

# POLICY *dialogue* BRIEF



## Designing Elements for a Robust Carbon Pricing Club

### Executive Summary

On October 14–16, 2015, experts from academia, government, international organizations, and civil society gathered at the Airlie Center in Warrenton, Virginia, to continue a dialogue on low-carbon clubs at the intersection of pricing, technology investment, and trade. This workshop built on conversations from an earlier workshop, hosted by the Stanley Foundation, Climate Strategies, the International Center for Trade and Sustainable Development, and the Institute for Sustainable Development and International Relations (IDDRI) on July 8, 2015, in Paris, which focused on the role and definition of, and interest in developing, low carbon clubs.

Carbon pricing has emerged as a powerful and viable tool for addressing global warming. As of September 15, 2015, 39 countries and 23 regions, representing 12 percent of the world's population, had implemented a carbon pricing policy of some kind, and over 1,000 companies reported to CDP that they had set an internal price on carbon or were planning to do so within two years.<sup>1</sup> With the 21st Conference of the Parties (COP21) of the United Nations Framework Convention on Climate Change (UNFCCC) in Paris in December that was followed closely by the 10th World Trade Organization (WTO) Ministerial, 2015 presented a crucial set of activities leading to the potential establishment of carbon clubs.

These frameworks incentivize new participants to join, address concerns about free riding and carbon leakage, and can facilitate the transfer and development of technology, as well as the convergence of carbon prices and the widening of the carbon market. While the potential of carbon clubs remains great, their implementation can be challenging. This workshop focused on identifying the most promising and likely pathways for designing a carbon pricing club, with a particular eye to the role the upcoming COP21 could play in facilitating this process. It also explored the role of the WTO and the lessons from trade policies. A consideration of the steps that could support the emergence of a club framework in 2016 brought the session to a close.

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This brief summarizes the primary findings of the conference as interpreted by the rapporteur, Amy Weinfurter, and the co-chairs, Andrzej Blachowicz and Todd Edwards. Participants neither reviewed nor approved this brief. Therefore, it should not be assumed that every participant subscribes to all of its recommendations, observations, and conclusions.

## Pathways for Designing a Club: Key Themes and Components

Several recurring themes emerged from the workshop's discussions around carbon pricing pathways and the elements for a carbon pricing club. These themes are summarized below and discussed in greater depth in the following sections:

1. Putting a price on carbon, regardless of the specific price, helps to generate a market signal, spur discussion, prompt behavior changes, and trigger a race to the top.
2. Over the long term, different market and/or tax schemes should aim to converge. This goal of convergence is distinct from the goal of explicitly linking market and/or tax schemes.
3. The goal of convergence requires fair and transparent standards or frameworks, which should be set by the club's actors and participants.
4. There is a risk that heterogeneity between different market and/or tax schemes will threaten or delay the potential for long-term or medium-term convergence.
5. Compatible policies of carbon pricing can help calm the "stormy waters" that heterogeneous policies could create.
6. The World Trade Organization (WTO) and the United Nations Framework Convention on Climate Change (UNFCCC) are not likely to pose a threat to carbon clubs; on the contrary—their respective frameworks could provide a supporting environment for the clubs to deliver on both WTO and UNFCCC goals.
7. The goals for carbon pricing pathways and frameworks will need to be determined by the club's actors and participants, including national and subnational jurisdictions.
8. The term *club* may alienate some potential participants because of its connotations of exclusivity; alternative terminology should be considered.

## Perspectives on Carbon Pricing Pathways The State of Carbon Pricing Policies

Over the last year, the pulse of private sector engagement on carbon pricing has increased dramatically. Based on the presentation of the CDP and We Mean Business Coalition report *Carbon Pricing Pathways: Navigating the Path to 2° C*, the number of companies that reported to CDP that they use an internal price on carbon rose from approximately 25 in 2013 to 150 in 2014, spanning the world's major economies. In 2015, approximately 1,000 companies reported to CDP that they had set an internal price on carbon or were planning to do so within two years.<sup>2</sup> These companies have set prices ranging from \$4 to \$357 per ton. While the motivations and methodology for designing these prices vary, companies share a gut feeling that some kind of mechanism to account for the costs of carbon is increasingly important. Many investors are echoing this sentiment, citing concerns about increased risk and stranded assets and linking carbon pricing policies with broader initiatives to assess the carbon footprint and carbon intensity of their portfolios. The growing level of interest within the private sector dovetails with increasing attention to carbon pricing strategies from the world's governments.

