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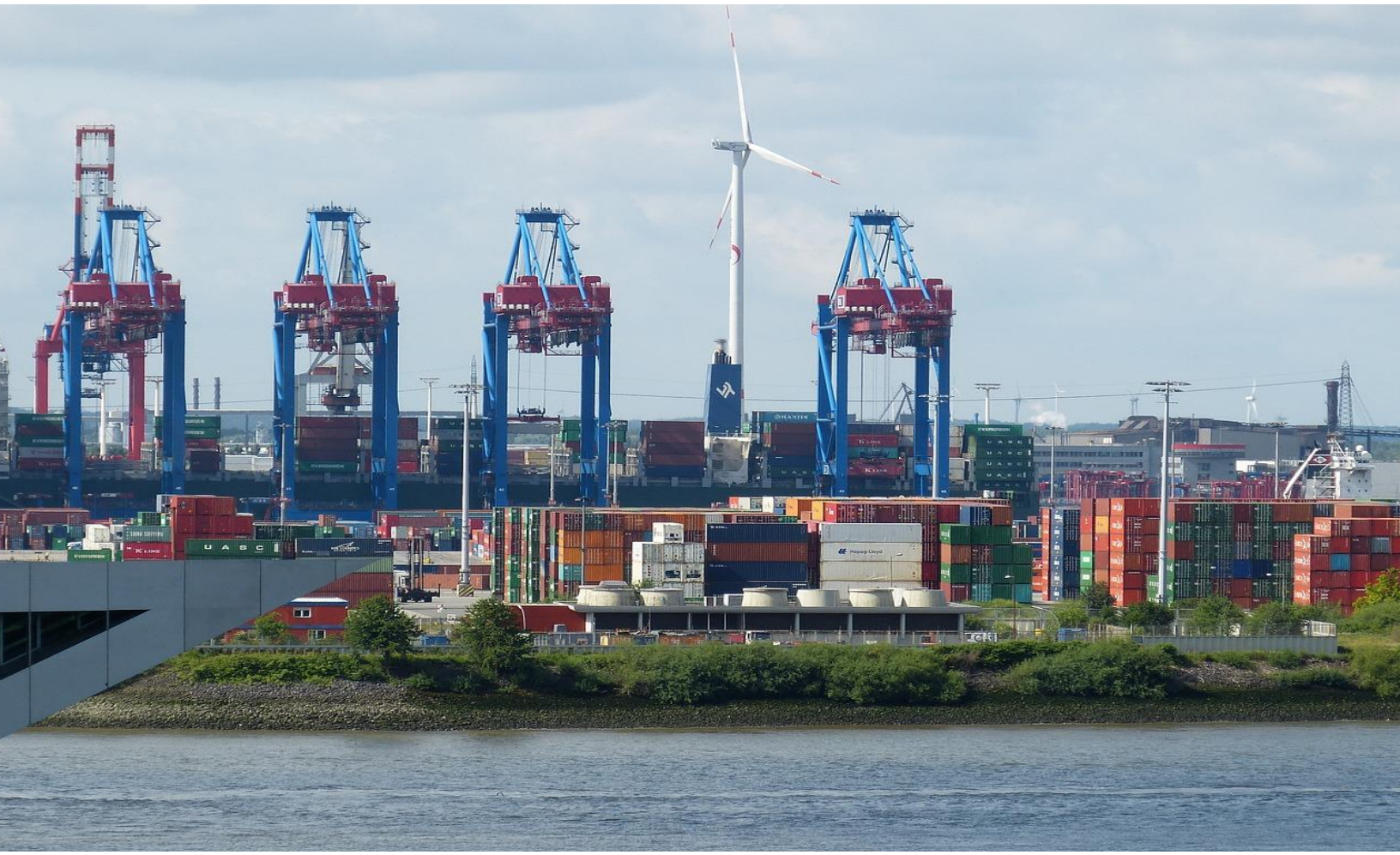
CBAM: Aligning the Design with Evolving Circumstances



Andrei Marcu Michael Mehling Aaron Cosbey

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ERCST Team Contributions to this Report from:

Pauline Nouallet, Bente De Graeve

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1 Introduction

Building on the successful track record and favorable reception of Phase I (2019-2020) and Phase II (2020-2021) of its project "Border Carbon Adjustments in the EU", the European Roundtable on Climate Change and Sustainable Transition (ERCST) has extended its analysis of the evolving European Union Carbon Border Adjustment Mechanism (CBAM) into a third Phase, providing decision makers and stakeholders with a better understanding of critical issues and options as this file advances through the legislative process. Phase III of the ERCST project is intended to provide in-depth analysis of issues that have either been left unsolved in or faced criticism in the initial legislative proposal.

The present report is the last in a series of four reports that together form the third phase of the" Carbon Border Adjustment in the EU" project. Each of the reports provides in-depth analysis and reflection around identified issues. The first report looked at the treatment of exports in the CBAM (Marcu et al., 2022a), the second report assessed the possibilities for, and implications of, including indirect (scope 2) emissions in the scope of the EU CBAM (Marcu et al., 2022b), and the third report considered the potential role of CBAM in proposals for international climate cooperation (Marcu et al., 2022c).

This paper, "CBAM: Aligning the design with evolving circumstances", is intended to provide stakeholders with an overview the fundamental economic, environmental and geopolitical changes that have occurred since the Commission's first proposal for a CBAM in 2021 and consider whether any of those changes compels reconsideration of the broad approach, or details of the effort to elaborate and implement a CBAM.

