

# Guidance on Border Carbon Adjustment

Results of the Global  
Stakeholder Dialogues

**IISD REPORT**

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### **Guidance on Border Carbon Adjustment: Results of the Global Stakeholder Dialogues**

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## Preface

Border carbon adjustment (BCA) is a hot topic in trade and environment policy circles. The proximate reason is the European Union's Carbon Border Adjustment Mechanism coming into law in May 2023. But the underlying reasons are more fundamental. As the science around climate change becomes more unequivocal, as the impacts of climate change are being more acutely felt, and as the cost of low-carbon technologies comes down, governments are under increasing pressure to act. As countries ramp up their climate ambition, some of their actions will impose costs on producers in emissions-intensive trade-exposed sectors, forcing policy-makers to consider how to protect those sectors from leakage.<sup>1</sup> With no plan to address leakage, policy-makers risk the political fallout from fostering deindustrialization rather than decarbonization.

BCA is fast becoming a primary tool dedicated to addressing this challenge. While the current trends lean heavily toward use by high-income countries, that may change—many emerging developing countries have strong industrial sectors and ambitious plans for climate ambition of their own.

However, this flurry of activity raises important questions about design and process, both in the countries developing their own BCAs and in those affected by them. What principles or best practices should guide the key choices designers make in elaborating a BCA regime? What principles or best-practice standards could be used as benchmarks to judge the design choices made by foreign designers in elaborating a BCA regime? Responses to these questions will benefit from active international discussions before the individual BCA instruments solidify into different approaches—a situation that would make international trade more challenging and more costly on the one hand and potentially undermine climate ambition on the other.

The International Institute for Sustainable Development (IISD) undertook a series of national stakeholder consultations and Global Stakeholder Dialogues over a period of 2 years to collect, discuss, and refine perspectives and inputs regarding guidance for key BCA design elements. Funded by the Laudes Foundation, IISD worked through local partners in two countries considering their own BCAs (Canada and the United Kingdom) and three countries that will be affected by BCAs (Brazil, Trinidad and Tobago, and Vietnam). The first-year activities focused on national stakeholders' consultations in the five countries. The stakeholders included representatives of relevant government ministries and agencies, industries, labour, finance providers, academics, and civil society. The year-long process culminated with the publication of five country reports.<sup>2</sup>

These country reports were one of the inputs for the three Global Stakeholders Dialogues in the second year. The global stakeholders included representatives of several international

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<sup>1</sup> Leakage is the increase in greenhouse gas (GHG) emissions in other jurisdictions in response to climate policies in an implementing jurisdiction.

<sup>2</sup> See a summary of those reports at <https://www.iisd.org/articles/deep-dive/global-dialogue-border-carbon-adjustments>.



organizations, experts, think tanks, global industry, and labour associations, in addition to the local partners in the five countries, all participating in their personal capacities. The interactive, substantive, and iterative process immensely benefited from the deep knowledge of the participants, as well as the rich and constructive exchanges among them.

The final outcomes are the guidelines presented in this document. They aim to assist policy-makers in BCA-considering countries in developing and implementing BCAs that support climate ambition while avoiding regulatory fragmentation and trade frictions. They also aim to provide a benchmark by which BCA regimes can be assessed by the countries and firms to which they are applied.

In producing this guidance, neither IISD nor any of the participating experts are passing judgment on the propriety, desirability, or legality of any specific BCA measure. Yet, as we are likely to see more such regimes, the multilateral trading system and global efforts for industrial decarbonization might best benefit from more international coordination on such instruments, including the use of guidance developed by the group represented under this initiative.



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# 1.0 Measuring GHG Emissions Embodied in Goods

## THE ISSUE

### How should a BCA regime calculate the embodied carbon in imported goods?

The question extends beyond just measurement protocols to also cover the protocols for verifying those measurements (if actual data is used) and accrediting the bodies that perform verification.

## Recommendation 1.1: Defaults vs. actual data

The primary demand should be for actual data. There will, however, be cases where importers and producers legitimately cannot access actual data, particularly in the case of complex goods further down the value chain.<sup>3</sup> In that scenario, it is acceptable to use default values. These should be unfavourable enough to motivate the use of actual data but not so unreasonable as to amount to punishment or protection of domestic producers. Default values should be updated regularly enough to reflect significant progress made in decarbonizing foreign production.

### Discussion

- Allowing the use of default values also allows importers to simplify reporting where it would be prohibitively costly to assemble actual data—most likely to be the case for complex goods and for small and medium-sized enterprises (SMEs)—or where they are simply unable to obtain data from producers.
- Using **mandatory** default values would unfairly punish clean producers by not rewarding them for their performance and would unfairly reward GHG-intensive producers by not punishing them. The result would be to remove the long-run incentives for clean investments. There are also World Trade Organization (WTO) rulings (such as in the case of *United States – Standards for Reformulated and Conventional Gasoline*<sup>4</sup>) that suggest a preference for actual data vs. using mandatory defaults. On the other hand, mandatory defaults remove the possibility for resource shuffling—a rearrangement of trade flows such that only the clean producers from a given country export to the jurisdiction with a BCA (though the possibilities for resource shuffling diminish as more countries adopt carbon pricing). On balance,

<sup>3</sup> Complex goods are those produced from inputs that are covered by the BCA regime. Producers of such goods may have to go back up the value chain to their suppliers (and potentially their suppliers in turn) to obtain data about the emissions intensity of those upstream goods.

<sup>4</sup> WTO Appellate Body. (1996). *United States – Standards for Reformulated and Conventional Gasoline*. (WT/DS2/AB/R). <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:WT/DS/2ABR.pdf&Open=True>.



however, these arguments fail to win us over because they are weaker than the unfairness/incentives arguments.

- Encouraging the provision of actual data improves the accuracy of the BCA in pricing emissions; in addition, it creates spillover effects by scaling private sector measurement, reporting, and verification in BCA sectors. This helps those firms compete in global green markets even outside of BCAs and provides a foundation for countries outside of BCA regimes to improve their own regulations, including carbon pricing.