### Key Criteria for Successful Carbon Pricing Policies

The rising interest in and adoption of carbon pricing policies creates an opportunity to bring these policies to greater scale and effect. However, moving from a general interest and agreement on the need for a price on carbon to tackling the technical details involved in the implementation of these policies remains difficult. The aforementioned CDP and We Mean Business Coalition report gives readers a toolkit to help businesses, governments, and investors overcome this common stumbling block. The toolkit identifies three goals central to limiting global temperature rise to 2° C while also maintaining a thriving global economy:

1. Broadening the engagement in carbon pricing discussions, to support the widespread adoption of effective carbon pricing policies.
2. Establishing carbon price levels that will transform economies and trigger large-scale decarbonization.
3. Converging carbon price levels over time, to ensure open markets on a global scale. This goal of convergence is distinct from a goal of formal linkages between different carbon markets.

The toolkit considers those three central goals in the context of two complicating scenarios:

1. **The need for alignment across global, national, and subnational and nonstate carbon pricing policies.** It is crucial for carbon pricing policies to interact positively with each other, as well as with corresponding efforts to address trade, development, and climate change.
2. **The selection of explicit and implicit carbon pricing policies.** Explicit carbon pricing policies, such as carbon taxes or emission-trading schemes, do not form a silver bullet but one part of a suite of strategies that includes implicit carbon pricing policies, such as energy efficiency or product-performance standards. Different parts of the economy will respond better to different types of strategies. For instance, standards for behavior change, such as consumers' energy usage, may respond more to efficiency and product standards than to price signals. In other areas, such as the use of fuel in the transportation sector, explicit price signals are most effective in prompting the adoption of low-carbon products and processes. Additionally, some economies may require a carbon price that is too high to be politically palatable; in these situations, investments in the research and development of new technology and infrastructure may represent the best path forward.

### Carbon Pricing Bands

The *Carbon Pricing Pathways* report also identifies five bands of carbon pricing policies:

1. The *subsidies band* reflects the negative price many countries have placed on carbon; an estimated annual \$5 billion currently supports fossil fuel consumption. Subsidies often remain in place, even as carbon prices are implemented.
2. The *introductory band*, which puts a price of up to \$20 per ton on carbon, helps economies prepare for and adapt to the concept of putting a price on greenhouse gas emissions, and lays the foundation for more substantial future reductions. While this level of pricing may begin to catalyze change, it is not sufficient to drive an economywide transformation.
3. The *operational band*, which spans prices from \$20 to \$50 per ton, begins to trigger real switches away from carbon as companies begin to look toward lower-carbon fuels. This scenario is characterized by the switch from coal to natural gas, the use of renewable energy (though not at large scales), and the pursuit of "low-hanging" options for improving efficiency and reducing emissions.
4. The *transformational band* puts a price of \$50 to \$80 per ton on carbon, generating a shift away from fossil fuels to renewable energy and spurring investment in alternative and clean technologies, such as carbon capture and storage and fuel-cell storage. This is the pricing level at which different carbon pricing policies are expected to converge.
5. The *targeted band*, with prices of over \$80 per ton, is generally politically unfeasible and difficult to implement, but it can be used in a targeted way to help phase out a particular technology, raise funds for early stage technology investment, or respond to crises by jump-starting a switch to a low-carbon economy.

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*The Carbon Pricing Pathways report identifies five bands of carbon pricing policies: the subsidies band, the introductory band, the operational band, the transformational band, and the targeted band.*

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## Carbon Pricing Pathway Scenarios

To help give context to these pricing bands, the report's authors suggest four possible scenarios for the trajectory of carbon pricing policies. (A trajectory, in this context, refers to the variation of a carbon price within a particular economy, assuming the existence of complementary policies in other economies.) Scenario one—*sailing to the new low carbon world*—describes the successful implementation of carbon pricing policies. In this trajectory, the number of countries with introductory carbon prices (up to \$20) expands during 2015–2020 and moves into the operational and transformational categories between 2020 and 2030. Predicting the behavior of the market beyond 2030 is challenging. Prices could decrease if the adoption of low-carbon technology and infrastructure reduces demand for fossil fuels, or remain high to help keep remaining fossil fuels in the ground.