The remainder of this report is structured as follows:

The second section of the report looks at the context, revisiting the origins of the CBAM proposal, and surveying the most salient ways in which circumstances have evolved since that time.

The third section explores the ways in which those evolved circumstances might affect the deliberations on the final character of the CBAM regime and accompanying policies.

The fourth section looks to a future in which the CBAM has been implemented and asks, in light of the preceding analysis, what issues will most preoccupy EU lawmakers in its implementation.

The last section reflects on what all this means in the present, as EU lawmakers strive to finalize the details of the CBAM legislation while at the same time facing unprecedented and unanticipated economic, environmental, and geopolitical challenges.

2 An Evolving Context for the EU CBAM

In many ways, the CBAM is a product of evolving circumstances, yet its rationale and prospects also continue to be affected by the changing context in which the CBAM stands to be implemented. Some of the most relevant drivers of this evolving context, including inflationary pressures and the energy crisis, a changing geopolitical landscape, and new climate policy developments around the world, are outlined in the following subsections. First, however, the emergence of the current CBAM debate is itself traced back to substantially evolved circumstances over the last years.

2.1 CBAM as a Result of Evolving External Circumstances

After more than a decade of hesitant debate and mostly sceptical attitudes about BCAs in Brussels and many Member State capitals, the convergence of a number of factors highlighted the need and created space for the CBAM to be placed on the climate policy agenda as a central part of the EU's industrial decarbonization strategy under the European Green Deal. Mostly, these factors originated in the domestic climate policy debate within the EU, including support for rapidly growing climate policy ambition and fundamental reform to the central pillar of European climate policy, the EU ETS. In this paper we focus on the three important developments originated outside the EU, however, and each arguably was a contributing factor for the CBAM to become a viable policy option in the political guidelines of Ursula von der Leyen released in July 2019.

- International climate cooperation had finally found an open-ended and legally binding architecture with the Paris Agreement, which entered into force in 2016, alleviating earlier concerns that any discussion of unilateral trade restrictions in the context of climate policy would undermine the sensitive negotiation process under the United Nations Framework Convention on Climate Change (UNFCCC) and further widen the existing rift between developed and developing countries. With the Paris Agreement in place, however, countries weighing BCAs as a policy option no longer had to fear unravelling the sensitive balance of powers and interests that underlie the diplomatic process which ultimately resulted in the Paris Agreement. While negotiations continue on the operationalization of the Paris Agreement, its fundamental architecture is in place, and with it a transparency framework and ambition mechanism that apply to all Parties.

- After assuming the presidency of the United States, President Donald J. Trump proceeded to fulfil a campaign promise by wielding unilateral trade restrictions as an extension of his foreign policy, and eventually ordered a substantial increase in import tariffs on a number of basic commodities and consumer goods for purported reasons of national security. Affected trade partners were quick to respond with retaliatory measures, prompting an escalation of trade conflicts around the world and an erosion of trust and cooperation in international economic relations. Already frayed due to protracted gridlock, negotiations on further trade liberalization under the World Trade Organization (WTO) came to a complete standstill, whereas the dispute settlement mechanism of the WTO had already become dysfunctional due to U.S. refusal to appoint new members of the Appellate Body. Against this contentious backdrop, unilateral trade-related climate policies such as BCAs, once considered legally risky and too disruptive of international trade, no longer appeared so controversial an option, and indeed even more recent climate policy developments

– such as the Inflation Reduction Act (IRA) adopted in the United States earlier this year – contain provisions that indicate a greater willingness to test the boundaries of WTO free trade disciplines.

- Finally, just as the European Union was setting out on its most ambitious and transformative climate policy roadmap yet with the European Green Deal, finding its palpable expression in the dramatic rise of allowance prices under the EU Emissions Trading System (EU ETS) from less than €5 per tonne of carbon dioxide equivalent (CO_2e) in early 2017 to almost €30 by July 2019, political developments across the Atlantic underscored that the Paris Agreement by itself was not going to avert growing climate policy asymmetry. With its announcement that the U.S. would withdraw from the Paris Agreement, the Trump administration highlighted the continued vulnerability of concerted climate action, manifesting a rift between even closely aligned partners. As more recent climate policy developments in the U.S. (described later in this chapter) have also underscored, such asymmetries can take different shapes, and are not merely limited to the overall ambition of climate policy. In any case, these external developments added support to a fundamental change in the European approach to competitive distortions arising from climate policy asymmetries in the form of the CBAM.

Taken together, evolving external circumstances thus contributed to the viability of Ursula von der Leyen's declaration that the EU would look for new solutions to emissions leakage, creating the societal environment to credibly propose a BCA as part of her agenda for Europe and affording what had previously been a politically shunned policy choice enough support to progress to the initial stages of the legislative process.

2.2 Inflationary Pressures and Rising Energy Costs

Since 2019, when the European Green Deal was first proposed, the measures put in place to address COVID-19 have destabilised the global economy and disrupted complex supply chains for everything from fossil fuels to critical materials and components of the energy transition. These responses in turn included generous stimulus packages that were also used to expand financial support for decarbonization efforts, and injected record amounts of currency into the economy. As the situation stabilized and the global economy showed signs of a recovery, not unpredictably, the impact of the loose fiscal and monetary policies, coupled with supply chain disruptions, contributed to a dramatic rise in inflation, reaching levels not seen in many decades in both developed and developing economies.

