The Role of U.S. States in International Carbon Pricing Efforts

Global Climate Policy Project (GCPP) at Harvard and MIT Emerging Research Series: New Perspectives from Student and Alumni Researchers

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November 2026

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Executive Summary

In 2026, the European Union Carbon Border Adjustment Mechanism (CBAM) entered its definitive phase as the EU, China, and Brazil launched a coalition to deepen cooperation on carbon market design and integrity. Together, these developments could create powerful incentives for jurisdictions to adopt carbon pricing and align disparate approaches.

Over the past three decades, dozens of national and subnational governments have implemented carbon pricing instruments, largely tailored to their economic profiles and political constraints. By 2030, nearly one-third of global GHG emissions will be covered by carbon pricing if schemes currently under development are implemented. Whether CBAM and the Open Coalition influence global carbon pricing outcomes will depend largely on how well these initiatives interact with existing systems. A central open question is the impact and feasibility of recognizing subnational actors in both border carbon adjustments (BCAs) and international carbon pricing efforts. This paper focuses on the United States, as one of only two countries where subnational jurisdictions price carbon but the national government does not.[1]

Key Judgements

- EU CBAM rules do not exclude subnational carbon pricing from recognition, yet the present impact does not provide a sufficient incentive for states to adopt new measures that would reduce their exposure before 2028, such as establishing a carbon price and product-level emissions reporting infrastructure compliant with EU standards.
- Under current EU and state carbon pricing policies, U.S. industries will be less prepared for a global economy increasingly shaped by carbon pricing, subnational governments will forego potential revenue as their firms bear the EU CBAM, and the EU would miss an opportunity to leverage positive policy development that could inform federal U.S. climate policy down the road.
- Fragmentation risk across U.S. subnational carbon markets and emissions reporting has grown as federal emissions reporting requirements and tools remain in flux.
- Including U.S. subnational observers in the Open Coalition on Compliance Carbon Markets could offer a practical channel for multi-level governance by enabling leading states to incorporate emerging interoperability norms and diffuse them through shared infrastructure and regional market development that influences other states over time.
- U.S. states could establish common emissions reporting on shared MRV infrastructure to prepare their industries for CBAM as the mark-up rate for using default values grows more severe by 2028, laying groundwork for carbon pricing at the subnational and national level.
- The EU Commission could recognize subnational systems meeting specified MRV standards by offering them the same default option it offers national systems.
- The decisions made by U.S. state leaders could reduce implementation and political obstacles on the pathway toward a national carbon price, even if federal adoption remains unlikely in the near term.

[1] "State and Trends of Carbon Pricing Dashboard," World Bank Group, 2026, https://carbonpricingdashboard.worldbank.org/compliance/instrument-detail.

Introduction

Economists have long argued that carbon pricing can drive global greenhouse gases (GHG) emission reductions, yet policymakers at every level have learned that it is one of the most politically difficult climate policies to enact. As a result, carbon pricing instruments have evolved unevenly over the past three decades to fit each jurisdiction's local political constraints and economic profile.

In general, broader coverage by carbon pricing is better for global GHG emissions reductions, yet fragmentation across approaches may complicate trade relations and increase administrative burdens for companies and countries alike. The EU's Carbon Border Adjustment Mechanism (CBAM) has set in motion a process to expand its regulatory market, and the UK promptly followed suit. As the Global Climate Policy Project (GCPP) Working Group on Climate Coalitions emphasized, policymakers increasingly recognize the need for a coherent and trusted carbon accounting framework to underpin efforts to align trade and climate.[2]

CBAM poses an interesting test for U.S. federalism. It raises the cost of selling emissions-intensive goods into the EU market unless producers can document lower embedded emissions or a carbon price already paid. The United States could partially recoup these costs with its own carbon price, discounted from the import fee. Several states already operate carbon markets, but if these prices are not recognized, exporters in carbon-priced states may end up paying for emissions twice. Multinational companies across all states face the risk of a patchwork of carbon pricing regimes.

U.S. engagement, or its absence, is highly influential in global efforts to price carbon. Carbon pricing is uniquely politically difficult in the United States, and at least a half-dozen national and subnational attempts have failed. Largely in response to the EU CBAM, federal lawmakers proposed bills to produce national emissions intensity data and tax covered imports, but neither would establish a domestic price. The country's withdrawal from the Paris Agreement likely cleared the way for the European Union, China, and Brazil to launch the Open Coalition on Compliance Markets following COP30. Still, as the second-largest emitter of greenhouse gases and a historic leader on climate multilateralism, U.S. participation could strengthen the economic and political impact of these efforts.

Even when federal climate action stalls, U.S. federalism enables climate leadership at the state level. Enhanced climate action from ambitious states could achieve approximately 72% of the previous national emissions-reduction target by 2035.[3] Thirteen U.S. states operate carbon pricing programs representing over 30% of the U.S. population and 36% of GDP, and subnational networks including America Is All In, U.S. Climate Alliance, and the Under2 Coalition give governors channels to engage in global climate discussions.

This paper explores multi-level governance as a theory of change for implementing supranational carbon market and climate-trade frameworks. It analyzes the role of U.S. subnational carbon pricing systems in the EU Carbon Border Adjustment Mechanism (CBAM) and the Open Coalition on Compliance Carbon Markets. The analysis reflects a snapshot of a fast-moving policy landscape, and the emission reduction outcomes of these initiatives will depend on decisions by officials across every level of governance.

Literature Review

Multilevel governance has emerged as a leading framework for understanding global climate action in a world where decision-making authority and implementation capacity sit across local, national, and

[2] Global Climate Policy Project Working Group on Climate Coalitions, *Building a Climate Coalition: Aligning Carbon Pricing, Trade, and Development* (Global Climate Policy Project at Harvard and MIT, 2025), https://salatainstitute.harvard.edu/building-a-climate-coalition-gcpp-flagship-report/.

[3] Alicia Zhao et al., *Pathways to 2035: Expanding Non-Federal Climate Leadership in the United States* (Center for Global Sustainability, University of Maryland, 2025), https://cgs.umd.edu/research-impact/publications/pathways-2035-expanding-non-federal-climate-leadership-united-states.

international institutions.[4] Elinor Ostrom argued that the global collective action problem of climate change is best addressed through policy experimentation and information sharing across multiple levels of government, even absent a global agreement.[5,6] In decentralized countries with strong state and regional governments, this can create multiple reinforcement points that make climate action more resilient to setbacks at any single level.

Carbon markets are a clear case for multi-level governance as they require domestic enforceability and practical interoperability. Governments establish cap-and-systems and carbon taxes at national and subnational levels, while firms and regulators are incentivized to align rules to cut transaction costs and avoid double-counting. In practice, international coordination between carbon markets is based on the robustness of MRV standards, not multilateral treaties, opening the door for local-global cooperation.[7]

Subnational climate experiments can have a "catalytic impact" on national policy by creating norms, demonstrating feasibility, and building coalitions.[8] If coordinated effectively, overlapping regulatory frameworks let jurisdictions tailor regulations to their own context while providing regulatory safety nets.[9] One study of carbon pricing policies from 1988 to 2021 found that prior adoption of carbon pricing in Canada increased probability of adoption in the U.S. by 78%.[10] In 2011, Maslin and Scott wrote in *Nature* that "carbon pricing needs a multi-level approach,"[11] yet this discussion has not resurfaced amidst the EU CBAM and Open Coalition on Compliance Carbon Markets, which represent the most advanced approaches at establishing supranational carbon market coordination.

The same literature documents risks associated with uncoordinated subnational climate action, including emissions leakage, inconsistent policies, and inadequate standards and accountability.[12] Industries operating across multiple states can be hurt by inconsistent carbon accounting, and a patchwork of subnational markets raises the need for certification and oversight. The European ETS and North American carbon markets developed without consistent coordination and ended up with "incompatibilities in reporting requirements and basic units of emission measurements."[13] If this approach continues, it could produce a "balkanized global trading system."[14] Ostrom accordingly argued that monitoring and oversight across all levels of governance is essential.[15]

Subnational carbon pricing is especially complicated in countries like the United States that lack a national carbon price and unified accounting framework. Some scholars argue producers should receive lower BCA liabilities for documented subnational carbon costs above a national benchmark, without clarifying how this

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[4] Simona Piattoni, "Multi-Level Governance: A Historical and Conceptual Analysis," *Journal of European Integration* 31, no. 2 (2009): 163–80, https://doi.org/10.1080/07036330802642755.