Three alternative scenarios represent some of the other most common possible pathways of global carbon pricing policies. Scenario two—*sailing into a cliff*—anticipates that carbon prices will remain depressed at primarily introductory levels before rising sharply to the transformational or targeted levels between 2020 and 2030, in response to a series of catastrophic weather events that push policymakers to take rapid action. This scenario anticipates a 2015 global climate commitment that, while strong, is not implemented at the national level, resulting in delayed action that creates 3° C of global temperature rise, strands assets, and shocks the world economy.

Scenario three—*stormy waters*—also produces 3° C of global temperature rise, because of a lack of convergence between many different types of carbon pricing policies. This scenario results in confusing market signals that undermine investor confidence and concerns about competitiveness that erode the political will for countries to implement and accelerate carbon pricing policies.

Scenario four—*running aground*—produces the direst prediction of a 4° C global temperature rise that could have occurred if the 2015 Paris climate change conference failed to produce a strong agreement; yet even with the Paris Agreement there is still plausibility for this trajectory if post-Paris implementation is lackluster and the majority of carbon prices remain in the introductory price band. The resulting climate change produces social and economic upheaval.

## The Role of the UNFCCC and the Paris Climate Conference

Based on the Carbon Pricing Pathways report, a number of questions emerged at the Strategy for Peace Conference workshop regarding the next steps for supporting carbon pricing, particularly related to COP21. For many workshop participants, the *stormy waters* scenario stood out as the most likely trajectory for the global carbon market, raising questions about the best way to harness the groundswell of activity and ambition to move toward a best-case scenario. Over 80 of the 150 Intended Nationally Determined Contributions (INDCs) voluntarily submitted by countries to the UN Climate Change Secretariat as of the date of the conference discussion feature carbon pricing in some way. This level of engagement is encouraging, especially since it is complemented by both an increase in the number of businesses setting an internal price on carbon and technological advances that are lowering prices for renewable energy.

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However, the downside to the growing number of carbon pricing policies is the risk of increasing heterogeneity, which could make convergence more challenging and potentially water down ambition through the introduction of less-rigorous standards. Additionally, even with progress, carbon pricing policies still face challenges from political inertia, government intervention to strengthen or weaken carbon prices, lobbying from climate laggards, and a lack of public support.

While it may be difficult to go beyond high-level language in the Paris negotiating text, several factors would characterize a successful outcome for carbon pricing in and beyond December 2015. Most fundamentally, the implementation of the Paris Agreement could raise the ambition to address climate change to the levels needed to catalyze effective levels of carbon pricing. More specifically, the Paris COP21 conference and the UNFCCC framework could help set or build the framework for clear international rules for market use and trading criteria.

In particular, the UNFCCC could help facilitate the development of effective accounting standards and practices, enabling parties to link trading schemes or to exchange units across borders, subject to accounting rules. Simply reporting exchanges/trades may not be enough to ensure a robust trading framework, and verifying emissions trading may be key to a successful pricing policy. In Poland, for example, chronic underreporting of companies' historic emissions to national authorities became evident when the same companies later reported data for the European Emissions Trading Scheme in order to inform the allocation of emissions trading allowances (where free allocation of those was based on historic CO<sub>2</sub> emissions).

A UNFCCC's accounting mechanism could provide a foundation for widening the carbon market and engaging countries on carbon pricing through, for instance, the creation of a new crediting mechanism that replaces or builds on tools like the Clean Development Mechanism. Focusing on the accounting dimension of the UNFCCC could be less contentious than trying to negotiate new rules and regulations. Moreover, working with the existing UNFCCC structure would give much-needed attention to adjusting current UNFCCC's accounting frameworks. The UNFCCC includes a number of principles that allow certain parties to act while others choose not to, enabling this type of agreement to proceed without being hindered by countries opposed to it. Differentiated INDCs with respective capabilities could enable actors at different levels of development to work together to buy or sell carbon tax credits. In addition, ideas might be drawn from other reporting forums, such

as the UNFCCC's Non-State Actor Zone for Climate Action online platform that could allow for third party assessments to track progress of carbon markets and safeguard against double counting.