In the energy sector, growing demand met with severe supply shortages, compounded by a number of factors which include the imbalance of energy assets coming off line without enough replacement capacities in place, high demand for gas with limited options to switch to other sources, and a slowdown in the exploration and development of new fossil fuel reserves, the result both of the challenging investment environment during the COVID-19 pandemic as well as growing pressure from decarbonization policies and activist stakeholders. Taken together, these forces have resulted in rapidly surging energy costs, setting the scene for an unprecedented energy crisis across Europe.

As prices for fossil fuels, and by extension also electricity prices, have repeatedly breached new records, it has become clear that the energy transition has not yet achieved sufficient maturity to claim independence from conventional energy sources. So far, policy makers have largely withstood demands

to weaken the ambition or revisit the implementation timeline of the European Green Deal as a way to mitigate high energy costs, although some short-term responses – such as subsidised gas and electricity prices, market intervention through price controls and emergency activation of already shuttered thermal generating assets – will invariably lead to a temporary increase in energy sector emissions.

If anything, the energy crisis has further accelerated energy conservation and renewable energy deployment efforts through the emergency measures set out in the RePower EU package, although inertia in the energy system and the inability to close supply shortfalls in the near future mean high energy prices are likely to persist for several years. With policy makers already sensitive to the economic and distributional impacts of inflation, any policies such as the CBAM – whose cost increases for covered basic materials will be passed through to European producers and, from there, to European consumers – are likely to be met with heightened scrutiny.

In the short run, increased energy sector emissions will also affect the balance of demand and supply under the EU ETS. European manufacturers thus face a storm of ill winds—record energy prices; higher emissions intensity of electricity, meaning higher carbon costs passed through in electricity rates; a dramatic surge in the price of EU ETS allowances; and record prices for gas as a feedstock and source of industrial heat—which is eroding the competitiveness and business case of important sectors of the European economy (Hollinger et al., 2022). At a time of economic turmoil, when reshoring of critical industries and the supply chains they form part of has acquired renewed strategic importance, incessant reports of production curtailment and plant closures risk undermining public acceptance of the European Green Deal and its ambitious decarbonization trajectory. For the CBAM, which will gradually phase out free allocation of allowances and expose many sectors to the full carbon cost burden of the EU ETS, while offering no leakage protection for export industries (Marcu et al., 2022a) and no, or potentially imperfect adjustment of indirect carbon costs (Marcu et al., 2022b), all this elevates the stakes and translates into new political vulnerability.

2.3 New Geopolitical Realities

While the surge in energy costs – spurred by recovering demand from the global pandemic and constrained supplies – already was in broad evidence by the end of 2021, a momentous development in early 2022 exacerbated the supply shortfall and accentuated the crisis, further altering the context in which the European Green Deal is being operationalised. The war in Ukraine has amplified the disruption in energy markets, further elevating preoccupation with energy affordability, but it also fundamentally altered the geopolitical equilibrium that had prevailed since the end of the Cold War. The largest territorial conflict on the European continent in nearly a century has propelled strategic security concerns to the forefront of political priorities, rivalling and – at least in many parts of Europe – surpassing climate change as the most pressing threat facing Europe in contemporary affairs.

For Europe, the blunt reminder of its strategic vulnerability and military dependence on partners such as the U.S. has already recalibrated political priorities, and is likely to translate into greater hesitation to advance measures which might antagonise its allies. Already, reactions from the U.S. have clearly signalled concern about the CBAM, which – as currently proposed – would fail to recognise U.S. climate policy efforts in the same way it would credit an explicit carbon price paid in those countries where the political economy of climate action has allowed enactment of a carbon tax or ETS. European willingness to allow

security concerns take precedence over climate policy objectives may become even more pronounced if a change in Congressional majorities in 2023 or a new administration in 2025 result in a more isolationist or transactional U.S. foreign policy.

2.4 Growing Asymmetries in Domestic Climate Policy

Another development that would have been hard to predict only a year ago was the adoption, after repeated setbacks and protracted negotiations, of legislation by the U.S. Congress that advances key elements of President Joe Biden's Build Back Better Plan. Included in the already mentioned Inflation Reduction Act of 2022 (IRA),[1] the U.S. legislature has set out what is being described as the largest investment program for clean technology development and deployment in history. While the Congressional Budget Office (CBO) has estimated the size of this investment program – which takes the form of a wide range of tax incentives, grants and concessionary loans – at around US$ 391 billion over the next decade,[2] other estimates suggest that the uncapped nature of many tax credits and the ability to leverage private sector investment will result in significant multiplier effects that could end up mobilising up to US$ 1.7 trillion in financing.[3]

Coupled with the previously adopted Infrastructure and Jobs Act[4] and its considerable investments in public transportation, electric vehicle charging infrastructure and electric transmission grids, the United States is poised to become the most attractive market for clean energy technologies around the world. Additional policy initiatives of the Biden administration, such as the "Buy Clean America" public procurement platform that will leverage the annual U.S. federal government purchasing power of US$ 650 billion by conditioning the award of tendered projects and materials on their climate impact, will further accelerate the migration of low-carbon technology development and deployment to the United States from other regions, including the European Union.

Already, industries located in Europe, where climate policy continues to prioritize carbon constraints such as carbon pricing, are citing concerns about a "green leakage" scenario in which vastly more generous policy conditions in the U.S. lower operational and capital costs for low-carbon technologies, attracting relevant investment and manufacturing capacities away from Europe.