[5] Elinor Ostrom, "A Polycentric Approach for Coping with Climate Change," *Workshop in Political Theory and Policy Analysis Indiana University*, no. World Bank Policy Research Working Paper 5095 (October 2009), https://doi.org/10.1596/1813-9450-5095.

[6] Ostrom, "A Polycentric Approach for Coping with Climate Change."

[7] Luke Kemp, "US-Proofing the Paris Climate Agreement," *Climate Policy* 17, no. 1 (2016): 86–101, https://doi.org/10.1080/14693062.2016.1176007.

[8] Steven Bernstein and Matthew Hoffmann, "The Politics of Decarbonization and the Catalytic Impact of Subnational Climate Experiments," *Policy Sciences* 51, no. 2 (2018): 189–211, https://doi.org/10.1007/s11077-018-9314-8.

[9] Mark Maslin and Joanne Scott, "Carbon Trading Needs a Multi-Level Approach," *Nature* 475 (July 2011): 445–47.

[10] Manuel Linsenmeier et al., "Global Benefits of the International Diffusion of Carbon Pricing Policies," *Nature Climate Change* 13, no. 7 (2023): 679–84, https://doi.org/10.1038/s41558-023-01710-8.

[11] Maslin and Scott, "Carbon Trading Needs a Multi-Level Approach."

[12] Elinor Ostrom, "Polycentric Systems for Coping with Collective Action and Global Environmental Change," *Global Environmental Change*, 20th Anniversary Special Issue, vol. 20, no. 4 (2010): 550–57, https://doi.org/10.1016/j.gloenvcha.2010.07.004.

[13] Matthew Paterson et al., "The Micro Foundations of Policy Diffusion Toward Complex Global Governance," *Comparative Political Studies* 47, no. 3 (2014): 420–49, https://doi.org/10.1177/0010414013509575.

[14] Guri Bang et al., "California's Cap-and-Trade System: Diffusion and Lessons," *Global Environmental Politics* 17, no. 3 (2017): 12–30.

[15] Ostrom, "A Polycentric Approach for Coping with Climate Change."

would work where no national price exists;[16] others implicitly treat subnational prices as a partial substitute for national pricing by constructing a national price from state-level averages.[17] A Resources for the Future policy brief frames recognition of subnational systems under the EU CBAM as an unresolved design choice, with options ranging from no recognition to a hybrid combining subnational default benchmarks and facility-level documentation.[18] Given persistent political constraints on national commitments, some analysts argue that international platforms such as the Open Coalition could create roles for subnational jurisdictions while awaiting national engagement.[19]

This literature remains several steps removed from the CBAM policy debate. CBAM analysis from Brookings,[20] the IMF,[21] and BloombergNEF largely ignores subnational carbon pricing and describes the U.S. having no carbon price at all.[22] That disconnect leaves an unresolved core design question: how should BCAs built for national governments treat subnational carbon markets?

U.S. Subnational Carbon Pricing Systems

Several distinct state and regional cap-and-trade systems in the United States price carbon through the trade of allowances.

Figure 1: A Comparison of U.S. Subnational Carbon Pricing Systems and the EU ETS

	RGGI	**California Cap-and-Trade**	**Washington CCA**	**Oregon CPP**	**EU ETS (For comparison)**
Jurisdiction(s)	CT, DE, ME, MD, MA, NH, NJ, NY, RI, VA, VT	California (linked with Québec)	Washington	Oregon	EU (plus Iceland, Liechtenstein, Norway)
Year Launched	2009	2012	2023	2025	2005

[16] Goran Dominioni and Daniel Esty, "Designing Effective Border Carbon Adjustment Mechanisms: Aligning the Global Trade and Climate Change Regimes," *Arizona Law Review* 65, no. 1 (2023).
[17] Geoffroy Dolphin, *Evaluating National and Subnational Carbon Prices: A Harmonized Approach* (Resources for the Future, 2022), https://www.rff.org/publications/working-papers/evaluating-national-and-subnational-carbon-prices-a-harmonized-approach/.
[18] Katarina Nehrkorn and Milan Elkerbout, *Accounting for the Carbon Price Paid in a Country of Origin Under Carbon Border Measures* (Resources for the Future, 2026), https://www.rff.org/publications/issue-briefs/accounting-for-the-carbon-price-paid-in-a-country-of-origin-under-carbon-border-measures/.
[19] Florentine Koppenborg, "A Coalition on Compliance Carbon Markets to Make Climate Clubs Politically Feasible," *Nature Climate Change* 16, no. 3 (2026): 232–33, https://doi.org/10.1038/s41558-025-02541-5.
[20] Sanjay Patnaik et al., *A Voluntary Export Fee (VEF) on Pollution: Recovering Foreign Tax Revenue to Support US Clean Manufacturing* (The Brookings Institution, 2026), https://www.brookings.edu/articles/a-voluntary-pollution-fee-on-exports-recovering-foreign-tax-revenue-to-support-us-clean-manufacturing/.
[21] Geoffroy Dolphin and Gianluigi Ferrucci, "The EU's CBAM: Implications for Member States and Trading Partners," IMF Working Papers, *IMF Working Papers* 2025, no. 125 (2025), https://doi.org/10.5089/9798229000420.001.A001.
[22] Claire Curry et al., "The EU's CBAM: What Will Be Its Impact on Trade, Costs and Competitiveness?," BloombergNEF, April 16, 2026, https://events.bloombergevents.com/hub/events/27369ab2-653e-4a38-934f-add7fde42aa3/.

Emissions Coverage	~14% of aggregate regional emissions	~76% of statewide emissions	~71% of statewide emissions	~48% of statewide emissions	~40% of EU emissions
2030 Emissions Reduction Target	30% from 2020 power sector emissions	40% from 1990 GHG levels	45% from 1990 GHG levels	45% reduction from 1990 GHG levels *by 2035*	62% from 2005 GHG levels
Offset Credits	In-region offsets up to 3.3%	CARB and linked Québec offsets up to 4% (2021–25); 6% (2026–30)	Domestic offsets up to 5% with rulemaking to increase to 8%, plus 3% from tribal land projects	No traditional offsets, in-state investment credits up to 15%	Not allowed
Approach to Free Allocations	No free allocation; some allowances are held by states and transferred by their rules	Significant free allocation to industrial facilities using product-based benchmarks, plus for utilities	Significant free allocation to industrial facilities using product-based benchmarks, plus for utilities	Industrial allocation is under development	Significant free allocation with phase-out from 2028-2038 for CBAM sectors
Proportion of Auctioned Allowances (2024)	91%	46%	36%	Compliance instruments are distributed rather than auctioned	57%
Avg. Carbon Price in USD (2024)	$18/MT CO_2	$35/MT CO_2	$32/MT CO_2	N/A	$81/MT CO_2
Covered Sectors	Power sector only	Mining, power, heavy industry, buildings, transport, agriculture/forestry fuel use	Power, industry, buildings, transport, mining	Mining, industry, buildings, transport, waste, maritime, agriculture/forestry fuel use	Power, industry, aviation, maritime
Point of Regulation	Point source	Upstream fuels; point source power, industry, and imported electricity	Upstream fuels and imported power; point source power and industry	Upstream fuel; point source for large industrial facilities	Primarily point-source and aviation/maritime operators
Regulatory Framework	EPA regulations (40 CFR Part 75)[23] and individual state regulations	California Code of Regulations (Mandatory Reporting Regulation)[24]	Washington Administrative Code (Climate Commitment Act Program Rule and Reporting of	Oregon Administrative Rules (GHG Reporting Rule and Climate	EU ETS monitoring and reporting regulation[27]

[23] Title 40, Code of Federal Regulations, 40 C.F.R. (2026), https://www.ecfr.gov/current/title-40/part-75.

