective in rolling back environmental, health, and consumer safety regulations.

Trump expediently attacked the TPP in his presidential campaign due to concerns about the trade deficit and the outsourcing of manufacturing jobs. Nevertheless, he apparently likes the provisions of the TPP that can undercut environmental regulations.^x Commerce Secretary Wilbur Ross recently said, "There are some concessions that the NAFTA partners made in connection with the proposed TPP. There is no reason to throw those away. We would view those as the starting point."^{xi}

Trump can be expected to support global corporations that have called for a rollback of environmental and public health regulations. Dozens of powerful corporate lobby groups ranging from the American Farm Bureau^{xii} and the Corn Growers Association^{xiii} to DuPont Chemical^{xiv} and the Business Roundtable^{xv} have filed public comments with the USTR demanding a rollback of public health, environmental, and other public interest regulations.

After unleashing Scott Pruitt and his deregulation task force to cripple the Environmental Protection Agency^{xvi} and pulling the U.S. out of the Paris climate agreement, Trump is almost certain to continue his record of attack on the planet in the upcoming NAFTA renegotiation.^{xvii}

Friends of the Earth's Demands on NAFTA Renegotiation

NAFTA must not be renegotiated in secret. The Trump Administration must release detailed and comprehensive information on its objectives for NAFTA renegotiation. Negotiating text should be available to everyone after every round of talks. Public interest groups must have the opportunity to make presentations and meet with negotiators at upcoming talks, as has been past practice.

No special consideration should be given to corporate lobbyists who have been designated as cleared advisors. During TPP negotiations, most of the negotiating materials were kept secret from the public, but not from the official corporate advisors.^{xviii} While the majority of Americans were barred from knowing what was taking place in negotiations, approximately 600 corporate representatives were named "cleared advisors," giving them regular access. Full transparency and a public debate will either make a new NAFTA a better agreement or sink a bad deal.^{xix}

The Environment Chapter must be robust and enforceable. Trump's renegotiated NAFTA is likely to have a largely unenforceable environment chapter similar to what is found in the TPP,

opening the way for a rollback of public interest regulations.^{xx} Friends of the Earth believes that a new NAFTA must include an environment chapter that is comprehensive and enforceable through dispute resolution.^{xxi} It must include an obligation for Canada, Mexico, and the U.S. to enforce their domestic environmental laws, including those related to agriculture, food, chemicals, and biotechnology. It also should include an enforceable obligation on the three parties to NAFTA to adhere to a comprehensive list of multilateral environmental agreements, including the Paris Climate Accord. The environment chapter also must address, for example, issues of biodiversity conservation, illegal logging, and illegal wildlife trade, economic subsidies that lead to overfishing and illegal fishing more generally.

The Technical Barriers to Trade Chapter must be dropped. Renegotiation of the TBT chapter of NAFTA on the model of the TPP is likely to expand the legal basis for international suits before NAFTA trade tribunals challenging regulations in North America.^{xxii} As a result, the new NAFTA could force the rollback of effective chemical regulations in some U.S. states such as California's Green Chemistry initiative^{xxiii} and preclude future, more effective U.S. federal regulation of dangerous chemicals associated with breast cancer, autism, infertility, and other illnesses.

NAFTA renegotiation could thwart efforts to stop the use of bee-killing neonicotinoid (neonic) pesticides, which are a leading cause of bee declines.^{xxiv} The new NAFTA could stop future national action to save pollinators and the crops that depend on pollinators. It might also undercut more limited state and local initiatives, like Minnesota Governor Mark Dayton's executive order restricting the use of neonic pesticides.^{xxv}

TBT provisions in the new NAFTA will also likely undercut food-labeling standards.^{xxvi} Global corporations are likely to use a new NAFTA to further undercut consumers' right to know what is in their food and whether their food is produced in a humane manner protective of animal welfare.

The goal of global corporations is to include "TBT-plus" provisions in NAFTA that are even more restrictive of protective regulations than the tough standards in the current NAFTA agreement as well as harsh World Trade Organization (WTO) standards related to technical barriers to trade. The WTO TBT standards, for example, were in part the basis for an international tribunal ruling in a case brought by Mexico, which concluded that the voluntary U.S. dolphin-safe tuna product-labeling standard violated international trade law.^{xxvii} A renegotiated NAFTA chapter on technical barriers to trade promises to be even worse than the very bad WTO and current NAFTA agreements.

