CLIMATE LEADERSHIP COUNCIL

The Council's **Revenue Estimator for Foreign Pollution Fees**

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Anticipating Revenues from a Pollution Import Fee

Policymakers in Washington are considering charging a foreign pollution fee or pollution tariff on imports determined by the pollution caused during their production abroad. The Climate Leadership Council ("the Council") created a model to estimate the potential federal revenues from a pollution fee ("the revenue estimator"). This analysis is particularly relevant as tax reform takes center stage in Washington in 2025 and policymakers explore offsets to tax cuts.

Depending on the precise policy design, the revenue estimator suggests **a pollution import fee could generate between $120 billion and $240 billion over ten years**.

This report provides a summary of the revenue estimates for three potential approaches to establishing a pollution import fee. It also documents the revenue estimator model, including its methodology, data sources, and approach.

Policy Design Approaches and Revenue Estimates

Recent pollution import fee proposals in the U.S. have proposed an *ad valorem* fee based on the difference between U.S. and trade partners' pollution intensity across covered sectors. The intention is to ensure that the fee escalates with the pollution intensity difference. This system would ensure that foreign manufacturers with higher pollution intensities would pay more than manufacturers who are more efficient.

The model considers revenue potential from three policy designs: a "Simple Multiplier" approach, a "Graduated Tiers" approach, and a "Hybrid" approach that unites the two concepts.

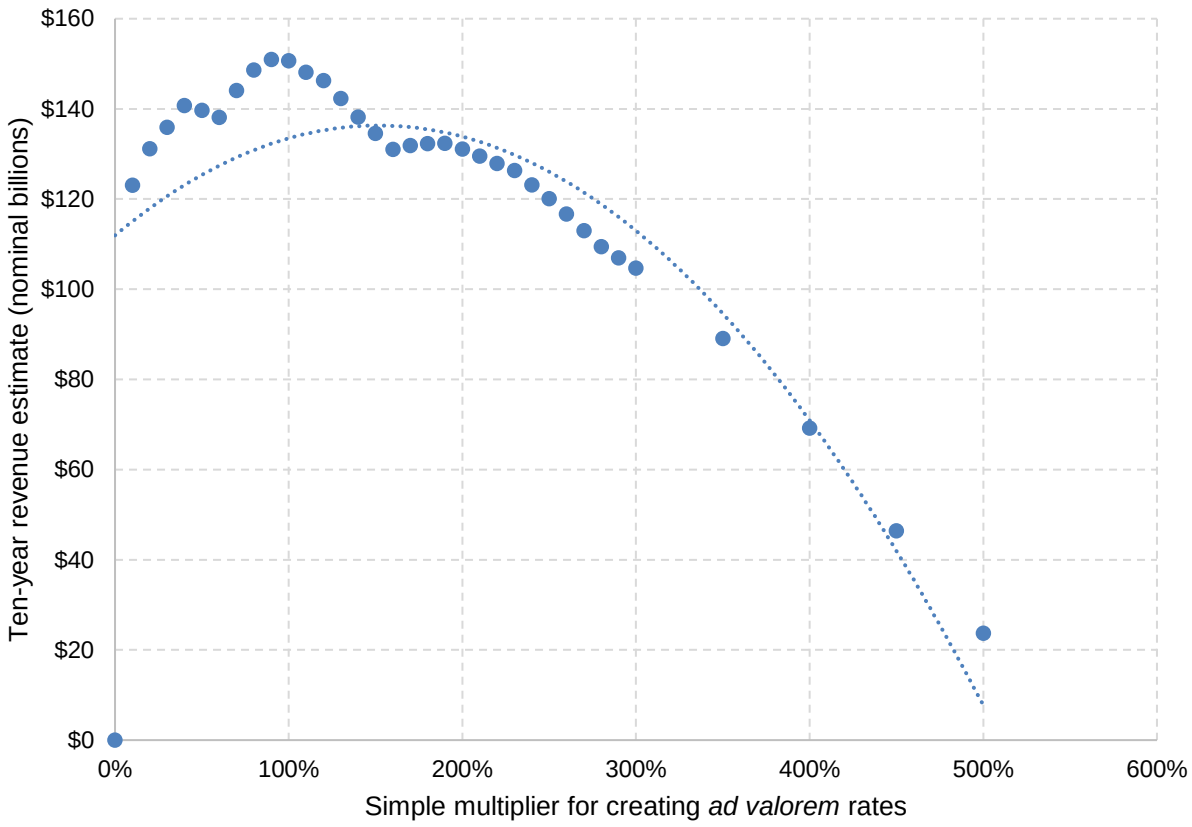
Simple Multiplier

Revenue Estimate: $120-$150 billion over 10 years

Under the simple multiplier, the import fee would be calculated as the product of the pollution intensity difference and a simple multiplier. The revenue estimator can test multipliers between 10% and 500% in increments of 10%. Figure 1 shows the outputs from testing multipliers between 10% and 500%. This approach could generate between $120 billion and $150 billion over ten years.