## Recommendation 1.2: Reducing GHG emission tallies via offsets

The acceptability of offsets under a BCA regime should be guided by the need for parallel treatment. If the carbon pricing regime offers domestic producers the option to use offsets to reduce the calculation of their declared GHG emissions, then those options should also be available to foreign producers (subject to the same legal and regulatory conditions).



### Discussion

- If the domestic regime limits the use of offsets—for example, as a percentage of total compliance obligations—those same limits should apply to foreign producers.
- This guidance is straightforward in the case of international offsets (Paris Agreement Article 6 offsets) and voluntary carbon market offsets—they can be used by foreign producers **if they are allowed under the domestic regime**.
- Where the carbon pricing regime allows producers to use domestic offsets to reduce their declared GHG emissions, it should also allow foreign producers the same opportunity. This would mean complying with the detailed protocols and verification requirements that the domestic regime will have spelled out for approved offsets—not a simple proposition, in part because the domestic regime will typically only have national-level accredited verifiers.
- In order to maintain stability in the domestic carbon market, any foreign offset credits should be available for use as compliance credits only and should not be tradable within said domestic market.
- It is also possible to imagine the use of offset purchases to count as a carbon price paid, and guidance to that effect is described below (Recommendation 4.5). In that case, they would not also count toward reducing declared emissions, as described here.



## Recommendation 1.3: Confidentiality of data

Data on firm-level emissions intensity should be effectively treated as commercially sensitive. This involves, among other things, minimizing the agents to whom that data must be submitted and to whom that data is available (ideally, only a small number of regulators), as well as aggregating, redacting, or anonymizing data that is made public. Under certain circumstances, exporters should be able to transmit commercially sensitive data directly to the regulator of the importing country rather than to their customers, the importers.

### Discussion

- The data submitted by foreign producers may contain enough information to be strategically useful to their competitors or their customers, allowing them to derive important details about production processes, profit margins, and original suppliers. A BCA regime should minimize, to the extent possible, the likelihood that this would occur while respecting the principle of transparency at the level of aggregated data.
- Appropriate and effective treatment of commercially sensitive information may make it easier for firms to obtain actual data from their suppliers. Failing such treatment, suppliers may not furnish data on request even if they have it.

## Recommendation 1.4: Disaggregation

Special provisions should allow the submission of separate emissions data for individual production routes within an integrated facility that may have several operations with varied GHG intensities.

### Discussion

- The intent is to incentivize new clean investment within integrated facilities, such that new, efficient additions that can independently produce a product should not be saddled with the average data that includes older production facilities within the same installation boundary.
- This allowance should focus on new investments; however, to avoid the possibility of resource shuffling—a re-routing of trade flows from existing production rather than the result of new clean investment—it should be available only to facilities established after some baseline date.
- If such special provisions are made available to foreign producers, it should be done in such a way that it does not put domestic producers at a disadvantage.

## Recommendation 1.5: Transition periods

BCA regimes should feature transition periods for learning by both producers and regulators. Transition periods should be characterized by flexible demands for data, minimal financial penalties (if any), tolerance of multiple methodologies for calculating emissions intensity, and forgiving reporting requirements.



## Discussion

- The requirements of a transition period involve a difficult balancing act. They should be simple and forgiving for producers and importers to allow them to learn the system; however, if they are too simple, they allow producers and importers to delay learning anything and deprive regulators of data that they should be using to improve the workings of the final regime. One possibility is to increase the stringency of reporting demands over the period of transition.
- Transition periods also offer a critically important opportunity for regulators to hear from affected firms about what is working in practice and what needs to be improved. They should feature scheduled points for review and revision.

## Recommendation 1.6: Access to verifiers

BCAs should mutually recognize accredited verifiers from each other's regimes where possible (i.e., where the underlying standard is not too different). Also, in an effort to limit costs and delays for producers, accreditation should be available for verifiers based outside the country of BCA implementation.



## Discussion

- Note that in the case of mutual recognition, what is being recognized/accepted is not the data and reporting from other regimes, but rather the ability of verifiers to certify data and reporting for the purposes of the domestic regime. There is a long history of such mutual recognition in conformity assessment bodies.
- The challenge with accrediting verifiers from other countries is how to avoid circumvention through the use of false data. The concern from the BCA-implementing country may be that it is less capable of ensuring the veracity of data certified by foreign verifiers. This is not a challenge unique to BCAs—there is a well-established industry of international verifiers for other standards. Established procedures for accreditation should be employed to minimize this possibility.

## Recommendation 1.7: Interoperability

BCA regimes should ensure that their carbon accounting standards are, if not harmonized, at least similar enough that producers are not forced to establish different accounting systems to meet the different demands of each. Even where reporting requirements and carbon accounting standards differ across multiple BCA regimes, those regimes should strive to coordinate such that all the information



needed to satisfy their various requirements can be contained in a single common reporting document.

## Discussion

- It would be trade-restrictive to have many BCA regimes with carbon accounting protocols so different that they require distinct measurement efforts. While it may be unrealistic to harmonize carbon accounting across all BCA regimes in the near future, given that they are each tied to very different underlying carbon pricing regimes, they should strive to make their requirements interoperable by basing them on common underlying principles of accounting.
- The ideal for reporting requirements is that covered producers should only have to register their corporate details and GHG intensity data once on platforms that are shared by national regulatory regimes, even if the actual data needed by each national regime is different. This requires that the various carbon accounting standards do not differ too markedly from regime to regime, as recommended above. It also requires an unusual openness to international coordination among national-level regulators.

## Recommendation 1.8: *De minimis* rule

No embodied GHG reporting or compliance requirements should apply to covered goods for imports that fall below a certain *de minimis* threshold on a per-year mass-based basis.

## Discussion

- A *de minimis* rule benefits both the administrators of the BCA and the importers to which it applies. The vast majority of shipments to which a BCA would apply are of minimal value or mass and are responsible for a minimal amount of embodied emissions. In other words, for importers that import below a certain total value or a certain mass on an annual basis, the effort of administering the rule and the costs of compliance are disproportionate to the environmental benefits.
- A per-year mass basis is preferable to a per-consignment basis because the latter allows too much scope for circumvention by importers that strategically split up their shipments. In addition, the former has the benefit of exempting importers that import very few shipments per year, even if those shipments are sized such that they would individually breach a per-consignment threshold.
- The threshold could be set by determining the percentage of embodied emissions that the BCA aims to cover and working from historical data on trade flows and emissions intensity to determine what level of threshold will achieve that target. Such a target would need to be regularly reviewed and revised in light of more recent data.



