Written Testimony for Environmental Hearing on the Trans-Pacific Partnership
House Ways and Means Committee
U.S. House of Representatives

Ranking Member Levin, members of the committee, and other attending members, thank you for the opportunity to submit written testimony on the environmental implications of the Trans-Pacific Partnership (TPP). Our testimony is offered on behalf of the Sierra Club and its 2.4 million members and supporters.

After nearly six years of TPP negotiations conducted under extraordinary secrecy, the release of the final text reveals that the TPP environment chapter fails to protect our environment. The chapter excludes core environmental commitments that have been included in all U.S. trade agreements since 2007 and fails to meet the minimum degree of environmental protection required under the Bipartisan Congressional Trade Priorities and Accountability Act of 2015, also referred to as "fast track." Even more, it falls far short of the meaningful protections called for by environmental groups including the Sierra Club. Provisions in the text that have been touted as new are generally hampered by weak language that would not adequately protect the environment.

In addition to its often-weak conservation rules, the TPP environment chapter includes the same overall enforcement mechanism that the George W. Bush administration included for the environmental provisions of its last four trade deals – a mechanism that has failed to curb rampant, widely-documented environmental violations in trade partner countries. Moreover, the final text would do nothing to prevent foreign firms or governments from using polluter-friendly rules in other TPP chapters to challenge and undermine U.S. environmental protections.[1]

On October 29, 2015, 13 leading U.S. environmental organizations sent a letter to Congress stating, "The environment chapter should be judged by whether its provisions are strong enough to have a meaningful impact on the ground in TPP countries and whether the obligations will be enforced."[2] The letter detailed a set of rules in six key areas of the environment chapter that needed to be included and called for a stronger enforcement mechanism in order to meet this baseline of adequate environmental protection.

The final TPP environment chapter fails to provide adequate protection in five of six environmentally critical areas, while doing nothing to strengthen an enforcement mechanism that has consistently failed to curb environmental violations on the ground. Below is an analysis of the environment chapter's provisions in these key areas, compared to the standards for adequate environmental protection identified in the October 29 letter from U.S. environmental organizations. Following a review of the environment chapter is a brief summary of some of our concerns outside of the environment chapter.

Multilateral Environmental Agreements

> **Standard for adequate environmental protection:** "The TPP must include all of the May 10th obligations, including that countries shall adopt, maintain, and implement its obligations under" seven core Multilateral Environmental Agreements (MEAs).
>
> **TPP text:** These essential commitments are missing for six of the seven core MEAs.

Article 20.4 on MEAs – agreements between governments to protect the environment – marks a clear step backwards from the May 10, 2007 bipartisan agreement on trade. It also fails to meet the standard set in the Bipartisan Congressional Trade Priorities and Accountability Act of 2015 (i.e. "fast track").

On May 10, 2007, congressional Democrats and the George W. Bush Administration agreed to "incorporate a specific list of multilateral environmental agreements"[3] in U.S. free trade agreements (FTAs) and to subject the implementation of those seven MEAs[4] to the FTA dispute settlement process.[5] Since the "May 10" agreement, all U.S. FTAs have required each FTA partner to "adopt, maintain, and implement laws, regulations, and all other measures to fulfill its obligations under" the seven MEAs identified in the "May 10" deal.[6] Each pact has subjected those commitments to the FTA dispute settlement process.

Similarly, U.S. law states that any trade agreement (e.g. the TPP) to be submitted to Congress under expedited "fast track" procedures should "ensure that a party to a trade agreement with the United States adopts and maintains measures implementing…its obligations under common multilateral environmental agreements (as defined in section 4210(6)…."[7] The agreements listed in section 4210(6) are the same ones listed in the May 10, 2007 agreement.

The standard FTA obligation for U.S. trade partners to "adopt, maintain, and implement" policies to fulfill their obligations under these seven MEAs is essential for a basic degree of environmental protection.[8] With proper enforcement, the obligation should deter countries from violating their MEA commitments in order to boost trade or investment. Unlike the past four U.S. FTAs, the TPP only requires countries in the pact to "adopt, maintain, and implement" domestic policies to fulfill *one* of the seven core MEAs – the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Art. 20.17.2). Even so, it is important to note that with respect to CITES, countries are only called on to "*endeavour* to implement, *as appropriate*, CITES resolutions that aim to protect and conserve species whose survival is threatened by international trade" (Art. 20.17.3c, emphasis added).

Of the other six MEAs listed in the "May 10" agreement and in the fast track law, the final TPP text merely requires each TPP country to "maintain" specific existing domestic policies that adhere to the Montreal Protocol on Substances that Deplete the Ozone Layer (footnote 4) and the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships (MARPOL) (footnote 7). This means that for these two critical MEAs, TPP countries are simply required to keep domestic policies named by the TPP on the books. The provision fails to require countries to effectively *implement* such policies, or to *adopt* new policies if the existing ones have proven insufficient for a country to actually fulfill its MEA obligations.

The environment chapter does not even *mention* the four remaining MEAs – a clear violation of the "May 10" standard and the fast track negotiating objective. The text omits, for example, the International Convention for the Regulation of Whaling (ICRW) – a critical agreement to regulate whale trade and to ensure the conservation of whale stocks. Since the ICRW established a moratorium on commercial whaling in 1985,[9] TPP member Japan has been issuing itself "scientific" whaling permits to kill hundreds of whales each year.[10] In 2014, the International Court of Justice ruled that Japan's whaling program was commercial, not scientific, in nature and should therefore be cancelled under the terms of the ICRW.[11] After a brief suspension of whaling activities, Japan announced in late 2014 that it would continue issuing itself scientific whaling permits under revised criteria.[12] Given the TPP environment chapter's failure to even mention the ICRW, and its non-existent provisions on commercial whaling (described below), the final TPP text cannot be expected to have any impact on Japan's whaling practices.