Europe's industrial decarbonization strategy has remained strongly committed to the policy recommendations of economists, who have traditionally endorsed carbon pricing as the most cost-effective solution to the main market failure underlying climate change, the negative externality of unpriced carbon emissions. In a world in which the expansion of carbon pricing across other regions

[1] 117th Congress (2021-2022), H.R. 5376, Inflation Reduction Act of 2022, Pub.L. 117–169, 16 August 2022, https://www.congress.gov/bill/117th-congress/house-bill/5376/text.
[2] Congressional Budget Office, *Estimated Budgetary Effects of H.R. 5376, the Inflation Reduction Act of 2022, as Amended in the Nature of a Substitute (ERN22335)*, 5 August 2022, https://www.cbo.gov/system/files/2022-08/hr5376_IR_Act_8-3-22.pdf.
[3] American Public Power Association, *Ultimate Public Climate Spending Spurred by Inflation Reduction Act Could be Over $800 Billion: Credit Suisse*, 19 October 2022, https://www.publicpower.org/periodical/article/ultimate-public-climate-spending-spurred-inflation-reduction-act-could-be-over-800-billion-credit.
[4] 117th Congress (2021-2022), H.R. 3684, INVEST in America Act, Pub.L. 117–58, 15 November 2021, https://www.govinfo.gov/content/pkg/PLAW-117publ58/pdf/PLAW-117publ58.pdf.

remains woefully inadequate, however, and price convergence through climate cooperation – for instance through linking of emissions trading systems – remains at best a localized phenomenon (Marcu et al., 2022c), the pursuit of a fundamentally different policy approach by a trade partner as vital and influential as the United States is likely to raise questions about the continued expedience of Europe's approach: whereas European emitters face a private cost for emissions under first-best policies that maximize benefits to the public, U.S. emitters are able to secure private benefits for decarbonization funded in the form of a public cost to taxpayers. In simplified terms, one way to deal with policy asymmetry is to grant cost relief or support to domestic producers—as the EU has done with free allocation and the U.S. is doing under the IRA—and the other is to impose charges on foreign products, as is being proposed in the CBAM.

Two elements need to be highlighted, and will be reiterated through this paper: CBAM will not by itself address the risk of carbon leakage, and the fundamental difference in approach may strain climate diplomacy across the Atlantic.

In any event, if the CBAM was itself the product of evolving circumstances, it stands to reason that it will not remain unaffected by the dramatically changed economic and geopolitical context since 2019. The next section focuses on some of the ways in which the CBAM – as currently proposed – could face new political and diplomatic challenges or be undermined in its effectiveness as a means of levelling the climate policy playing field.

3 Potential Consequences on the CBAM

3.1 Can We Afford to Ignore Exports?

How to treat exports in the CBAM is one of the most difficult questions facing EU lawmakers as they finalize the contours of the mechanism (Marcu et al., 2022). From a legal perspective, a diplomatic perspective, and the perspective of administrative ease, it would be more convenient to focus the CBAM exclusively on imports.

But, in terms of leakage prevention, such a regime might fall short. A meta-analysis of 25 *ex ante* estimates of leakage concluded that export rebates could significantly reduce leakage (Branger & Quirion, 2014). The leakage in question would come from loss of export markets to foreign producers; the Commission's impact assessment of CBAM without export coverage projected a 6.8% loss of export markets (European Commission, 2021), and this does not cover the full extent of impacts that would arise in domestic markets a well.

In the EU, the candidate sectors for CBAM coverage have significant export shares: in 2018, iron & steel 22%, aluminum 18%, fertilizers 14% and cement 6%. The loss of those kinds of markets as free allowances were rolled back could risk significant political backlash.

All of this is well-known, and was known when the Commission proposed no coverage of exports under the CBAM, effectively postponing a solution given the long period (essentially ten years) for the full ramping up of carbon costs. And, given the diplomatic, administrative and legal challenges of covering exports, that postponement was seen as pragmatic at the time.

But European industry now finds itself subject to a host of unforeseen negative forces, as described above. Some of the cost pressures that the Commission foresaw coming years hence have materialized at present, in the form of high EU allowance prices, and ETS-exacerbated inflation of electricity costs due to the short-term need to resort to increased fossil fuel-fired electricity generation.

Combined with spiking prices of gas and oil as fuel and feedstock, supply chain disruptions, the heavy subsidization of decarbonization in competing U.S. facilities under the IRA, the pressure from EUA prices both directly and through electricity prices argue for measures to adequately address European industry in crisis mode.

One such measure would be extending coverage of the CBAM to cover exports. There have been a number of proposals for how this might be done in ways that have a chance of passing WTO rules on subsidies (Marcu et al., 2022), as well as arguments that downplay the need to pursue full certainty of WTO legality in any such measures. While exports are not equally important in all sectors and all enterprises, the lack of measures to address exports will only add a new level of stress that will test the viability of EU industry. There cannot be a prosperous Europe without a strong industrial sector.

3.2 Should the CBAM Credit Non-price-based Climate Policies?

The U.S. IRA, surveyed in the previous section, is just one example of powerful climate policy in a non-EU state that is not based on pricing carbon. A variety of approaches is to be expected, in line with differing national circumstances. In fact, the Paris Agreement is founded on the premise that countries will express ambition in their own manner, through their *nationally determined* contributions.

But, while the IRA is no different in principle than other non-price-based climate ambition, it stands out in two respects. First, at $391 billion it amounts to the world's biggest ever government budget allocation to climate- and clean energy-related action. And second, it amounts to serious climate ambition from the world's biggest economy, and second-biggest emitter. So from a *realpolitik* perspective, the IRA much more poignantly forces the question whether non-price-based policies should receive some sort of credit under the EU's CBAM. The geopolitical shift that drove the U.S. and the EU closer together in the wake of the Russian invasion of Ukraine, and the EU's vulnerability to energy insecurity, add further pragmatic arguments in favour of international cooperation that can accommodate the different approaches of its key allies.