## 2.0 Coverage of Goods and Emissions Scope

### THE ISSUE

How should a BCA regime decide which sectors to cover, how far up and down the value chain to cover in those sectors, and which emissions scope (i.e., which types of direct and indirect emissions) to charge for?

### Recommendation 2.1: Sectoral coverage

The decision about which sectors to cover in a BCA regime should be determined by criteria that are transparent, objective, and consistently applied. The risk of leakage should be the major criterion. To ensure any future changes to sectoral coverage are predictable, the criteria should not be overly complex, should be announced well in advance of implementation, and should be subject to regular reviews (e.g., every 3–5 years).

#### Discussion

- The risk of leakage can and should be objectively calculated, though the specific formula used may differ from regime to regime. The degree of complexity involved in covering a particular product, however, is more challenging to quantify.
- Sectors covered by a BCA regime should be limited to those that face a carbon price in the implementing country.

### Recommendation 2.2: Goods coverage upstream and downstream

Determining how far upstream or downstream a BCA extends in any sector should be an exercise in applying the same criteria that were used to determine what sectors should be covered.

#### Discussion

- This recommendation will tend to mean that coverage ends higher on the value chain, toward the level of basic commodity production.<sup>5</sup> Extending downstream coverage toward manufactured products increases administrative and compliance costs, as does extending upstream to extraction activities. It may also diminish the benefits in terms of leakage prevention; typically, the further we move downstream of basic commodity production, the more value-added there is and the lower the emissions intensity. This means the cost of the embodied carbon becomes less significant as a percentage of the

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<sup>5</sup> Basic commodities are those high on the value chain, which are typically used as inputs to more processed final goods. Sheets and bars of steel, for example, are basic commodities in the iron and steel sector. Polymers are basic commodities in the chemicals sector.



good's final price, resulting in less risk of leakage. When moving upstream to extraction activities, the same principles apply: only those that are highly emissions intensive relative to the price of the final goods would pass the basic test for high risk of leakage.

## Recommendation 2.3: Emissions coverage

The scope of emissions that are covered by a BCA should not exceed the scope of emissions covered under the domestic carbon pricing regime to which the BCA is associated.

### Discussion

- There is a reason for this “parallel treatment” recommendation: if a BCA is to be effective in preventing leakage, it should require imports to pay for any emissions that are also paid for by domestic producers under explicit carbon pricing regimes.
- In practice, this will mean that direct (Scope 1) emissions are always covered by a BCA since all carbon pricing regimes cover them.
- Scope 2 emissions are those bound up in electricity used by producers (also, heat and steam). Many carbon pricing regimes impose a carbon cost on electricity production. They do not typically impose a carbon cost directly on producers of goods for the carbon embodied in the electricity they use, but they do impose a cost indirectly if electricity has had a carbon price imposed on it. Electricity pricing will typically be structured to pass through the carbon cost to which it was directly subject. In such a case, a BCA covering Scope 2 emissions of imports does not violate the principle of parallel treatment, even though the domestically produced goods covered by the BCA were not directly subject to a carbon price on their Scope 2 emissions.
- Scope 3 emissions are all other emissions, including upstream emissions from the production of inputs to a good and downstream emissions from the transport of that good to market, as well as the use and disposal of that good. The most important Scope 3 emissions from the perspective of a BCA are upstream emissions from a good's inputs or precursors and downstream emissions from transporting the good to market.
- On upstream emissions bound up in inputs, if the carbon pricing regime imposes carbon costs on inputs and those costs are passed through to domestic producers of downstream goods, then the BCA should cover the emissions bound up in those same inputs for imported goods. As with Scope 2 emissions, this is not a violation of the principle of parallel treatment.
- Downstream emissions bound up in transport to markets are seldom covered under industrial carbon pricing regimes. If they were covered, and domestic producers were liable for those costs, then those emissions, as embodied in imports, should also be covered. It is preferable to price those emissions with direct instruments, such as multilaterally agreed carbon-based shipping charges, in part because such coverage would significantly add to the complexity of a BCA regime. Also, such coverage in a BCA would make the regime structurally disadvantageous to imports, including from developing and least developed countries (LDCs)—a problem that a multilateral solution would presumably be designed to address.



## 3.0 Use of Revenues

### THE ISSUE

What should be done with the revenues raised by BCA regimes?

### Recommendation 3.1: Revenue recycling

Should the revenues raised by a BCA be recycled—directed to help defray the administrative (compliance) costs that the BCA imposes on foreign producers?

**We could not reach consensus on a recommendation. There are good arguments on both sides of this issue, which we present below.**