The environment chapter also excludes the Inter-American Tropical Tuna Convention (IATTC), another "May 10" MEA included in recent U.S. FTAs. The IATTC is a regional fisheries management organization

(RFMO) that seeks to ensure the long-term conservation of tunas and other marine species in the eastern Pacific via sustainable fishing quotas, fishing bans, data on catch and bycatch quantities, and other measures. In its 2015 report to Congress, the U.S. National Oceanic and Atmospheric Administration (NOAA) cited TPP member Mexico for violations of the IATTC.[13] Mexico's IATTC violations, according to NOAA, include Mexico-flagged boats killing sharks for their fins, dumping trash at sea, and ensnaring sea turtles in fishing operations.[14] The TPP would fail to curb such abuses not only because it omits any mention of IATTC obligations, but also because it fails to require countries to adhere to trade-related RFMO provisions, as explained below.

Worse still, by failing to require implementation of six out of seven core MEAs, the TPP could actually spur an increase in the environmental degradation that the MEAs aim to reduce. For example, the United Nations reports that ships operating along TPP member Vietnam's coastline are annually dumping "thousands of cubic meters of waste oil" into the seawater,[15] which has reportedly resulted in environmentally toxic and illegal levels of pollution.[16] Such dumping could be a violation of Vietnam's obligations under MARPOL, a "May 10" MEA that restricts the disposal of oil from ships.[17] By facilitating increased shipping to and from Vietnam without requiring the country to *implement* its obligations under MARPOL, the TPP could actually exacerbate oil pollution levels off the coast of Vietnam, further threatening marine life.

The Office of the U.S. Trade Representative (USTR) may argue that not all seven of the core MEAs need to be included in the TPP with the "adopt, maintain, and implement" obligation because not all TPP countries are party to all of the agreements. But all 12 TPP countries are in fact party to at least two of the six core MEAs for which the TPP fails to require implementation. Moreover, eight TPP countries are party to at least five of these six missing MEAs that would have been enforceable under the TPP if it had adhered to the bipartisan "May 10" standards used since 2007.[18] In the table below, the green squares indicate core MEA commitments included in the TPP while red squares indicate those that the TPP failed to include.[19]

In several cases, a TPP country is not only party to an MEA omitted by the TPP, but also one of the world's most notorious violators of that MEA. As explained above, the annual killing of hundreds of whales violates Japan's ICRW obligations and the ensnaring of sea turtles violates Mexico's IATTC obligations. The TPP would do nothing to curb such abuses, given its failure to require implementation of "May 10" MEAs and the failure to adequately address these problems in other parts of the chapter.

	CITES	Montreal Protocol	MARPOL	Ramsar	ICRW	CCAMLR	IATTC	TOTAL
Australia	x	x	x	x	x	x		6
Brunei	x	x	x					3
Canada	x	x	x	x		x	x	6
Chile	x	x	x	x	x	x		6
Japan	x	x	x	x	x	x	x	7
Malaysia	x	x	x	x				4
Mexico	x	x	x	x	x		x	6
New Zealand	x	x	x	x	x	x		6
Peru	x	x	x	x	x	x	x	7
Singapore	x	x	x					3
United States	x	x	x	x	x	x	x	7
Vietnam	x	x	x	x				4
TOTAL	12	12	12	10	7	7	5	

Trade in Illegally-Sourced Forest, Wildlife and Living Marine Resources

> **Standard for adequate environmental protection**: "A legally enforceable prohibition on trade in illegally sourced timber, wildlife, and marine resources…[in which] countries must be required to adopt, maintain, and implement policies to identify contraband and to penalize violators of the prohibition in a manner that will serve as a strong disincentive to engage in illegal trade."
>
> **TPP text**: TPP countries commit "to combat" illegal trade in flora and fauna – not to *prohibit* it. To comply, the text requires generally weak measures, such as to "exchange information and experiences," and to "undertake, as appropriate, joint activities on conservation issues of mutual interest," while stronger measures like sanctions are listed as options.

TPP countries are significant exporters, importers, and transit countries for a wide range of illegally-taken wildlife products used as food, luxury goods, pets, and trophies. Trade in wildlife products in the Asia-Pacific region has led to dramatic declines in biodiversity and the populations of many endangered species, such as elephants and rhinos.[20] TPP countries also include major timber producer, processing, and consumer countries.[21] All are impacted by illegal logging and associated trade that has a devastating impact on the environment, local livelihoods, and economic development opportunities.

Members of Congress and civil society have repeatedly called for a legally enforceable TPP *prohibition* on trade in illegally harvested timber and illegally taken fish and wildlife.[22] The TPP text, however, falls short. Rather than a prohibition, Article 20.17.3 calls on each Party "*to combat* the illegal take of, and illegal trade in, wild fauna and flora." The measures listed as constituting compliance with this inadequate commitment are extremely weak, such as "exchang[ing] information and experiences" and "undertak[ing], as appropriate, joint activities" on related issues. The text also suggests stronger measures like sanctions that TPP countries can use "to combat" the illegal trade and take of flora and fauna, but does not require them. Instead, it allows countries to choose whether to pick such measures from a non-binding list: "Such measures shall include sanctions, penalties, **or** other effective measures…that can act as a deterrent to such trade" (Art. 20.17.5, emphasis added). This provision is then further undermined by the subsequent one, which explicitly gives TPP governments broad "discretion" in deciding when and whether "to combat" illegal trade in flora and fauna, including whether to actually devote resources to enforcement (Art.20.17.6).

Plagued by loopholes and non-binding language, this provision falls far short of *requiring* countries to *adopt, maintain, and implement* policies to identify contraband and to penalize actors that fail to identify contraband in a manner that would serve as a strong disincentive to engage in illegal trade.

TPP: New Threats to Endangered Animals?