The Sanitary and Phyto-Sanitary Measures Chapter must be dropped. Friends of the Earth is concerned that provisions in a renegotiated NAFTA will make it even easier to challenge food safety and animal welfare safeguards. These fall into the categories of sanitary measures related to food safety, such as bacterial contamination, and phyto-sanitary measures related to animal and plant health, such as animal diseases.

The goal of global corporations is to include "SPS-plus" provisions that are more restrictive of protective regulations than the tough restrictions in the old NAFTA agreement as well as overbroad World Trade Organization standards. In other words, NAFTA and the WTO are a

threat to food safety and animal welfare but a renegotiated NAFTA could very well be an even bigger threat.^{xxviii}

A renegotiated NAFTA like the TPP is likely to put food safety protections at risk by authorizing more industry legal attacks on food safety standards before corporate dominated trade tribunals. Moreover, it might very well follow the TPP model to give foreign food exporters greater powers to challenge border inspections and substitute private food safety certifications for government inspections in many cases.^{xxix}

Regulatory Review and Intellectual Property Rights Chapters must be dropped. Trade agreement chapters related to intellectual property and regulatory review threaten food, agriculture, chemical, and biotechnology regulations as well as environmental and climate measures generally.^{xxx} Adding new regulatory review provisions in Trump's NAFTA would be likely to encourage regulatory impact assessments, based on the inappropriate use of cost-benefit analysis.^{xxxi} This would stymie the promulgation of new and improved environmental and public health regulations.^{xxxii} Any new regulatory review provisions in NAFTA also would be likely to establish committees of trade bureaucrats and industry representatives empowered to review and stymie new regulations before they can be formerly proposed to the public.

A renegotiated NAFTA is also likely to provide new protections for biotechnology and the use of genetically modified organisms. Obligations are likely to be established for NAFTA countries to quickly approve GMO crops and products unless unreasonably high standards of scientific certainty regarding the risk to health and the environment are met. In addition, significant patent protections could be provided to biotechnology seed companies.

All of this runs counter to the precautionary principle, a central tenet of sound environmental regulation that provides that deregulatory action should not be taken if the consequences are highly uncertain and potentially quite dangerous.^{xxxiii} When industry initiatives, such as many forms of biotechnology and synthetic biology, threaten serious or irreversible damage to people and the planet, the lack of full scientific certainty should not be used as a reason to block or postpone the promulgation of environmental regulations.

The investment chapter must be dropped. The chapter on investor-state arbitration must be excluded from a renegotiated NAFTA. The U.S., Mexico, and Canada have well-developed and generally fair court systems to resolve allegations of property rights and due process violations resulting from environmental and public health measures.^{xxxv} Investors' substantive and procedural rights are sweeping when compared to U.S. constitutional law or the general legal practice of nations around the world.^{xxxvi}

Arbitrators in these cases are typically international commercial lawyers who may alternately serve as arbitrators one day and return as corporate counsel the next, thus raising questions of conscious or unconscious bias. Scholarly studies often based on empirical research make a convincing case that arbitrator bias is real.^{xxxvii}

A services chapter in a new NAFTA must not apply to agricultural and other environmental services. A new NAFTA services chapter is a potential threat to regulations related to

agricultural services and to environmental services across the board. It might well hinder future regulation of services using technologies like cloning, GMO seeds and gene editing – including the gene drives. A new NAFTA services chapter also might be used by affiliated service providers for global meat giants like Smithfield to challenge new regulations to protect the environment, public health, and especially the climate. Eating beef, in particular, carries a carbon footprint many times the size of meats like chicken. All meats are generally more harmful to the climate than plants.^{xxxviii}

A new NAFTA services chapter must protect policy space for the adoption of new agricultural and environmental regulations as well as amendments to existing regulatory measures. The NAFTA services chapter should use a “positive” list of coverage that excludes agricultural and environmental services. The NAFTA services chapter should use a “positive” list of coverage that excludes agricultural and environmental services as well as an exception for these services.^{xxxix}

Across-the-board exceptions for environmental, agricultural, food safety and chemical regulations must be included throughout the text of a renegotiated NAFTA. Across-the-board exceptions should be included in the NAFTA to effectively ensure that environmental laws, regulations, and enforcement actions are not undermined.