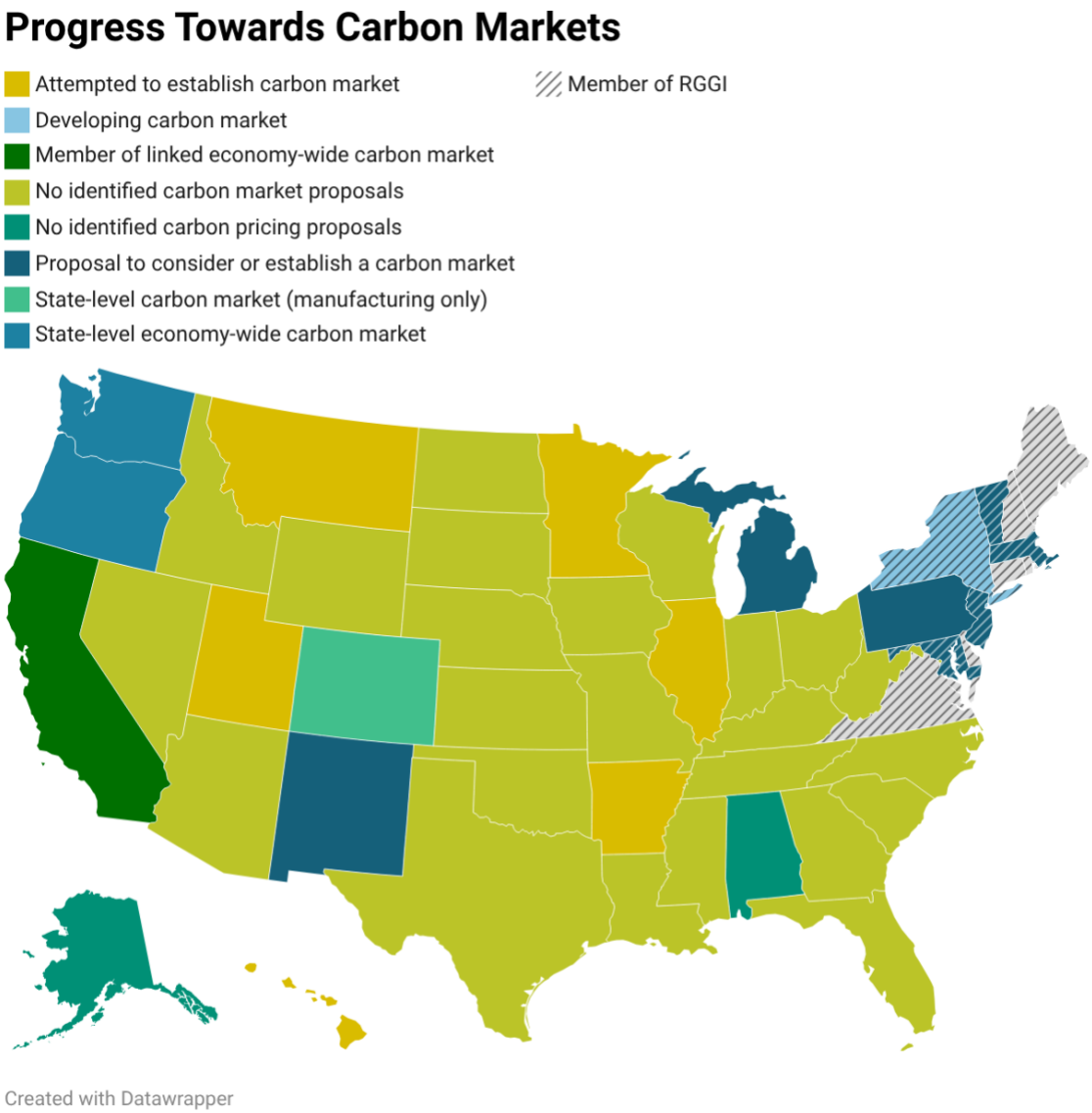
[24] Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, 17 Cal. Code Regs. (2026), https://ww2.arb.ca.gov/sites/default/files/classic/cc/reporting/ghg-rep/regulation/mrr_2026_unofficial_2026-10-14.pdf.

[27] Commission Implementing Regulation (EU) 2018/2066 of 19 December 2018 on the Monitoring and Reporting of Greenhouse Gas Emissions Pursuant to Directive 2003/87/EC of the European Parliament and of the Council and Amending Commission Regulation (EU) No 601/2012 (Text with EEA Relevance) (2025), http://data.europa.eu/eli/reg_impl/2018/2066/2025-05-27.

			Emissions of Greenhouse Gases Rule)[25]	Protection Program Rule)[26]	

The map below depicts the status of subnational carbon pricing, with members of the Regional Greenhouse Gas Initiative (RGGI) shaded. Further details on recent policies appear in the appendix. Virginia will join RGGI as of July 1, 2026, and Washington will link with California and Québec in 2027.

Figure 2: Landscape of U.S. Carbon Pricing Initiatives



[25] Washington Administrative Code (WAC), Wash. Admin. Code § Ch. 173-441 & 173-446 (2026), https://app.leg.wa.gov/wac/.
[26] Oregon Administrative Rules, Chapter 340 Or. Admin. R. § Div. 215, 272, & 273, accessed November 8, 2026, https://secure.sos.state.or.us/oard/ruleSearch.action.

U.S. Trade to the EU in Covered Industries

The EU CBAM entered into force in January 2026 and subjects EU imports to the same carbon price EU producers pay under the EU Emissions Trading System (ETS) to create a single carbon regulatory space. The United States is the EU's 12th-largest trading partner by exports, and only 0.07% of U.S. trade is exposed.[28] Figure 3 outlines the annual production value, global export value, and estimated CBAM fees across the covered industries.

Figure 3: U.S. Production and EU Exports in Covered Industries

	Cement	Fertilizers	Iron and steel	Aluminum	Hydrogen
Average Annual Production Value (2021-2025) (thousand metric tons)	**166,826**	**33,548**	**81,760**	**4,249**	**10,000**
Average Global Annual Export Value (2021-2025) (thousand metric tons)	**908**	**8,047**	**7,660**	**1,354**	**1.73**
Estimated CBAM fees (million USD)	**$0.57**	**$153.4**	**$253.7**	**$7.08**	**Not available**
Dominant Producing States	Texas, Missouri, California, and Florida	Louisiana, Texas, Florida, and Iowa	Indiana, Ohio, Pennsylvania, Illinois, Texas	Indiana, Oklahoma (coming online), South Carolina, Iowa	California, Louisiana, and Texas

Data from UN Comtrade, U.S. Geological Survey, U.S. Department of Agriculture, and the U.S. Department of Energy, with CBAM estimates from Sandbag.

A Deep Dive into Iron and Steel

CBAM exposure is currently small for the United States in aggregate, yet national estimates can miss concentrated state-level impacts. This paper uses the iron and steel industry, which faces the greatest exposure out of any CBAM-covered industry in the U.S., to illustrate regional patterns and data limitations involved in estimating state-level impacts.

