

Trade-related implications of different carbon pricing approaches

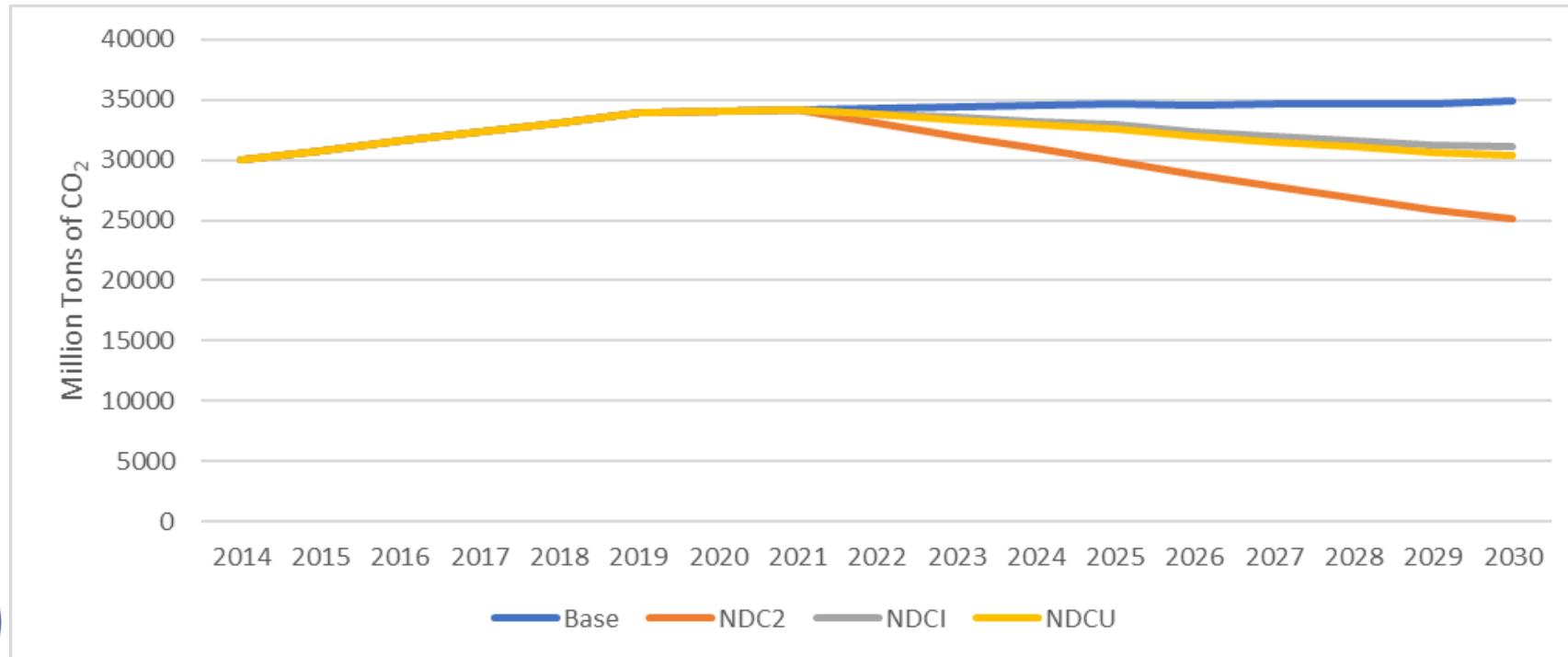
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Overview of the presentation

1. The necessity, efficiency and urgency of global carbon pricing, considering CBDR
2. The economic advantages and disadvantages of BCA
3. International cooperation on carbon pricing

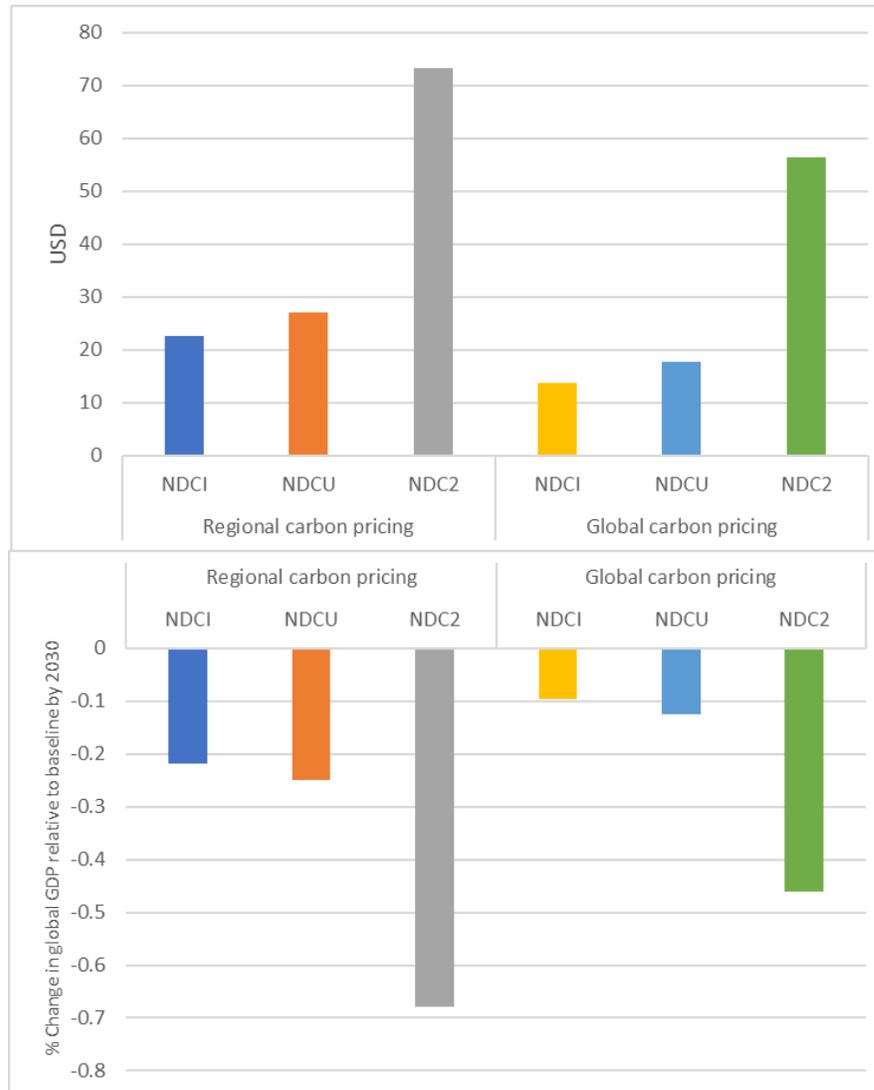
The necessity, efficiency and urgency of global carbon pricing, considering CBDR