## Key Considerations and Next Steps for Carbon Pricing Pathways

The workshop participants discussed other key considerations in fostering an effective carbon pricing trajectory. In particular, the discussions identified the following questions, caveats, and potential strategies:

- **There is untapped potential to leverage the impacts of a 2° C trajectory to motivate governments—particularly in developing countries—to act.** Models show that limiting warming to 2° C requires carbon emissions to reach net zero levels between 2055 and 2070 (or sooner for a 1.5° C trajectory), and even this level of global average temperature increase will trigger consequences with enormous social and economic costs.<sup>3</sup> However, the recognition of the impacts of global warming have been belated and could be more strongly communicated in terms of the resources countries will need to address them. Linking adaptation and mitigation can help frame the protection of citizens and resources as a key reason to act on climate.
- **Widening the carbon marketplace will be crucial to significantly lowering emissions.** Emissions in developed countries are already declining. Emissions from developing and emerging economies such as Peru and Vietnam are growing and will have to decrease dramatically if their current rates of economic growth continue. It may be possible to create a wider scope for a market mechanism by mobilizing countries like Venezuela and Bolivia to engage large emerging economies such as Brazil, China, and India, as well as oil-producing economies in dialogue on the best structures and use of these mechanisms. This approach could target certain key constituencies and then slowly expand its focus.
- **The use of revenue from a carbon pricing policy can help promote the policy's acceptance.** In British Columbia, for example, the creation of a revenue-neutral carbon tax, which generates funds for other programs, has made the tax extremely valuable to the government and has helped protect it from repeal.
- **Preparing for questions about the transparency of carbon pricing policies can help prevent opposing parties from derailing their implementation.** Studies that can combat claims of competitive disadvantage will be crucial to addressing pushback

on climate pricing policies by companies opposed to them.

- **There is a need to consider incorporating the social costs of carbon into negative subsidies.** Developing countries are responsible for most of the currently listed subsidies; including the social cost of carbon in subsidies would bring more developed countries into the fold.
- **Almost no starting amount of a carbon pricing policy is too small.** In British Columbia, even low levels of taxation changed people's habits and started key conversations about climate change. These sociological benefits were found to begin at prices of approximately \$10 per ton.
- **Carbon can be portrayed as a source of value, in addition to a source of penalty.** Carbon can also hold value for many actors working to develop alternative energy sources, and many companies have started viewing carbon as a feedstock that will fuel the development of a corollary market. For example, many organizations are using algae to extract carbon dioxide from the air; one-third of their current costs come from acquiring sufficient carbon dioxide. Markets should also focus on harnessing and developing these kinds of new technologies.

## Elements for a Carbon Pricing Club

### Proposal to Use the WTO to Avoid Competitive Distortions

The roundtable participants heard and responded to a presentation about a proposal to explore ways in which the WTO could help avoid competitive distortions and carbon leakages created by different price levels employed by various national and subnational trading schemes. The presentation noted that introducing an evaluation of competition distortions into the WTO's assessment of competitive distortion would allow an industry operating within a country with a carbon price (Industry A) to complain about unfair competition from an industry operating in a country without a carbon price (Industry B). The industry operating within the country with a carbon price would argue, in effect, that a country's lack of a carbon pricing policy amounts to an undue subsidy of Industry B. A WTO ruling against the industry operating without a carbon price would only apply if the carbon price that applies to Industry A is greater than a WTO reference price.

The presentation posited that a number of potential advantages could be created from the aforementioned approach within the WTO. Its penalty on industries free

of carbon pricing would only be applied in situations where the carbon price difference is significant enough to warrant a case in front of the WTO. This approach also avoids the need to create new trade barriers or border taxes, which are often complicated and difficult to calculate, further enhancing its efficiency. Rulings from the WTO would also influence governments not directly involved in the case and could help support the convergence of worldwide carbon prices.

However, many questions were also associated with this approach. The workshop focused, in particular, on the proposed mechanism's compatibility with WTO operating procedures and on what, if any, internal governance mechanisms within the WTO would facilitate the introduction of this policy. The presenter also highlighted questions about how the reference price on carbon, or the carbon price trajectory, could be determined.