Tracing EU imports in CBAM-covered industries back to specific states is difficult because U.S. trade data were not built for this purpose. The Census Bureau tracks the "Origin of Movement" (OM) which documents where goods entered the export transportation network, whether the actual manufacturing site, an assembly point, warehouse, or the port of export.[29] State-level export data are available only in North American Industry Classification System (NAICS) aggregates rather than the CN / HS product codes CBAM

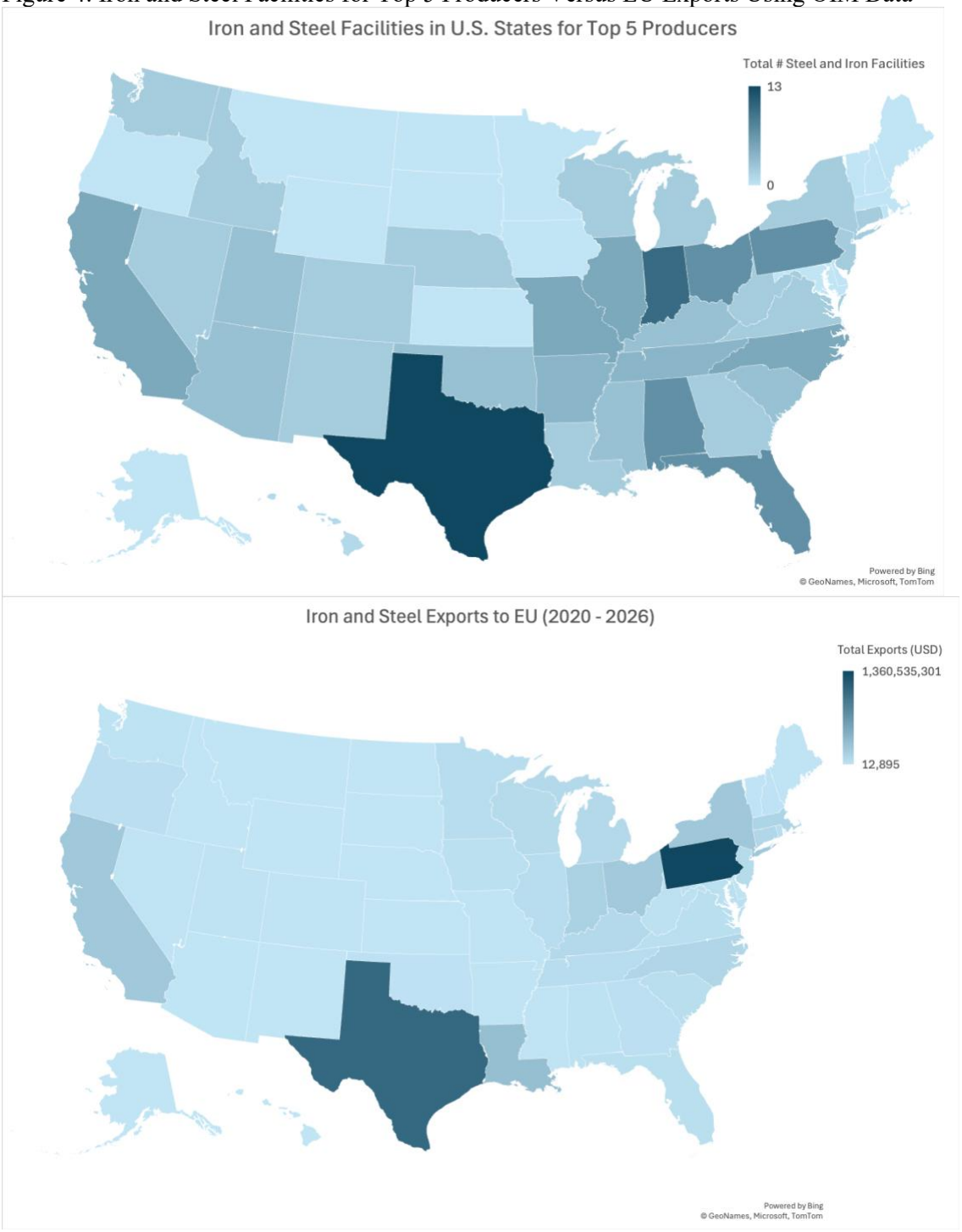
[28] Curry et al., "The EU's CBAM: What Will Be Its Impact on Trade, Costs and Competitiveness?"

[29] Census and Related Programs Support Branch (301)763-4673, "How the Data Are Collected," accessed April 14, 2026, https://www.census.gov/manufacturing/exports/how_the_data_are_collected/index.html.

actually uses.[30] This can lead to misleading conclusions about which states' producers face greatest exposure.

To complement OM-based exports, this research paper compiles locations for 128 facilities in covered steel and iron products from the largest U.S. iron and steel manufacturers (Nucor, CSM, Cleveland Cliffs, U.S. Steel, and Steel Dynamics). As there is no publicly available listing of all steel facilities in the U.S., this list is used as a proxy but does not represent smaller producers or specialized mills.

Figure 4: Iron and Steel Facilities for Top 5 Producers Versus EU Exports Using OIM Data



[30] This analysis uses NAICS 3311 (Iron & Steel & Ferroalloy) and NAICS 3312 (Steel Products from Purchased Steel) as the closest available proxies for CBAM-covered iron and steel commodities.

The combined analysis primarily reinforces the present shortcomings in U.S. trade data for estimating the state-level economic impact of CBAM. OM tends to over-attribute exports from port states and under-attribute exports from inland manufacturing states. The EU designed CBAM costs to attach to goods' site of production, not to a location where they entered the transportation network, and the result can misidentify which jurisdictions house the facilities with the strongest incentive to respond through emissions measurement or carbon pricing.

Relying only on NAICS-based export proxies compounds this problem. NAICS data alone would imply that Pennsylvania and Texas would face $65.7 million and $51.75 million in CBAM fees for their iron and steel exports, yet the facility-level snapshot suggests that production occurs across a wider set of states. The lack of public, industry-wide data means smaller producers could be driving export patterns this analysis does not capture.

Even with these limitations, facility location patterns provide a useful signal for where CBAM could become more meaningful for major producers over time. Four of the top five oil and steel producers have approximately one in four facilities concentrated in a single state. Cleveland Cliffs has 36% of its facilities in Ohio, 60% of the U.S. Steel's facilities are split evenly between Pennsylvania and Indiana, and 23% of Steel Dynamics are concentrated in Indiana. Notably, none of these jurisdictions currently face a carbon price nor mandatory emissions reporting frameworks. This pattern demonstrates that CBAM's near-term incentives for the iron and steel industry likely are not concentrated in the same states that already operate carbon markets.

Trade-exposed manufacturing states that do not currently price carbon, such as Pennsylvania, offer a useful window into CBAM's near-term political impact in the U.S. Pennsylvania has invested $267 million in projects to reduce emissions in the manufacturing sector, which could reduce the emissions intensity of iron and steel exports in comparison to those from other states. The legislature is considering a proposal for a power-sector cap-and-invest program less aggressive than RGGI that is unlikely to pass, and a senior official emphasized that CBAM has not currently impacted their approach.[31] However, the state may pay greater attention to emission reporting and carbon pricing if the iron and steel industry, which is an essential part of the state's identity, is more significantly impacted by CBAM, or if CBAM expands to the chemical industry.

The next section details how important installation-level documentation and production-level traceability is for CBAM documentation.

Current Approach

CBAM rules do not explicitly exclude subnational carbon prices from recognition and the Commission's own feedback synthesis report notes that some respondents called for subnational schemes to be recognized.[32] Exporters can, in theory, seek credit through two routes. In practice, both are difficult to maneuver.

1. **The effective route** credits the carbon price actually paid at the facility level and requires production quantities to calculate product-level emissions intensity. Many U.S. manufacturers have never had to trace exported goods to a specific installation, and comments from U.S. firms during CBAM's transitional phase describe supply chains that cannot provide verified installation-level data.

[31] Representative from the Pennsylvania Governor's Office, May 20, 2026.
[32] Directorate-General for Taxation and Customs Union, *Synopsis Report on Calls for Evidence on the Implementing Act on the Carbon Price Paid in Third Countries for the Definitive Phase of the CBAM* (2026), https://taxation-customs.ec.europa.eu/news/carbon-price-paid-third-countries-2026-05-13_en.

2. **The default route** credits conservative national benchmark emissions values and carbon prices. The EU Commission plans to publish default carbon prices for third countries by 2027. As of May 2026, the Commission is leaning against incorporating subnational instruments in default carbon prices.[33]

Figure 5: EU CBAM Credit Pathways for U.S. Exporters

1. Effective Pricing Route Credit based on the actual carbon price paid at the facility level	2. Default Pricing Route Credit based on conservative national benchmarks in the absence of facility data
Requires installation-level emissions and production data States with carbon markets already require facility-level emissions reporting; production values are confidential and not publicly disclosed. **Requires documentation of carbon price paid at the facility level** Currently accessible only to companies operating in states with active carbon markets.	**Uses conservative emissions values that do not reward more efficient production or access to cleaner grids** **Likely assigns a national carbon price of $0** Effectively double-charges companies with facilities in states that already operate carbon markets.