The TPP could actually increase the risks faced by endangered animals and critical ecosystems. For example, by expanding demand for destructive cash crops like oil palm, the TPP could contribute to the loss of habitats for animals like rhinos and elephants. Studies have documented how oil palm plantations in TPP member Malaysia – the world's second largest palm oil producer[23] – have contributed to the disappearance of habitats for endangered species.[24] Indeed, the Sumatran rhino was just declared extinct in Malaysia,[25] due in part to habitat loss driven by the expansion of oil palm plantations.[26] And 14 rare pygmy elephants were recently found dead in Malaysia after apparent poisoning from pesticides used on oil palm plantations.[27]

The TPP is likely to encourage greater oil palm expansion in TPP countries like Malaysia by increasing demand for exports of palm oil. The TPP would eliminate the palm oil tariffs currently imposed by major palm oil importing TPP countries like Vietnam and Japan (Annex 2-D).[28] Falling palm oil tariffs would likely spur increased palm oil exports, and thus oil palm production, in TPP countries like Malaysia. Expanding oil palm plantations would spell shrinking habitats for endangered animals, heightening the risk that they could face the same fate as Malaysia's extinct rhinos.

Illegal, Unreported, and Unregulated (IUU) Fishing

> **Standard for adequate environmental protection:** "require countries to address IUU fishing, including through: (1) legally binding requirements to implement port state measures, including specifically referencing the commitments of the 2009 Agreement on Port State Measures, which are necessary to exclude illegally caught fish from entering international supply chains; (2) prohibiting the trade, transshipment or sale of products harvested or traded in violation of laws that protect living marine resources; and (3) obligating countries to abide by the trade related provisions of regional fisheries management organizations (RFMOs), including the Inter-American Tropical Tuna Convention (IATTC) and the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), which are critical to prevent illegally caught fish from entering international trade."
>
> **TPP text**: The text fails to prohibit trade in products that violate marine conservation laws, fails to obligate countries to abide by the trade-related provision of RFMOs, and fails to name the specific commitments of the 2009 Agreement on Port State Measures or require their implementation.

IUU fishing – fishing that violates or bypasses conservation measures – undermines efforts to protect marine ecosystems and ensure the sustainability of fish populations. IUU fishing is widespread, accounting for up to 32 percent of the wild-caught seafood imported into the United States.[29] Some TPP countries like Singapore and Malaysia have historically served as transshipment ports for illegally caught fish, such as Chilean sea bass.[30] At best, such practices could continue unabated if the TPP failed to include specific, binding provisions to deter IUU fishing. At worst, a TPP without such provisions could potentially expand trade in illegally-caught fish and marine products by expanding market access for seafood.

The text states that TPP countries "shall…implement port state measures" (requirements imposed on fishing vessels that use a country's ports) to assist with efforts to combat IUU fishing (Art. 20.16.14c), and it "recognise[s] the importance" of the 2009 Agreement on Port State Measures (Art. 20.16.13). However, it does not mention the specific commitments of that agreement, much less require TPP countries to adhere to them.

Furthermore, the text fails to *prohibit* the trade, transshipment, or sale of products harvested or traded in violation of laws that protect living marine resources. Instead, it lists measures that TPP countries shall undertake "to help *deter* trade in products" harvested illegally (Art. 20.16.14).

The environment chapter also fails to obligate TPP countries to abide by the trade-related provisions of RFMOs, which are critical to prevent illegally caught fish from entering international trade.[31] Instead, the text only calls on TPP countries to "endeavour not to undermine" the trade documentation of RFMOs in which they are not members (Art. 20.16.14e). This failure to require adherence to fundamental RFMO trade provisions and to prohibit trade in products that violate marine conservation laws could allow the TPP to facilitate increased trade in IUU fish.

Fisheries Subsidies

> **Standard for adequate environmental protection:** "Legally binding rules to prohibit subsidies that contribute to overcapacity and overfishing"
>
> **TPP text:** The TPP includes legally binding rules against two types of subsidies that contribute to overcapacity and overfishing.

Environmental groups have cited fisheries subsidies as contributing to unsustainable fishing practices.[32] The TPP environment chapter states, "no Party shall grant or maintain" two types of fisheries subsidies – those "that negatively affect fish stocks that are in an overfished condition" and those "provided to any fishing vessel" cited for IUU fishing (Art. 20.16.5). This is the only one of the six critical environmental areas to meet the standard for adequate environmental protection identified in the October 29 letter to Congress from leading U.S. environmental groups. The binding and specific nature of the TPP commitments regarding fisheries subsidies accentuates the comparably hortatory and vague nature of the TPP provisions in the five other identified areas. In addition, the stronger fisheries subsidies provisions would only prove meaningful in diminishing overfishing if they are effectively enforced.

Shark Finning and Associated Trade and Commercial Whaling

> **Standard for adequate environmental protection:** "legally binding bans, or prohibitions, on shark finning, shark fin trade, and commercial whaling. With respect to whaling, it is critical that TPP countries are required to adopt, maintain, and implement its obligations under the International Convention for the Regulation of Whaling."
>
> **TPP text:** The text includes a toothless aspiration to "promote the long-term conservation of sharks…and marine mammals" via a non-binding list of suggested measures that countries "should" take.

International trade of shark fins and commercial whaling, including among TPP countries, is a major driver of the worldwide depletion of shark and whale populations. TPP member Singapore, for example, is the world's second-largest importer of shark fins, and the third-largest shark fin exporter.[33] TPP member Japan has killed more whales than any other nation since a 1985 moratorium on commercial whaling,[34] and, as mentioned, continues to kill hundreds of whales each year, claiming that the killings are necessary for "scientific" purposes.[35]

Article 20.16.4 of the TPP environment chapter states that each Party "shall…promote the long-term conservation of sharks…and marine mammals." However, the chapter includes no *binding* requirements for TPP countries to prohibit shark finning, despite TPP countries' significant role in the shark fin trade, and the requirement under U.S. law for the U.S. government to "seek[] to enter into international agreements *that require* measures for the conservation of sharks, including measures to prohibit removal of any of the fins of a shark..."[36] Instead, the text includes a non-binding list of measures, including a prohibition on finning, that TPP countries "should" take if they deem it "appropriate."

