



Task Force 2  
**Climate Change, Sustainable Energy  
& Environment**

**Policy brief**

# **AVOIDING A CARBON TRADE WAR: G20 DIALOGUE AND COORDINATION AND THE EUROPEAN CARBON BORDER ADJUSTMENT MECHANISM (CBAM)**

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**Jan Cernicky** Konrad-Adenauer-Stiftung  
**Bernice Lee** Futures – Chatham House  
**Ricardo Meléndez-Ortiz** Center for China and Globalization (CCG)

T20 NATIONAL COORDINATOR AND CHAIR



T20 CO-CHAIR



T20 SUMMIT CO-CHAIR



**Università  
Bocconi**  
MILANO





# ABSTRACT

Catalysing the G20's competitive advantage on global climate action, this policy brief proposes:

1. To swiftly act to fill the existing vacuum on coordination in the global governance architecture imperative to align the legal and policy regimes on climate and trade. Coordination is the G20's remit and imperative for systemic global scale action, as demonstrated by the COVID-19 pandemic. We propose the establishment of a dialogue under the aegis of the G20, inclusive of the multilateral institutions, to seek globally accepted principles and rules to govern climate, energy transition and trade, starting with the issue of Carbon Border Adjustment Mechanisms (CBAM).
2. In this spirit, we also propose elements of an inclusive CBAM. We look at the EU, given the imminence of its CBAM, and offer an approach to its design and introduction based on a permit trading model and building on the EU Emissions Trading System (EU-ETS), ensuring that it is not contrary to the UNFCCC principles of equity and CBDR-RC.<sup>1</sup>



# CHALLENGE

G20 economies account for 74% of global greenhouse gas emissions and 75% of world trade. Since 2016, the G20 has embraced the Paris Agreement (PA) as a keystone of cooperation and coordination. Italy's G20 coincides with the commencement of the PA's execution. Full implementation of national policies and measures on climate may result in expansive tension with the trade regime, as key global actors in the climate arena and the global economy (e.g. the EU and China) adopt carbon pricing schemes that may entail the use of level playing field tools, such as Carbon Border Adjustment Mechanisms (CBAM).<sup>2</sup> Currently, there is no intergovernmental forum beyond regional groupings for policy debate among authorities competent for climate and those competent for trade. Indeed, in the absence of an appropriate intergovernmental forum that delivers with the expediency demanded by the looming climate crisis, an intense debate is ongoing among epistemic and policy communities as to which of the existing regimes should prevail and which forum should be chosen to resolve ensuing tensions.<sup>3</sup>

The intertwined nature of the governance frameworks for international trade and climate change has been recognised in WTO and UNFCCC agreements from the outset. Equivalent provisions are also reaffirmed across the ever more extensive international trade and investment system. Still, the PA has led to apprehension by enabling countries to autonomously determine their contribution to global carbon emission reduction targets.<sup>4</sup> This, by default, results in heterogeneous policies and uncoordinated measures. For this approach to a common global problem to work smoothly, the PA would need to operate in isolation. The challenge is that this is not the case. Indeed, pre-existing legally binding engagements may constrain countries' ability to design and implement certain climate policies, such as those that embrace measures affecting international trade or investment.

The multilateral trade system and a myriad of regional and multi-party legal frameworks set terms and rules for the cross-border movement of goods and services and the use by governments of certain domestic policies. National carbon abatement policies are increasingly likely to lead to intended and unintended third-party consequences. A possible surge of negative spill-overs, heterogeneously dispersed across borders, is also expected to ensue, resulting in the use of contentious countermeasures. As an illustration, the emerging pledges towards carbon neutrality by 2050 by the United Kingdom, Japan, South Korea and Argentina consider the possible adoption of Carbon Border Adjustment Mechanisms (CBAMs) in their requisite fine-tuning pathways. The new US Administration's trade policy plan includes language suggesting that mechanisms such as these would be considered.<sup>5</sup> More imminently, the EU has announced that a proposal for a CBAM will be released in 2021, with plans to enact it by 2023.

Managing and resolving what is shaping up to be a damaging confrontation is imperative for success in the race against climate change and the planet's economic well-being. In this



policy brief, we call on the G20 to take the bull by the horns and act as a catalyst for cooperation and problem-solving. More specifically, we propose that the G20 actively engages in fostering best practices and cooperative principles among its members as they define approaches to address greenhouse gases, intending to contain the tension between climate and trade. In this context, we present and explore a proposal for an inclusive, open-architecture CBAM designed to be perceived by third countries as an invitation to become part of a climate-friendly market area, or encourage them to find effective ways to harmonise their respective schemes. Furthermore, we propose that the G20 Italy should actively foster dialogue across its mechanisms and engage the central intergovernmental bodies responsible for climate and trade policies in joint sessions.