There is also an argument from the perspective of the Paris Agreement, as suggested above. In that agreement, all Parties are free to choose whatever means is most appropriate for addressing climate change, without judgment from other parties as to the adequacy or propriety of their policy mix. While some may choose to price carbon in industrial sectors, others might choose to reduce deforestation, and others to subsidize the rollout of clean technologies. The Paris Agreement only requires that these different vectors of ambition be regularly reported, and that they be strengthened over time. So, it has been argued, an approach to climate mitigation that involves coercing other countries to adopt only one type of approach, as evidenced by strictly price-based crediting, runs counter to the spirit of the Paris Agreement.

There is some validity to these arguments. But there are at the same time a number of counter-arguments. Five of those are summarized below.

1. **Non-price-based policies are de facto reflected, when they occur, *if they are effective*.** The EU's CBAM demands (in the first instance) actual data on embodied emissions in industrial products. If non-price-based policies in the country of export are effective in reducing greenhouse gas (GHG) intensity in covered sectors, then the CBAM charge is accordingly lower. In the extreme, a fully carbon-neutral product would pay zero. Conversely, if products with the same carbon intensity are subject to carbon pricing in one jurisdiction and an equally costly performance standard in another, both benefit from the lowered embodied emissions, yet only the former will additionally have its policy-related carbon costs credited. This asymmetry also has a temporal dimension: if there is a cost as a result of carbon pricing, that is immediately credited, whereas a cost as a result of non-price-based policies will only be reflected once the actual emissions reduction has occurred. In practice, this timing difference could be a significant factor.
2. **Crediting non-price-based policies would be methodologically difficult.** One challenge would be in deciding which policies should be considered climate policies, for the purpose of conversion to some cost figure. Are air pollution regulations climate policies? Are strong environmental impact assessment policies climate policies? Does the country of export get to decide this question, in which case there is incentive to cast the net too broadly, or is it the prerogative of the importing country, in which case the judgement could be seen as an intrusion on sovereignty? Once the policies are chosen, the challenges would continue, as the impacts of a wide variety of policies would have to be assessed on average, though they would differ for each covered firm. While such calculations can be done, the practice of trade remedy law should give us pause in mandating national officials to perform those sorts of estimates; there could be political pressure to produce numbers that granted low credit, protecting domestic firms. There is also the question of whether only costly policies would be assessed for adjustment. If a foreign country grants climate-related subsidies to the covered sectors, should that not constitute the basis for an *upward* adjustment (debit), if climate-related costs are the basis for a downward adjustment (credit)? Finally, all these challenges would need to be regularly revisited as climate policies in non-EU countries evolve.
3. **If the EU credited foreign producers for non-price-based policies, it would have to also debit them for the same policies faced by EU producers.** Suppose that a foreign country and the EU both adopted a climate regulation (non-price-based) that imposed an effective €10/tonne cost on nitrate fertilizers. Just crediting the foreign producer would amount to granting them a €10/tonne cost advantage over EU producers. To be fair, if foreign firms are credited for foreign non-price-based policies, they should also be debited for EU non-price-based policies. That is, the CBAM would have to consist of not only a levy based on the EU ETS costs imposed on EU firms, but also a levy based on the non-price-based costs imposed on EU firms. There are two problems with such a policy. First, it brings about all the methodological challenges described above. Second, charging firms at the border for the non-price-based regulatory costs faced by EU firms is highly likely to be seen as WTO-illegal, with the risk that it would not be considered justifiable under the GATT's environmental exceptions (Article XX).
4. **Effect of crediting only price-based climate policies.** The Paris Agreement, like the Kyoto Protocol before it, is silent on exactly how countries should achieve their specified targets, rightly leaving those decisions to sovereign choice, depending on national circumstances. The EU's carbon pricing approach is no more valid in the eyes of the Paris Agreement than is the U.S. IRA's industrial policy approach; ultimately the important matter is achieving the targets. Some argue

that the CBAM is coercive, forcing other countries to adopt carbon pricing under threat of penalty, or of the withdrawal of existing benefits, therefore violating the Paris Agreement's tacit accord that the targets can be legitimately achieved in many different ways. But, others argue, the CBAM refusing to credit non-price-based policies is not punitive or coercive in that way – it is just internally consistent for an instrument that is designed to level the playing field in the face of an explicit domestic carbon price. This is not a straightforward matter, and even though it can be argued that the CBAM does not oblige foreign producers to do anything, and there are other alternatives to trade with the EU, such a view would be out of line with the reality of world trade and the market power of the EU, as well as the commitments that Parties have made to UNFCCC, the Paris Agreement, and WTO.

Ultimately, the current circumstances create much more pressure on the EU to credit for non-price-based climate policies in the CBAM, and it is probably not sufficient to simply say that different approaches to addressing climate change will not be accommodated in any way. However, a resolution to this question is not yet obvious. It involves challenges at the technical, legal, and political levels that require much more effort going forward.

3.3 Is There a New Role for Subsidies and Support?

The U.S. IRA constitutes an unprecedented effort at green industrial policy, with at least three impacts on the decarbonization of European industry. First, it will create competition in the supply of green materials by subsidizing the investments needed for their production,[5] and creating lead markets for them through government procurement (The White House, 2021), both of which ultimately help to lower costs of production. Second, by derisking investment it will draw heavily on the available pool of climate- and clean energy-related finance, to the detriment of non-U.S. industry in need of capital. Third, in advancing research, development and deployment of new low-carbon technologies it will lower barriers for adoption by others, including European firms, for example by pioneering new techniques that can be copied or licensed, by demonstrating an economic case for new technologies and processes, and via intra-firm technology transfer in multinationals that operate in the U.S. and other countries.