### Compatibility With WTO Operating Procedures

For an issue to fall within the WTO's dispute settlement framework, it must address the notion of unfair competition through competitive distortions or undue subsidy. Some participants suggested that the lack of a carbon price was unlikely to find a strong foothold in the existing WTO framework since it is unlikely to be considered a categorical distortion or to fit the WTO's very narrow and specific definition of a subsidy. The WTO currently defines a subsidy as a financial contribution provided by a government or public body that confers a benefit to a particular industry or enterprise. To successfully argue that the lack of subsidies conferred an unfair advantage would require demonstrating that the lack of a carbon price was designed to promote a country's exports or to favor the use of domestic over imported products. The WTO also includes an antidumping argument that prevents goods from being exported at a price below that of the normal price in a country's own market, but without a carbon price in place, it would be very difficult to make this comparison.

The difficulty of determining a reference price for carbon also emerged as a probable obstacle to the proposed proactive use of the WTO. Setting this price falls outside the WTO's area of expertise and involves considering a wide variation of possible prices from different polices. Some participants suggested that the WTO might be able to choose a reference from some of the world's existing carbon pricing systems.

While WTO agreements can be altered by, for instance, proposing an amendment that addresses these issues, this has historically been very difficult. Even a plurilateral agreement would need to be ratified by the whole membership, making it vulnerable to

countries opposed to carbon pricing policies. It might be easier, some participants suggested, to use border tax adjustments or to work with existing mechanisms within the WTO than to attempt to amend the subsidies agreement.

### **Additional Strategies for Engaging the WTO Framework**

The difficulties of amending the WTO's subsidy agreement do not rule out the WTO as a forum for furthering carbon pricing policies. There are currently a number of trade-related policies that penalize clean-energy technologies; addressing protectionist tariffs or calling for a moratorium on the overrepresentation of antidumping cases that target the clean energy sector could help accelerate the path to a low-carbon economy. Other potential strategies could support the use of the lowest possible tariff for climate goods, though some participants noted that this approach could be costly to countries that are already investing in decarbonization. A forthcoming report from the International Center for Trade and Sustainable Development's E15 Initiative will outline these and other strategies for engaging trade frameworks to support decarbonization in greater detail.<sup>4</sup>

### **Framing the WTO as a Tool Rather Than a Roadblock**

More broadly, the workshop's participants discussed the need to address the perception that the WTO poses a threat to carbon pricing policies. There is frequently a great deal of misunderstanding about the coverage of the WTO's rules and disciplines, as they only relate to trade in goods and services. Since emission units do not fall into either of these categories, carbon pricing does not fall under the WTO's immediate jurisdiction. The WTO's involvement would only be triggered through issues that might arise from linking carbon prices with other instruments designed to trade with trade-competitiveness issues. In other words, fear of incompatibility between the WTO and carbon pricing policies should not inhibit efforts to create a global framework for decarbonization.

There may also be ways for the WTO to facilitate a race to the top through mechanisms that increase and facilitate technology transfer, develop coherent trade policies to help attract investment, and enable countries to reduce high tariffs to facilitate access to environmental goods and services. Additionally, in increasingly global value chains, goods are evermore defined by sectors rather than by nations. International standards can help address this new reality. Focusing on how two markets can work together can substitute for or complement efforts to address carbon pricing through cases on competitive distortion. The group also noted the need to consider other plurilateral forums, such as the Trans-Pacific Partnership, which might also provide a space for advancing carbon pricing.

### **Designing a Robust Carbon Pricing Club**

This part of the roundtable provided participants with an opportunity to discuss more-detailed issues in two working groups. They focused on identifying three key elements of a club approach that could realistically be implemented with regard to carbon pricing in 2016 and explaining the role (if any) COP21 could play in achieving these goals. Working group one focused on elements that would lead to emergence of a carbon club, and working group two focused on the comprehensive design process of a carbon club arrangement.

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## Working Group One

Working group one articulated its objective as the need to increase the speed of the adoption of carbon pricing ambition. This goal focuses on building engagement and buy-in into a carbon pricing policy rather than establishing a specific pricing target, which would be set by the club's members. The group identified three key design elements to help realize this goal:

1. The club organization will maintain the spirit of collective action with focus on cooperation between members and pathways toward solid carbon pricing rather than introduction of very strict rules upfront.
2. Entities with the authority to set and enforce pricing mechanisms will have an important role to play in the club. This focus on national and subnational governments reflects the working group's observation that legal jurisdictions currently face higher risks than companies when they consider carbon pricing schemes. The club members would be expected to develop and fine-tune standards to inform future decision making on the inclusion of current and/or future pricing commitments, accounting quality assessments, and market transparency assessments.
3. The incentives for joining a club were the subject of a great deal of debate within the working group and would ultimately be decided by the club members. However, participation in the formation of the club's rules, access to capital, and soft benefits such as access to other participants represent some of the potential draws for new members.