The first part of this policy brief describes the EU CBAM approach and design. The second part focuses on the idea of rapid deployment of a standing dialogue between G20 authorities on climate and trade (and possibly energy).



# PROPOSAL

## ***AN INCLUSIVE, OPEN-ARCHITECTURE CARBON BORDER ADJUSTMENT MECHANISM***

At first glance, a Carbon Border Adjustment Mechanism (CBAM)<sup>6</sup> would appear to be a welcome tool. It is intended to ensure that countries and regions that adopt carbon pricing policies and abatement measures effectively reduce global greenhouse gas emissions and do not fall into situations where the burden imposed on domestic polluters results in the migration of industry and emissions to jurisdictions making lesser mitigation efforts. However, in the current COVID-19 pandemic and recovery scenario, there are some indications suggesting that a CBAM could be seen as a good opportunity to introduce protectionist measures, or be perceived as such by trading partners. It is not surprising that a recently published study (ref. Hübner 2021) has shown that the EU can expect especially strong resistance to the introduction of a CBAM from important trading partners such as China, India and Japan. At the same time, many countries are in the process of setting up emissions pricing systems. Even in the United States, where subnational jurisdictions have embraced carbon pricing despite widespread scepticism, uncertainty remains over possible approaches to economy-wide carbon action. Given such developments and pledges in the context of the UNFCCC, it seems safe to assume that various carbon pricing systems with their own individual CBAMs may be introduced relatively soon. However, it is also reasonable not to expect any medium-term agreement on a global emissions trading system that all countries and regions could adhere to, given the complexity of pricing systems and local constraints affecting their design.

Therefore, it seems appropriate to raise the concern that differently designed CBAMs may lead to severe distortions in international trade and even jeopardise economic recovery after the pandemic. Such a development could also hamper efforts to mitigate climate change. An ideal solution would be to adopt a global pollution rights trading system, as outlined and envisaged under the Kyoto Protocol. Climate diplomacy should continue to pursue this goal. However, in the medium-term, different systems are likely to co-exist as necessary interim steps. In order to alleviate the negative impact of such fragmentation, CO<sub>2</sub> trading systems in any jurisdiction, whether that is a region (e.g. the EU), a subnational entity (such as the State of California) or a nationwide system as in the cases of Japan or China, should be designed in such a way as to make it as easy as possible to merge them.

## ***A POSSIBLE APPROACH TO CBAM THAT CONSIDERS GLOBAL TRADE RELATIONSHIPS***

The EU is discussing various options for the design of a CBAM, all of which have their own strengths and weaknesses. However, if one wishes to establish a system that can be easily



combined with other systems, the best solution would be to adopt one based on tradable pollution permits. It looks likely that the proposal by the EU Commission will take this approach.

Initially, a CBAM based on permit trading would not be much different from introducing a simple CO<sub>2</sub> tariff. Since the cap for the EU Emissions trading system (EU-ETS) has already been decided for the next decade and is being applied, it would not be possible to add additional permits for imports in the short term. Therefore, a parallel system should be set up. This system would require importers to purchase permits at the EU's external border based on the quantity of GHG emissions released in producing the goods they are importing.

This would entail a certain, but not excessive, administrative cost. The existing EU customs nomenclature would indicate the average quantity of GHG emissions released during production of each good.<sup>7</sup> When importing such goods, importers would have to purchase permits corresponding to the declared amounts of GHG in addition to paying import duties. The price of these permits should closely correspond to the average burden on EU industry so that the WTO principle of non-discrimination is not violated. If an importer can prove that similar measures have already been imposed on the product in the country of origin, or that it has generated fewer GHG emissions than assumed in the customs nomenclature by using more efficient technology, or that it has otherwise offset its GHG emissions, it would have to purchase fewer permits or not purchase any at all.<sup>8</sup>

In a second step, this could be extended to create a trading system analogous to the EU-ETS. The number of available permits would be capped and reduced each year in line with the yet-to-be-established GHG emission reduction targets. Since the number of permits would thus be limited, they could no longer simply be purchased at the border at the time of import. Instead, they would be auctioned or allocated,<sup>9</sup> and importers who did not have any permits would have to purchase them via a trading system. This “capping and trading” of available permits would create ever higher entry barriers to the EU market for producers from regions where little climate change mitigation takes place in production processes. Such countries may be among the poorest.