Key Data Availability Questions for Route 1: Washington and California		
Do companies with WA or CA facilities report facility-level emissions? **✓ Yes**	Do these companies have data on production quantities? **✓ Yes: internally tracked but not publicly available**	When exporting to the EU, do companies track which products came from which facilities? **— Varies** Depends on the company and supply chain structure.

California and Washington's ETSs predate the EU CBAM and don't mirror EU ETS methodology, but both impose robust facility-level monitoring, reporting, and third-party verification (MRV) that help firms establish the installation-level emissions data required for CBAM "actual emissions" calculations. This matters because default values are designed to discourage reliance on benchmarks, and it could shape the incentives of manufacturing companies that want to report lower emissions than the default values.

Default emission values do not reflect sizable differences in regional grid carbon intensity. U.S. production uses varying energy mixes, and certain iron, steel and aluminum products rely heavily on electricity. For these sectors, the geographic variation in grid carbon intensity represents one of the largest determinants of a product's embedded emissions. For example, California received roughly three times as much electricity from clean energy sources than Florida in 2024.[34]

[33] Representative from the EU Directorate-General for Climate Action, April 15, 2026.
[34] Gavin Maguire, "The Cleanest and Dirtiest US State Electricity Systems: Maguire," Energy, *Reuters*, September 26, 2024, https://www.reuters.com/business/energy/cleanest-dirtiest-us-state-electricity-systems-maguire-2024-09-26/.

CBAM also introduces traceability requirements many U.S. manufacturers never had to meet. Firms operating multiple plants often don't report which installation produced a given exported good. Emerson Electric, a Missouri-based global technology and engineering company, noted that exporters could previously satisfy EU requirements by reporting country of origin without installation-level detail.[35] CBAM pushes exporters and suppliers towards installation-level traceability across complex, multi-state supply chains. Comments from U.S. companies and industry groups during CBAM's transitional phase highlights a recurring obstacle in receiving installation-level data and calculating actual emission values. The Association of Equipment Manufacturers (AEM) wrote that manufacturing supply chains lacks the data infrastructure needed to trace embedded carbon, as "specific identification of steel content back to the steel mill of origin is lost," while another company noted that many non-EU suppliers lack awareness or infrastructure to provide verified, installation level data aligned with EU Monitoring and Reporting Regulation (MRR) standards.

The advantages in MRV infrastructure do not overcome broader obstacles in receiving CBAM credit for subnational prices. Differences in the point of regulation complicate emissions attribution to goods. California and Washington allocate fuel emissions to upstream producers to avoid leakage, while the EU CBAM requires operators to attribute direct and indirect emissions to goods, so exporters may need to document how upstream compliance costs relate to the embedded emissions for the exported products.

Additionally, reporting the emissions *intensity* requires production data, not just emission totals. Facility operators in California and Washington report annual emissions that state authorities publish. Production quantities are needed to calculate product-level emissions intensity, and those figures are often confidential. It is not clear if companies will provide activity-level data to EU importers and accredited third-party verifiers.

Even when firms document state compliance costs, the resulting discount likely covers at most half of the EU liability, since the headline EU carbon price is roughly twice that of California and Washington. The gap in effective carbon cost may be even greater, as the EU is phasing out free allocation and does not allow offsets. Given how limited and uncertain this credit is, it's unsurprising that climate advisors in states without carbon markets report that CBAM is not yet factoring into their decisions. The larger effects, if they materialize, likely emerge over a longer time horizon as CBAM requirements and coverage expand.

Taken together, these constraints limit both crediting routes. The default route can treat the U.S. as having a carbon price of zero, while the effective route imposes documentation and traceability requirements that many firms cannot meet at a reasonable cost.

Box 1: Federal Rollbacks to GHG Emissions Reporting Infrastructure

Calculating overall facility emissions in the United States has been destabilized under the Trump administration, which places greater responsibility on individual states or third parties. The EPA required approximately 8,000 facilities to report annual emissions under the Greenhouse Gas Reporting Program for 14 years, then proposed eliminating all reporting requirements in 2025. In April 2026, the University of Maryland's Center for Global Sustainability took over publishing an annual Greenhouse Gas Inventory for the United States in a consistent approach with past EPA inventories, though continued reporting remains uncertain. There is currently no official U.S. list of average facility-level emissions intensities.

Implications of CBAM's Evolution on U.S. States

CBAM's impact today comes down to the country's EU trade exposure and emissions intensity of covered industries, and the impact on the U.S. may not draw much attention in the first few years. Proposed scope changes could materially alter this picture. Beginning in January 2028, CBAM is proposed to cover an

[35] "Feedback from: Emerson Electric Co.," European Commission, September 24, 2025, https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14828-Carbon-border-adjustment-mechanism-CBAM-methodology-for-the-definitive-period-starting-on-1-January-2026/F33069959_en.

additional set of aluminum and steel-intensive downstream products, including machinery and appliances.[36] According to the International Institute for Sustainable Development, the United States is the third largest exporter of goods covered by the proposed downstream expansion.[37]

The EU is also likely to eventually align CBAM fully with their ETS by expanding its scope to cover all ETS industries, including chemicals and polymers, organic chemical precursors, commercial fuels, pulp and paper, glass, and ceramics. Under that scenario, U.S. exports would be the second-greatest share of total EU CBAM imports, only 3.7% behind China, versus 13.9% behind under current coverage.[38]

This expansion will likely have uneven effects across states. Chemicals and polymers are largely concentrated in the Gulf Coast, while the Mid-Atlantic and Northeast has a higher concentration of specialty chemicals. The Southeast dominate the pulp and paper market, while the glass and ceramics industries are more dispersed. The U.S. hydrogen sector may also increase exports to the EU in the next few years as federal rollbacks in low-carbon hydrogen support pushes producers towards markets willing to pay a green premium. The Inflation Reduction Act's 2022 tax credits for blue and green hydrogen were curtailed by the One Big Beautiful Bill Act (2025). According to a former Public Utility Commission of Texas Commissioner, the best near-term approach for low-carbon hydrogen developers, companies, based primarily in Texas and Louisiana, is to export into countries with a carbon market.[39]

Insights from state officials align with this analysis that CBAM incentives will only kick in years down the line, primarily as they will respond to economic shifts. Climate advisors in multiple states emphasized that industry signals are one of the most important factors in the feasibility and success of a carbon pricing scheme. Aligning carbon markets with EU ETS methodology would only become attractive if they could understand the economic impact of CBAM on their exports base. Washington's carbon market program manager described CBAM as a topic of interest but not an immediate methodological priority given near-term demands. Maryland Assistant Secretary for Climate Policy and International Affairs expressed a similar view and suggested that multinational companies would likely play an influential role in clarifying what state policymakers would need to do to support exports under CBAM, and this perspective was echoed by a Pennsylvania senior official.

The Potential for Regulatory Alignment across Subnational Carbon Markets

While CBAM does not currently drive regulatory convergence in the United States, this research finds that greater linkage in the United States would be beneficial, and state carbon pricing decisions have so far responded strongly to neighboring states' policies. However, greater coordination and standardization are needed to provide a baseline for interoperability given the potential rise of idiosyncratic schemes.

State-commissioned studies and consultations with state officials indicate that linkage offers advantages. Expanding market size can improve policy efficiency and strengthen emissions outcomes. Linkage can accommodate differences in program design, but states need to agree on core elements, including MRV, leakage and competitiveness measures, compliance, and, perhaps most importantly, the allowance price dynamics that converge through linkage.[40]

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[36] "Commission Strengthens the Carbon Border Adjustment Mechanism," European Commission, December 16, 2025, https://ec.europa.eu/commission/presscorner/detail/en/ip_25_3088.

[37] Antoine Bonnet et al., "EU Carbon Border Adjustment Mechanism Is Set to Get Bigger: Implications for Trade and Industrial Value Chains | International Institute for Sustainable Development," International Institute for Sustainable Development (IISD), January 27, 2026, https://www.iisd.org/articles/explainer/eu-carbon-border-adjustment-mechanism-bigger-trade-implications.

[38] Bonnet et al., "EU Carbon Border Adjustment Mechanism Is Set to Get Bigger."

[39] Representative from the Public Utility Commission of Texas, April 24, 2026.

