

TOWARDS A GLOBAL AGREEMENT ON CARBON PRICING

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Introduction

"WE CANNOT SOLVE THE CLIMATE CRISIS WITHOUT EFFECTIVE CARBON PRICING."

Janet Yellen, United States Secretary to the Treasury

Economists have long celebrated the role that carbon pricing can play in tackling global heating. By placing a high and rising carbon price on every unit of carbon dioxide (and equivalent greenhouse gas) that is produced, you provide a market signal which drives producers, consumers and investors to adopt (and put their money towards) behaviours and technologies that enable everyone to pollute less. In doing so, they avoid the carbon price, making businesses more competitive in a world that is slowly aligning towards a 'net zero' future, and lowering the cost of low-carbon living for consumers. That's not to mention the multitude of health and planetary benefits derived from a reduction in the production of greenhouse gases.*

Whilst some progress on carbon pricing has been made - approximately 22% of global emissions are currently 'priced'¹ - uptake has not been quite as prolific or ambitious as might be expected.** This is partly due to concerns about (and the reality of) the regressive impacts*** of carbon pricing, which - if implemented without due consideration - can disproportionately impact those who already struggle to pay for necessities such as heating and transport.² However, progress has also been hampered by the inherent complexities of achieving an explicit global agreement on carbon pricing, as proposed under Article 6 of the Paris Agreement.³

* According to Public Health England, air pollution is responsible for 28,000 - 36,000 deaths per year in the UK ([source](#)) whilst WWF estimate that the 'co-benefits' of decarbonisation could amount to £80bn per year ([source](#)).

** According to the [World Bank](#), less than 50% of GHG emissions are priced within the recommended range of US\$40-80/tCO₂, with about half of covered emissions priced at less than US\$10/tCO_{2e}. The IMF calculates the global average carbon price is only US\$2/tCO₂ ([source](#)).

*** The Sustainability Research Institute at Leeds has calculated that the lowest income households in the UK spend a significantly larger share of their income (10%) on heating and powering their homes than those on the highest income (less than 1.5%). This means that any price increases (including those relating to carbon pricing) might disproportionately hit the poor in spite of their having lower carbon footprints ([source](#)). LSE calculated that by 2030 UK households in the highest income decile will emit 3.7 times more carbon dioxide-equivalent (CO_{2e}) than those in the lowest income decile, whilst earning 9.4 times as much money ([source](#)).

As our Commission has demonstrated there are ways to implement carbon pricing that are both fair and effective, and as such this policy instrument should continue to receive attention as being a very real and integral part of the decarbonisation solution.⁴ With increased environmental ambition coming out of the EU,^{*} the US rejoining the Paris Agreement,⁵ and even China's commitment towards achieving 'net zero' emissions 'before 2060'⁶ and rolling out a nationwide Emissions Trading System (ETS),⁷ we should not lose hope that a global agreement on carbon pricing might one day be achieved.

Whilst it remains to be seen what progress will be made with regards to Article 6 at the upcoming UN Climate Conference (COP 26),⁸ increasing attention has been paid to the role that 'Border Carbon Adjustments' (BCAs) can play as a 'stepping stone'⁹ towards a global agreement on carbon pricing. This paper will explore some of the proposals that have been put forward - including that of the Zero Carbon Commission - and look to build the case for BCAs becoming a core focus of UK diplomacy in the run up to COP26, including at the G7 summit.

* EU leaders have agreed to cut emissions by at least 55% between 1990 and 2030. Source: Climate Home News (December 2020). EU Leaders secure deal on raising 2030 ambition. Available [here](#).

Border Carbon Adjustments

"THERE IS NO POINT IN ONLY REDUCING GREENHOUSE GAS EMISSIONS AT HOME, IF WE INCREASE THE IMPORT OF CO2 FROM ABROAD...IT IS NOT ONLY A CLIMATE ISSUE; IT IS ALSO AN ISSUE OF FAIRNESS TOWARDS OUR BUSINESSES AND OUR WORKERS."

Ursula Von Der Leyen, President of the European Commission

What is a BCA?