Nor does the chapter even mention commercial whaling, much less *require* any prohibitions on the practice – the vague concept of "prohibitions" is merely included in a suggested list of measures that TPP countries "should" implement with respect to "marine mammals." The text also does not even mention the International Convention for the Regulation of Whaling, much less require countries to "adopt, maintain, and implement" policies to fulfill that agreement to protect whales.

Moreover, Vietnam, which recently became the world's largest importer of shark fins re-exported through Hong Kong (the leading shark fin transit hub), is slated to eliminate its 20 percent tariff on shark fins under the TPP (Annex 2-D: Viet-Nam Tariff Elimination Schedule).[37] The TPP, therefore, would actually increase demand for shark fins, spurring the killing of more at-risk sharks.

Trade and Climate Change

> **Standard for adequate environmental protection:** "require countries to live up to their commitments in the [United Nations Framework Convention on Climate Change] UNFCCC and explicitly protect the ability of countries to adopt, maintain, and implement rules and policies to address climate change including greenhouse gas emission standards, feed-in tariffs, a carbon cap and/or tax and any related border tax adjustments, renewable energy programs, government programs that cultivate local production of clean energy and green goods, and energy efficiency standards or labels."
>
> **TPP text:** The TPP environment chapter fails to even mention the words "climate change," or the UNFCCC.

Increased trade can significantly increase climate-disrupting emissions by shifting manufacturing from high-wage countries (e.g. the United States) to low-wage countries with more carbon-intensive production (e.g. Vietnam),[38] spurring increased shipping,[39] and locking in fossil fuel exports.[40] Despite these well-established connections and the likelihood that the TPP would increase the emissions that cause climate change, the TPP fails to even mention the words "climate change."[41] Instead, the text includes the non-binding assertion "that transition to a low emissions economy requires collective action," while doing nothing to require such action or to prevent the TPP from increasing climate-disrupting emissions (Art. 20.15.1).

The TPP environment chapter also fails to require TPP countries to adhere to their UNFCCC commitments despite the fact that all TPP countries are party to the climate convention.[42] Indeed, it omits any mention of the UNFCCC.

Further, the environment chapter offers no protection from TPP rules that would allow foreign investors and governments to challenge climate and clean energy policies in unaccountable trade tribunals.[43] The environment chapter includes no safeguards for green jobs programs that could run afoul of the TPP's procurement rules, fossil fuel export restrictions that could violate TPP rules on trade in goods, energy-saving labels that could be construed under the TPP as "technical barriers to trade," border adjustment mechanisms that could conflict with TPP rules despite boosting the efficacy of domestic greenhouse gas mitigation, or an array of climate change policies that could be challenged by foreign fossil fuel corporations as violations of the TPP's special rights for foreign investors.[44] With no protection for such policies from the TPP's polluter-friendly rules, the TPP could not only spur increased climate-disrupting emissions, but inhibit domestic efforts to curb such emissions.

Enforcement

Historically, the environmental provisions of U.S. trade agreements have been unenforced, even when subject to dispute settlement and even when stronger than most of the TPP's environmental terms. After six years of the Peru FTA, for example, illegal logging remains rampant in Peru despite the FTA's eight pages of detailed provisions – stronger and more specific than the TPP's forestry provisions – that required Peru to reduce illegal logging.[45] These terms were subject to a state-state dispute settlement mechanism enforceable via trade sanctions – essentially the same enforcement mechanism used for the TPP environment chapter (Art. 20.23). Even so, Peru's own government found in 2014 that 78 percent of Peru's wood slated for export was harvested illegally.[46]

Though environmental organizations asked USTR to use the FTA to verify the legality of log exports from Peru in 2012,[47] USTR took no such action. To date, Peru has faced no formal challenges, much less penalties, under the trade pact,[48] despite ample evidence that Peru has violated the pact's rules by allowing

Amazonian trees to be illegally cut and exported to unwitting U.S. consumers.[49] If the Peru FTA's stronger environmental provisions failed to actually reduce environmental degradation on the ground, there is no reason to believe that the TPP's weaker provisions would prove any more successful.

Indeed, the TPP wholly ignores Peru's failure to comply with the Peru FTA forestry provisions in a new "Bilateral Understanding between the U.S. and Peru on Conservation and Trade." The TPP "Understanding" turns a blind eye to Peru's widespread illegal logging and instead "recognize[s]" that Peru has laws on the books against the production and export of illegal flora and fauna. This sends precisely the wrong signal – that enforcement of those laws has been sufficient, and therefore that the government need not strengthen enforcement of its conservation laws to comply with the TPP. This posture of permissiveness towards obvious violations sends an equally harmful message to any other TPP governments that may be wondering how seriously they must treat the deal's environmental provisions.

Another recent indication that non-enforcement would not be penalized centers on a Peru FTA provision, included in the environment chapters of all U.S. FTAs since 2007, stating that Peru "shall not waive or otherwise derogate from" its environmental laws "in a manner affecting trade or investment."[50] This provision, which is largely replicated in the TPP environment chapter (Art. 20.3.6), was subject to state-state dispute settlement. However, in 2014 Peru explicitly rolled back an array of environmental protections (e.g. stripping the environmental ministry of enforcement powers) in order to attract foreign investment – a clear violation of the supposedly enforceable terms of the Peru FTA.[51] Though environmental groups once again called on USTR to use the Peru FTA to reverse this weakening of environmental protections,[52] USTR once again has failed to take action.

Indeed, the state-state dispute settlement mechanism for environmental provisions in all U.S. trade agreements since 2007 has failed to produce a single formal case against documented environmental violations. In the October 29 letter that U.S. environmental groups sent to Congress regarding the TPP, they asked for a new approach to dispute settlement for environmental complaints. For example, the letter suggested that TPP could "establish and empower an independent body to continuously monitor countries' compliance with environment chapter obligations, report on best-practices and compliance, and bring cases directly to a dispute settlement body if and when it finds non-compliance with environmental obligations." Had the TPP included such an expedited process, it would have had a higher chance of avoiding the categorical inefficacy of the environmental dispute settlement mechanism of existing FTAs. Instead, the final TPP environment text largely replicates the old, ineffective mechanism.