[40] Representative from the Québec Ministry of the Environment and the Fight Against Climate Change, Wildlife and Parks, April 17, 2026.

Addressing leakage therefore entails regulatory alignment across markets, yet two regulatory models are emerging. On the West Coast, the Western Climate Initiative (WCI) provides the registry and auction platform used by California, Washington, and Québec that facilitates cross-jurisdictional allowance trading between California and Québec, with Washington expected to link in 2027. Oregon lawmakers are discussing linkage proposals. On the East Coast and Mid-Atlantic, the Regional Greenhouse Gas Initiative (RGGI) operates a shared allowance market for 11 states but remains limited to power-sector emissions. Both approaches reveal the gravitational pull of states with large economies.

As the first-mover, California's cap and trade system design influenced Washington's system. Linking with California requires comparability of emissions data, program design, and price, as well as approval from the governor. If Oregon does join WCI, it may build further momentum for linkage across the West Coast.[41] As one senior WCI leader put it, "If we are using the same IT infrastructure in North America, we are one step closer to facilitating linkage and connection."

RGGI's experience, by contrast, reveals some of the difficulties of linkage. Its multi-state nature creates political complexities that can constrain ambition, and RGGI is unlikely to transition from a power-sector to economy-wide initiative in the near term. Several member states require legislative approval for new requirements, such as a tighter cap, making it difficult to advance new proposals. The partnership is already strained by high, concentrated electricity prices in the Northeast and Mid-Atlantic.[42] Following Pennsylvania's withdrawal, Governor Shapiro stated that, "We will set our own cap. We will set our own price for those carbon credits. And we won't have any other state determining what is right for us here in Pennsylvania."[43] A senior official in the Pennsylvania Governor's Office described how this perspective shapes the state's current engagement with international carbon pricing mechanisms and standards, stating that, "We are the 25th largest economy in the world, and we're just not that outwardly oriented," adding that "we have been doing this in a vacuum."[44]

Individual RGGI states could still develop complementary markets covering a broader share of emissions. Until early 2026, New York state was expected to play a standard-setting role on the East Coast: carbon pricing studies prepared for both Vermont and Maryland included recommendations for implementing a cap and invest program linked to New York's as it was developed.[45] However, Governor Hochul's decision to push the program's implementation to 2028 amidst affordability concerns leaves this role open.

Past efforts to scale multi-jurisdictional carbon market initiatives help contextualize RGGI's current emphasis on narrower, incremental approaches. The 2007 Midwestern Greenhouse Gas Reduction Accord (MGRA) did not reach implementation, and the Transportation and Climate Initiative Program also failed in 2021 to sustain multi-state agreement to expand RGGI to additional sectors.

Given the economic diversity of U.S. states and the political complexity of a multi-state system, several states have considered developing their own independent carbon market system before pursuing linkage. This sequencing makes sense from a political perspective yet can increase the number of programs in the short term and complicate the pathway towards converging around shared infrastructure and standards.

The foundation of compliance carbon markets is a robust Monitoring, Reporting, and Verification (MRV) framework, and instability in federal emissions-reporting infrastructure risks exacerbating regional

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[41] Representative from the Washington State Department of Ecology, March 26, 2026.

[42] Ryan Wiser, "Retail Electricity Price Trends and Drivers: Data Update−2026 Edition," Lawrence Berkeley National Laboratory, April 2026.

[43] Justin Sweitzer, "Josh Shapiro Announces New Plan to Cap Emissions in Pennsylvania," City & State PA, March 13, 2024, https://www.cityandstatepa.com/policy/2024/03/josh-shapiro-announces-new-plan-cap-emissions-pennsylvania/394922/.

[44] Representative from the Pennsylvania Governor's Office, interview.

[45] Meredith Fowlie and Dallas Burtraw, *Assessing the Affordability Implications of California's GHG Cap and Trade Program* (Annual Report of the Independent Emissions Market Advisory Committee, 2025).

fragmentation. The power sector is the most interoperable, as California, Washington, and RGGI all rely on an EPA monitoring rule still active through the Clean Air Act, yet differ in verification and scope. California and Washington also cover electricity imports and Washington is lowering the reporting threshold for electric power entities in 2027. Comparable measurement in other sectors faces greater challenges. The EPA stopped publishing the annual GHG inventory in 2025 and has proposed rescinding facility-level reporting requirements for most source categories (See Box 1). Without a common MRV baseline, states risk developing parallel systems that reduce emissions comparability across jurisdictions; Washington already built a state-specific reporting platform.[46]

State officials interviewed for this paper agreed that interoperability across carbon markets would benefit businesses, but that external incentives would be needed to overcome the pull toward market-specific approaches. A senior official from Pennsylvania argued that it would be best for businesses to deal with only two legal regimes in the United States: one based on California's carbon market standards and one without a carbon market.[47] The pathway toward regulatory convergence is less clear. Industry signals are incredibly important, as mentioned previously, but so are coalitions and platforms that help officials develop shared guidelines.

Global Carbon Pricing Frameworks and Coalitions

Subnational governments have played a more visible role in global climate governance over the past two decades. While their role has traditionally been as implementers of national climate policy, subnational coalitions have called for greater representation in co-developing national and global climate commitments.[48] The UNFCCC Local Government and Municipal Association (LGMA) constituency's COP30 Joint Position called on Parties and future COP Presidencies to "further the engagement of local and other subnational governments in the design of new and holistic climate and sustainability governance processes."[49]

Many national governments have responded through multi-level governance initiatives. Nearly eighty countries have endorsed the Coalition for High Ambition Multilevel Partnership for Climate Action (CHAMP) launched at COP 28, committing to work with subnational governments to plan, finance, and implement national climate strategies.

COP30 catalyzed two initiatives aimed at creating platforms for countries to discuss carbon pricing approaches. The first, the Integrated Forum on Climate and Trade creates dialogue between climate and trade communities but is only open to UNFCCC members, which excludes U.S. stakeholders. The second, the Open Coalition on Compliance Carbon Markets, gives members a platform to explore coordination in the development and integrity of their carbon markets. The EU Commission (on behalf of the EU), Brazil, and China launched the Coalition in May 2026 following the COP30 declaration, and membership is open to countries with a nationwide compliance carbon market. Subnational governments operating a carbon pricing scheme can participate as observers, but none joined by the first meeting in September 2026.

While only national governments signed the Open Coalition declaration, it notes that "compliance carbon markets in more countries and regions mark an important step forward in expanding coverage and ensuring more equitable participation in global climate efforts." Over two thirds of the Declaration endorsers and half of countries with an implemented carbon pricing instrument have endorsed CHAMP, and nearly three quarters of subnational governments are in CHAMP-signatory countries, including the United States, which signed under the Biden Administration.

[46] Representative from the Washington State Department of Ecology, interview.
[47] Representative from the Pennsylvania Governor's Office, interview.
[48] "COP30 Joint LGMA Position," Local Governments and Municipal Authorities Constituency, November 14, 2025, https://www.cities-and-regions.org/2025-united-nations-climate-change-conference-cop30/cop30-joint-lgma-position/.
[49] *Local Gov. Munic. Authorities Const., "COP30 Joint LGMA Position."*

There is also precedent for diplomatic coalitions mixing subnational and national representatives. The Carbon Pricing of the Americas initiative, launched by Canada and Mexico in 2018, provides training and resources focused on helping Latin American jurisdictions implement carbon pricing. Membership is made up of 13 subnational governments, including California, and six national governments. The group doesn't explicitly focus on harmonizing markets but rather sharing design principles and exchanging best practices, yet a senior Québec official suggested it could eventually provide a foundation for linkage with Latin American governments.[50]

Discussion

This research investigated the open question: is subnational recognition in BCAs and global carbon pricing platforms feasible and impactful? The current prospect of subnational crediting under the EU CBAM does not yet create a strong enough economic signal to reshape state carbon pricing decisions in the near term. For producing exporters in California and Washington, subnational recognition under CBAM is technically feasible, but most exporters will struggle to obtain credit in practice, facing the greatest constraints in installation-level traceability and in allocating upstream compliance obligations to exported goods at the level of detail CBAM expects. States without carbon markets, meanwhile, continue proposals to develop carbon pricing primarily around domestic affordability, industrial competitiveness, and regional policy dynamics, without reference to CBAM.