While the third dynamic is positive, the first two give rise to the question: does the EU need to respond? Is it possible to maintain a policy based on saddling EU producers with costs under the ETS and CBAM when one of their primary competitor states is instead lavishing its producers with subsidies?

The answer is that this is a false dichotomy. The EU is not being forced to choose between carbon pricing or subsidizing industrial decarbonization; it should in fact be doing both. To some extent, it already is. As examples, the ETS Innovation Fund is budgeted at €38 billion over ten years,[6] and Horizon Europe's second pillar includes tens of billions of Euros for enhancing industrial competitiveness broadly defined. But those funds are thin in comparison to the scale of US funding. Moreover, they are allocated in such a way as to be less directly helpful to decarbonizing industry. The Innovation Fund can only fund a maximum of 60%

[5] The Advanced Industrial Facilities Deployment Program offers loans and grants for industrial decarbonization, with a budget of USD 5.8 billion. In addition, there are generous tax credits aimed at greening the grid, producing green hydrogen, and engaging in carbon capture, use, and storage.
[6] Assuming a carbon price of €75/ton, which is conservative.

of the gap against a viable business case, whereas the IRA is provided in grants, loans and tax credits not limited in that way. And Horizon Europe is mostly focused on research, development and scale-up, with some funding being of immediate practical use for mature sectors/technologies, but by no means all. The scale and focus of the U.S. IRA should trigger increased and strategically targeted commitments to supporting the European industrial transition.

While the kind of support discussed here is not part of the CBAM per se, it is a necessary flanking policy effort – one that helps ensure that the ETS and the CBAM can fruitfully contribute to the task of green industrial transformation in Europe.

4 Implementing CBAM in a World with Diverse Decarbonization Approaches

While the issues addressed in this chapter were already mentioned in previous chapters of this report, it is important that they be highlighted, as the CBAM has emerged and been debated mainly as an EU policy issue in the EU context. Sure, WTO compatibility has been a fundamental element invoked in the design of the CBAM, but the global framework in which it is being developed has changed and other elements besides WTO need to be highlighted. It is not the intention of this chapter to provide solutions, but rather to identify issues that will, without doubt, preoccupy EU policy makers after the CBAM Regulation becomes EU law, and will need to be examined and addressed in the future.

4.1 Is Heterogeneity Here to Stay?

CBAM is not a self-standing instrument; it is challenging to justify introducing it by itself. There would be no need to introduce it, except as a "band-aid" to rectify competitive pressure created by asymmetrical climate change policies, and the risk of carbon leakage that they bring with them. The EU political decision to speed up decarbonization, which demanded lowering the cap for the EU ETS, introducing the Market Stability Reserve (MSR) and other ETS-related measures which led to rapidly increasing EUA prices, is the main reason for the introduction of the CBAM. Like a Swiss army knife, the CBAM has also found support in other EU stakeholders who had other agendas, such as doing away with free allocation under the EU ETS, or forcing other jurisdictions to consider introducing carbon pricing mechanisms.

The CBAM is therefore part of the decarbonization approach by the EU, which, since it includes carbon pricing, also demands a CBAM if EU industry is to survive and thrive. That is, if the EU wants to remain an industrial society which is in our view a pre-condition for a prosperous and resilient EU.

Currently the impact of EUA prices has *almost* taken a back seat in terms of priority, given the current energy crisis triggered by the response to the war in Ukraine, which calls into question the viability and survival of significant elements of EU industry. But this will not be the case forever. While the impact of an 80-100 Euros EUA price pales in comparison to the impact of current EU energy prices, by itself it would also have a serious impact and will make a comeback to the center of EU policy debate.

The EU has referred to carbon pricing as the cornerstone of EU climate policy – as underscored by the dramatic expansion of carbon pricing to new sectors with the so-called "ETS 2" - and, in the past, has

referred to the EU ETS as a docking-station for an emerging global carbon market. While many countries have taken that approach (ROK, China, NZ, CH, UK, etc.) and almost 30% of global emissions are covered by a carbon pricing mechanism, not many have implemented as demanding or as broad carbon pricing (World Bank, n.d.). Others are considering the introduction of a carbon pricing mechanism (e.g. Turkey). With that, a national CBAM is also being considered as part of the policy package these countries are introducing.

What is however emerging, are other different approaches to decarbonization. While the EU has chosen pricing through EU ETS and the "protection" of a CBAM, the U.S. has stayed away from a federal carbon pricing approach and has moved on the path of massive financial incentives, currently embodied in the IRA. Given the current volatile and polarized political environment it is difficult to predict the evolution of U.S. climate policy. But the consensus seems to be that a federal carbon pricing approach is not imminent.

At the same time, the U.S. and the EU have committed to reaching agreement under the "EU-U.S. Global Arrangement on Steel and Aluminum" which – while not explicitly mentioning BCAs – refers to "restrict[ing] market access for non-participants that do not meet standards for low-carbon intensity" (US White House, 2021).

The U.S. approach is a case in point and is in no way meant to indicate a belief that only two approaches will be used globally. Others are also exploring other approaches, including for example the use of low-carbon product standards in sectors such as steel and cement (UNIDO, 2022) – a tool that some have speculated may be the final result of the US-EU joint effort on steel and aluminum.