Finally, in a third step, the EU-ETS and the trading system for imports could then be merged in 2030 at the earliest. For instance, German industrial companies that have surplus CO<sub>2</sub> permits due to gains in efficiency could then sell them to importers.<sup>10</sup>

## **STRATEGIES FOR INCLUDING OTHER REGIONS**

In the scenario described above, there would then be three types of permits: EU-issued permits (EU-ETS), permits from trading schemes of other regions, and permits that show that GHG emissions have been offset or lie below the quantity declared in the customs nomenclature. Therefore, it would be necessary from the outset to establish rules for recognising and affirming the equivalency of non-EU permits and EU permits.



Initially, this could be achieved through bilateral agreements and the recognition of standards by certification companies (for the last two types of permits mentioned). However, the G20, together with the EU and other interested parties, should seek as early as possible to establish an independent “clearing house” and task it with recognising and establishing equivalency between the various pollution permits. Ideally, such a clearing house could be set up within a multilateral institution (e.g. the WTO or the UNFCCC). Alternatively, a private body operating in the stock exchange and financial system environment could be a viable option.

The key task of such a clearing house would be to assess the costs that a firm in a given jurisdiction would have to bear for GHG emissions. Since not all pricing systems directly set a price per ton of CO<sub>2</sub> (China, for example, measures CO<sub>2</sub> intensity) and many jurisdictions use other measures in addition to CO<sub>2</sub> pricing to effectively reduce emissions, it would be necessary to develop categories for converting CO<sub>2</sub> prices. In the end, an exchange rate system could be established for pollution permits from different systems. Given the target of “CO<sub>2</sub> neutrality”, permits from (previously voluntary) offset mechanisms will become far more significant in future, so they should be incorporated into this system as early as possible. After all, if the EU wants to be carbon neutral by 2050, the number of permits issued needs to be reduced dramatically. Nonetheless, emissions will continue to be generated simply through operational processes, for instance, in the chemical industry. The easiest way to bring such products to market would be to offset their emissions.

One problem in the system described would be the treatment of the Least Developed Countries (LDCs). As described above, a CBAM could disadvantage these countries the most, since LDCs have the fewest resources for switching to low carbon production systems.<sup>11</sup> Since these countries are also the least responsible for global climate change, there is consensus that they should not be subject to the same financial burden as industrial countries. Nevertheless, there are good reasons not to exclude LDCs and middle-income countries from a CBAM. Firstly, this would be inconsistent with the WTO’s most-favoured-nation clause. Secondly, it would incentivise investments in GHG-intensive technologies in those particular countries. Therefore, following the CBDR-RC principle, the EU should increase its financial and technological support for countries using low carbon technologies and thus compensate the poorest countries for costs or losses they face because of the EU CBAM.

Such a system of establishing appropriate conversion factors between different carbon pricing systems may be realistic even if it is only a second-best way of reconciling open world trade with climate change mitigation requirements based on the PA. Unfortunately, there is little prospect of establishing a functioning global market in pollution rights in the medium-term. The solution would allow each country to decide whether it wants to price GHG emissions and, if so, how. Parallel to the introduction of the CBAM, the EU should seek to work together with like-minded partners on the mutual recognition of permits, before the EU CBAM is implemented if possible. At the same time, there is a need to define globally accepted principles and rules for CBAMs so that these mechanisms cannot be used to hide protectionism. The G20 would be the ideal framework for this. Below we propose a purposeful dialogue process with that aim.



## **A DIALOGUE-BASED POLICY COORDINATION AND HARMONISATION INITIATIVE FOR THE G20**

During Italy's presidency, the G20 should initiate a pro-active dialogue to generate synergies on trade and climate change policies and move countries toward more affirmative dynamics to update frameworks and regulatory systems.

Coordination is the G20's remit and imperative for systemic global scale action, as demonstrated by the COVID-19 pandemic. We propose that after the Italian summit, the G20 should engage in dialogue that ideally would take place systematically every year to allow for a generative approach to identifying issues and problem-solving. As argued above, exchanges would initially include principles and rules, as well as possible inclusive designs and approaches to CBAMs. Other topics could include ambitious solutions to trade policy, impediments to the rapid scale-up of innovation and diffusion of climate essential goods and technologies, regulations on fossil fuel subsidies, and renewable energy. On this basis, this proposed debate on climate and trade should also help governments define legitimate national climate "response measures".