This is precisely the fragmentation risk the multi-level governance literature predicts. Without a common national framework for monitoring, information-sharing, and evaluation, states will likely continue advancing carbon markets independent of one another and of global processes.

This analysis identifies two pathways for U.S. responses to EU CBAM and the Open Coalition that can also reduce fragmentation without a near-term federal carbon price. These proposals respond to the central takeaway from applying a multi-level governance lens to carbon markets: the importance of smoothing frictioning of integrating subnational schemes into global processes by increasing compatible reporting and information-sharing. The final section discusses how these recommendations could also reduce obstacles in the longer route towards a federal carbon price.

A Pathway toward U.S. Engagement in the Open Coalition

The Open Coalition has not publicly resolved whether it will invite observers from jurisdictions whose national governments are not members. California and Washington have economic and emission profiles large enough to matter in a Coalition focused on real-world convergence and market credibility. The states operate mature programs that have explored linkage with international jurisdictions and position them as credible participants in discussions on practical interoperability and administrative feasibility. These states could translate emerging norms from the Open Coalition into the design of WCI infrastructure that other states may later adopt.

This approach does carry political and administrative tradeoffs, but there are strong political signs that the Open Coalition leading countries may be open to this approach. Subnational observers could create friction if they take positions conflicting with their national government's stated approach or trade posture. The Coalition could manage this by clarifying that observers are technical contributors without voting rights. The EU and Brazil are both signatories of the Coalition for High Ambition Multilevel Partnerships (CHAMP) for Climate Action which reflects a commitment to working with subnational governments, and China has expressed interest in engaging U.S. state governments, companies, and organizations on climate action.[51]

[50] Representative from Québec Ministry of the Environment and the Fight Against Climate Change, April 17, 2026.
[51] "China and Europe Form Carbon Alliance as US Bets on Fossil Fuels," Energy Connects, May 7, 2026, https://www.energyconnects.com/news/renewables/2026/may/china-and-europe-form-carbon-alliance-as-us-bets-on-fossil-fuels/."

A Pathway toward U.S. Subnational Accreditation in the EU CBAM

Use of default emission values is not the long-term goal of CBAM, but the reality is that many companies will need time to meet the reporting requirements for the effective pricing route. The EU Commission will likely solely scheme at the national level when determining default prices, but they could also consider an average national price incorporating subnational prices. Either approach penalizes states with carbon pricing.[52]

The Commission could allow default carbon prices and emissions values by state or province as an interim approach while companies adjust their reporting and tracking. There are over 40 subnational carbon pricing compliance schemes in operation around the world, and eligibility criteria could avoid a carve-out limited to the United States by applying across federal systems, for example, to jurisdictions that meet specified MRV conditions above a defined economic threshold. This approach could strengthen incentives for subnational jurisdictions to implement carbon pricing schemes.[53]

Beyond offering a more straightforward path to crediting subnational carbon prices, state-level default emissions values could strengthen incentives for jurisdictions with cleaner grids and less emissions-intensive industries, and better reflect geographic variation in embedded emissions within the United States. Upon learning about the Commission's current approach to default values, representatives from several states in RGGI expressed concern that national values would fail to reflect regional variation.

Ultimately, the Commission must decide if the trade-offs of establishing subnational default values and prices are worth the potential advantages. The default value approach would add an additional rulemaking process to the forthcoming implementing act on recognizing carbon prices paid in a third country. There is also a risk that a formal process for recognizing subnational systems could incentivize countries to ring-fence emissions-intensive, trade-exposed industries within specific jurisdictions.

At the same time, U.S. states could take significant steps to help prepare their industries to report actual emissions values. The Providing Reliable, Objective, Verifiable Emissions Intensity and Transparency (PROVE IT) Act prompted a national emissions intensity study, with an implicit goal of revising the EU's national default emissions values.[54] It does not, however, address the reporting gap at the facility level or the intensity variation across states. Without action, exporters will face EU CBAM default values carrying markups of 30% by 2028. To be CBAM-compatible, reporting must capture installation-level emissions and production quantities rather than emission totals alone. California and Washington's MRV systems provide a useful baseline, but they do not mirror EU methodology, and production data remains confidential.

States, including those without carbon prices, could establish greenhouse gas reporting processes that incentivize exporters to document actual emissions rather than face CBAM default values. An initiative led by California, Washington, and RGGI states could leverage existing subnational networks and reporting platforms to develop a standard that other states can adopt. CDP already runs voluntary emissions disclosure processes with state governments and companies and could adapt these into a standardized form for states to request facility-level data. A nonprofit, such as WCI or the U.S. Climate Alliance, or a private platform, such as Xpansiv, could host the shared reporting platform. States could offer tax incentives and MRV training for facilities to meet these reporting standards, and the companies would benefit from lower emissions charges. States could preempt potential federal pushback by developing joint analysis with major U.S. producers on the economic impact of reporting effective emissions. This approach also paves the way to expanded carbon pricing, as most national ETSs begin with a MRV phase requiring all companies to report emissions before pricing takes effect.

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[52] Nehrkorn and Elkerbout, *Accounting for the Carbon Price Paid in a Country of Origin Under Carbon Border Measures*.

[53] Nehrkorn and Elkerbout, *Accounting for the Carbon Price Paid in a Country of Origin Under Carbon Border Measures*.

[54] Congress.gov. "S.1863 - 118th Congress (2023-2024): PROVE IT Act of 2024." January 25, 2024. https://www.congress.gov/bill/118th-congress/senate-bill/1863.

Implications for a National Carbon Price

The U.S. federal government has not advanced meaningful strategies to prepare U.S. industries to compete in a global economy where carbon pricing is proliferating. The latest proposal, the Foreign Pollution Fee Act of 2025 (FPFA), aimed to tax covered imports based on their pollution intensity and explicitly rejected serving as a stepping stone, stating that nothing in the Act should be construed to authorize any carbon tax, fee, pricing, or other mechanism.[55]

The FPFA would generate revenue from importers without mitigating the EU CBAM costs U.S. exporters face. Beyond failing to capture the revenue U.S. industries will pay to the EU, the bill would not support the MRV infrastructure U.S. facilities need to report actual emissions and avoid punitive default values. The PFFA is neither projected to impact global emissions, as it does not incentivize domestic emissions reductions, nor raise substantial revenue, as countries will likely shift their trade in response.[56]

As a result, any future political coalition for a national carbon price would likely depend less on the PFPA itself and more on the continued expansion and alignment of subnational markets, combined with increasing external pressure for credible emissions accounting in traded goods. For U.S. states, taking proactive measures to lower their firms' CBAM compliance costs can serve a dual purpose of retaining revenue while laying the groundwork for future subnational and national carbon pricing.

The decisions made by U.S. state leaders could help create conditions under which a future national price becomes more politically viable by strengthening state-level policy capacity, standardizing emissions accounting, and building a broader constituency for carbon pricing. The last serious attempt to enact a national carbon price in 2009 relied heavily on negotiations among national environmental organizations, members of Congress, and supportive businesses. The effort lacked durable support within states and congressional districts. In her 2013 assessment, Harvard sociologist Theda Skocpol wrote that "members of the House and Senate will decide to support new laws and regulations to help nudge the economy in climate friendly directions only when they think that articulate leaders and well-organized voters back in their home states and districts really want them to act."[57]A growing constituency of states with data on the comparative "carbon advantage"[58] of their products, on top of the thirteen states with carbon pricing and four states considering carbon market proposals, could create the bottom-up support that was absent in 2009. Voters in states with carbon pricing will have experience with electricity price impacts reported as relatively modest and stable,[59] as well as household benefits or public investments funded by auction revenue. Companies would gain compliance experience with state-level MRV and, potentially, EU and UK CBAM reporting requirements.

