Global Climate Policy Project
at Harvard and MIT

Frequently Asked Questions (Updated: 11/4/2025)

Building a Climate Coalition: Aligning Carbon Pricing, Trade, and Development
Flagship Report of the Global Climate Policy Project (GCPP) Working Group on Climate Coalitions

Core Proposal

What is carbon pricing?

Carbon pricing puts a cost on greenhouse-gas emissions, helping market participants see their environmental impact and aligning profit incentives with climate goals. Compared with prescriptive regulation, it lets firms choose how best to comply, typically lowering overall costs.

- Carbon taxes: A fixed charge per ton of greenhouse gas (GHG) emissions. Simple to administer, provides price certainty**,** and can raise revenue.
- Emissions trading systems (ETS): A cap on total (or intensity-based) emissions; firms must hold allowances per ton and can trade them, so prices fluctuate. Auctions can raise revenue; ETSs provide emissions certainty rather than price certainty.

Carbon pricing has been used for decades in some parts of the world, and the United States has used emissions pricing to reduce other, non-carbon pollutants.

What is a border carbon adjustment (BCA) measure?

A border carbon adjustment (BCA) is a policy that charges imported goods based on the amount of carbon pollution created in making them. It works alongside a domestic carbon price, which taxes local producers for their emissions. The goal of a BCA is to level the playing field—making sure imported and domestic goods face the same carbon costs.

Does the proposal require that coalition members formally link national carbon pricing systems?

The proposed climate coalition would not require creating a single global carbon market or linking national carbon pricing systems. Each member country would retain its own independent scheme — whether a carbon tax or an emissions trading system — designed to fit its domestic context. What makes the coalition work is mutual recognition: members agree on minimum carbon prices ("price floors") and accept one another's systems as long as they meet those floors. In effect, the coalition is about raising ambition across diverse national systems.

How does this proposal differ from the Climate Club and other multilateral initiatives?

A climate coalition would require countries to make binding commitments to carbon pricing and border carbon adjustments, building on the dialogue and technical work of existing multilateral initiatives. The G7's Climate Club, for instance, promotes cooperation on industrial decarbonization—initially in steel and cement—by sharing best practices on mitigation policies. The Coalition of Finance Ministers for Climate Action has explored multilateral carbon pricing approaches. International bodies such as the IMF, World Bank, WTO, and OECD are also advancing data and methodological work to help countries align their systems for measuring and comparing carbon emissions.

Does the proposal envisage U.S. participation?

The United States does not currently have a national industrial carbon pricing mechanism, which is why it was not included in our coalition modeling. However, the coalition design does not preclude U.S. participation. U.S. firms in targeted industries may face incentives to engage, particularly if their international competitors and principal export markets become members of the coalition.

Modeling and Analysis

Why does the report use two models?

The report employs two models – Trade with Frictions and Trade without Frictions – to give decisionmakers a more reliable picture of the impact of a climate coalition on key climate and economic outcomes:

- **Trade without Frictions:** Treats steel, aluminum, cement, and fertilizer from different countries as perfect substitutes, allowing producers to re-route exports quickly in response to policy. This brackets a longer-run, highly flexible global adjustment.
- **Trade with Frictions:** Treats goods as imperfect substitutes by country of origin, reflecting contracts, shipping limits, and customer preferences that slow re-shoring or re-routing. This brackets a near-term, stickier adjustment path.

We deliberately used two complementary trade models to test whether our findings hold under different, reasonable assumptions about how global trade responds to carbon pricing. When both approaches point in the same direction—as they largely do—policymakers and stakeholders can be more confident the results are not an artifact of any single modeling choice:

- Robustness: Using two frameworks reduces model risk and shows a range of plausible outcomes relative to the current policy baseline (EU & UK ETS/CBAM).
- Policy relevance over time: The friction model is more informative for immediate impacts; the frictionless model illustrates where markets could settle after firms and supply chains fully adapt.
- Transparency: Both models use the same 2023 data and scenarios (uniform vs. graduated price floors with BCAs), so differences in results are traceable to clearly stated assumptions rather than data inconsistencies.

- Limits acknowledged: Both are static equilibrium models; they compare outcomes across scenarios but do not forecast the speed of transitions.
- Using two models allowed us to cross-check results, bracket uncertainty, and improve confidence in the report's conclusions for policymakers and stakeholders.

How did you reach your estimate that 82% of global emissions in heavy industry sectors are covered by carbon pricing?

- **Scope.** We assessed 2023 emissions from iron & steel, aluminum, cement, and fertilizer production.
- **Emissions data.** Country-level totals were derived from a proprietary, global, plant-level emissions dataset (2023).
- **Carbon pricing coverage.** We mapped the status and scope of carbon pricing instruments using (i) a detailed summary of ETS policies in potential coalition countries (see Report Appendix B, *Mapping Existing Carbon Pricing Systems*), and (ii) the World Bank's Carbon Pricing Dashboard (accessed April 1, 2025). Where relevant, the two sources were cross-checked for consistency.
- **Sectoral coverage test.** For each country with an existing or planned carbon pricing policy, we identified whether it explicitly covers each of the four sectors. In most cases, policies cover all four or none; a notable exception is China, where the national ETS currently excludes fertilizer.
- **Computation.** We summed emissions in the four sectors that are covered by existing or planned carbon pricing and divided by global sectoral emissions to obtain the coverage share, reported in aggregate.
- **Presentation.** Countries with carbon pricing that individually account for <0.7% of global sectoral emissions are grouped as "Other countries with carbon pricing."

Why does the Current Policy Baseline assume no carbon price when you have estimated that 82% of emissions from these sectors are covered?

The Current Policy Baseline carries the broad assumption that countries outside the European Union, United Kingdom, Iceland, Norway, Switzerland, and Liechtenstein have a carbon price of $0. Although there are many jurisdictions that have existing carbon prices, average price levels remain low due to high free allowance allocations, as the Online Technical Appendix indicates.

Governance and Implementation

Does this conflict with countries' UNFCCC obligations?

As envisaged in this report, a climate coalition complements the UNFCCC's efforts on climate mitigation as well as its emphasis on transparency and fairness: Countries continue to fulfill their responsibilities under the Paris Agreement, but coalition membership—and, for low- and middle-income countries, access to coalition incentives—will likely accelerate the timeframe for countries to achieve their Nationally Determined Contributions (NDCs) under the Paris Agreement, as stronger market signals influence domestic industries to reduce emissions more quickly.

Does this proposal violate WTO provisions?

Existing WTO rules may allow members, in certain cases, to adopt trade-related environmental measures provided these measures "meet conditions that prevent misuse for protectionist purposes" or are even designed to advantage developing countries.

Why are measurement, reporting, and verification (MRV) requirements different for coalition members and non-members?

A climate coalition would apply different reporting requirements: whereas non-members would be required to report the detailed, product-level data needed to calculate BCAs, requirements for members would be limited to periodic reporting of aggregate, industry- or sector-level data to an independent body as a way to verify member commitments while also addressing data privacy and cross-border sharing concerns. Asymmetric reporting reflects the coalition's architecture: members benefit from streamlined requirements, while non-members must provide higher-resolution data to ensure climate integrity and a level playing field.