Other issues linking climate action to cross-border trade and investment include the emergence of clubs of countries around carbon markets,<sup>12</sup> endeavours to define special procedures that facilitate international diffusion and use of essential climate technologies and other climate-friendly goods, the need to develop level playing field disciplines for the phase-out of fossil fuel subsidies, and faster scale-up of renewable energy. We also need to more effectively conceptualise the increasingly pressing climate action matters that are overspilling into other policy regimes such as legitimate national climate "response measures", "energy efficiency", and "sustainable agriculture".<sup>13</sup>

The international community has agreed that action during the 2020s is vital to the planet's future. However, many possible solutions remain elusive and mired in a lack of dialogue amongst policy communities. The G20 stands as the premier forum for global crisis management and addressing economic, social and environmental challenges. This brief calls for optimisation of the G20's convening clout to ensure the trade and climate regimes work together, rather than against one another.

We propose establishing a standing and structured intergovernmental policy dialogue across relevant international agreements and a mechanism for coordination and multi-stakeholder participation in diagnosing and seeking responses and in identifying tensions and offsetting potential conflict. Specifically, we propose that G20 members should:

1. Work cooperatively at the UNFCCC and the WTO to install joint policy dialogues between the relevant intergovernmental machinery. Fifty-three WTO members have already launched a process called *Trade and Environmental Sustainability Structured Discussions (TESSD)* in March 2021<sup>14</sup>. Its proposed agenda may include decarbonising





supply chains, fossil fuel subsidies, and Carbon Border Adjustment Mechanisms (WTO 2021). On the UNFCCC side, COP24, held in 2018 in Katowice, agreed on a trade-related work programme for the PA's *Forum on Response Measures* to minimise the impact of climate measures in developing countries. Judging from past efforts, these attempts may well operate in *silo diplomacy*: most delegates tending to be unique to each forum, representing and bringing specific interests. Decades of failure to deliver in a similar format prompts us to anticipate that neither platform may be sufficient or comprehensive enough to arrive at solutions (Bacchus 2016).

2. More immediately, convene joint G20 ministerial meetings on climate and trade in 2021 and beyond. As a precedent, previous iterations of G20 presidencies have established the *Trade and Investment Working Group (TWIG)*<sup>15</sup> (see China, G20 Presidency, 2016) and *The G20 Ministerial Meeting on Trade and Digital Economy* (ref. Govt of Japan, G20 Presidency 2019) to effectively address linkages. Moreover, in practice such schemes result in generative and integrated work among secretariats of the most relevant international organisations. They also tend to foster combined intergovernmental dialogue back at their respective institutions.
3. In the same vein, extend the blended dialogue to non-national actors (*major groups* in UNFCCC terms), creating a G20 permanent multi-stakeholder forum on climate, energy transition, and trade that actively involves *G20 engagement groups*: S20, T20, B20, and C20.<sup>16</sup>



# NOTES

<sup>1</sup>These acronyms refer to the United Nations Convention on Climate Change (UNFCCC) and its principle of *Common but Differentiated Responsibilities and Respective Capabilities* (CBDR-RC).

<sup>2</sup>This Policy Brief adopts the use of the term “Carbon Border Adjustment Mechanism” (CBAM) when referring to the generic policy tool – most commonly known as “Border Carbon Adjustment” (BCA) – including the scheme proposed by the European Commission’s President Ursula von der Leyen in July 2019 and now announced for release by the European Commission in 2021.

<sup>3</sup>For example, see Charnovitz, 2020.

<sup>4</sup>There is an extensive body of literature documenting such apprehension, e.g. (Charnovitz 2020; Lee and Vaughan 2020), and arguments on the insufficiency of current global governance institutions *vis-à-vis* a lack of agreed commitments, the PA design and challenges faced by the international trade system.

<sup>5</sup>See USTR, 2021

<sup>6</sup>For details of the advantages and disadvantages of a CBAM and weighing of the various theoretical possibilities for its concrete implementation see Cernicky and Hartlieb, 2020.

<sup>7</sup>It would be important to use a transparent and verifiable system to determine these values because individual products could otherwise easily be protected against foreign competition if excessively high values were used.

