

Pricing Carbon



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In 2013, the UNFCCC set a path toward a new agreement for the post-2020 period. This year, negotiations have aimed to solidify that agreement and will culminate in Paris at the COP21 December meetings. So far, climate talks have tackled national emissions targets, global temperature targets, technology transfer, assistance to poor countries for adaptation and mitigation (a.k.a. “finance”), clean energy cooperation, forest preservation, compensation for countries affected economically by mitigation measures, and many other topics. In comparison to those issues, there has been little discussion of the most cost-effective means to reduce emissions: reducing fossil fuel subsidies and pricing greenhouse gas emissions.

Christine Lagarde, managing director of the IMF, and World Bank Group President Jim Yong Kim recently announced the formation of a “carbon pricing panel” consisting of an alliance of national, state, and local policymakers. This is an important move and should promote carbon pricing as a focus of the post-COP21 negotiations.

The prospect of a new long-term agreement and new venues for climate talks could open an important opportunity for carbon pricing consultations (CPC). Although carbon pricing should eventually be included directly in the UNFCCC process, a smaller-scale carbon pricing dialogue could be undertaken now outside UNFCCC. The goal would be to gather the economic ministries of the largest emitters to discuss the use of carbon pricing to reduce emissions cost-effectively, manage impacts on trade and competitiveness, and foster mutual confidence in the economic ambition of climate commitments.

A carbon price, arising from a cap-and-trade market, a carbon tax, or a “hybrid” policy creates broad, efficient incentives to reduce greenhouse gas emissions. Done well, these policies can gradually shift consumer demand, production methods, new investment, and technology development toward less emissions-intensive goods and services without unduly burdening poor households. A carbon tax or auctioned cap-and-trade allowances can also raise revenue to fund government outlays or reduce other, more distortionary, taxes. Longer-term carbon financial instruments can be used to create political constituencies to sustain the policy through political cycles. Finally, a carbon price can promote



economic growth by replacing less efficient tax, regulatory, and spending policies. For these reasons, economists nearly universally agree that a price on carbon is a highly desirable, even essential, step for reducing the risk of climatic disruption.

But why should carbon pricing be integrated into international consultations? There are six reasons:

First, outside of finance issues, few countries have included their finance and trade ministries in climate negotiations. The absence of the expertise of those most familiar with the economic outcomes of the commitments under discussion gives rise to calls for infeasible targets and timetables, and vague policy commitments. Framing discussions around the explicit or implied carbon price of proposed commitments would make their economic ambition more transparent and comparable, and foster mutual trust in the ambition of commitments.

Second, many countries have recently reduced fossil fuel subsidies or adopted carbon pricing policies, so there is increasing experience to analyze and discuss.

Third, some countries that have not yet adopted carbon prices, such as the United States, have considerable expertise in efficient administration of excise taxes and could provide valuable advice.

Fourth, talks to date have focused on emissions targets (both collectively and by country), divorcing the dialogue from the economic realities of achieving those commitments. It is much easier to reach consensus on the goal of containing global mean temperature increases to 2 degrees Celsius than to grapple with what it would take to achieve the goal and who should do it. Until negotiators directly address the levels of economic effort involved and how to minimize the cost, collective commitments to stabilization targets will remain both theoretical and infeasible, however compelling they may be scientifically.

Fifth, disparate carbon prices across different countries can shift emissions, production, investment, and trade patterns, and mutual understanding of these cross-border effects is of interest to major trading partners and the multi-national companies with which they operate.

Finally, the vehement opposition to the European Union's efforts to price carbon in aviation fuels suggests that unilateral approaches to carbon pricing can undermine cooperation and climate policy progress.


Toward carbon pricing consultations

It is important that the international community establish a much-needed place to discuss, laud, and understand efforts by countries to price greenhouse gases. The process we have in mind would complement talks under UNFCCC by focusing on administrative, economic, and trade-related aspects of policies that price carbon and other greenhouse gases. For example, discussions could include an exchange of countries' views, experience, and methodologies related to a number of important issues, which are detailed in Box 1.

Box 1. Important discussion topics for potential carbon pricing consultations

- how to report on carbon pricing policies in a way that allows comparisons across countries;
- how cap-and-trade and/or carbon tax systems work administratively;
- administration of excise taxes on carbon content of fuels, including ways to identify taxable entities, establish a tax base (emissions and sources), set reporting requirements for firms, track revenue, minimize administrative costs, and ensure compliance;
- ways to harmonize tax administration across countries to make it simpler for multi-national firms to comply and to prevent tax gaps and double-taxation;
- the potential economic benefits to developing countries of carbon pricing as a low carbon growth strategy and efficient revenue instrument;
- the environmental and economic effects of alternative carbon tax levels and tax trajectories;
- mechanisms for managing allowance markets and registries, and distributing allowances or allowance auction proceeds;
- the design and implementation of border carbon adjustments;
- approaches to taxing carbon in bunker fuels;
- the feasibility of including non-CO₂ gases, agriculture- and forest-related emissions, and process-related CO₂ emissions in a carbon pricing system;
- the role of sub-national approaches;
- the macroeconomic and trade impacts of carbon pricing;
- the distributional effects of a price on carbon, such as effects on poor households or disproportional regional effects, and how to address them;
- approaches to pricing carbon in imported and exported fossil fuels and closely related products;
- experience with the environmental performance of carbon pricing;
- other fiscal reforms made in conjunction with carbon pricing (such as budget deficit reductions or reductions in other taxes), and their impacts;
- approaches to fiscal cushioning (such as reducing other energy taxes while establishing a price on carbon);
- the relationship between carbon pricing and other policies, such as energy efficiency standards and renewable energy subsidies; and
- efficient implementation of carbon pricing in large, complex, federalist systems.