The Bottom Line

NAFTA is about trade in goods and services, but it is also all about deregulation and forcing governments to pay corporations and wealthy investors for the cost of complying with environmental and other public interest safeguards.^[xxxv] Like the old NAFTA, any new NAFTA is likely to broadly restrict the policy space for governments to take effective environmental and climate action. This applies particularly with respect to public policy related to food, agriculture, chemicals, and biotechnology.

Endnotes

ⁱ The Trade Promotion Authority law and past practice contemplates that the publication of negotiating objectives will be detailed, but rumors have been circulating that the NAFTA renegotiation objectives will be broad and general in order to cloak Trump’s plans, thereby keeping Congress and the public in the dark.

ⁱⁱ Julie Hirschfeld, Alan Rappoport, After Calling Nafta ‘Worst Trade Deal,’ Trump Appears to Soften Stance, New York Times, <https://www.nytimes.com/2017/03/30/business/nafta-trade-deal-trump.html>

ⁱⁱⁱ [Cale Jaffe](http://www.slate.com/articles/health_and_science/science/2017/05/trump_hates_regulations_because_he_doesn_t_understand_them.html) and [Steph Tai](http://www.slate.com/articles/health_and_science/science/2017/05/trump_hates_regulations_because_he_doesn_t_understand_them.html) Trump’s Disdain for Environmental Regulations Stems From His Misunderstanding, http://www.slate.com/articles/health_and_science/science/2017/05/trump_hates_regulations_because_he_doesn_t_understand_them.html

^{iv} Friends of the Earth endorses wholeheartedly the demands on NAFTA renegotiation of a broad coalition of environmental groups. See 350.org., Center for Biological Diversity, Center for Food Safety, Defenders of Wildlife, Earthjustice, Friends of the Earth, Food and Water Watch, Global Exchange, Green America, Greenpeace USA, Institute for Agriculture and Trade Policy, League of Conservation Voters, Natural Resources Defense Fund, Sierra Club, U.S. Human Rights Network, Institute for Agriculture and Trade Policy. <https://www.sierraclub.org/sites/www.sierraclub.org/files/uploads-wysiwig/NAFTA%20Enviro%20Redlines%20FINAL.pdf>

^v Friends of the Earth is also a member of the Citizens Trade Campaign and endorses that coalition's demands as well.¹Citizens Trade Campaign, <http://www.citizenstrade.org/ctc/blog/2017/01/13/labor-nonprofit-groups-outline-priority-nafta-changes/>

^{vi} A press release issued in May by the Office of the U.S. Trade Representative Robert Lighthizer stated that NAFTA renegotiation “...will be pursued consistent with U.S. priorities and the negotiating objectives established by Congress in the Bipartisan Congressional Trade Priorities and Accountability Act of 2015 (TPA).” USTR: Trump Administration Announces Intent to Renegotiate the North American Free Trade Agreement, <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2017/may/ustr-trump-administration-announces> The TPA or Fast Track legislation is replete with negotiating objectives that would roll back environmental regulations. TPA 2015 text negotiating objectives <https://www.congress.gov/114/plaws/publ26/PLAW-114publ26.pdf>

^{vii} Friends of the Earth, Statement on Trump's plan for NAFTA renegotiation, <http://www.foe.org/news/news-releases/2017-03-statement-on-trumps-plan-for-nafta-renegotiation>; Lori Wallach, Will NAFTA Renegotiation Produce TPP 2.0 and Intensify Damage? Or Fulfill Trump Promise of a 'Much Better' Deal for Working Americans? Maintaining Secretive Process With 500 Official Corporate Advisers Does Not Bode Well. <https://www.commondreams.org/newswire/2017/05/18/will-nafta-renegotiation-produce-tpp-20-and-intensify-damage-or-fulfill-trump>; Friends of the Earth, Trump's NAFTA “re-do” threatens people and the planet, <http://www.foe.org/news/news-releases/2017-05-trumps-nafta-re-do-threatens-people-and-the-planet>

^{viii} Bill Waren, Friends of the Earth, Deregulatory Disappointment: Transatlantic Free Trade Agreement Negotiations, pp.8-9; http://www.foe.org/system/storage/877/b0/6/3031/ISSUE_BRIEF_TAFTA_overview_3.pdf; Paul De Clerck at al, How TTIP could create a red tape labyrinth, <https://euobserver.com/opinion/128350>; Friends of the Earth, President Obama dodges Pacific trade deal threat to the environment, <https://medium.com/economic-policy/president-obama-dodges-pacific-trade-deal-threat-to-the-environment-7f9b4ff44c91>