<sup>8</sup>There would likely be a need for commonly accepted documentation for the actual carbon content of a commodity. A *carbon passport* could be a solution, perhaps employing blockchain technology to guarantee assurance. (see Meléndez-Ortiz 2020).

<sup>9</sup>Determining the functioning of an allocation system (to countries/companies, etc.) would be a complex process.

<sup>10</sup>As a consequence of the integration of imported GHG emissions, the total quantity of GHG emissions in the EU system would be mathematically higher than before. This might lead to a need to redefine the EU-reduction targets.

<sup>11</sup>Whether this is really a problem would be a topic to be examined in another paper. Since less developed countries are generally less industrialised and export fewer processed products, the costs of adapting to a GHG-free economic system should not be any higher than the costs that they would otherwise incur in establishing a competitive economic system; this would



at least hold true in the case of countries that are not dependent on exports of raw materials.

<sup>12</sup> A controversial idea that could lead to less, rather than more, cooperative action, depending on its purpose and design. (Lee and Baron 2021).

<sup>13</sup> See a comprehensive inventory of linkages, and options to resolve them, in Das et al. 2018; Bacchus 2016.

<sup>14</sup> See communication regarding the initiative from Australia; Canada; Chad; Chile; Costa Rica; European Union; the Gambia; Fiji; Iceland; Japan; Korea, Republic of; Liechtenstein; Maldives; Mexico; Moldova, Republic of; Montenegro; New Zealand; North Macedonia; Norway; Senegal; Switzerland; the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu; and the United Kingdom (ref. WTO 2020).

<sup>15</sup> Agreed at the G20 Trade Ministers Meeting held in Shanghai on 9-10 July.

<sup>16</sup> Refers to Science 20, Think-tank 20, Business 20, and Civil Society 20.



## REFERENCES

Bacchus J., (2016), *Global Rules for Mutually Supportive and Reinforcing the Trade and Climate Regimes*, E15 Expert Group on Measures to Address Climate Change and the Trade System – Policy Options Paper, E15Initiative, International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum, Geneva, [http://www3.weforum.org/docs/E15/WEF\\_Climate\\_Change\\_POP.pdf](http://www3.weforum.org/docs/E15/WEF_Climate_Change_POP.pdf)

Cernicky J. and A. Hartlieb, (2020), “Carbon border adjustment mechanism: Tax or tariff for the climate?”, Konrad-Adenauer-Foundation, Berlin, <https://www.kas.de/en/analysen-und-argumente/detail/-/content/carbon-border-adjustment-mechanism-tax-or-tariff-for-the-climate>

Charnovitz S., (2020), *Solving the Challenges to World Trade*, GWU Legal Studies Research Paper no. 2020-78, November <https://ssrn.com/abstract=3736069>

China, (2016), G20 Presidency, “Leaders’ Communique Hangzhou Summit”, 6 September [http://www.g20chn.org/English/Documents/Current/201609/t20160906\\_3395.html](http://www.g20chn.org/English/Documents/Current/201609/t20160906_3395.html)

Das K., H. van Asselt, S. Droege, and M. Mehling,(2018), *Making the International Trade System Work for Climate Change: Assessing the Options*, Climate Strategies [https://climatestrategies.org/wp-content/uploads/2018/07/CS-Report-\\_Trade-WP4.pdf](https://climatestrategies.org/wp-content/uploads/2018/07/CS-Report-_Trade-WP4.pdf)

Government of Japan, (2019), G20 Presidency, Ministry of Economy, Trade and Industry, *G20 Ibaraki-Tsukuba Ministerial Meeting on Trade and Digital Economy*,

Tsukuba City, 9 June [https://www.meti.go.jp/english/press/2019/0610\\_003.html](https://www.meti.go.jp/english/press/2019/0610_003.html)

Lee B. and R. Baron, (2021), *Why the EU’s Proposed Carbon Border Must Not Be Used to Launch a Carbon Club*, Agenda, World Economic Forum, 2 June <https://www.weforum.org/agenda/2021/06/eu-carbon-border-clubs-climate/>

Lee B. and S. Vaughan, (2020), *Inevitable Clash When Climate Meets Trade at the Border*, Expert Comment, Chatham House, 8 November <https://www.chathamhouse.org/2020/11/inevitable-clash-when-climate-meets-trade-border>