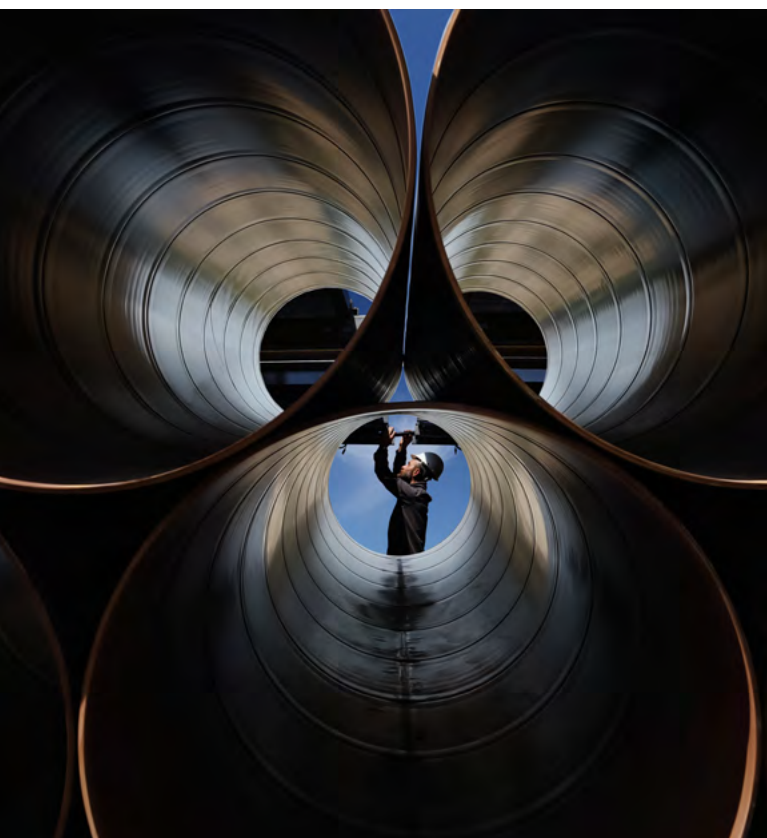
#### Discussion

Revenue recycling can be conceived of as funds directed either to producers or to the host countries of those producers. While most finance ministries do not allow hypothecation of revenues, if revenue recycling is favoured, there are ways to get around such restrictions, such as mandating that new development assistance should match BCA revenues.

- Arguments for recycling BCA revenues:
  - BCA regimes will always impose costs on foreign producers: costs of setting up GHG accounting regimes, reporting emissions, or hiring verifiers to certify those emission reports. While, legally, these responsibilities will likely fall on the importers, in practice, accounting, verification, and certain aspects of reporting will be expected to be carried out by the producers/exporters.
  - Those costs fall disproportionately on (i) small and medium-sized exporters that have to spread fixed costs over lower revenues and (ii) on exporters from developing countries that are subject to fewer existing demands for GHG accounting and tend to have fewer resources to support industrial decarbonization. Recycling BCA revenue to those producers is a way to compensate for imposing those costs and a way to respect the principle of common but differentiated responsibilities and respective capabilities (CBDR-RC). If well-designed, revenue recycling is also a way to help foreign producers decarbonize that is consistent with the broader global goal of mitigating climate change, as addressed below, in Recommendation 6.2.
  - If a BCA is implemented to compensate for the removal of competitiveness protections, such as free allocations of emissions allowances to domestic firms, the elimination of those free allowances will generate much more revenue than the BCA. This means that, first, recycling BCA revenues is not a relatively big sacrifice, and second, BCA-imposing countries might consider creating additional means to support affected foreign producers.



- Keeping the revenues could make the BCA look more like a protectionist measure—particularly if revenues are directed to support BCA-covered domestic producers. It could also give the impression that a BCA is motivated by a desire to raise revenues.
- Arguments against recycling BCA revenues:
  - Retaining the revenues can be seen as compensation for the fact that buyers of industrial goods in BCA-covered countries are having to pay more for those goods because of carbon pricing.
  - Retaining the revenues makes carbon pricing more politically viable in the implementing jurisdiction. By contrast, recycling the revenues may make the prospect of carbon pricing less politically viable because it supports competing producers.
  - Recycling revenues may have to feature some sort of conditions imposed on the use of those funds (depending on the design of the funding facility). Imposing such conditions is politically controversial and may involve significant costs to try to ensure compliance.
  - Some foreign exporters may actually benefit from BCAs. Those that are particularly low carbon may become more competitive in BCA-covered markets. Primarily, but not exclusively, these will be firms in more developed countries.
  - Administering a BCA regime has costs, and retained revenues—or a portion of them—could be used to support those costs.



### **Recommendation 3.2: Additionality of recycled revenues**

Any BCA revenues recycled to affected producers or countries should not count as climate finance for the purposes of fulfilling pledged finance, and it should not cause a subtraction from existing climate finance.

#### **Discussion**

- All developed countries have pledged certain levels of climate finance to assist developing and LDCs mitigate and adapt to climate change. Any revenues recycled from BCA regimes should be additional to those pledged amounts, since they are intended to offset the costs of those regimes.



## Recommendation 3.3: Destination for recycled revenues

Recycled revenues should be directed in such a way as to reach those most affected by the BCA regime.

### Discussion

- BCA revenues could be transferred either to the governments of countries where affected exporters are located, to the affected exporters themselves, or both.
- If recycled revenues are directed to countries, transfers should prioritize those countries that have the largest affected trade flows relative to their economies or their export streams. This focuses the support on those countries where the relative impact of BCAs is greatest. Countries' capacity—fiscal and institutional—to support their firms to decarbonize should also be taken into account.
- If recycled revenues are directed to countries, transfers should be made conditional on funds being used to advance objectives related to BCA and its impacts—for example, using the funds to support decarbonization in the affected sectors to build firm capacity on measurement, reporting, and verification or to fund a just transition. At a minimum, it should be required that the funds are not simply unconditionally rebated to foreign exporters, effectively cancelling out the BCA's leakage prevention and incentives to decarbonize. Enforcing conditionality is challenging, but it is a challenge that countries have met in other contexts.
- If recycled revenues are directed to firms, they should go to those firms that most acutely feel the costs of compliance. These will tend to be small and medium-sized firms in low-income economies. Such targeting may not be straightforward since there is no globally accepted definition of “small and medium sized.”
- For recycled revenues to reach affected firms, the procedures for revenue recycling should be designed to minimize the administrative costs of applying for funds that are, ultimately, designed to reduce the costs of compliance. Support could come, for example, in the form of subsidized costs for verifying emissions or capacity building for creating and operating systems of carbon accounting, neither of which would involve significant administrative costs to access.
- For recycled revenues to reach those most acutely affected by BCAs, there should be a preference for directing revenues to firms rather than to governments and to governments rather than to multilateral funds. In general, the more indirect the route, the more administrative costs eat into the funds available, and the more diluted the benefit of the funds is likely to be for those directly affected. That said, funds directed to the country level can nonetheless be helpful if they support efforts like lowering the GHG intensity of the electricity grid on which producers depend, which would, in turn, lower the BCA charges they face at the border.



## 4.0 Crediting for Carbon Prices Paid in Foreign Countries

### THE ISSUE

In assessing border charges, what credit should be granted for foreign climate change measures such as carbon pricing?