Under a Border Carbon Adjustment (BCA), a domestic carbon price is extended to imports so that competitors are subjected to the same carbon costs as domestic producers. This provides a level playing field between domestic producers and importers, ensuring that increased ambition on carbon pricing (and other decarbonisation policies) does not cause 'carbon leakage' - the offshoring of emissions to jurisdictions with less ambitious climate policies in place. As such, it creates the conditions for building a domestic market for low-carbon production.

It also helps to drive global progress on carbon pricing; under a BCA, importing jurisdictions are incentivised to develop their own carbon pricing policies, because most countries would rather implement their own pricing system - and receive the revenues from it - than see that price paid to a different Government.

Border Carbon Adjustments (BCAs) have gained increasing attention over the past eighteen months, in part thanks to the ambition being demonstrated by the European Commission - whose plan for implementing a BCA by 2023 as part of the European Green New Deal is due to be published in June.¹⁰ This momentum has been solidified by the Biden administration's proposal to "impose carbon adjustment fees or quotas on carbon-intensive goods from countries that are failing to meet their climate and environmental obligations."¹¹

However, the implementation of a BCA does not come without its challenges¹² - not least with regards to compliance with World Trade Organisation (WTO) obligations - and they have received some criticism as being an inward-facing, protectionist measure that goes against the principles of the Paris Agreement.¹³ In order to ensure that BCAs live up to their environmental potential - including addressing issues such as 'freeriding'^{**} - the Zero Carbon Commission have highlighted the need for multilateral cooperation with regards to their implementation.¹⁴

More specifically, the Commission has called for the UK Government to lead a 'high ambition club' of countries who can align on carbon pricing levels by agreeing a 'carbon price floor', outside of which a BCA would be implemented. Such a mechanism would create room for flexibility with regards to how carbon prices might be applied, whilst helping to realise the potential of BCAs to drive international progress on carbon pricing.^{**}

* Critics (including Nordhaus 2015) highlight that under voluntary systems such as the Paris Agreement, jurisdictions can share in the benefits of action on climate change without having to commit any costs towards emissions abatement.

** This is a model that has also been also variously been proposed by the [International Monetary Fund \(IMF\)](#), [Bruegel](#) and more recently, the [Climate Leadership Coalition](#).

Climate Clubs and The International Carbon Price Floor

"CONDITIONS HAVE NEVER BEEN BETTER TO NEGOTIATE AN EFFECTIVE CLIMATE CLUB."

Guntram B Wolff, Director, Bruegel

What is an International Carbon Price Floor?

Under an International Carbon Price Floor (ICPF), a group (or club) of countries - for example, the EU, US and China, or indeed the CPTPP* - would come together to agree on a minimum carbon price.

This price could be achieved (or exceeded) through whichever carbon pricing system best suited the jurisdiction in question - through a carbon tax, cap-and-trade system or otherwise.

Outside of the club - where equivalence in pricing could not be demonstrated - a BCA would be applied on imports to club member jurisdictions. Meanwhile - on account of having achieved carbon pricing equivalence - club members would be free to trade with each other without a BCA being applied.**

The International Carbon Price Floor (ICPF) is premised on the 'Climate Club' concept first proposed by William Nordhaus.¹⁵ Under a Climate Club model an agreement is reached by participating countries (club members) to undertake harmonized emissions reductions - for example, through setting an 'international target carbon price'. Under the club model, non-participants would be penalised via "uniform percentage tariffs on the imports of nonparticipants into the club region"¹⁶ - essentially, what is now being described as a BCA.

* The \$12trb Comprehensive and Progressive Trans-Pacific Partnership - which the UK has applied to join - has not ruled out making carbon prices or markets mandatory among its members. Theoretically, they could find a way to determine whether a country's climate policy is sufficiently ambitious to become a member of a CPTPP—or G7—carbon club without triggering a border adjustment at the door of the huge EU market ([source](#)).

