Insight

The New Foreign Pollution Fee Act

SHUTING POMERLEAU | JANUARY 29, 2025

Executive Summary

- In December 2024, Senators Bill Cassidy and Lindsey Graham released a new discussion draft of the 2023 Foreign Pollution Fee Act, which would levy a flat 15-percent carbon tariff on goods imported into the United States across six sectors: aluminum, cement, iron and steel, fertilizer, glass, and hydrogen, with a surtax of 40 percent based on the carbon intensity of these goods.
- The tariff would raise an estimated $212.8 billion from 2026–2035; top exporting countries affected by the tariffs would include China, Canada, India, the European Union, and Mexico.
- These carbon tariffs would increase production costs for certain industries, lead to the appreciation of the dollar – thus making U.S. exports less competitive – lower gross domestic product by an estimated $16.6 billion by 2035 and have little impact in reducing global emissions.

Introduction

The Foreign Pollution Fee Act (FPF), originally introduced in 2023 and intended to "discourage the import of more pollution-intensive, foreign-produced goods," is expected to be reintroduced early in the new Congress. The legislation would impose tariffs on certain imported goods based on their carbon intensity, with the intent of addressing "the nexus between energy, economic development, supply chains, national security, and the environment at the expense of China and Russia." The bill's original cosponsors, Senators Bill Cassidy (R-LA) and Lindsey Graham (R-SC), released an updated discussion draft of the proposal in December 2024, which reduced the list of covered goods, specified tariff rates, and outlined specific methodology to determine tax liability compared to the 2023 legislation.

The new proposal would levy variable tariffs on certain covered goods – aluminum, cement, iron and steel, fertilizer, glass, and hydrogen – imported into the United States. The tariffs consist of a base rate of 15 percent and an additional rate based on the difference in carbon intensity between domestic and foreign goods.

The proposal is estimated to raise approximately $212.8 billion in net revenue from 2026–2035 assuming there is no tariff exemption or reduction. Top exporting countries affected by the tariffs would include China, Canada, India, the European Union, and Mexico.

The FPF would have an adverse impact on the economy. It would increase the cost of production for certain manufacturers that rely on the taxed imported goods, lead to an appreciation of the U.S. dollar, and make U.S. exports less competitive in foreign markets. It would result in approximately $16.6 billion in lower gross domestic product (GDP) by 2035 (in 2025 dollars).

The proposal would also have a very limited impact in reducing global emissions, as the world's largest emitting countries release carbon emissions primarily through domestic consumption. Due to the highly targeted nature of the FPF's carbon tariffs, the bill would address only a small fraction of the carbon emissions of large polluters such as China.

This insight provides an overview of the new Foreign Pollution Fee proposal and its projected revenue, as well as its potential impact on the economy and global emissions.

Overview of the New Foreign Pollution Fee Proposal

The updated version of the Foreign Pollution Fee Act, if it mirrors the most recent draft, would impose tariffs on certain imported goods based on their carbon intensity, which measures the greenhouse gas emissions associated with the production of one unit of a good.

Objectives

According to the official two-pager, the proposal is designed to address "environmental, economic, and national security concerns." Although the proposal's name signals that it is an environmental policy, its press release emphasizes its aim to boost U.S. manufacturing jobs, economic growth, and competitive advantage. Touted as a "trade and manufacturing policy," the proposal has six strategic objectives: "Combat China's Exploitation of Trade Rules," "Strengthen Global Supply Chain Resilience," "Revitalize American Manufacturing," "Expand U.S. Export Markets," "Deepen Trade Ties with Allies," and "Reward Leadership in Cleaner Manufacturing."

The proposal does not include any domestic tax component. In fact, it includes explicit language prohibiting the imposition of any costs on domestic producers.

Tax base

The proposal levies an ad valorem tax on imported goods, meaning the tariff amount is in proportion to the customs value of the goods imported into the United States.