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The club could achieve and implement its objectives by:

- Linking carbon pricing with existing trade mechanisms.
- Creating new credit mechanisms.
- Harmonizing broader carbon pricing mechanisms.
- Establishing mechanisms to facilitate cooperation between members.
- Creating forums for communication and exchanges.

The exercise generated several points of overarching consensus, including the importance of starting small, including developed and developing countries, and applying fresh thinking without reinventing the wheel. The participants also noted the need to focus on accounting policies and to avoid double counting, whereby emissions reductions can only be owned by one jurisdiction, in any integration of this scheme with the UNFCCC.

## Working Group Two

Working group two defined its objective as creating a collaborative environment for carbon pricing to focus on solutions consistent with the Sustainable Development Goals that bridge the divide between developed and developing countries. The group outlined a number of guiding benefits, criteria for membership, and mechanisms for reviewing compliance:

- This scheme's *benefits* would include technology development and transfer, capacity building, carbon-leakage reduction, revenues from carbon pricing policies, comparability between carbon pricing policies,

and transparency in the carbon pricing policies of trading partners.

- The club's *criteria for membership* would include a commitment to green growth, the phase-out of fossil fuel subsidies, transparency, the absence of regulatory arbitrage, and carbon price differentiation. The club's framework would allow for several levels of engagement and encompass leaders as well as participants working to develop and implement carbon pricing policies.

A review panel would help determine and review the adequacy of *compliance strategies* and devise a framework for ensuring the implementation of membership commitments. Different standards would apply to nonstate and state actors, and the review panel would also create indices to assess different levels of participation and access to membership benefits.

The working group, while not dismissing the prospect of including language on carbon pricing in the Paris Agreement, felt that the real benefit of COP21 might lie in its ability to bring stakeholders from business, government, and civil society together to discuss this framework, and the club's potential participants, in more detail. The group suggested COP21 as a potential site for a conversation about forming a steering committee that could begin the process of creating a club-like arrangement. The Non-State Actor Zone for Climate Action online platform was also mentioned as an informal way of linking a club to the UNFCCC and publicly reporting the commitments of its members.

### Trade Templates and Precedents

A number of existing models offer potential templates for carbon clubs, though their relevance varies. Several structures—such as the Pacific Island Development Forum, Green Climate Fund, Organisation for Economic Co-operation and Development Climate Forum, International Energy Agency forum, several regional bodies in Latin America, the Alliance of Small Island States, and the Clean Development Mechanism—engage and involve nonstate actors, though their agency varies widely across these different platforms. The General Agreement on Tariffs and Trade can offer a lesson in the importance of starting small and scaling up, as well as a model for covering trade among territories (such as Macau and Hong Kong). It defines membership in terms of authority rather than national borders.

The WTO includes clubs within clubs, that is, plurilateral agreements that take on more-ambitious commitments than the rest of the organization. These groups can choose whether to share the benefits of their actions with nonclub members; however, since the creation of these agreements requires the approval of the

entire WTO, the benefits are typically shared. The Environmental Goods Agreement (EGA), which has 17 WTO members including the European Union, represents one example of this approach; its members have removed tariffs on environmental goods. The promise of greater market access typically drives the participation in these kinds of frameworks. For instance, the EGA's members represent the majority (approximately 85 percent) of the market share affected by this agreement, minimizing the impact of free riding from those outside the club. A similar kind of positive incentive would be needed to translate this approach to carbon pricing.

Regulation of the telecommunication industry offers a slightly different template. Telecom companies often form clublike structures driven not by market access but by the chance to help shape the regulatory structure. Investment in these businesses requires their adherence to certain regulatory practices, and early engagement with the rules helps these organizations set the rules of the game and obtain advantages from early adoption.

### Points of Convergence

Two key elements distinguish the current carbon pricing club narrative from past discussions: (1) the role of carbon pricing as a source of investment and stability and (2) the inclusion of nonstate and subnational actors. Finding ways to harness the incentives of a club and to create space for different kinds of actors will be central to efforts to build a successful carbon pricing framework. The workshop considered a number of key opportunities and challenges in moving this process forward.