** Depending on the level of the price floor - and how significantly domestic carbon prices differ from it - small BCAs may still be required in order to comply with WTO law, and the requirement for a BCA to be a direct extension of domestic pricing policy. However, a price floor agreement would still go a significant way towards levelling the playing field between producers across club jurisdictions.

Arguably however a BCA is not a penalty, but an important part of levelling the playing field and avoiding carbon leakage.¹⁷ Although there are a few crucial differences between the Nordhaus model and that which we are proposing - namely that the club should be considered as being *complementary* to (rather than a replacement for) the Paris Agreement - the working premise is the same: the structure of the incentives creates a "strategic situation in which countries acting in their self-interest will choose to enter the club and undertake high levels of emissions reductions."¹⁸

Ensuring an environmental focus:

A lot has rightly been made of the need for BCAs to focus on environmental (rather than economic) outcomes¹⁹ - not least in order to qualify for an environmental exemption under the WTO's General Agreement on Tariffs and Trade (GATT).^{*} This is also true of how the revenue is used - with experts commenting that in order to comply with WTO laws, revenue from a BCA must be put towards schemes that have similar objectives to the mechanism itself - i.e decarbonisation - rather than being used to address COVID-related deficits.²⁰

The benefit of multilateral action on BCAs is that they can help deliver on this environmental ambition, not just in terms of emissions covered (and therefore likely impacts on abatement), but also their increased scope to drive global ambition on emissions pricing. This is partly inherent to the ICPF model - in that non-members would be incentivised to raise domestic carbon pricing ambition such that they could avoid a BCA when trading with club members - but it can also be made explicit in the way that the ICPF is implemented.

For example, the revenue from a BCA could be used to help developing countries finance their transition to a zero-carbon economy.^{**} In a UK context, a proportion of the revenue could be used to complement the Foreign, Commonwealth and Development Office's ongoing work to support climate mitigation and adaptation in developing countries, including export of carbon pricing expertise.²¹ This is something that the EU are reportedly also considering; in response to concerns that the EU's BCA is a protectionist measure - and to ensure WTO compatibility - a French Green MEP in charge of the European Parliament's report on the EU's BCA revealed that part of the revenue will be allocated to finance low-carbon technology in developing countries.²²

Even without consideration as to how revenues might be used to further the environmental impacts of an ICPF, the potential level of emissions abatement it could drive is still substantial. The IMF have proposed that even the least aggressive price floor (\$50/25)^{***} still increases mitigation at the G20 level by 120% (relative to G20 countries meeting Paris pledges only)²³ even when only China, India, and the US participate in the ICPF.^{****} This finding reflects: (i) the large share of relatively low-cost mitigation opportunities in these three countries; and (ii) their relatively lax pledges at present under the Paris Agreement.

* In order for a trade-related environmental measure to be eligible for an exception under GATT Article XX, paragraphs (b) and (g), a member has to establish a connection between its stated environmental policy goals and the measure at issue. The measure needs to be either: necessary for the protection of human, animal or plant life or health (paragraph (b)) or relating to the conservation of exhaustible natural resources (paragraph (g)). From: World Trade Organisation GATT Exemptions. Available [here](#).

** As Adair Turner has argued, 'there is a good argument for channeling the revenues from carbon tariffs to overseas aid programs designed to help developing countries finance their transition to a zero-carbon economy'. From Project Syndicate (2020). Available [here](#).

*** The IMF has proposed differentiated minimum prices for advanced and non-advanced countries under an ICPF in order to address international equity issues.

**** According to the IMF, these three countries account for 80% of the future low-cost CO₂ mitigation opportunities in G20 countries (who in turn collectively account for almost 80% of global emissions).

Considerations for Implementation

The WTO has a key role to play in mediating multilateral negotiations pertaining to the implementation of BCAs; it is encouraging that they will be launching a Trade and Environmental Sustainability joint initiative group to help drive cooperation on this front. As WTO Deputy Director-General Alan Wolff has said *“Cooperation will be necessary as countries move to raise the cost of emitting greenhouse gases...the alternative to co-operation would be bitter conflict and protracted policy uncertainty. The WTO has an important role to play to deliver the better of these two choices.”*²⁴

Table 1 presents a (non-exhaustive) list of challenges that would have to be addressed before an ICPF was implemented, alongside some possible solutions. Although the number of club members could - and should - be expanded over time, a benefit of limiting the number of founding members is that negotiations relating to club rules - such as those outlined below - could be agreed relatively quickly. Much more so than would be expected if these rules had to be agreed by a large group of countries - for example, all of the jurisdictions who have ratified the Paris Agreement.