Consider a simple multiplier of 40%. If a trade partner is 50% more pollution intensive than the U.S. in a given sector, imports from that trade partner in that sector would face an *ad valorem* import charge of 20% (40% x 50% = 20%).

Figure 1 – Laffer Curve associated with "Simple Multiplier"



A key benefit of this approach is that it provides for differentiation between trade partners who are relatively more pollution-intensive and those that are relatively pollution-efficient. Incremental pollution reductions are incentivized, as are major investments towards larger reductions.

Graduated Tiers

Revenue Estimate: $180-$220 billion over 10 years

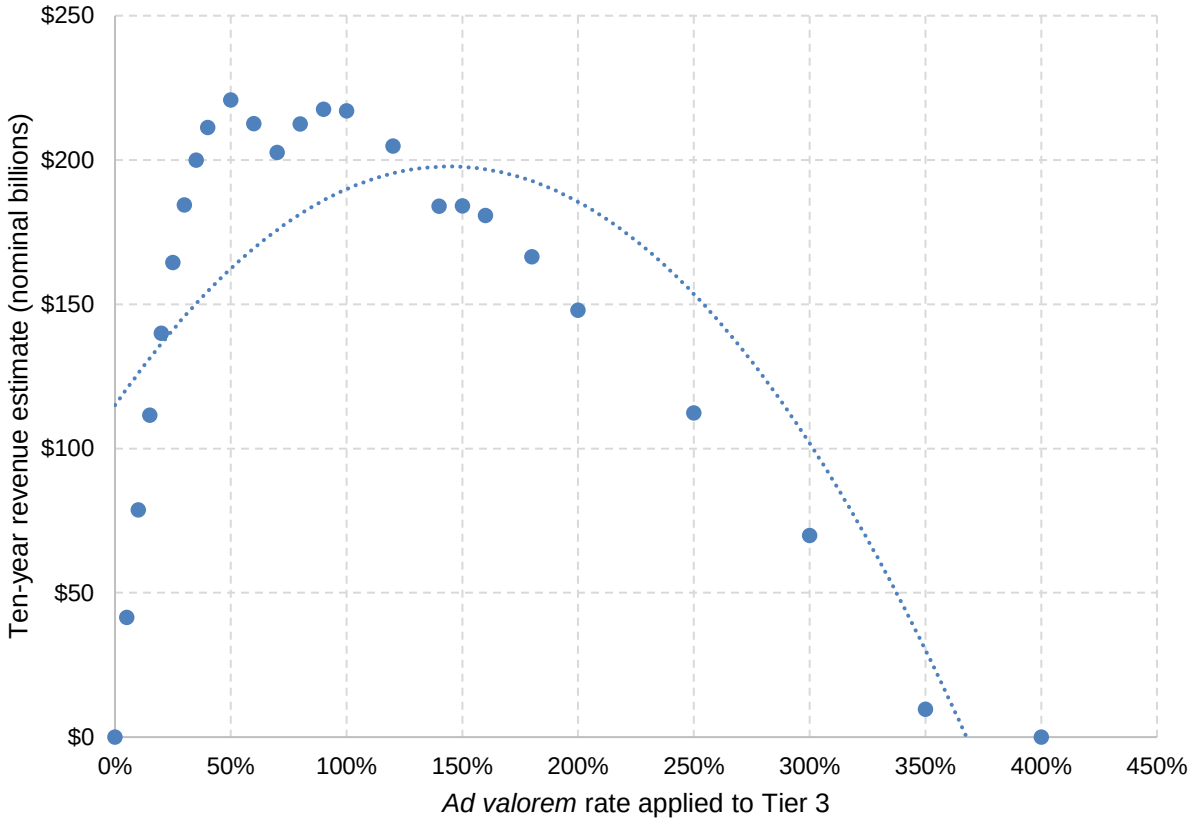
Instead of an import fee increasing arithmetically with pollution intensity difference, U.S. policymakers might consider assigning imports across "tiers." Imports produced with more emissions would be assigned to higher tiers that have higher *ad valorem* charges. Figure 3 shows that this design can achieve revenues between $180 billion and $220 billion over ten years.