### The Paris COP

COP21 offered opportunities to develop and clarify what forms a carbon pricing club might take. Although workshop participants generally agreed that it was unlikely for the Paris Agreement to directly reference language on carbon pricing, some participants suggested that if the text was to simply recognize the role of market mechanisms that this language would both encourage carbon pricing and acknowledge the need to address challenges of double counting.

The need to implement the Paris Agreement would/ could also help advance the discussion around carbon clubs. The months following the agreement are likely to see an increased focus on the methods for implementing and reaching climate targets; carbon pricing and carbon pricing clubs could use this interest to build additional ambition and momentum.

Countries have largely overcome an initial hesitation to discuss carbon clubs due to fears about diverting attention and resources away from an agreement in Paris and concerns that a carbon pricing club might be cast as an alternative to this agreement. Today there is a general level of support for carbon pricing clubs or clublike initiatives, but it is unclear how much political capital will be invested in promoting this agenda in the short-term compared to other Paris Agreement implementation efforts. Moreover, to effectively advance this discussion on an international scale it will need to be inclusive across the Global North and Global South.

### Institutional Design

Finding incentives that enable carbon club participants to acquire mutual benefits by imposing an explicit price on carbon is crucial to the success of these frameworks. Technology development and transfer, along with the possibility of access to capital, influence over the formation of the club rules, and access to other club members can help motivate participants to join. Collaborating to determine how carbon pricing can help accelerate green growth could also create a strong draw. Possible structures for linking carbon pricing with incentives to invest, and with other trade policies, should be explored in more detail.

A number of key considerations will also influence the organization of a club's structure. Many participants emphasized the need for form to follow function. The specific objective of a club, which could range from socializing the idea of carbon pricing to helping maintain a 1.5 to 2° C temperature rise, will affect the stringency of membership criteria and review and influence the club's primary activities. Clubs could also evolve gradually or encompass a range of different levels of participation. For instance, a principle-based approach, by which membership is based on adherence to standards that promote transparency and reduce the risk of double counting, might carry the implicit threat of transitioning to a rules-based approach should participants fail to meet these standards.

This kind of phased or flexible criterion for membership might offer one route toward including subnational governments, businesses, and other nonstate actors. Other participants suggested that devoting different forums to national and subnational actors might be most effective; still others suggested defining inclusion in terms of an entity's ability and authority to set and enforce a carbon price. Private-public relationships are often closest at the regulatory, rather than the policymaking, level; it might be possible to rely on these relationships to help harmonize different pricing schemes. Private investment is often crucial to funding the kinds of technology development and transfer

that might incentivize governments to join clubs; this could create another tool for bringing different types of actors together.

Whatever the structure, strategies for encouraging transparency and avoiding double counting among the different participants will be vital. It will also be crucial to ensure efforts to form a club do not jeopardize or marginalize the unprecedented business and investor engagement in carbon pricing.

### Next Steps

Workshop participants identified three guiding steps for moving forward with the conversation:

1. **Continue to explore precedents and replicable structures for carbon pricing clubs, drawing on examples from trade and other institutions.** This research could also explore opportunities to utilize frameworks like the UNFCCC and WTO to support a club framework and to link carbon pricing with other trade policies.
2. **Map the existing ecosystem of efforts to support and converge carbon pricing policies.** Assessing the existing institutions, along with their roles, would help paint a complete picture of the ecosystem around carbon pricing policies. This research could help avoid duplication of efforts and ensure coordination between different participants. The Carbon Pricing Leadership Coalition might be a natural starting place for this kind of assessment.
3. **Identify key stakeholders and participants for future discussions.** The annual COP meeting and other multilateral gatherings on climate, trade, and sustainable development might offer especially valuable opportunities to convene key stakeholders and to further socialize this issue.

### Endnotes

<sup>1</sup> CDP and We Mean Business Coalition, *Carbon Pricing Pathways: Navigating the Path to 2° C*, 2015, <https://www.cdp.net/CDPResults/carbon-pricing-pathways-2015.pdf>.

<sup>2</sup> Ibid.

<sup>3</sup> United Nations Environment Programme, *The Emissions Gap Report 2014*.

<sup>4</sup> More details are available at <http://www.e15initiative.com/>.

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Affiliations are listed for identification purposes only. Participants attended as individuals rather than as representatives of their governments or organizations.

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