

### An Explosion of Fracking? One of the Dirtiest Secrets of the Trans-Pacific Partnership Free Trade Agreement

The United States is quietly negotiating an expansive trade agreement with 11 other countries that would dramatically increase exports of liquefied natural gas (LNG) to overseas markets without any domestic oversight. The proposed Trans-Pacific Partnership (TPP) trade agreement, therefore, would increase dirty fracking and carbon emissions; put sensitive ecological areas at risk; and increase natural gas and electricity prices; impacting consumers, manufacturers, workers, and increasing the use of dirty coal power.

# The Trans-Pacific Partnership

The Trans-Pacific Partnership (TPP) is an expansive trade deal being negotiated between twelve countries in the Pacific Rim: Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, Vietnam, and the United States. Because the TPP is intended as a "docking agreement," other countries would be able to join over time.

The TPP touches on a broad range of issues—the environment, workers and jobs, access to medicines, and more. The TPP would also allow foreign corporations to sue governments directly for unlimited cash compensation— in private, non-transparent tribunals—over almost any domestic environmental or other policy that the corporation alleges is hurting its ability to profit.

Despite the impact that the TPP would have on nearly every aspect of our lives, the TPP is being negotiated in near complete secrecy. None of the draft chapters of the agreement have been made public, and the only people with access to texts are a handful of government officials and hundreds of "trade advisors" who almost exclusively represent multinational corporations.

One of the dirtiest secrets of the TPP is its potential to pave the way for dramatically increased fracking across the United States.

### How the TPP could increase fracking

In order for the United States to export natural gas to another country, the Department of Energy (DOE) must first conduct a public analysis to determine whether those exports are consistent with the public interest. This analysis is critical to understanding the environmental and economic impacts associated with natural gas exports and to building a deliberate energy policy that protects the interests of the American public.

Unfortunately, the DOE loses its authority to regulate exports of natural gas to countries with which the United States has a free trade agreement that includes so-called "national treatment for trade in gas."

The TPP, therefore, would mean automatic approval of LNG export permits—without *any* review or analysis—to TPP countries. And many TPP countries would likely be quite interested in importing LNG

from the United States. This is particularly true of Japan—the word's single largest LNG importer—which is one of the 12 TPP countries.

Already, the DOE is considering applications to export approximately 45% of the total U.S. domestic gas production. Exporting this volume of U.S. LNG would in turn mean increased fracking, the dirty and violent process that dislodges gas deposits from shale rock formations. It would also likely cause an increase in natural gas and electricity prices—up to three times their current price by some estimates—impacting consumers, manufacturers, and workers, while increasing the use of dirty coal power.

### **Environmental impacts of natural gas exports**

Exporting natural gas is polluting at every stage of its life cycle. The process begins with extracting the gas, the vast majority of which will come from fracking. A dangerous and intrusive process, fracking involves pumping millions of gallons of a mixture of water, sand, and chemicals underground to create pressure which forces out natural gas.<sup>1</sup> The fracking process can spew large amounts of hazardous, smog-forming, and climate-disrupting air pollutants into our air, and is also linked to serious threats to our water supply. Fracking operations also pollute and fragment forests, parks, and communities across the country as they spread across the landscape.

But the environmental impacts associated with natural gas exports don't stop here. Once the gas is extracted, it needs to travel from production sites to coastal export terminals through hundreds of miles of pipelines. Whether exporters are expanding old pipelines or building new ones, these major construction projects can cut across private property and public land, further fragmenting landscapes and increasing pollution.

Then there are the environmental impacts associated with the building of the natural gas export terminals. New terminals will require the dredging of sensitive estuaries to make room for massive LNG tankers. Expanding facilities and ship traffic will also take their toll on coastal communities and the environment.

Finally, liquefied natural gas itself is a carbon-intensive fuel,<sup>2</sup> with life-cycle emissions significantly greater than those of natural gas. The energy needed to cool, liquefy, and store natural gas for overseas shipment makes LNG more energy- and greenhouse-gas-intensive than ordinary pipeline gas and even some fuel oils.<sup>3</sup> Moreover, natural gas production and infrastructure, including wells and pipelines, have been found to leak methane, a potent greenhouse gas that traps nearly 86 times as much heat as carbon dioxide over the crucial 20-year period, and 34 times as much heat over a 100-year period.<sup>4</sup> More natural gas exports, therefore, means more climate-disrupting pollution.

## For more information on Sierra Club's Responsible Trade Campaign, including information on how to get involved, please contact Courtenay.Lewis@sierraclub.org and visit www.sierraclub.org/trade

Sci. Technol. 6,290 (2007), http://www.ce.cmu.edu/~gdrg/readings/2007/09/13/Jaramillo

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<sup>&</sup>lt;sup>1</sup> "Beyond Natural Gas: Protecting our Air, Water, and Communities". The Sierra Club. 2012. PDF.

http://content.sierraclub.org/sites/content.sierraclub.org.naturalgas/files/documents/natural-gas-campaign-factsheet.pdf. Pg. 1. <sup>2</sup>See Paulina Jaramillo, W. Michael Griffin, H. Scott Matthews, Comparative Life-Cycle Air Emissions of Coal, Domestic Natural Gas, LNG, and SNG for Electricity Generation, 41 Environ.

ComparativeLCACoalNG.pdf <sup>3</sup> Kavalov, B., H. Petrio, and A. Georgakaki. "Liquefied Natural Gas for Europe – Some Important Issues for Consideration." Joint Research Centre of the European Commission Reference Report, 2009. Joint Research Centre. Accessed on May 2, 2013: http://ec.europa.eu/dgs/jrc/downloads/jrc\_reference\_report\_

<sup>&</sup>lt;sup>4</sup> IPCC, Climate Change 2013: The Physical Science Basis: Chapter 8, page 714, Table 8.7, attached as Exhibit 12.