^{ix} Services provisions in past U.S. trade agreements broadly affect the environment, including services related to water, as well as solid waste, hazardous waste, electricity, pollution control, transportation, oil/gas pipeline transportation, and other energy services, to name a just a few. *See*, Friends of the Earth, US, The Trade in Services Agreement is an environmental hazard, <https://wikileaks.org/tisa/Analysis-TiSA-Annex-on-Environment-related-Services/Analysis-TiSA-Annex-on-Environment-related-Services.pdf>

^x Bill Waren, President Obama dodges Pacific trade deal threat to the environment, January 21, 2016. <https://medium.com/economic-policy/president-obama-dodges-pacific-trade-deal-threat-to-the-environment-7f9b4ff44c91#.aq9eld2s6>

^{xi} Andrew Mayeda, David Gura, Ross Says TPP Could Form Starting Point for U.S. on Nafta Talks, Bloomberg, May 3, 2017, <https://www.bloomberg.com/news/articles/2017-05-03/ross-says-tpp-could-form-starting-point-for-u-s-on-nafta-talks>

^{xii} Dale Moore American Farm Bureau <https://www.regulations.gov/document?D=USTR-2017-0006-0862>

^{xiii} Iowa Corn Growers Association <https://www.regulations.gov/document?D=USTR-2017-0006-0806>

^{xiv} DuPont Federal Register Comments on NAFTA renegotiation. “DuPont agrees that there are many aspects of NAFTA that can, and should be, modernized. We would support provisions that preserve or modernize the following areas: National Treatment/Market Access of Goods; Energy; Agriculture/Sanitary and Phytosanitary Standards; Technical Barriers to Trade; and Biotechnology and Regulatory Cooperation. During the upcoming negotiations, we should look for opportunities to improve regulation of crop protection chemicals. NAFTA has facilitated efficient risk assessments for new crop protection products by encouraging joint reviews of data by the appropriate regulatory agencies; we can build upon that progress. Common registration data requirements and data interpretation increase efficiencies and result in significant cost savings for companies, farmers, and customers. NAFTA also encourages identification of trade barriers, leading industry and regulatory agencies to think beyond their own borders, facilitating Maximum Residue Level (MRL) alignment and harmonization among countries to the benefit of U.S. companies like DuPont.”<https://www.regulations.gov/document?D=USTR-2017-0006-1401>

^{xv} Business Roundtable, federal register comments on NAFTA renegotiation.

<https://www.regulations.gov/document?D=USTR-2017-0006-0874>

^{xvi} Danielle Ivory, Robert Faturechiljuly, The Deep Industry Ties of Trump’s Deregulation Teams, New York Times, July 11,2017, <https://www.nytimes.com/2017/07/11/business/the-deep-industry-ties-of-trumps-deregulation-teams.html?hp&action=click&pgtype=Homepage&clickSource=story-heading&module=first-column-region®ion=top-news&WT.nav=top-news&r=0>

^{xvii} Friends of the Earth, U.S. exit from Paris Agreement will accelerate climate crisis, <http://www.foe.org/news/news-releases/2017-06-paris-agreement-withdrawal>

^{xviii} Bill Waren, April fool--but secrecy in Trans Pacific trade negotiations is no joke, Friends of the Earth, <http://www.foe.org/news/archives/2012-04-april-fool--but-secrecy-in-trans-pacific-trade-negot>

^{xix} See, Jared Bernstein and Lori Wallach, The New Rules of the Road: A Progressive Approach to Globalization, <https://www.citizen.org/sites/default/files/new-rules-of-the-road.pdf>

^{xx} Friends of the Earth, 350.org, Center for International Environmental Law, Center for Biological Diversity, Earthjustice, Food & Water Watch, Friends of the Earth, Green America, Greenpeace USA, Institute for Agriculture and Trade Policy, Natural Resources Defense Council, Oil Change International, Sierra Club, SustainUS, Environmental Provisions in the Tran-Pacific Partnership, October 29, 2015, <https://www.sierraclub.org/sites/www.sierraclub.org/files/uploads-wysiwig/TPP%20letter%20FINAL%20%282%29.pdf>

^{xxi} This should include a formal administrative process for citizen and civil society submissions regarding enforcement of environmental laws, compliance with multilateral environmental agreements, and initiating dispute resolution against other NAFTA parties.