Meléndez-Ortiz R., (2020), “Trade in a World Where Goods Carry Carbon Passports” in D. Esty and S. Biniiaz (eds), *Cool Heads in a Warming World: How Trade Policy Can Help Fight Climate Change*, New Haven, Yale Center for Environmental Law & Policy <https://envirocenter.yale.edu/cool-heads-warming-world-how-trade-policy-can-help-fight-climate-change>; <https://ssrn.com/abstract=3741549>

*Perception of the Planned EU Carbon Border Adjustment Mechanism in Asia Pacific - An Expert Survey*, Regional Project Energy Security and Climate Change Asia-Pacific (RECAP), Konrad-Adenauer-Stiftung e.V, Hong Kong, 2021 <https://www.kas.de/en/web/recap/single-title/-/content/perception-of-the-planned-eu-carbon-border-adjustment-mechanism-in-asia-pacific-an-expert-survey>

The Office of the United States Trade Representative, (2021), *The 2021 Trade Policy*



*Agenda and 2020 Annual Report of the President of the United States*, March <https://ustr.gov/sites/default/files/files/reports/2021/2021%20Trade%20Agenda/Online%20PDF%202021%20Trade%20Policy%20Agenda%20and%202020%20Annual%20Report.pdf> (at page 3)

World Trade Organization (WTO), (2020), “Committee on Trade and Environment”, Communication on Trade and Environmental Sustainability, (WT/CTE/W/249), Geneva, 17 November <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?file-name=q:/WT/CTE/W249.pdf&Open=True>

World Trade Organization (WTO), (2021), *First meeting held to advance work on trade and environmental sustainability*, Trade and Environmental Sustainability Structured Discussions, WTO News, Geneva, 5 March [https://www.wto.org/english/news\\_e/news21\\_e/tessd\\_08mar21\\_e.htm](https://www.wto.org/english/news_e/news21_e/tessd_08mar21_e.htm)



## ABOUT THE AUTHORS



**Jan Cernicky** Konrad-Adenauer-Stiftung, Berlin (Germany)

After studying political science and philosophy in Hannover and Paris, Jan Cernicky received a doctor's degree with a thesis on regional integration in Western Africa. He ran a consulting company that assists small and medium-sized companies to enter markets in Africa. From 2015 he headed the offices of the Konrad-Adenauer-Stiftung in DR Congo and Kenya. Since 2020 he is responsible for international trade and economy at the headquarter of the foundation.



**Bernice Lee** Futures – Chatham House, London (UK)

Bernice Lee is Hoffmann Distinguished Fellow for Sustainability and Research Director (Futures) at Chatham House. She is a member of the UK's Global Resource Initiative Task Force; the International Advisory Group of the UK Climate Change Committee as well as Trustee of Climate Advisors (UK) and a member of the Energy Foundation (China) Board. She is the Founding Director of the Hoffmann Centre for Sustainable Resource Economy, now renamed the Chatham House Sustainability Accelerator, whose Advisory Board she chairs. Previously she was Director of Climate Change and Resource Security Initiatives at the World Economic Forum, Special Advisor to Laurence Tubiana, France's COP15 Ambassador, and Director of the Energy, Environment and Resources Department at Chatham House. She held positions at the UN Secretary-General's office; the Rockefeller Foundation in New York; the Aga Khan Foundation in London and the International Centre for Trade and Sustainable Development in Geneva.



**Ricardo Meléndez-Ortiz** Center for China and Globalization (CCG), Beijing (China)

Non-resident Senior Fellow, Center for China and Globalization; Advisor on ESG/NetZero; Member of the Scotia Group SG26; Climate and Energy Advisor, World Business Council for Sustainable Development (WBCSD); Strategic Adviser, Latin Trade Group; Senior Associate, Inter-American Institute on Justice and Sustainability; lecturer, Rotary International's Leadership for Sustainability; Principal and Fellow at Caereleum | Globe & Sustainability. With 30 years as policy entrepreneur, initiator, and curator of applied research, has dedicated his career to "aligning dynamics and mechanics of the global economy to the high ideals of sustainability". Co-founded and led the International Centre for Trade and Sustainable Development (ICTSD -1996/2018). Convened high-impact multi-stakeholder processes such as WEF-ICTSD-EI15 Initiative,



engaging 400 experts on future of global trade system, and Sustainable Energy Trade Initiative. Worked with G20 presidencies of China, Germany, Argentina (co-chaired T20 task-forces in 2016-2018); advised Panama (WTO accession), Ecuador and Bolivia (sustainability, forests, environmental funds). Co-founded Fundación Futuro Latinoamericano.