New Rights for Fossil Fuel Corporations to Challenge Climate Protections

Beyond the environment chapter, other provisions in the TPP would undermine efforts to combat the climate crisis, such as by empowering foreign fossil fuel corporations to challenge our environmental and climate safeguards in unaccountable trade tribunals via the controversial investor-state dispute settlement system (Chapter 9). The TPP's extraordinary rights for foreign corporations virtually replicate those in past pacts that have enabled more than 600 foreign investor challenges to the policies of more than 100 governments,[53] including a moratorium on fracking in Quebec, a nuclear energy phase-out in Germany, and an environmental panel's decision to reject a mining project in Nova Scotia.[54]

In one fell swoop, the TPP would roughly double the number of firms that could use this system to challenge U.S. policies. Foreign investor privileges would be newly extended to more than 9,000 firms in the United States.[55] That includes, for example, the U.S. subsidiaries of BHP Billiton, one of the world's largest mining companies, whose U.S. investments range from coal mines in New Mexico to offshore oil drilling in the Gulf of Mexico to fracking operations in Texas.[56]

Locking in Natural Gas Exports and Fracking

The TPP's provisions regarding natural gas would require the U.S. Department of Energy to automatically approve *all* exports of liquefied natural gas (LNG) to *all* TPP countries[57] – including Japan, the world's largest LNG importer.[58] This would:

- Facilitate increased fracking: Increased natural gas production would mean more fracking,[59] which causes air and water pollution, health risks, and earthquakes, according to a litany of studies.[60]
- Exacerbate climate change: LNG is a greenhouse-gas-intensive fuel with significantly higher life-cycle emissions than natural gas.[61] LNG dependency spells more climate disruption.
- Increase dependence on fossil fuel infrastructure: LNG export requires a large new fossil fuel infrastructure, including a network of natural gas wells, terminals, liquefaction plants, pipelines, and compressors that help lock in climate-disrupting fossil fuel production.[62]

Conclusion

USTR has touted the TPP's environmental provisions as breaking new ground for environmental protection.[63] In contrast, our analysis of the final text reveals that the environment chapter would fail to protect the environment and in some respects falls short of past U.S. trade agreements, of the "May 10" bipartisan agreement on trade and environmental protection, of U.S. law regarding fast-tracked agreements, and of what is needed to actually reduce environmental degradation on the ground. Far from an environmentally-friendly agreement, the TPP text also fails to protect environmental policies from the threats posed by the deal's many polluter-friendly rules, including those related to foreign investment and fossil fuel exports. For the environment, the TPP's net balance is decidedly negative.

Endnotes

[1] For example, the TPP investment chapter would give foreign fossil fuel corporations new rights to challenge climate protections, as summarized here:

- The TPP would undermine efforts to combat the climate crisis, empowering foreign fossil fuel corporations to challenge our environmental and climate safeguards in unaccountable trade tribunals via the controversial investor-state dispute settlement system.
- The TPP's extraordinary rights for foreign corporations virtually replicate those in past pacts that have enabled more than 600 foreign investor challenges to the policies of more than 100 governments, including a moratorium on fracking in Quebec, a nuclear energy phase-out in Germany, and an environmental panel's decision to reject a mining project in Nova Scotia.
- In one fell swoop, the TPP would roughly double the number of firms that could use this system to challenge U.S. policies. Foreign investor privileges would be newly extended to more than 9,000 firms in the United States. That includes, for example, the U.S. subsidiaries of BHP Billiton, one of the world's largest mining companies, whose U.S. investments range from coal mines in New Mexico to offshore oil drilling in the Gulf of Mexico to fracking operations in Texas.

[2] Letter from 13 U.S. environmental organizations to Congress, October 29, 2015. Available at: https://www.sierraclub.org/sites/www.sierraclub.org/files/uploads-wysiwig/tpp%20letter%20final_0.pdf.

[3] Office of the U.S. Trade Representative (USTR), "Bipartisan Trade Deal," May 2007. Available at: https://ustr.gov/sites/default/files/uploads/factsheets/2007/asset_upload_file127_11319.pdf

[4] The seven MEAs, included in all U.S. trade pacts since 2007, include: 1) Convention on International Trade in Endangered Species of Wild Fauna and Flora, 2) Montreal Protocol on Substances that Deplete the Ozone Layer, 3) Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973, 4) Convention on Wetlands of International Importance Especially as Waterfowl Habitat, 5) Convention on the Conservation of Antarctic Marine Living Resources, 6) International Convention for the Regulation of Whaling, and 7) Convention for the Establishment of an Inter-American Tropical Tuna Commission.

[5] *See* the text of the May 10, 2007 bipartisan agreement on trade here: http://www.bilaterals.org/IMG/pdf/05_14_07.pdf.

[6] *See*, for example, Article 18.2 of the U.S. – Peru Free Trade Agreement: https://ustr.gov/sites/default/files/uploads/agreements/fta/peru/asset_upload_file953_9541.pdf. A footnote on the provision clarifies, "To establish a violation of Article 18.2 a Party must demonstrate that the other Party has failed to adopt, maintain, or

implement laws, regulations, or other measures to fulfill an obligation under a covered agreement in a manner affecting trade or investment between the Parties."

[7] 19 U.S.C. § 4201(b)(10)(A). Available at: http://uscode.house.gov/view.xhtml?path=/prelim@title19/chapter27&edition=prelim.

[8] To meet this baseline of environmental protection, it could be acceptable to include a different set of seven MEAs, so long as the obligations under those seven MEAs were at least as strong, and at least as relevant for TPP countries, as the obligations under the standard "May 10" set of seven MEAs.

[9] International Whaling Commission, "Commercial Whaling," accessed October 20, 2015. Available at: https://iwc.int/commercial.