^{xxii} With respect to technical barriers to trade, Friends of the Earth fears that text of a renegotiated NAFTA will ignore the risk to important environmental and public health measures such as toxic chemicals regulation. Several TBT challenges in the WTO have succeeded in undermining important environmental and public health measures, particularly those related to product labels. See, Bill Waren, Friends of the Earth, Chemical safety and food labels under fire in TPP and TTIP. <http://www.foe.org/news/archives/2015-03-fast-track-attack-chemical-safety-and-food-labels-un>; Bill Waren, Friends of the Earth, Sinister partners: transatlantic trade agreement & toxic chemicals, <http://www.foe.org/news/archives/2013-06-sinister-partners-transatlantic-trade-agreement--toxi>

^{xxiii} Eric Rothenberg et al, O’Melveny Alert, Congress Passes Amendments to TSCA, June 8, 2016, <https://www.omm.com/resources/alerts-and-publications/alerts/congress-passes-amendments-to-tsca/>

^{xxiv} See, Bill Waren, Friends of the Earth, Assessment: Trade deal attack on pollinator protection. [http://webiva-downton.s3.amazonaws.com/877/58/2/6702/Assessment.Trade deal attack on pollinator protection.pdf](http://webiva-downton.s3.amazonaws.com/877/58/2/6702/Assessment.Trade%20deal%20attack%20on%20pollinator%20protection.pdf);

^{xxv} Dan Gunderson, ,Elizabeth Dunbar, Seeking to reverse bee decline, ,Dayton orders limits on pesticide use, MPRNews, <https://www.mprnews.org/story/2016/08/26/dayton-orders-steps-protect-bees-pollinators>

^{xxvi} Friends of the Earth Europe, GM Food and the US – EU trade deal, https://www.foeurope.org/sites/default/files/press_releases/briefing_-_gm_food_and_the_eu-us_trade_deal.pdf

^{xxvii} Krista Hughes, WTO rules against U.S. dolphin-safe canned tuna labels, Reuters, April 14, 2015, <http://www.reuters.com/article/us-usa-mexico-tuna-idUSKBN0N51IW20150414>

^{xxviii} A leading spokesperson for corporate agriculture John Keeling, the CEO of the National Potato Council, is one of many industrial agriculture leaders calling for “SPS-plus” in NAFTA renegotiation. He is very clear in his demand, saying, “including enhanced SPS standards and science-based procedures for resolving SPS disputes would expand trade opportunities with both our NAFTA partners. A strong “SPS Plus” chapter could streamline the

process....” John Keeling, NAFTA Renegotiation offers Opportunities, National Potato Council, May 2017, <http://spudman.com/article/nafta-renegotiation-offers-opportunities/>

^{xxxix} Bill Waren, Trade deal attack on safe food and sustainable agriculture, Friends of the Earth, March 25, 2015, <http://www.foe.org/news/archives/2015-03-trade-deal-attack-on-safe-food-and-sustainable-agric>; Bill Waren, 7 ways the Trans Pacific Partnership threatens people and the planet, Friends of the Earth, October 5, 2016. <https://medium.com/economic-policy/7-ways-the-trans-pacific-partnership-threatens-people-and-the-planet-ad49815f337b>;

^{xxx} Both the TPP and drafts of the still incomplete Transatlantic Trade and Investment Partnership agreement include a crosscutting discipline on development and review of government regulations. Friends of the Earth, The TPP trade agreement regulatory coherence chapter is an environmental hazard, <http://www.foe.org/news/archives/2012-06-the-tpp-trade-agreement-investment-chapter-is-an-env>; Bill Waren, Friends of the Earth, Deregulatory Disappointment: Transatlantic Free Trade Agreement Negotiations, pp.8-9; http://www.foe.org/system/storage/877/b0/6/3031/ISSUE_BRIEF_TAFTA_overview_3.pdf; Paul De Clerck at al, How TTIP could create a red tape labyrinth, <https://euobserver.com/opinion/128350>

^{xxxix} These seemingly definitive calculations of ratios of benefit to costs are frequently misleading and sometimes totally bogus. Identifying and quantifying the costs of environmental regulation can be inflated by assumptions, bias of the analyst, and flaws in data gathering. Quantifying the benefits of environmental regulation can be difficult, for example because public health data is not as comprehensively collected as economic data. Or, it can be impossible: an attempt to attribute a price to the intrinsic value of human life, living things and nature itself.