The goal of these international discussions would be to build mutual comfort and confidence in carbon pricing, share views, prevent disputes and trade disruptions, identify and replicate successful approaches, learn from one another's mistakes, build institutional capacity, and generally promote transparency and mutual cooperation on serious, economically efficient measures to mitigate emissions.



Carbon pricing consultations could also consider how to guide resources and activities of existing bilateral consultations, multi-lateral development banks, the Green Climate Fund, other institutions, and private sector entities toward efficient fossil fuel pricing. It may be possible to embed the discussions within the Major Economies Forum, the G-20, the U.N. Climate Summit follow-up meetings, or other existing forums.

The defining characteristic of these talks, distinguishing them from existing clean energy and climate consultations, would be that the finance and trade ministries (not the environment and energy ministries) would take the lead. These are the ministries charged with international economic relationships, tax administration, and general macroeconomic stewardship. Of course, to the extent that environment or energy ministries oversee domestic carbon tax or cap-and-trade systems, they would play a role. However, the focus of the discussions would be on the technical, administrative, and economic cooperation aspects of carbon pricing policies, with minimal attention to whether any particular country's approach would achieve any particular emissions target or other goal. To that end, the typical level of engagement within the CPC may best lie below that of the ministerial level, and it should include those with technical expertise.

One advantage of this approach is that it would separate the work of the CPC (i.e., the pragmatic details of carbon pricing) from divisive issues such as who bears what responsibility for collective mitigation goals, who should compensate whom for what, and whose approach is more ambitious or moral. These debates, however important, have contributed little to global emissions mitigation. Subsequent or parallel efforts can review the adequacy of the price signals and seek to increase and/or harmonize them; the CPC should center on relatively low-profile but critically important administrative and technical policy exchanges by interested countries. An underlying premise is that major emitters have a mutual interest in effective policy machinery to price carbon.

One useful outcome of the CPC dialogue could be to shape negotiations under the UNFCCC so that countries can supplement their emissions targets with commitments in the form of carbon pricing, allowing compliance by either achieving their emissions targets or demonstrating significant effort through imposing agreed-upon price signals. Price-based commitments would reduce the risk of inadvertent stringency or laxity, help achieve and document compliance, and allow parties to reach an agreement to compare their efforts transparently.

The United States can contribute to a CPC process

Consultations around mutual efforts to price carbon are clearly in the interests of countries that have already adopted or are seriously considering adopting such policies. But the inclusion of the United States in such talks is also critical owing to the unique position of the United States as a global economic leader, the largest historical emitter, and the major trading partner for many other potential participants.



Even though the United States does not currently price carbon at the federal level, it could contribute to and benefit from carbon pricing consultations. First, an increasing number of U.S. trading partners are adopting carbon pricing, and it is in U.S. interests to follow these developments closely. Carbon taxes have been adopted in Sweden, Finland, Ireland, Norway, and South Africa, and the European Union has a major CO₂ emissions trading system. China has been experimenting with cap-and-trade measures at the local and regional level and has announced an economy-wide carbon trading system to be implemented by 2017. Canada also has several sub-national carbon pricing systems and is likely to move further on carbon pricing under the new government of Prime Minister Justin Trudeau.

To be sure, the magnitude of the price signals and the scope of emissions to which they apply vary significantly across and within countries. But gradually more global fossil fuel consumption is falling under some sort of carbon pricing policy. The United States should welcome a venue in which it can learn from other countries' efforts, discuss potential economic spillovers and effects on international commerce, and foster discussions that could prevent international incidents such as the dispute over the EU aviation tax.

Second, the United States has considerable tax administration and cap-and-trade expertise that could highlight potentially successful approaches. Although this experience is not climate-related, the United States deploys an efficient and highly compliant excise tax system, and it could assist developing country efforts to build their own capacity to tax carbon. For example, the United States missed an opportunity to applaud and support India's adoption of a small tax on coal. The United States could offer to share its experience in administering its similar coal excise tax, which it collects under the Black Lung Benefits Act of 1977. The United States also has long experience with cap-and-trade systems for criteria air pollutants, much of which is transferable to greenhouse gas emissions trading, and a number of states have or will develop some form of carbon pricing policy, including as a way to comply with new Clean Air Act regulations on power plants.

Finally, one key impediment to carbon pricing in the United States is the concern that if the United States prices carbon and other major emitters do not, then U.S. climate efforts will harm its economy to little overall environmental benefit. An international venue to discuss carbon pricing policies among major emitters could fruitfully evolve into a place to address such concerns and coordinate, if not fully harmonize, carbon price signals.

Shifting focus of the UNFCCC negotiations toward pricing carbon in Paris would be a welcome development. However, realistically, the case arises for a parallel process of carbon price consultations to foster the practical implementation of carbon pricing across major emitters.