[10] International Whaling Commission, "Catches Taken: Special Permit," accessed October 20, 2015. Available at: https://iwc.int/table_permit.

[11] "Japan Accepts Court Ban on Antarctic Whaling," *BBC News*, March 31, 2014. Available at: http://www.bbc.com/news/world-asia-26818863.

[12] Arthur Neslen, "Japan Defies IWC Ruling on 'Scientific Whaling,'" *The Guardian*, September 18, 2014. Available at: http://www.theguardian.com/environment/2014/sep/18/japan-whaling-southern-ocean-iwc-ruling.

[13] National Oceanic and Atmospheric Administration, "Improving International Fisheries Management," February 2015, at 48. Available at: http://www.nmfs.noaa.gov/ia/iuu/msra_page/2015noaareptcongress.pdf.

[14] National Oceanic and Atmospheric Administration, "Improving International Fisheries Management," February 2015, at 48. Available at: http://www.nmfs.noaa.gov/ia/iuu/msra_page/2015noaareptcongress.pdf.

[15] Pham Thi Gam, "Coastal and Island Governance in Vietnam," United Nations, December 2013, at 62. Available at: http://www.un.org/depts/los/nippon/unnff_programme_home/fellows_pages/fellows_papers/Pham_1314_VietNam.pdf.

[16] "Oil Pollution Damaging Sea Environment," VietNamNet Bridge, February 17, 2015. Available at: http://english.vietnamnet.vn/fms/environment/123151/oil-pollution-damaging-sea-environment.html.

[17] Vietnam has committed to MARPOL provisions that require the government to inspect any oil in seawater observed near ships and to provide adequate facilities for ships to safely dispose of oil. The United Nations finds that in Vietnam, "the facilities for loading and receiving the waste from vessels or responding to incidents has not met the international standards." Sources: Annex 1 of MARPOL includes clear restrictions on the discharge of oil from ships and requires MARPOL governments to "promptly investigate" potential violations when oil is observed at sea. *See* Regulation 15 (http://www.marpoltraining.com/MMSKOREAN/MARPOL/Annex_I/r15.htm) and Regulation 34 (http://www.marpoltraining.com/MMSKOREAN/MARPOL/Annex_I/r34.htm). In Annex 1 of MARPOL, governments also commit "to ensure the provision" of "adequate" oil disposal facilities. *See* Regulation 38 (http://www.marpoltraining.com/MMSKOREAN/MARPOL/Annex_I/r38.htm). Vietnam acceded to MARPOL, including Annex 1, in 1991. Australian Maritime Safety Authority, "IMO Documentation," updated August 28, 2015. Available at: https://imo.amsa.gov.au/public/parties/marpol78.html. For the United Nations finding, *see* Pham Thi Gam, "Coastal and Island Governance in Vietnam," United Nations, December 2013, at 62. Available at: http://www.un.org/depts/los/nippon/unnff_programme_home/fellows_pages/fellows_papers/Pham_1314_VietNam.pdf.

[18] Had the TPP included all seven core MEAs, the standard requirement to "adopt, maintain, and implement" policies to fulfill each MEA would have been binding on *any* TPP members who are party to that MEA, even if not *all* TPP members are party to that MEA

[19] For sources on the TPP countries that are party to the seven core MEAs, *see*: CITES – https://www.cites.org/eng/disc/parties/chronolo.php, Montreal Protocol – http://ozone.unep.org/en/handbook-montreal-protocol-substances-deplete-ozone-layer/3, MARPOL – https://imo.amsa.gov.au/public/parties/marpol78.html, Ramsar – http://www.ramsar.org/country-profiles, ICRW – https://iwc.int/members, CCAMLR – http://www.austlii.edu.au/au/other/dfat/treaty_list/depository/CCAMLR.html, IATTC – http://www.fpir.noaa.gov/IFD/ifd_iattc.html. For CCAMLR, Canada and Peru are "acceding states" rather than "members," but are still bound by the relevant Convention. Commission for the Conservation of Antarctic Marine Living Resources, "Explanation of Terms," accessed October 20, 2015. Available at: https://www.ccamlr.org/en/organisation/explanation-terms.

[20] For an analysis of how demand for rhino horn in TPP member Vietnam has driven rhino poaching in South Africa, *see* Tom Milliken and Jo Shaw, "The South Africa – Viet Nam Rhino Horn Trade Nexus," Traffic, 2012. Available at: www.traffic.org/species-reports/traffic_species_mammals66.pdf. For information on TPP member Japan's role as a leading destination for ivory from poached elephants, *see* this April 2015 letter from U.S. environmental groups to Japanese Prime Minister Abe, urging him to strengthen enforcement of Japan's rules against the illegal ivory trade: http://eia-global.org/images/uploads/Statement_of_Concern_042715_ENG.pdf.

[21] For example, the World Bank estimates that 80 percent of TPP member Peru's timber exports come from illegal logging. Marilyne Pereira Goncalves, et al., "Justice for Forests," The World Bank, 2012, at 2. Available at: http://siteresources.worldbank.org/EXTFINANCIALSECTOR/Resources/Illegal_Logging.pdf.

[22] *See*, for example, a July 29, 2015 letter to USTR Michael Froman from 19 members of Congress (http://blumenauer.house.gov/images/pdf/072915_letter_TPP.pdf) and an October 21, 2014 letter to USTR Froman from 13 leading U.S. environmental organizations (https://www.sierraclub.org/sites/www.sierraclub.org/files/uploads-wysiwig/TPP_Environment_Chapter_Letter.pdf).