FIG 1: DESIGN CONSIDERATIONS FOR AN ICPF

Sector	Proposed solution(s)
<p>Setting a floor price</p>	<p>Ideally the price floor* would be set at a level that can drive the volume of emissions reductions required to achieve the temperature targets set out in the Paris Agreement.** This would be one way of addressing the inadequate ambition of existing voluntary commitments (NDCs) under the Paris Agreement. If implemented as they stand, current NDCs would lead to a temperature increase of at least three degrees Celcius by mid century.²⁵</p> <p>There is some debate as to whether a lower (but still ambitious) floor price should be implemented in the first instance as the mechanisms of the ICPF are tried and tested - rising over time to ensure continued abatement.</p> <p>This may mean that small cost adjustments would still be required between jurisdictions who stick to the floor price and those who exceed it, in order to satisfy the requirement that a BCA should be a direct extension of domestic policy.²⁶ In this instance, adjustments would likely be relatively minor, and the ICPF would still play a significant role in levelling the playing field between different producers.</p> <p>It is worth noting that the IMF has proposed setting a differentiated minimum price for advanced and non-advanced countries in order to address international equity issues.²⁷ This falls in line with the principle of “common but differentiated responsibilities and respective capabilities” outlined in the Paris Agreement.²⁸</p>

* As per the Zero Carbon Commission’s proposal, this paper proposes alignment in relation to a floor price, as opposed to emissions limits. Whilst in theory either approach could be taken, Nordhaus (2015) has argued that a review of both theory and history suggests that the use of prices is a more promising approach - citing the Kyoto Protocol as an example of where the setting of quantitative targets in the form of tradable emissions limits has failed.

** The High-level Commission on Carbon Prices estimates this to be between US\$40–80/tCO₂ by 2020 and US\$50–100/tCO₂ by 2030, provided a supportive policy environment is in place. Available [here](#).

Sector	Proposed solution(s)
Determining carbon price 'equivalence'	<p>In the first instance it would be simplest for equivalence to be determined by assessment of explicit carbon price levels. However, that is only possible if all jurisdictions have domestic carbon pricing in place, which is not yet the case with key players such as the United States who currently place more emphasis on implicit prices (such as product standards) than explicit ones, at least at the Federal level. It would be possible for the definition of equivalence to be broadened to include implicit prices, provided these approaches can be demonstrated to have an equivalent emissions impact as meeting the price floor.²⁹</p>
Provision of exemptions	<p>Opponents of BCAs have highlighted their propensity to discriminate against jurisdictions that neither have the means nor the wealth to develop low-carbon exports, emphasising the hypocrisy of rich nations 'punishing' developing countries for carbon emissions, whilst investing in their fossil fuel extraction.³⁰</p> <p>Aside from careful and considered use of club revenues, one way to address this concern would be to provide BCA exemptions for Least Developed Countries (LDCs) - as defined by the United Nations.³¹ This is enabled under WTO law, which allows for developing countries to receive special and differential treatment.</p> <p>The UK makes use of these provisions to grant unilateral tariff and quota-free access to 46 least developed countries,³² as well as applying a Generalised Scheme of Preferences to grant unilateral preferential access to the UK's market to lower developed countries such as India, Indonesia, the Philippines and Pakistan.³³</p> <p>The same justification could be used to exempt all least developed countries from a BCA when exporting to club member jurisdictions. Consideration should also be given to whether this exemption (or a BCA reduction) should be extended to lower developed countries as well.</p>
Carbon pricing coverage	<p>A jurisdiction need not achieve equivalence with the ICPF across its entire economy in order to qualify for club membership.</p> <p>Indeed - as with the proposal for an EU BCA - it may make more sense to start by demanding equivalence in key sectors that have high levels of accountability and transparency in terms of carbon intensity of supply and value chains (i.e the power sector and energy-intensive industrial sectors such as cement and steel)³⁴ before extending that ambition across a greater proportion of a member's economy.*</p> <p>After all, it is in these sectors where the threat of carbon leakage is greatest,** and where the greatest abatement is required. They are also the sectors most likely to be covered by - and responsive to - a carbon price.³⁵</p>