The question that this narrative raises is whether these different approaches, one of providing negative "incentives" through carbon prices coupled with a CBAM protection, and the other through massive financial incentives, can co-exist and allow for cooperation that will avoid trade frictions to take place. It is certainly too early to tell, and neither of these approaches is unidimensional. As noted above, the EU approach also includes some limited financial support such as the ETS Innovation Fund, but the scale and objective of the U.S. and EU interventions are different.

4.2 CBAM and the Paris Agreement

Measures that some would call "unilateral trade measures", such as the EU CBAM, are not new to the UNFCCC process, which is widely accepted as the arena where global climate change policy ought to be agreed. In this context, it must be recalled that this issue is addressed in Art. 3.5 of the UNFCCC

"Measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade."

Art. 4.15 of the Paris Agreement also states that "*Parties shall take into consideration in the implementation of this Agreement the concerns of Parties with economies most affected by the impacts of response measures, particularly developing country Parties*."

This also needs to be seen in the general context of the Paris Agreement whose fundamental building blocks are the National Determined Contributions (NDC), through which each Party to the Agreement agrees to accept that every Party will contribute to the objectives of the Paris Agreement to the extent it is able to and in the manner it chooses – that is, in a nationally determined way.

Before the political commitment made by incoming European Commission President Ursula von der Leyen in 2019, BCAs did not have any significant support among EU institutions (which is an understatement). There was no great interest to discuss climate change as a significant issue under the WTO, while in the UNFCCC process, developed countries adamantly opposed (and continue to oppose) discussion of trade under Article 4.15 of the Paris Agreement or any other venue.

Under both the WTO and the UNFCCC, there is currently no clear CBAM "target" to latch on and attack, as there is no finalized CBAM legislation; that is bound to change when the proposal becomes law, however. In both the UNFCCC and WTO contexts, the CBAM has already been raised. In the UNFCCC it was raised under Art. 4.15 of the Paris Agreement and signaled as a concern and caution in several negotiating sessions over the last two years, but not pressed, as it seemed that the mandate that negotiators had did not include making CBAM a major issue.

How Parties may react in future sessions when the CBAM law is on the books is difficult to forecast, but earlier declarations and statements, such as the BASIC Ministerial Statement adopted in New Delhi in 2021 (BASIC Ministers, 2021), suggest reactions will not be favorable, and challenges – including litigation – are a distinct possibility. This will therefore need to be closely monitored, as it could have a significant disruptive effect if pressed.

As noted above, some Parties and stakeholders see the CBAM and its direct consequences, as challenging the spirit and maybe the letter of the Paris Agreement. A CBAM will likely be seen as essentially penalizing countries that have an NDC that is not as ambitious as the EU's and does not take the form of an explicit carbon pricing mechanism. Some Parties will see that as coercion – imposing a top-down price of carbon on any EU trading partners, with resulting penalties if they differ in approach or level.

Given the upcoming stock takes under the Paris Agreement in 2023 and 2028, and the reviews of several programs under the Paris Agreement, the articulation between the CBAM, the UNFCCC and Paris Agreement, and the WTO is something that demands close monitoring.

4.3 What the Future Holds

If the past is any indication of the future, then chances are good that it will remain difficult to predict the future. Prior to its introduction, few would have bet on the CBAM as becoming the instrument of choice to address emissions leakage. In EU policy circles, not long ago a BCA was seen as incompatible with WTO rules and therefore as a non-starter.

Based on the cursory discussion above, it is possible, maybe even probable, that we will see WTO challenges and challenges under the UNFCCC that will need to be addressed so as not to interfere with the rest of the climate change negotiations, as well as developments that are bilateral or sectoral.

Looking back to recent history, one parallel that can be found is the unsuccessful EU attempt to include international aviation under the EU ETS. That led to the "Stop the clock" decision and eventually an International Civil Aviation Organization (ICAO) scheme – the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) – that is multilateral, but not as strong as the EU would have wanted.

One can examine this precedent from several angles to see if there are similarities with the CBAM. A first question needs to be whether the environment under the which the discussions have taken place are

similar; the answer to that question is negative, as there has clearly been a change in societal attitudes towards climate change. Awareness and recognition of the problem, while still not universal, are certainly not comparable to when international aviation was proposed for inclusion in the EU ETS. The same holds true for how the urgency to act is accepted in society at large.

Are the measures similar in nature? While some may see it more nuanced, the answer to this question needs to be seen as positive. Both involve EU legislation applied to activities that, while originating outside EU sovereign territory, reach inside the EU for their delivery. No two situations will be identical, but it is hard to ignore the strong similarities.

Was there a happy ending? As Chinese premier Zhou Enlai replied in 1972 when asked about the impact of the French Revolution: "Too early to say," he replied. It seems to have moved the debate and shifted a solution into the multilateral arena, which should be the appropriate forum. At the same time, the stringency is not yet there in ICAO's CORSIA.

The CBAM as a unilateral instrument will always give rise to difficulties. If countries manage to move the CBAM debate forward in a cooperative mode that strengthens collaboration on decarbonization, then there is certainly hope.

5 Takeaways

Policy asymmetries continue to be an undeniable reality in climate policy around the world. With that, the need for a policy solution to address the undesirable spillover effects of such asymmetries – notably emissions leakage – remains in place, which at first glance strengthens the case for the EU CBAM.