[23] Malaysian Palm Oil Board, "Malaysian Palm Oil Industry," updated 2011. Available at: http://www.palmoilworld.org/about_malaysian-industry.html.
[24] Anne Casson, "Oil Palm, Soybeans & Critical Habitat Loss," World Wide Fund for Nature, August 2003, at 6. Available at: http://d2ouvy59p0dg6k.cloudfront.net/downloads/oilpalmsoybeanscriticalhabitatloss25august03.pdf.
[25] Rasmus Gren Havmoller, et al., "Will Current Conservation Responses Save the Critically Endangered Sumatran Rhinoceros *Dicerorhinus Sumatrensis*?" *Oryx*, 2015, at 3. Available at: http://www.rhinoresourcecenter.com/pdf_files/143/1439165239.pdf.
[26] "Zainal Zahari, et al., "Displacement of Asian Elephants *Elephas Maximus*, Sumtran Rhinoceroses *Dicerorhinus Sumatrensis* and Malayan Tapirs *Tapirus Indicus* in Peninsular Malaysia," *Journal of Wildlife and Parks*, 19 (2001): 13-18, at 17. Available at: http://www.rhinoresourcecenter.com/pdf_files/124/1246174846.pdf.
[27] Jason Motlagh, "Palm Oil Casualty? 14 Pygmy Elephants Fall Prey to Pesticides in Borneo," *The Christian Science Monitor*, February 11, 2013. Available at: http://www.csmonitor.com/World/Global-News/2013/0211/Palm-oil-casualty-14-pygmy-elephants-fall-prey-to-pesticides-in-Borneo.
[28] Vietnam and Japan are the world's 12th and 14th largest palm oil importers, respectively. International Trade Centre, "Trade Map – International Trade Statistics," accessed October 20, 2015. Available at: http://www.trademap.org/tradestat/Country_SelProduct_TS.aspx?nvpm=1|||||1511|||4|1|1|1|2|1|2|1|. Vietnam's most-favored-nation tariff on palm oil is 5 percent, and Japan's is 3.5 percent. Export.gov, "CUSTOMS Info," accessed October 20, 2015. Available at: http://export.customsinfo.com/Default.aspx.
[29] Ganapathiraju Pramod, et al., "Estimates of Illegal and Unreported Fish in Seafood Imports to the USA," *Marine Policy*, 48 (2014): 102-113, at 102. Available at: http://ac.els-cdn.com/S0308597X14000918/1-s2.0-S0308597X14000918-main.pdf?_tid=0f89c148-7781-11e5-8cbc-00000aacb35d&acdnat=1445383370_768302e852df26c45aed5cdc47862e01.
[30] "Singapore and Malaysia Asked to Close Ports to Toothfish Pirates," World Wide Fund for Nature, November 9, 2010. Available at: http://wwf.panda.org/wwf_news/?196524/Singapore-and-Malaysia-asked-to-close-ports-to-toothfish-pirates.
[31] *See* National Oceanic and Atmospheric Administration, "Improving International Fisheries Management," February 2015, at 61 and 63-64. Available at: http://www.nmfs.noaa.gov/ia/iuu/msra_page/2015noaareptcongress.pdf.
[32] Oceana, "Stopping Overfishing," accessed October 20, 2015. Available at: http://oceana.org/our-campaigns/promote_responsible_fishing/campaign.
[33] National Marine Fisheries Service, "2014 Shark Finning Report to Congress: Appendix," National Oceanic and Atmospheric Administration, 2014, at 22-24. Available at: http://www.nmfs.noaa.gov/sfa/laws_policies/sca/documents/2014_combined_appendix.pdf.
[34] "Fact Check: How Does Japan Compare with Other Whaling Nations," *ABC*, January 6, 2015. Available at: http://www.abc.net.au/news/2014-04-08/whaling-around-the-world-how-japans-catch-compares/5361954.
[35] International Whaling Commission, "Catches Taken: Special Permit," accessed October 20, 2015. Available at: https://iwc.int/table_permit.
[36] 16 U.S.C. § 1826i(3). Available at: http://uscode.house.gov/view.xhtml?req=(title:16%20section:1826i%20edition:prelim). Emphasis added.
[37] World Wide Fund for Nature Hong Kong, "WWF Announces Changes in Shark Fin Trade Figures – Imports Drop Over 30 Per Cent," April 8, 2014. Available at: http://www.wwf.org.hk/en/news/?11220.
[38] Vietnam's economy is more than four times as carbon-intensive as the U.S. economy. U.S. Energy Information Administration, "International Energy Statistics," accessed November 11, 2015. Available at: http://www.eia.gov/cfapps/ipdbproject/IEDIndex3.cfm?tid=91&pid=46&aid=31.
[39] The International Maritime Organization projects that carbon emissions from shipping will increase between 50 percent and 250 percent by 2050, depending largely on the extent to which demand for traded items rises. International Maritime Organization, "Reduction of GHG Emissions from Ships," July 25, 2014, at 34. Available at: http://www.iadc.org/wp-content/uploads/2014/02/MEPC-67-6-INF3-2014-Final-Report-complete.pdf.
[40] To implement the TPP, for example, the U.S. government would automatically approve LNG export permits to TPP countries like Japan, the world's largest LNG importer. For more, *see* Sierra Club, "An Explosion of Fracking? One of the Dirtiest Secrets of the Trans-Pacific Partnership Free Trade Agreement," 2014. Available at: https://www.sierraclub.org/sites/www.sierraclub.org/files/uploads-wysiwig/TPP-LNG_Factsheet_Updated.pdf.
[41] In contrast, "climate change" provisions were included in an earlier leaked draft of the TPP environment chapter. *See* Article SS.15 of the November 24, 2013 consolidated negotiating text of the TPP environment chapter, leaked by WikiLeaks on January 15, 2014: https://wikileaks.org/tpp2/static/pdf/tpp-treaty-environment-chapter.pdf.
[42] United Nations, "Parties and Observers," United Nations Framework Convention on Climate Change, accessed November 5, 2015. Available at: http://unfccc.int/parties_and_observers/items/2704.php.
[43] For a synopsis of such rules, *see* Sierra Club, "Trading Away Our Climate?" 2014. Available at: https://www.sierraclub.org/sites/www.sierraclub.org/files/uploads-wysiwig/Investor-State-Climate-FINAL.pdf.
[44] For a summary of the environmental threats posed by rules in other TPP chapters, *see* Sierra Club, "Raw Deal," 2013. Available at: http://www.sierraclub.org/sites/www.sierraclub.org/files/trade_downloads_raw-deal-report.pdf.
[45] Matt Finer, et al., "Logging Concessions Enable Illegal Logging Crisis in the Peruvian Amazon," *Scientific Reports*, 4 (2014): 4719. Available at: http://www.nature.com/articles/srep04719.