The new proposal covers six sectors of imported goods: aluminum, cement, iron and steel, fertilizer, glass, and hydrogen. It specifies a short list of goods that fall under 101 four-digit Harmonized Tariff Schedule (HTS) codes. This is a narrow list as it only accounts for 8 percent of the total 1,281 four-digit HTS codes representing all goods produced throughout the economy.

Tax rate

The tax rate of the tariff consists of two parts: a base rate of 15 percent and a variable rate. The variable rate is based on the difference between the carbon intensity of a good produced in the United States and one produced in an exporting country. The variable rate is equal to 40 percent of the difference (expressed as a percentage) that exceeds 10 percentage points. For example, if a country's covered good has a carbon intensity that is 30 percent higher than for the same good produced in the United States, the variable rate would be equal to 40 percent multiplied by 20 percent (30 percent minus 10 percent) which is 8 percent. The total tax rate for the covered good would be 23 percent – the result of 15 percent plus 8 percent.

Special features

The proposal includes several provisions that allow importers to get partial or full exemption from the tariffs. In some cases, the tariffs would escalate as punitive measures.

A. Exception or reduction of tariffs

If a covered product is determined to be imported for national security purposes (e.g., fulfilling a contract with the Department of Defense), it could be exempted from the tariffs. Tariffs reduction is also possible if qualified recycled materials or captured carbon oxides are used in the production process of a covered good.

Additionally, the proposal includes an "International Partnership Agreement" mechanism to allow significant tariff reduction for participating countries that levy FPF-like carbon tariffs on goods from other non-participating countries. Low-income and lower-middle income countries can get full exemption from the tariffs during the first five years and potentially

for 10-year periods if new production capacity of the covered product meets certain carbon intensity thresholds. Nonmarket economy countries are not qualified to enter the agreement.

B. Additional punitive tariffs

The proposal specifies several circumstances in which an imported good would be subject to additional tariffs as a punitive measure. If the carbon intensity data associated with the imported good is unavailable, unverifiable, or of poor quality, the carbon intensity of the covered good would be assumed 20 percent higher. If the exporter of such a good circumvents the import tariffs via fraudulent practices, the import tariffs would be increased by an amount deemed appropriate for offsetting the circumvention.

C. Country-average vs. facility-specific carbon intensity values

The proposal defines the carbon intensity of an imported good as the average carbon intensity of such goods produced in a country of origin. In other words, an imported good's carbon intensity varies based on its country of origin, not the specific manufacturing facility.

Products produced at a foreign facility can apply to be treated differently from the country of origin's average value, however, if such a facility is "owned or operated by a United States entity" or located in a country that participates in the international partnership agreement. A qualified facility that meets certain emissions measuring and reporting requirements can petition U.S. Customs and Border Protection and the Environmental Protection Agency to be assigned a facility-specific carbon intensity value. If the facility's specific carbon intensity is lower than the country-average value, the facility-specific value cannot be included for calculating the country's average carbon intensity for a covered good.

Potential Fiscal, Economic, and Climate Impact

This research finds that – considering the FPF's tax rate, tax base, covered goods' carbon intensity, behavioral responses, and the effects of the tariffs on income and payroll tax revenue – the Foreign Pollution Fee proposal would raise up to $212.8 billion in net revenue from 2026–2035 (Table 1, below). This is likely an upper-bound estimate as it does not account for any potential tariff exemption or reduction for national security purposes or through the International Partnership Agreement, nor does it include any potential foreign retaliation, which would reduce taxable income in the United States.

Table 1. New Foreign Pollution Fee Act's Projected Net Revenue

USD Billions

2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
25.3	24.7	23.6	22.4	21.3	20.1	18.9	18.5	18.9	19.2	212.8

Source: Author's calculation, US Census Bureau, the new discussion draft of the Foreign Pollution Fee released in December 2024, author's carbon intensity analysis, Christoph Boehm et al. 2023. "The Long and Short (Run) of Trade Elasticities. American Economic Review, 113(4): 861-905."