A key benefit of this approach is it can be designed to establish a relatively significant penalty on the highest foreign emitters in an industry and create market pressure for major changes to their pollution rates—or risk losing much or all of their market share in the U.S. market.

Figure 2 – Example application of "Graduate Tiers"

Tiers[i]	Pollution intensity difference	*Ad valorem* charge	Example rate
Tier 1	110% to <150% of U.S. level	1/3 X	30%
Tier 2	150% to <200% of U.S. level	2/3 X	60%
Tier 3	>200% of U.S. level	X	90%

Figure 3 – Laffer Curve associated with "Graduate Tiers"



Hybrid Approach

Revenue Estimate: $150-$240 billion over 10 years

The hybrid approach uses a combination of the multiplier approach and the graduated tiers approach. It would establish a few tiers (four in the example below) for establishing the tariff rate for imports, but also the ability to pay an incrementally lower rate as you improve within a given tier. It incorporates features of both of the above approaches by giving policymakers the option to establish higher rates for the highest emitters than the graduated tier approach might provide. At the same time, it would provide incentives for incremental improvements to environmental performance like the multiplier approach. Figure 4 shows the model results for the hybrid approach with different options for the maximum tariff rate, which suggest ten-year revenues of $150 billion to $240 billion.

Figure 4 – Range of tariff rates by tier and revenue estimates for "Hybrid" approach

	Tier 1 (5% to 25% more pollution intensive)	**Tier 2** (25% to 80% more pollution intensive)	**Tier 3** (80% to 100% more pollution intensive)	**Maximum** (more than 100% more pollution intensive)	**Revenue Estimate**
Option A	10-20%	20-100%	100-110%	110%	$217.9
Option B	10-50%	50-100%	100-140%	140%	$156.2
Option C	10-20%	20-200%	200-210%	210%	$241.7
Option D	10-50%	50-200%	200-210%	240%	$178.4
Option E	10-100%	100-200%	200-290%	290%	$146.3

Tiers in the hybrid approach could be assigned in an analogous manner to the graduated tiers approach. Within each tier, however, the import fee would be calculated in the same way as the simple multiplier to ensure that higher-emitting importers would pay more than their lower-emitting counterparts in the same tier. The maximum import fee could be capped (this modeling capped maximum tariff rates at 110-290% across design options).

Revenue Estimator Methodology and Approach

The revenue estimator model is designed around several relevant concepts:

- Current policy regarding tariff treatment
- Goods coverage that matches the most mature piece of legislation[ii]
- Recent, well-regarded, and publicly available data:
  - Historic trade value between the U.S. and its trade partners
  - Pollution intensity differences between the U.S. and its trade partners
- Price elasticities to anticipate consumer responses to the increase in costs
- Federal scoring conventions and best practices to approximate how the Congressional Budget Office or Joint Committee on Taxation may approach a pollution import fee

Current Policy

The Council's revenue estimator is calibrated to the effective U.S. tariff regime in 2024, including most favored nation tariffs and additional tariffs imposed under Section 232 and Section 301 authorities. Should the U.S. approach to tariffs change, revenue projections would be impacted. For example, the Trump administration has recently pledged 25% tariffs on all imports of steel and aluminum under Section 232 authorities. This additional wrinkle would increase the effective tariff rate on a subset of products and reduce the revenue estimates in this analysis by 6-8%.

Trade Value Data

The revenue estimator relies on historical trade values from calendar year 2024 between the U.S. and its trading partners. Trade value data were pulled from U.S. Trade Online,[iii] a database maintained by the U.S. Census Bureau. It provides trade value data for every country and product combination included in the estimator.[iv]

Pollution Intensity Data

A pollution import fee as analyzed here is calculated against the difference between the pollution intensity (i.e., the emissions embodied in manufacturing one unit of that good) of domestic goods and the pollution intensity of comparable imported goods. This calculation requires a data source describing the emissions intensity of production in largely similar terms across different goods, sectors, and countries.

In theory, a pollution import fee could use a variety of sources for pollution intensity data, though few exist with a "like" comparison across borders and industries. Two examples include the Council's carbon advantage literature[v] and the Organization for Economic Cooperation and Development ("OECD") emissions factors by sector and country.[vi] Either source would allow policymakers to use a single and internally consistent dataset to determine the difference in the carbon/pollution intensity between the U.S. and foreign production. These datasets share a high degree of sectoral aggregation. With time and as data improves, policymakers will be able to rely on more granular data that can further differentiate between products within sectors.