### Recommendation 4.1: Credit for explicit carbon prices

Explicit carbon prices, such as those paid under carbon taxes and emissions trading systems in the exporting country, should be credited under BCA regimes.

#### Discussion

- Credit should be granted only for carbon prices effectively paid. Under cap-and-trade schemes that grant free allowances, for example, this would mean accounting for those allowances by crediting only for the producers' average cost of carbon.
- Crediting for explicit carbon prices paid in the country of export avoids double charging for the carbon embodied in goods, making crediting fundamentally fair. Crediting also increases the likelihood that a BCA could fit within a General Agreement on Tariffs and Trade (GATT) Article XX defence. It would arguably be arbitrary and unjustified to, in effect, demand a higher carbon price be paid on goods that have already been subject to a carbon price in the exporting jurisdiction.
- Crediting for explicit carbon prices paid in foreign countries also has the positive effect of motivating those countries to adopt carbon pricing, since jurisdictions with carbon pricing would get to retain the revenue that would otherwise be sent abroad to BCA-implementing countries.
- Producers should be granted credit for explicit carbon prices paid on any inputs or precursors that are covered under the domestic BCA. This would involve a complex tracking of inputs back up the value chain, but in practical terms, such tracking would demand much of the same data already being used to comply with BCA reporting requirements.
- While it is not easy to define exactly what constitutes an explicit carbon price, one guideline is whether the charge varies in proportion to the GHGs embodied in the taxed good or emitted in the process of producing that good. This would exclude many existing fuel taxes.
- Of course, governments could simply convert existing excise taxes or other charges into an explicit carbon price for the purpose of benefiting from crediting. While, in principle, any legitimate explicit carbon price should be credited, even if it is simply a repackaged charge of a different type, there should be safeguards against policy efforts



that amount to backsliding from a climate perspective. Backsliding, in that sense, could be the imposition of a new carbon price and the simultaneous withdrawal of a charge that actually had more impact. Or it could be the imposition of a new carbon price and the simultaneous granting of an offsetting rebate. The safeguard could reside in the process described in Recommendation 4.3: Establishing the price paid.

## Recommendation 4.2: Export taxes

Should BCA credit export-only taxes as an explicit carbon price paid in the country of export?

**We could not reach consensus on a recommendation. There are good arguments on both sides of this issue, which we present below.**

### Discussion

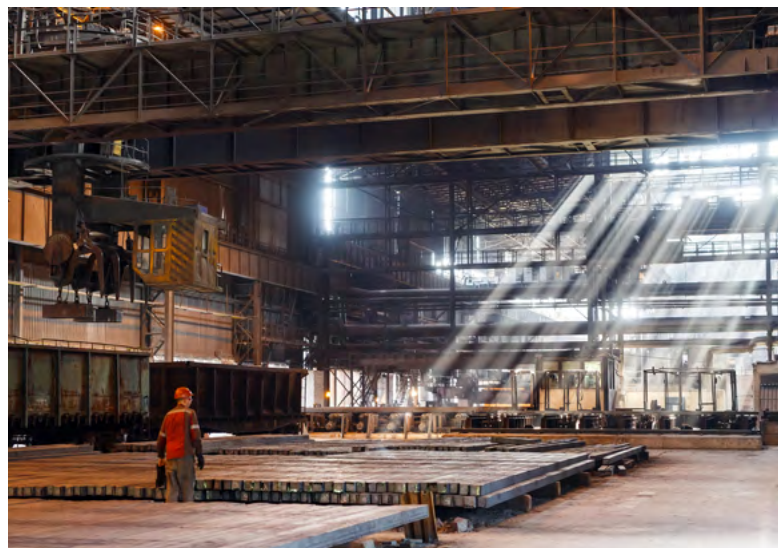
- Exporting countries have incentives to levy a carbon price only on the exports of BCA-covered sectors, leaving the rest of their domestic production free of a carbon price. In doing so, governments would retain revenues that would otherwise go to the BCA-imposing country and would not have to impose a sector-wide carbon price on their producers.
- There are several possible scenarios. The first is that a government applies a carbon tax only on those exports destined for BCA destination countries. Arguably, these should not be credited; such a tax would border on circumvention of the BCA regime and would create significant opportunities for circumvention through transshipment. Similarly, any export tax that was simply unconditionally rebated to the exporting firms would negate the effect of the BCA and should not be credited.
- The second scenario is a carbon tax levied on all exports of the covered goods. Whether to credit for this kind of exports-only carbon tax turns, to some extent, on the objectives of the BCA. There are arguments for and against the idea depending on whether the priority policy objective is to prevent leakage from BCA-covered sectors or whether it is to enable ambitious climate action.
- On the one hand:
  - Crediting for export-only taxes might diminish the effectiveness of BCA at preventing leakage. Foreign producers that export only a small share of their total production could effectively cross-subsidize their exported production, lowering their average cost of carbon.
  - Crediting for export-only taxes erodes one of the most important impacts of a BCA: to incentivize other governments to implement carbon pricing.
- On the other hand:
  - Implementing an export carbon price is better than having no carbon price. Moreover, it requires many of the same steps as implementing an economy-wide carbon price, such as setting up firm- and regime-level accounting and reporting regimes. Allowing credit for such schemes could therefore act as a stepping stone that facilitates more comprehensive carbon pricing.



- Requiring that a carbon price be paid on all production as a condition of crediting may conflict with trade law. It constitutes a demand for policy in the exporting country that may not directly affect the exported goods.

### **Recommendation 4.3: Establishing the price paid**

Given the complexity of each calculation, establishing the price actually paid by foreign producers is a task that should be undertaken as a result of calculations and discussions between the BCA-imposing governments and the exporting country governments. Producers and importers should not be responsible for calculating the carbon prices paid.