* Consideration should also be given as to how a BCA can account for the likelihood of semi-finished products (i.e component fertiliser parts) being exported between jurisdictions in order to avoid paying a border levy on final products.

** Emissions from the power sector and energy-intensive industrial sectors represent 94% of EU industrial emissions. European Parliament (2020). DRAFT REPORT: Towards a WTO-compatible carbon border adjustment mechanism. Available [here](#).

The Case for UK Leadership

“(COP26) IS THE LAST BEST CHANCE THE WORLD HAS TO COME TOGETHER IN ORDER TO DO THE THINGS WE NEED TO DO TO AVOID THE WORST CONSEQUENCES OF THE CLIMATE CRISIS.”

John Kerry, United States Special Presidential Envoy for Climate

A lot has been made of the propensity of both the G7 summit and COP26 - the June and November talks that the UK is presiding over this year - to determine the outcome of the global battle against climate change. Whilst both of these presidencies present a huge opportunity for the UK to demonstrate the ‘world-beating’ climate leadership, they also present a massive challenge - which will only be met if the full weight of British diplomacy and climate expertise is thrown behind them.

Fortunately, the UK does have a good track record when it comes to carbon pricing. Not only did we conceive the pilot emissions trading scheme that evolved into the EU ETS, but we have already implemented our own ‘Carbon Price Floor’ - a scheme rolled out in 2013 to underpin the price of carbon emissions on the EU market. We have also just announced the roll out of the ‘world’s first net zero cap and trade market’ - the UK ETS.³⁶

In light of the UK’s long history of leadership on carbon pricing, our Presidency over COP26, and our stated intent³⁷ to take more responsibility for the UK’s ‘consumption emissions’ it makes sense for the UK to take the lead on multilateral negotiations relating to the ICPF, including the underlying principles that will support them. If the UK fails to do so, they may risk being left behind as other countries move further and faster on carbon pricing,^{*} and environmental ambition more broadly.

As Sam Lowe has argued *“With both the European and American BCA discussions at an early stage, the UK should engage with, and attempt to shape the international BCA debate now, rather than sit it out and risk being bounced into adopting a mechanism designed by others at a later date. If the EU and US do end up adopting a BCA, and the UK does not, there is an additional risk that carbon-intensive products that would otherwise have been sold on the European and American markets end up being dumped onto the UK’s.”*³⁸

* This is also true in regards to prospects for linking the UK ETS with the EU ETS - there is some concern that the UK will not demonstrate sufficient ambition to qualify for linkage.

Conclusion

A multilateral Border Carbon Adjustment - premised on an International Carbon Price floor - could serve as an effective and flexible stepping stone towards a global agreement on carbon pricing. It could ensure that substantial progress is made against emissions reductions targets - even whilst formal negotiations under Article 6 remain unresolved. It could also help realise the potential of BCAs to drive international progress on emissions reductions, not least through providing revenues to support decarbonisation in developing countries, and through expanding the international market for low-carbon products.

The UK has a history of demonstrating successful leadership on carbon pricing, and is under huge pressure to ensure that both the G7 and COP26 are a success. Meeting this challenge by facilitating multilateral engagement with regards to BCAs is exactly the sort of leadership that will be expected from “Global Britain”. If it fails to meet this challenge, the UK risks being left behind, becoming a recipient of a BCA rather than one of the jurisdictions that has a defining role in shaping it.

Endnotes

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- ²¹ For example, through initiatives such as the [Partnership for Market Implementation](#).
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