Fragmented program design could undermine this pathway. U.S. environmental law often follows a cooperative federalism model where the federal government sets nationwide requirements and states implement them through their own plans. A federal carbon price will integrate more smoothly if state programs already share core MRV, accounting, and compliance architecture. If state programs diverge significantly, federal legislation may need to preempt local regulations, risking resistance from states and regulated firms. California, Washington, and Oregon are already moving towards linkage. If they use Open

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[55] Congress.gov. "Text - S.1325 - 119th Congress (2025-2026): Foreign Pollution Fee Act of 2025." April 8, 2025. https://www.congress.gov/bill/119th-congress/senate-bill/1325/text.

[56] Kimberly A. Clausing et al., Evaluating the Economic and Environmental Impacts of the Foreign Pollution Fee Act on Carbon-Intensive Sectors - (MIT Center for Energy and Environmental Policy Research, 2025), https://ceepr.mit.edu/workingpaper/evaluating-the-economic-and-environmental-impacts-of-the-foreign-pollution-fee-act-on-carbon-intensive-sectors/.

[57] Theda Skocpol, Naming the Problem: What It Will Take to Counter Extremism and Engage Americans in the Fight against Global Warming – Climate Access (Harvard University, 2013), https://climateaccess.org/resource/naming-problem-what-it-will-take-counter-extremism-and-engage-americans-fight-against/.

[58] "America's Carbon Advantage 2025," *Climate Leadership Council*, n.d., accessed September 25, 2026, https://clcouncil.org/publications/research/americas-carbon-advantage-2025/.

[59] Fowlie and Burtraw, *Assessing the Affordability Implications of California's GHG Cap and Trade Program*.

Coalition observer engagement to help define common interoperability norms, this could reinforce a de facto template for other states and make future federal harmonization less disruptive.

Conclusion

Subnational carbon pricing in the United States is still less than two decades old, and states have meaningful flexibility over its direction and scope. The first cap-and-trade systems emerged when a national carbon price still appeared politically plausible. Today, with no near-term pathway to a federal price and uncertainty around federal emissions reporting, states are building regulatory architecture largely on their own. External pressures exist, but no framework currently nudges state programs toward a common approach.

States may converge through shared infrastructure and common accounting practices, or proliferate divergent systems that firms must navigate separately. Standards may become harder to change as these programs mature and as more jurisdictions adopt shared market infrastructure. As noted by a senior official in the Washington State Department of Ecology, "If more North American jurisdictions are linking into the WCI market that's operating on a different set of standards than EU ETS, the center of gravity gets farther away and it gets harder to align over time."[60]

The process of multilevel governance offers a framework for establishing a resilient and coordinated effort to global carbon pricing absent a formal international agreement. This approach requires monitoring and information-sharing across all levels to avoid leakage, redundant policies, and fragmentation. Countries spearheading global carbon market coordination should view U.S. states with carbon pricing as core partners. To begin, U.S. governors can request to join the Open Coalition as observers to include their relevant experience in the process of shaping emerging interoperability norms without requiring immediate methodological convergence with the EU ETS. As it works to develop national default prices, the EU Commission can extend CBAM's impact by crediting subnational default values, which lowers the threshold for states and firms to document emissions and carbon costs consistently.

This study reflects a moment of uncertainty for CBAM implementation, the membership of the Open Coalition, and subnational carbon pricing more broadly. Further work could deepen the state-level exposure analysis for fertilizer and aluminum, while extending the analysis to sectors that may enter CBAM scope in later phases could provide a proactive business case for preparing industries for a future regulatory environment. Beyond the United States, it would be valuable to consider strategies of Latin American and Asian subnational governments. Brazil, as a federal country with the 4th largest exports to EU in CBAM covered industries and stalled attempts to implement a federal carbon price, would be an excellent case for analysis, as subnational carbon pricing initiatives may generate substantial regional revenue.

[60] Representative from the Washington State Department of Ecology, interview.

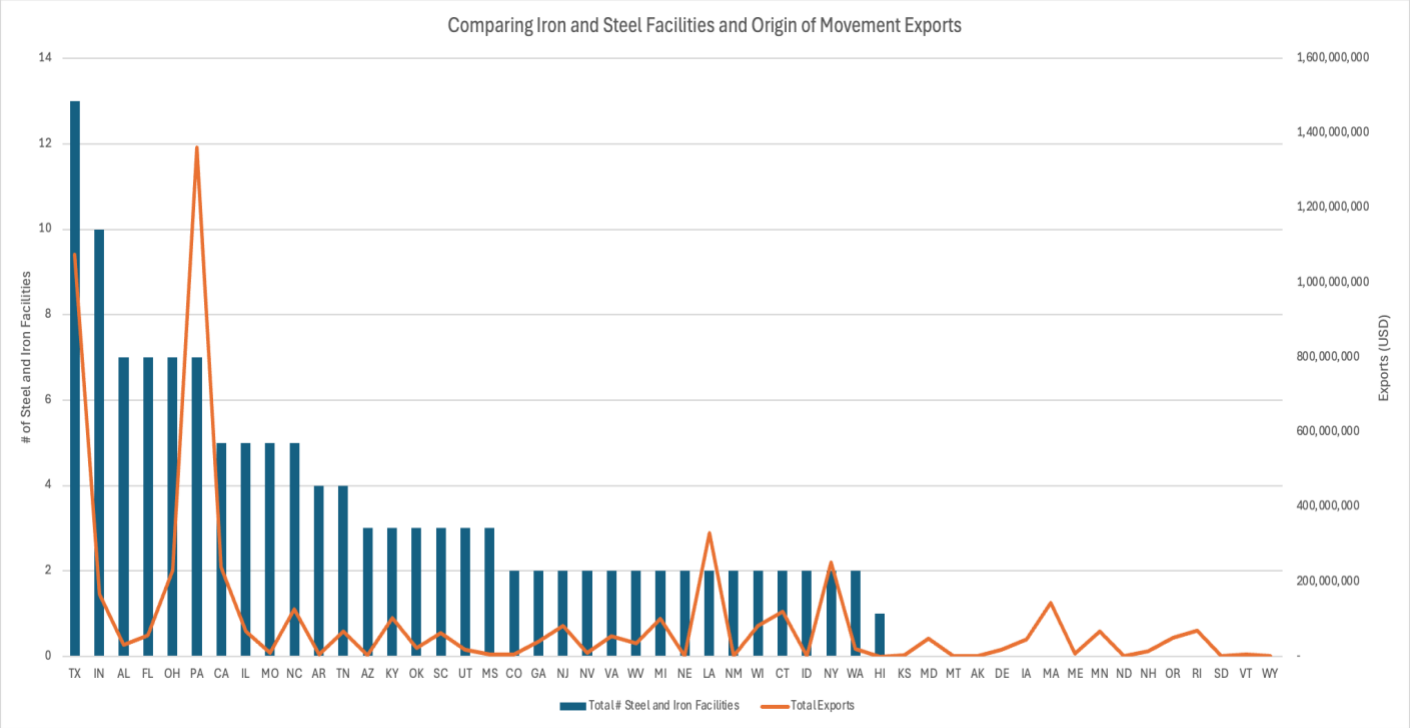
Appendix

A: Consultations*

Date	Affiliation
26-March	Bloomberg L.P.
26-March	Washington State Department of Ecology
27-March	California Air Resources Board (former)
2-April	Office of the Vermont State Treasurer
13-April	Maryland Department of the Environment
13-April	Rhode Island Office of Energy Resources
15-April	EU Directorate-General for Climate Action
16-April	Massachusetts Department of Energy Resources
16-April	The State Chamber of Oklahoma
16-April	Rubicon Carbon
17-April	Western Climate Initiative, Inc.
17-April	Québec Ministry of the Environment and the Fight Against Climate Change, Wildlife and Parks
24-April	Public Utility Commission of Texas (former)
11-May	State of Illinois
13-May	Office of New Jersey Assemblyman Balvir Singh
20 - May	Pennsylvania Governor's Office

**All consultations were conducted with senior officials at each listed entity with relevant expertise in carbon pricing policy and implementation. Individual names have been withheld throughout to preserve confidentiality; while some respondents consented to attribution, anonymization was applied uniformly across all consultations in the interest of consistency. Views expressed are those of the individuals consulted and do not necessarily reflect the official positions of their respective organizations.*

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