#### **Discussion**

- Each carbon pricing regime is unique and complex, and calculating effective prices paid is not straightforward. Beyond the different headline prices, each has different approaches (e.g., cap and trade, tax, output-based allocation), different sectoral coverage, different carve-out mechanisms to blunt competitiveness impacts (e.g., free allocation of allowances), different recourse to emissions trading or offset use, different bases for calculation (emissions intensity vs. absolute emissions), different price guarantees, and so on. It is challenging to calculate what a given producer effectively pays in a way that yields comparable results from regime to regime. Rather than asking importers to calculate and declare the effective price paid, BCA-implementing governments should determine default carbon prices paid based on objectively applied transparent principles of accounting, as a result of consultation with each affected trading partner to fully understand their regimes. The results should be regularly reviewed and updated as regimes evolve.
- BCA regimes could also allow importers to declare the explicit carbon price paid under special circumstances. These circumstances could include the imposition of subnational carbon prices, the failure of their host governments to undertake the necessary calculations or negotiations, or if importers can argue that the price they have paid is higher than that calculated by the BCA-importing regime.

### **Recommendation 4.4: Non-price-based climate regulations**

Non-price-based climate policies, even if they impose a cost, should not be credited under BCA regimes.



## Discussion

- To the extent that non-price-based climate regulations in the country of export are actually effective in lowering GHG intensity, they would already lower the BCA charges faced at the border.
- Crediting for non-price-based climate regulations would allow for more flexibility in accommodating differing types of climate policies in exporting countries and would invite less pushback from trade partners. But it would also create at least four problems:
  1. If the objective were to level the playing field, the BCA would also have to **increase** border charges to account for the costs of non-price-based climate regulations domestically (which would bring a host of other problems, including under trade law). That is, domestic firms may also be subject to costly climate regulations, but they still have to pay for their residual emissions. Foreign firms should have the same obligation.
  2. It would beg the question of which regulations would be considered climate-related and the associated thorny question of which country would make that judgment.
  3. It would be methodologically difficult to translate many non-price-based climate regulations to a product-level cost. That difficulty would leave room for political pressure to unfairly influence the final calculations.
  4. If regulatory costs were credited, there would be a principled argument for debiting the support granted by subsidies, which would open up a whole new front of controversy and complexity.

## Recommendation 4.5: The use of offsets as a carbon price effectively paid

Foreign producers should be allowed to claim the cost of purchasing offsets as a carbon price effectively paid.

## Discussion

- We recommend above (Recommendation 1.2) that, under certain conditions, offsets should be allowed as a means to lower declared GHG emissions. To be clear, offsets should not be able to be used both in that way **and** to count as an effective carbon price paid—importers should have to choose one or the other.
- Foreign producers that purchase any sort of offsets are paying a carbon price that will affect their overall production costs and competitiveness, thereby moderating the risk of carbon leakage for those producers.
- The credit per tonne for purchasing offsets should be the total cost of purchased offsets divided by the total domestic production of the covered goods. That is, foreign producers should not be allowed to claim the cost of offsets purchased only against their exported share of total production. In part, that is to prevent complexities of



carbon accounting that could see those offsets claimed for both BCA and other purposes. But more fundamentally, it is for two reasons:

- Crediting for offset purchases already represents an erosion of the incentives for countries to adopt sector-wide carbon pricing, as noted below, making it important to prevent compounding that erosion such that the incentives to purchase offsets only apply to a subset of producers' total production.
  - Crediting for offsets only against exports implies a low average cost of carbon for the firm, thereby increasing the risk of leakage.
- There are legitimate concerns about the environmental integrity and legitimacy of some sorts of offsets. Crediting for poor quality offsets as a price paid, however, is very different from crediting for tonnes of GHG mitigated (the practice described in Recommendation 1.2). Where offset quality is poor, the latter implies an overall increase in global emissions because the offset activity does not really reduce emissions, and the buyer is allowed to increase emissions. The former, however, does not have this problem; paying for an offset does not increase or decrease anyone's GHG mitigation obligations any more than the act of paying a carbon tax does. Even if it achieves very little in the way of real and permanent emissions reductions, the purchase of offsets is a cost that moderates the risk of leakage, as noted above. As such, for the purposes of BCAs—which are focused on reducing the risk of leakage—crediting offset purchases makes sense.
  - That said, to protect against the risk of reputational damage to the regime from crediting for poor quality offsets and to ensure maximum GHG mitigation potential from this feature of a BCA, regulators could specify that only certain high-quality classes of offsets were eligible to help ensure that offset purchases result in real and permanent emissions reductions.
  - If policy-makers in the BCA-implementing jurisdiction wanted crediting to have impacts beyond reducing the risk of leakage, they could impose other conditions on eligibility. They could, for example, mandate that only offsets from mitigation activities in LDCs would be accepted for credit to facilitate flows of climate finance to those countries.



## 5.0 Treatment of Exports

### THE ISSUE

Should a BCA cover exports as well as imports? This would probably mean some form of rebate of at least some domestic carbon costs at the point of export.

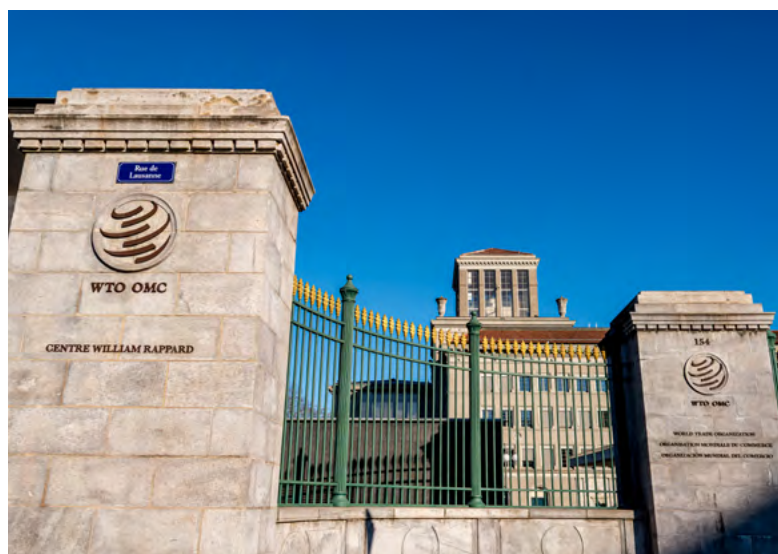
### Recommendation 5.1: Export coverage

Should BCAs cover exports as well as imports?