Using the best data currently available, the revenue estimator uses two mappings to join the U.S. Trade Online data with the OECD data:

1. The 233 regions in the U.S. Trade Online data are assigned to one of the 84 regions in the OECD data. For major U.S. trading partners, the regional concepts are generally a direct mapping (e.g., Canada, China, and Mexico). Most aggregation occurs with small developing economies without significant trade value.

2. HS codes are assigned to a specific economic sector in the OECD data, such as HS 2814 (ammonia) being sorted into chemical products.

Consistent with recent policy proposals, the revenue estimator does not impose a fee on imports from partners within 10% the U.S. level.

Price Elasticity Data

The revenue estimator uses an import sensitivity (or price elasticity) estimate produced by the Peterson Institute for International Economics.[vii] Their research uses a price elasticity of -0.75[viii] to create a revenue projection for changes in tariff rates. The mildly inelastic response in the range of -0.75 is in line with other estimates, such as those by Boehm *et al*.[ix]

This model does not include any dynamic responses found in computable general equilibrium ("CGE") models, such as GTAP.[x] Some of the more notable responses in a CGE framework

would include a long-term rebalancing of global trade as the U.S. preferences domestic production and imports from more carbon-efficient peers.

The Council's revenue estimator calculates its revenue estimates using the following process:

- The *ad valorem* rates are calculated for every U.S. Trade Online region and HS code using assigned USCA data from OECD countries/sectors
- A price elasticity is assigned to estimate the reduction in the trade volume between the U.S. and its trading partner based on the *ad valorem* rate
- The post-price impact trade volume is then multiplied by the *ad valorem* rate to produce a one-year revenue estimate for each region/HS code combination

Scoring Conventions

The model assumes the trade value from calendar year 2024 would grow over the ten-year scoring window at a rate equal to the growth in real U.S. GDP. The real U.S. GDP growth rate is from the most recent economic outlook published by the Congressional Budget Office ("CBO"); CBO expects real GDP to growth 22% from 2024 to 2035.[xi]

The Joint Committee on Taxation publishes an annual income and payroll tax offset for any changes in excise taxes.[xii] The estimate from any excise tax is reduced to accommodate anticipated reductions in revenue from taxes to income and wages. Because any tariff is likely to be scored by CBO similar to a consumption tax for imported goods, the Council's revenue estimator adopts this "haircut". The full value of the haircut reduces the revenue estimate by 26.3% over a 10-year scoring window.

The revenue estimator results are presented as nominal dollars for the 10-year scoring window, 2026 through 2035.

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[i] Imports <110% the U.S. level are not charged.
[ii] The Foreign Pollution Fee Act was originally introduced in 2023 (S. 3198, 118th Congress) and a discussion draft was released by sponsoring Senators Bill Cassidy (R-LA) and Lindsey Graham (R-SC) in December 2024. That draft proposed applying a foreign pollution fee to imports of goods listed in the Harmonized Tariff Schedule under subheadings HS codes 2523, 2804.10, 2808, 2814, 2834.21, 3101-3105, 6810-6811, 3824.50, 7001-7020, 7206-7326, and 7601-7616. The discussion draft is available at https://www.cassidy.senate.gov/wp-content/uploads/2024/12/FPF-Discussion-Draft.pdf
[iii] https://usatrade.census.gov/
[iv] U.S. Trade Online provides trading data between the U.S. and 233 partners, capturing sovereign nations or occasionally aggregations or subnational regions.
[v] https://clcouncil.org/our-solutions/carbon-advantage/
[vi] https://www.oecd.org/en/data/datasets/greenhouse-gas-footprint-indicators.html for emissions and https://stats.oecd.org/wbos/fileview2.aspx?IDFile=d1ab2315-298c-4e93-9a81-c6f2273139fe for output
[vii] https://www.piie.com/blogs/realtime-economics/2024/can-trump-replace-income-taxes-tariffs
[viii] "Yellow" scenario
[ix] https://econ.wisc.edu/wp-content/uploads/sites/89/2021/09/Boehm_Levchenko_PandalaiNayar-1.pdf
[x] https://www.investopedia.com/terms/l/laffercurve.asp
[xi] https://www.cbo.gov/system/files/2025-01/51135-2025-01-Economic-Projections.xlsx
[xii] https://www.jct.gov/getattachment/6a046715-7bc7-4687-9749-2b02a9cba0de/x-10-25.pdf