^{xxxii} Both the TPP and drafts of the still incomplete Transatlantic Trade and Investment Partnership agreement include a crosscutting discipline on development and review of government regulations. Friends of the Earth, The TPP trade agreement regulatory coherence chapter is an environmental hazard, <http://www.foe.org/news/archives/2012-06-the-tpp-trade-agreement-investment-chapter-is-an-env>; Bill Waren, Friends of the Earth, Deregulatory Disappointment: Transatlantic Free Trade Agreement Negotiations, pp.8-9; http://www.foe.org/system/storage/877/b0/6/3031/ISSUE_BRIEF_TAFTA_overview_3.pdf; Paul De Clerck at al, How TTIP could create a red tape labyrinth, <https://euobserver.com/opinion/128350>

^{xxxiii} See Food and Water Watch, The TPP Pushes the GMO Industry’s Global Agenda, https://www.foodandwaterwatch.org/sites/default/files/fs_1608_tpp-biotech-web.pdf; Bill Waren, Free trade in frankenfish? Trans-Atlantic free trade agreement could be a monster, <http://www.foe.org/news/archives/2013-04-free-trade-in-frankenfish-trans-atlantic-free-trade>; Bill Waren, Friends of the Earth, Deregulatory Disappointment: Transatlantic Free Trade Agreement Negotiations, http://www.foe.org/system/storage/877/b0/6/3031/ISSUE_BRIEF_TAFTA_overview_3.pdf

^{xxxiv} An excellent example of an environmental issue involving uncertain outcomes that requires application of the precautionary principle, not cost-benefit analysis, is regulation of synthetic biology. While genetic engineering involves the exchange of genes between species, synthetic biology involves artificially creating new genetic code and inserting it into organisms. Synthetic organisms self-replicate. No one knows how they will interact with naturally occurring organisms or the consequences for the ecosystem as a whole. Standard forms of risk assessment and cost-benefit analyses used by current biotechnology regulatory approaches often used in the U.S. are inadequate to guarantee protection of the public and the environment.

^{xxxv} Gus Van Harten et al, Public Statement on the International Investment Regime – 31 August 2010, available at <http://www.osgoode.yorku.ca/public-statement-international-investment-regime-31-august-2010/>

^{xxxvi} See, Friends of the Earth, Tall tales of the TPP (and TTIP). <http://www.foe.org/news/archives/2015-02-tall-tales-of-the-tpp> ; Friends of the Earth, [Sen. Elizabeth Warren: Trade deal must not undercut Wall Street reforms](http://www.foe.org/news/archives/2014-12-sen-elizabeth-warren-trade-deal-must-not-undercut-wa), <http://www.foe.org/news/archives/2014-12-sen-elizabeth-warren-trade-deal-must-not-undercut-wa>

^{xxxvii} See generally on arbitrator behavior, Gus Van Harten, Arbitrator Behaviour in Asymmetrical Adjudication: An Empirical Study of Investment Treaty Arbitration, 50 OSGOODE HALL L.J. 211, 226 (2012). Gus Van Harten, Fairness and Independence in Investment Arbitration: A Critique of Susan Franck’s “Development and Outcomes of

Investment Treaty Arbitration, SOCIAL SCIENCE RESEARCH NETWORK 1-2 (Dec. 1, 2011), <http://ssrn.com/abstract=1740031>

^{xxxviii} Services provisions in past U.S. trade agreements broadly affect the environment, including services related to water, as well as solid waste, hazardous waste, electricity, pollution control, transportation, oil/gas pipeline transportation, and other energy services, to name a just a few. *See*, Friends of the Earth, US, The Trade in Services Agreement is an environmental hazard, <https://wikileaks.org/tisa/Analysis-TiSA-Annex-on-Environment-related-Services/Analysis-TiSA-Annex-on-Environment-related-Services.pdf>

^{xxxix} In assessing the environmental impact of a particular trade agreement chapter, the first question is whether a specific environmental measure (law, regulation, or enforcement action) is covered by that chapter – in other words whether the rules and obligations of that chapter apply at all to the environmental measure in question under either a positive or a negative list of commitments. A negative list approach to coverage of government measures involves the comprehensive coverage under trade rules (such as non-discrimination, for one example) of all economic sectors or government measures, unless a specific reservation is listed for an economic sector (water transport, for example) or a government measure (California’s regulation of toxic chemicals, for example). Under a positive list approach to commitments under a trade agreement chapter, such as that used under the WTO services agreement (GATS), specific economic sectors or government measures are voluntarily listed on a national schedule.