**We could not reach consensus on a recommendation. There are strong arguments on both sides of this question, which we outline below.**

#### Discussion

- Coverage of exports under a BCA regime (or outside of it) could take many forms. If the underlying carbon pricing regime were a carbon tax, then export coverage could be a tax rebate at the point of export. If the underlying carbon pricing regime were an emissions trading system, then export treatment could consist of free allocation of emission allowances for the portion of production that was exported.
- Arguments against covering exports in a BCA:
  - If the domestic carbon pricing regime is an indirect tax, it can be argued that rebating the tax at the point of export accords with the destination principle of taxation; goods should be taxed where they are consumed. (However, note that if the goal is the overall reduction of global emissions, that only works if there is a carbon tax at the point of consumption.) However, if the domestic carbon pricing regime is not an indirect tax, then there is no similar principle—that is, there is no consensus that regulatory costs should only be borne at the point of consumption. In fact, there is multilateral consensus in law that seems to go against that prospect; rebating regulatory costs of carbon at the point of export is likely a prohibited subsidy under WTO rules.
  - Some might justify accepting legal risk by citing the current erosion of respect for the multilateral system of trade rules. However, that system benefits all countries, with smaller economies suffering the most if trade is conducted in a might-makes-right fashion. In that sense, further eroding the respect for those rules





by willfully ignoring them, particularly at a time when the multilateral trading system is vulnerable, is anti-development.

- On a political level, a BCA design that includes a subsidy of sorts for exports starts to look more like a protectionist endeavour, potentially raising concerns among trading partners and causing diplomatic problems.
- Depending on the design of the policy, coverage of exports under a BCA risks weakening the domestic incentives offered by carbon pricing. A policy that fully rebates carbon cost to producers at the point of export would incentivize the export of the most GHG-intensive goods, which, unlike goods sold domestically, would face no price penalty for their embodied carbon. This effect could, in turn, reduce the incentives in other countries to impose carbon pricing on those same sectors for fear of leakage.
- Arguments in favour of covering exports in a BCA:
  - BCAs have emerged as a solution to the international competitiveness effects of imposing carbon pricing on goods in highly traded sectors. Most firms in these sectors compete with imports in their own market and compete with foreign producers in third markets. Unless the firms covered by a BCA are atypically domestically focused, a BCA regime may be politically infeasible without export coverage. Carbon prices that are high enough to make a BCA necessary with respect to imports are also high enough to more or less eliminate export markets for BCA-covered firms. For some firms, that loss is the difference between viability and non-viability. That kind of impact is politically impossible to contemplate.
  - The other side of this same coin is that a lack of export coverage would likely lead to significant carbon leakage—the result of lost export markets for domestic producers. Preventing carbon leakage is a primary objective of BCA regimes.





- As noted above, in the case of carbon taxes (indirect taxes), WTO law is less of a concern; export coverage would function like value-added tax rebates. But even in the case of regulatory carbon pricing, such as emissions trading systems, it is not certain that export coverage would be WTO-illegal. Some analysts argue that even emissions trading systems could be deemed to be indirect taxation. Others have proposed policy structures that they argue do not contravene WTO subsidy law. Others argue that even if export coverage were deemed a prohibited subsidy, there would be a chance that the environmental provisions of GATT's General Exceptions might "save" it. Ultimately, it is impossible to be completely certain about the legality of any policy without taking it to WTO dispute settlement. But if BCA regimes cannot function without export rebates, if carbon pricing cannot function without BCA regimes, and if there is a reasonable chance that export rebates might be deemed legal, then the seriousness of the climate crisis dictates that BCA regimes should take that chance.

## **Recommendation 5.2: Modalities for export coverage**

If a BCA regime includes export coverage, the rebate of carbon costs should be at an assumed benchmark level of GHG intensity that will reduce any incentives for high-carbon producers to avoid the domestic carbon price by exporting.

### **Discussion**

- If there is a full export rebate of all carbon costs paid by individual producers under the domestic carbon pricing regime, there will be incentives for the most GHG-intensive of those producers to simply re-route all production to exports. This can be avoided if the rebates do not cover the full carbon costs paid, but rather cover an amount that would have been paid by a relatively clean producer—a benchmark value. A regime that is rebated in this way would also maintain some incentives for decarbonization, even for those firms that export heavily.
- This recommendation is only relevant in the case that a BCA-implementing jurisdiction has decided to pursue export coverage. As noted above, this guidance finds no consensus on whether that should be done.



## 6.0 Special Treatment and Exemptions

### THE ISSUE

Should the BCA grant special treatment or exemptions to some firms or countries (beyond the recycling of revenues recommended above)? If so, what sort of treatment would be appropriate?

### Recommendation 6.1: Country-based (blanket) exemptions

There should not be country-based exemptions for the coverage of a BCA. That is, whole economies should not be exempted from coverage.

#### Discussion

- To be clear at the outset, rejecting blanket exemptions does not mean rejecting other types of special treatment for some firms or some countries. These are addressed in the recommendations that follow.
- There are a few candidate criteria for exempting nations from the coverage of a BCA:
  - adequacy of climate ambition (for example, achievement of nationally determined contributions or legally binding commitments to net-zero)
  - development status (for example, all least developed and/or low- or lower-middle-income countries are exempt)
  - a link to the domestic carbon pricing regime (for example, a linked emissions trading system)
  - historical responsibility for climate change
  - temporary special circumstances, such as war or disaster
- If exemptions were premised on the national degree of climate ambition, that would amount to granting significant benefits based on assumed and unobservable future performance. Moreover, such exemptions would likely involve a unilateral determination of the adequacy of other countries' efforts. This would seem to run counter to the Paris Agreement's deference to national determination; no party to the UN Framework Convention on Climate Change or the Paris Agreement assesses the adequacy of the efforts of other individual parties beyond ensuring adequate reporting.
- Offering exemptions to low-income countries and LDCs, or exemptions based on historical emissions, would be a way to incorporate the principle of CBDR-RC into the design of a BCA measure. While offering national exemptions runs counter to the primary objective of BCAs—preventing leakage—such countries do not tend to export many emissions-intensive trade-exposed goods, so the costs of such an exemption in terms of leakage prevention would be low. But such an offer would pose significant challenges in implementation:



- Most low-income countries or LDCs do not need such exemptions. For example, only one LDC (Mozambique) is actually affected by the European Union’s Carbon Border Adjustment Mechanism as currently formulated. It could therefore be argued that targeted additional bilateral aid would be more appropriate and would avoid the challenges described below.
  - If such exemptions were offered, new investments might flow to such countries to take advantage of the exemptions. This would lock those countries into high-emission-intensity production pathways for years, perhaps decades, when we know that global markets will become increasingly intolerant of such production.
  - Any such exemptions might violate GATT Article I’s obligations for most-favoured-nation treatment. To be clear: such violations do not necessarily imply illegality under WTO rules. The measures might, for example, be saved under GATT Article XX’s General Exceptions or by the Enabling Clause that allows certain types of discrimination in favour of developing countries. Exemptions for LDCs might also be allowed via a waiver agreed by the WTO’s General Council.
  - A final challenge is pragmatic, but it is fundamentally important. The choice of thresholds for coverage—for example, based on national income levels—would have real economic impacts, and there is no international agreement on where such thresholds should be set. Experience in the UN Framework Convention on Climate Change and the WTO testifies to the difficulty of deciding thresholds for special treatment. The WTO, for example, has never been able to objectively define “developing country” and has had to leave that significant denomination as self-declared.
  - Special exemptions for temporary special circumstances, such as war or disaster, may be warranted.
- For countries with links to the BCA jurisdiction’s carbon pricing regime, a national exemption is not needed if there is full credit for carbon pricing in the exporting country, as that would accomplish the same treatment.

## **Recommendation 6.2: Treatment of SMEs: Transition periods and support**

SMEs should be granted transition periods during which they are not subject to reporting or payment obligations under a BCA. Further, they should be enabled in compliance and adaptive low-carbon transition by dedicated funding from the BCA-implementing government(s).

### **Discussion**

- To the extent the objectives of BCAs extend beyond leakage prevention, they should focus on enabling the low-carbon transition of foreign producers, rather than on punishing them for their high emissions intensities. (Ultimately, that transition is also part of the levelling of the playing field that reduces leakage risk.) Therefore, given that both transition and compliance are more difficult for smaller producers, they should be



given more time before the BCA fully applies to their goods, as well as help with their transition to low-carbon production.

- It is preferable to grant transition period exemptions to firms rather than to countries. While it may be true that any firm in a smaller economy faces more difficulties in compliance and low-carbon transition, the more significant predictor of such difficulties is the capacity of the firm itself, and size is a reasonable proxy for capacity. Large multinational enterprises typically have the capacity to account for GHG emissions and comply with international standards, regardless of where they are based.
- For transition periods to be effective, BCA-implementing governments should provide or underwrite dedicated support for foreign SMEs, such as training, advice on decarbonization pathways, match-making with technology providers, and de-risking of finance.
- There is no internationally agreed-upon definition for SMEs, so setting the threshold will not be straightforward. Even with the benefit of a specific definition, implementing such a preferential distinction would be difficult.
- BCA-implementing countries could consider staged thresholds, so that the transition from SME to non-SME is not a “cliff.”
- It will be critical to prevent circumvention by firms that split their production into parts to gain SME status. Penalties for this type of circumvention should be prohibitively high, and enforcement should be well resourced.

### **Recommendation 6.3: Treatment of countries: Funding a green just transition**

BCA-implementing countries should support affected countries in advancing a just transition and transitioning toward greener production.

#### **Discussion**

- Although it is firms—not governments or countries—that are most directly affected by BCAs, there are several reasons for BCA-implementing countries to also support governments whose firms are significantly affected by their BCA:
  - Governments have many options to support their exporting firms in the face of BCA regimes in their export markets, such as establishing and building capacity for carbon reporting requirements, export promotion, and support for industrial decarbonization.
  - Some elements of firm-level emissions intensity are more controlled by governments than by firms. Lowering the emissions intensity of the electricity that firms use in production, for example, is, in most cases, the responsibility of governments—a challenge that lower-income countries will need financial and technical assistance to overcome.
  - Decarbonization at the firm level is part of a transition that, if not managed, could have negative consequences for workers and communities. A just transition



requires that governments actively support those who are negatively affected. Again, this is a pursuit that governments in lower-income countries could struggle to address without help.

## Recommendation 6.4: Differential crediting for carbon price paid

BCA regimes could consider operationalizing the principle of CBDR-RC by offering credit for foreign carbon pricing that varies with the exporting country's level of development, at least for a transition period. If this option is pursued, the price premium should be based on internationally recognized factors.

### Discussion

- We have recommended a number of forms of special treatment. This option is presented as an option that governments might want to explore.
- Granting higher credit for carbon prices paid to exporters from less-developed countries has some challenges:
  - It erodes the effectiveness of the BCA as a tool for preventing leakage.
  - It may violate the GATT principle of “most-favoured nation.”
  - It would likely be politically challenging to implement.
  - It presents the pragmatic challenge of what criteria to use in granting credit premiums and at what level of premium.
- The erosion of effectiveness in preventing leakage could be reduced—but not eliminated—by granting credit premiums for only a limited time, with a gradual phase-out of preferences. It could be further limited by requiring that the foreign carbon price be economy-wide, as opposed to being levied only on exports.
- WTO legal provisions, such as the Enabling Clause, may be able to “save” discriminatory treatment that benefits developing countries.
- The pragmatic challenge is critical. If the BCA-implementing country unilaterally decides what criteria and what levels of premiums to assign, there will be questions of legitimacy. If, on the other hand, those decisions are internationally negotiated, it is hard to see countries reaching an agreement.
- Using an internationally recognized factor would avoid the pragmatic challenge. Purchasing power parity, which calculates exchange rates in terms of the real ability to buy goods and services, is an example of such a measure, though it is only a narrow reflection of the economic reality that prevails in different countries. Using purchasing power parity as an instrument of differentiation, a carbon price in China and Brazil would need to be multiplied by roughly 2 times to be equivalent to a U.S. carbon price, while the premium for India would be 5 times.

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