[46] Bob Abeshouse and Luis Del Valle, "Peru's Rotten Wood," *Al Jazeera*, August 12, 2015. Available at: http://www.aljazeera.com/programmes/peopleandpower/2015/08/peru-rotten-wood-150812105020949.html.
[47] Environmental Investigation Agency, "US Government Requested to Use Free Trade Agreement to Take Action on Illegal Timber Exports: Peru," April 19, 2012. Available at: http://eia-global.org/news-media/us-government-requested-to-use-free-trade-agreement-to-take-action-on-illeg.
[48] Environmental Investigation Agency, "Implementation and Enforcement Failures in the US-Peru Free Trade Agreement (FTA) Allows Illegal Logging Crisis to Continue," June 2015. Available at: http://eia-global.org/images/uploads/Implementation_and_enforcement__FINAL.pdf.
[49] Bob Abeshouse and Luis Del Valle, "Peru's Rotten Wood," *Al Jazeera*, August 12, 2015. Available at: http://www.aljazeera.com/programmes/peopleandpower/2015/08/peru-rotten-wood-150812105020949.html.
[50] U.S. – Peru Trade Promotion Agreement, April 12, 2006, Article 18.3(2), at 18-2. Available at: https://ustr.gov/sites/default/files/uploads/agreements/fta/peru/asset_upload_file953_9541.pdf.
[51] Environmental Investigation Agency, "Environmental Rollbacks in Peru Threaten Obligations under U.S.-Peru Free Trade Agreement," July 3, 2014. Available at: http://eia-global.org/news-media/environmental-rollbacks-in-peru-threaten-obligations-under-us-peru-free-t.
[52] *See* a March 2, 2015 letter from leading U.S. environmental organizations to USTR Michael Froman: http://switchboard.nrdc.org/blogs/amaxwell/Letter%20re-%20Action%20on%20Peruvian%20Law%2030230.pdf.
[53] United Nations Conference on Trade and Development, "Recent Trends in IIAs and ISDS," February 2015, at 5. Available at: http://unctad.org/en/PublicationsLibrary/webdiaepcb2015d1_en.pdf.
[54] For summaries of these and other ISDS cases affecting environmental protections, see Sierra Club, "Trading Away Our Climate?" 2014. Available at: https://www.sierraclub.org/sites/www.sierraclub.org/files/uploads-wysiwig/Investor-State-Climate-FINAL.pdf. See also Public Citizen, "Case Studies: Investor-State Attacks on Public Interest Policies," 2015. Available at: http://www.citizen.org/documents/egregious-investor-state-attacks-case-studies.pdf.
[55] The figure counts only the U.S. subsidiaries of foreign corporations based in TPP countries that do not currently have an ISDS-enforced agreement with the United States: Australia, Brunei, Japan, Malaysia, New Zealand, and Vietnam. Data on foreign-owned firms doing business in the United States from Uniworld, "Foreign Firms Operating in the United States," extracted September 21, 2015. Available at: https://www.uniworldbp.com/search.php.
[56] BHP Billiton, "Resourcing Global Growth: Annual Report 2015," 2015, at 36 and 44. Available at: http://www.bhpbilliton.com/~/media/bhp/documents/investors/annual-reports/2015/bhpbillitonannualreport2015.pdf?la=en.
[57] 15 U.S.C. § 717b(c). Available at: http://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title15-section717b&num=0&edition=prelim.
[58] LNG defined as HS 271111. United Nations, UN Comtrade database, accessed November 9, 2015. Available at: http://comtrade.un.org/data/.
[59] U.S. Energy Information Administration, "Effect of Increased Levels of Liquefied Natural Gas Exports on U.S. Energy Markets," October 29, 2014. Available at: http://www.eia.gov/analysis/requests/fe/.
[60] Jake Hays and Seth B.C. Shonkoff, "Toward an understanding of the environmental and public health impacts of shale gas development: an analysis of the peer-reviewed scientific literature, 2009-2015," PSE Healthy Energy, June 2015, at 9-11. Available at: http://www.psehealthyenergy.org/data/Database_Analysis_2015.6_.16_.pdf. William Ellsworth, Jessica Robertson, and Christopher Hook, "Man-Made Earthquakes Update," U.S. Geological Survey, January 17, 2014. Available at: http://www.usgs.gov/blogs/features/usgs_top_story/man-made-earthquakes/.
[61] Kavalov, B., H. Petric, and A. Georgakaki, "Liquefied Natural Gas for Europe – Some Important Issues for Consideration," Joint Research Centre of the European Commission, 2009, at 3. Available at: http://ec.europa.eu/dgs/jrc//downloads/jrc_reference_report_200907_liquefied_natural_gas.pdf. *See* also Paulina Jaramillo, W. Michael Griffin, and H. Scott Matthews, "Comparative Life-Cycle Air Emissions of Coal, Domestic Natural Gas, LNG, and SNG for Electricity Generation," *Environmental Science and Technology*, 41: 6290-6296, 2007. Available at: http://www.ce.cmu.edu/~gdrg/readings/2007/09/13/Jaramillo_ComparativeLCACoalNG.pdf.
[62] Gwynne Taraska and Darryl Banks, "The Climate Implications of U.S. Liquefied Natural Gas, or LNG, Exports," Center for American Progress, August 2014, at 1-2. Available at: https://cdn.americanprogress.org/wp-content/uploads/2014/08/TaraskaLNG_report.pdf.
[63] Office of the U.S. Trade Representative, "Preserving the Environment," accessed October 20, 2015. Available at: https://ustr.gov/tpp/#preserving-the-environment.