Whereas in the past asymmetries were largely framed as differences in the level of climate policy ambition, the recent adoption of the IRA by the U.S. has shown that fundamental differences in the regulatory approach of highly ambitious climate policies can also threaten competitive distortions and potential spillover effects. Climate policy asymmetry is thus also a matter of instrument choice – a choice in which the EU has doubled down in its reliance on carbon pricing, not only for domestic emitters, but also in the policy efforts of trade partners it favors under the CBAM by recognizing and crediting explicit carbon pricing only. While carbon pricing continues its gradual expansion into new sectors and geographies, it would be unrealistic and politically naïve to expect that all major emitters – including the U.S. – are willing and able to adopt a carbon price, let alone at a price level comparable to that in the EU.

This emphasis on carbon pricing, which echoes earlier aspirations of the European Commission to progress towards a global carbon market through market linking and integration, is noteworthy in its unflinching embrace of economic theory and does not lack a certain irony, given that market-based approaches were first developed in the U.S. and initially resisted by the EU. Still, in a context in which European industries currently face record energy and carbon costs and rising interest rates, the question inevitably arises whether the CBAM as currently proposed will be sufficient to avoid large-scale deindustrialization of the EU – at a time when reshoring of strategically vital production capabilities and diversification of supply chains has acquired a new importance due to the Ukraine conflict.

The U.S. IRA and free allocation under the EU ETS have the role of shielding and supporting industrial producers in the process of decarbonization, and do so effectively for both domestically consumed and exported goods. However, as earlier ERCST reports have underscored, in the long run free allocation is not a viable solution for emissions leakage and climate policy asymmetries. As free allocation in the EU is phased out and replaced with a largely untested policy tool—one that will likely only level the playing field for domestically consumed goods—European producers may require additional tools in the EU climate policy portfolio in order to survive as they compete with producers in jurisdictions such as the U.S. that have chosen to rely largely or exclusively on enabling and supportive decarbonization policies.

What is more, now that the largest economy in the world has opted to base its climate policy on instruments other than carbon pricing, the limitation of policy crediting under the CBAM to explicit carbon pricing further underscores how CBAM risks being perceived as an intervention in the domestic process of climate policy instrument choice in trade partner jurisdictions, an intervention that is likely to be challenged as contravening the letter and the spirit of the Paris Agreement.

At a time when the transatlantic alliance has gained new strategic importance, such a limitation may strain diplomatic ties between Brussels and Washington DC. Yet, as this report has argued, there is no easy solution to accommodate alternative policy preferences under a leakage safeguard that is as premised on carbon pricing as the CBAM.

As highlighted earlier in this report, changes in external circumstances were crucial in creating the political space to credibly advance the CBAM as an integral part of European climate policy. Now, as the CBAM proceeds through the political trialogue process, external forces once again have an important bearing on the direction and timeline of the CBAM. It remains as necessary as ever if the EU stays its ambitious course on the European Green Deal, yet it may not prove sufficient in- light of the recent and dramatic change of circumstances in which it stands to be implemented.

Two strategies need to be pursued to reflect the changing context, one over the near term, and the other in the longer term. The issues of export-related leakage and the competitive distortions introduced by the heavy reliance on fiscal incentives and other support policies in the U.S. require urgent attention and the political will for bold and immediate action.

We have outlined a possible solution for the inclusion of exports in the scope of the CBAM in an earlier paper (Marcu et al., 2022a), and believe that the changed international context only lends additional urgency to such an approach. As regards the asymmetries created not through different levels of climate policy ambition, but divergent choices of climate policy instrument – imposing a financial burden in the form of pricing vs. affording a financial support in the form of financial support – the EU should accelerate its mobilization of existing support for industrial decarbonization, and provide additional investment vehicles to foster an enabling market and policy environment for low-carbon technologies.

Over the longer term, it probably needs to be accepted that the CBAM remains an imperfect tool to address persistent climate policy heterogeneity in an imperfect world. There will need to be convergence between approaches in different jurisdictions. What is needed is a cooperative and not an adversarial approach. The recent launch of a “U.S.-EU Task Force on the Inflation Reduction Act” (European Commission, 2022) not only reflects the aforementioned tensions in the choice of climate policy

approaches across the Atlantic, but also signals a willingness to defuse such conflicts through engagement and cooperation.

On issues such as policy crediting and the inclusion of indirect emissions, further passage of time will ideally allow trade partners to catch up to the EU in terms of climate policy ambition, and also see further expansion of carbon pricing, gradually reducing both the need for and the impacts of the CBAM. Such convergence of climate policy ambition around the globe will be necessary sooner rather than later if the temperature stabilization goals of the Paris Agreement are to be met.

If the Paris Agreement's ambition mechanism as well as multilateral and bilateral capacity building and technology transfer efforts fail to spur such convergence, however, or important strategic partners such as the U.S. continue to pursue vastly different approaches to domestic climate policy, the EU should be prepared to make more fundamental changes to the design and operational architecture of the CBAM. Again, time will afford more opportunities to engage with affected trade partners, collect improved emissions data, and develop and test robust methodologies for complex issues such as crediting of non-price-based climate policies.

Such a two-pronged approach, combining immediate responses to the most urgent pressures while continuing to improve the design of the CBAM and embedding it in a broader suite of measures for industrial decarbonization, flanked by accelerated diplomatic efforts and engagement of trade partners, will not resolve all challenges the CBAM is likely to face; yet in our view it remains the most credible way of responding to a dramatically changed external context and securing a future for Europe's industrial base. If change is the only constant, then EU climate policy – including the CBAM – will have to remain nimble and flexible to adjust to a continuously evolving world.

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