As shown in Table 2, the top exporting countries selling covered goods under the FPF to the United States are China, Canada, India, European Union, and Mexico. Canada is the most important trading partner as it is a top exporting country across all the six covered sectors. (This is especially true for hydrogen, as Canada provides 99 percent of the United States' total hydrogen imports.) China accounts for the largest share of tariff revenue collected at 22.7 percent, followed by Canada at 13.4 percent, India at 9.1 percent, and the European Union at 8.3 percent.

The manufacturing products made in China and India are on average two to three times as carbon-intensive as the ones produced in the United States, which explains the large share of tariff revenue they would be subject to under the FPF. Canada's manufacturing products, however, are very similar in carbon intensity to those of the United States. Nevertheless, Canada's exports would be impacted significantly by the FPF, whose 15-percent base rate would be applied to a greater number of covered exports.

To calculate the effective tax rate of the FPF, one can divide its total revenue by the total imports from a country. The countries with the top effective tax rate are Russia at 14.9 percent – a punitive rate as the country's exports to the United States have declined over the past two years – India at 3.2 percent, and China at 1.6 percent. The covered goods' imports accounted for a much larger portion of the total imports compared to other countries.

Table 2. Selected Exporters' Effective Tax Rate and Share of Total Tariff Revenue Collected Under the New Foreign Pollution Fee Act

	Effective Tax Rate	Share of Total Tariff Revenue Collected
China	1.6%	22.7%
Canada	0.9%	13.4%
India	3.2%	9.1%
European Union	0.4%	8.3%
Mexico	0.4%	7.1%
South Korea	0.7%	2.8%
Russia	14.9%	2.3%
Japan	0.3%	1.6%
United Kingdom	0.3%	0.6%

Source: Author's calculation, U.S. Census Bureau, the new discussion draft of the Foreign Pollution Fee released in December 2024, author's carbon intensity analysis, Christoph Boehm et al. 2023. "The Long and Short (Run) of Trade Elasticities. American Economic Review, 113(4): 861-905."

Note: 2023 data was used in the calculation.

The carbon tariff proposal would have an adverse impact on the economy. Although it would protect certain industries in the United States, on net it would reduce economic output. Higher import prices would increase the cost of production for producers that rely on taxed goods. In addition, the tariff would result in an appreciation of the U.S. dollar, making U.S. exports less competitive in foreign markets and thus reducing incomes and output in export industries. Using a rule-of-thumb based on the Tax Foundation's tariff modeling, this proposal would result in $16.6 billion in lower GDP by 2035 (in 2025 dollars).

The carbon tariffs would also likely be perceived by U.S. trading partners as a protectionist policy, as the FPF does not impose any carbon prices on domestically produced goods. Additionally, a major portion of the tax rate is a 15-percent base rate on covered imported goods regardless of their carbon intensity. This would likely lead to escalated trade tensions and retaliatory tariffs on U.S. exports, which would further reduce U.S. economic output and lower the affected industries' employment.

The FPF would have little impact on global emissions reduction. This is because a majority of the world's largest carbon-emitting countries produce their emissions from domestic production. In 2018, 83 percent of China's total emissions were associated with domestic consumption. In other words, all of China's exported goods accounted for less than one-fifth

of the country's total emissions. In the same year, all U.S. imports from China only accounted for 4 percent of China's total emissions.

Conclusion

The updated version of the Foreign Pollution Fee Act will likely not achieve its intended goals of addressing environmental concerns, as it will have little impact on global emissions reduction since most large emitting countries' emissions are for domestic consumption. In the meantime, the legislation would lead to unintended consequences of having an adverse impact on the economy, resulting in $16.6 billion in lower GDP by 2035. It would also likely be perceived as a protectionist policy by U.S. trading partners and escalate trade tensions and retaliatory tariffs on U.S. exports.