Necessity of carbon pricing/climate change mitigation: NDC targets are insufficient to stay on 2 degrees global warming trajectory



- NDC2 is the hypothetical emission reduction trajectory necessary to stay on a path of 2 degrees global warming (27% reduction CO₂ emissions relative to 2019)
- Paths for global CO₂ emissions are modelled with carbon pricing introduced by all regions, but in practice can also be realized with other policy instruments.
 - Relates to discussion about equivalence between carbon price and other policy instruments in global approaches to coordinate carbon pricing

Efficiency: carbon price (upper panel) and GDP loss (bottom panel) are smaller with a uniform global carbon price



- The average carbon price required to stay on the path of 2°C global warming is higher with carbon prices varying by region (75\$) than with a uniform global carbon price (56.7\$) and the global GDP loss is smaller with one global carbon price
 - The reason for a smaller loss under one global carbon price is that more emission abatement would take place in regions with more scope for abatement
- For equity reasons, to live up to the principle of common but differentiated responsibility (CBDR), it could be optimal to vary carbon prices by region: tradeoff between equity and efficiency

Urgency: carbon pricing in developed regions implies a loss of competitiveness in EITE sectors leading to potential calls for BCA



- Simulations with the WTO Global Trade Model show that if seven hypothetical regions are assumed to set higher carbon prices than the rest of the world, they would face a reduction in output in emissions intensive trade exposed (EITE) sectors in 2030
- The losses are projected to be limited in most regions if these regions would introduce border carbon adjustment (BCA)
- This shows the urgency of coordinating carbon pricing, since more ambitious carbon pricing in a subset of regions can lead to calls for the introduction of BCA which in turn could lead to trade tensions between regions

The economic advantages and disadvantages of BCA

Economic arguments favouring BCA



- BCA can prevent carbon leakage
 - Meta-analysis techniques show that there is a statistically significant difference in estimated carbon leakage with and without BCA (Branger and Quirion, 2014), although the question is how much BCA contributes to the reduction in global emissions
- BCA can prevent a loss of competitiveness in EITE sectors.
 - This can be relevant for political economy in regions introducing ambitious carbon pricing policies
- BCA mechanisms could encourage countries directly affected by the BCA to adopt more ambitious carbon pricing to avoid border measures.
 - However, simulations suggest that the incentivizing effect of BCA is limited and could also lead to incentives for counter-measures
- BCA could contribute to the decarbonization of value chains by helping firms to be more transparent with regard to the emissions embodied in the products they trade.

Economic arguments against BCA



- BCA adversely affects the terms of trade of regions facing them.
 - BCA constitutes a levy on imports and would thus reduce the global demand for imported goods, thereby driving down prices of such goods and deteriorating the terms of trade of exporters facing BCA.
 - The projected negative terms-of-trade effects tend to be concentrated in countries exporting energy-intensive goods to countries that impose BCA mechanisms (Weitzel, Hübler and Peterson, 2012).
 - If BCA is introduced by more ambitious developed economies, adverse terms of trade effects would be concentrated in low-income regions, thus creating a potential tension with the principle of CBDR
- BCA could involve considerable administrative costs for companies and governments and lead to regulatory heterogeneity.
- BCA could potentially lead to trade conflicts between the regions imposing and facing such levies.

International cooperation on carbon pricing approaches

Context

- Two-thirds of all submitted NDCs under the Paris Agreement consider the use of carbon pricing to achieve their emission reduction targets.
- It is thus likely that local, national and regional carbon pricing schemes continue to proliferate.
- A situation in which a growing number of carbon pricing schemes diverge significantly can create additional transaction costs and lead to uncertainty for businesses and international trade.

Existing international cooperation



- International cooperation on carbon pricing is slowly taking shape. For example:
 - Various regional and international initiatives aim to promote policy coherence in carbon pricing.
 - International organizations are actively working to enhance transparency and promote information sharing of carbon pricing policies.
 - International cooperation on carbon pricing is also taking place with respect to the measurement and verification of carbon footprint of a product.
- These are all areas that would greatly benefit from additional international cooperation

International trade cooperation can contribute to supporting carbon pricing discussions



- Given the important trade implications of carbon pricing, international cooperation on trade and trade policy can help support the adoption and implementation of carbon pricing approaches.
- At the multilateral level, the WTO contributes to international co-operation in this area by:
 - providing a framework that can minimize trade-related negative spillovers arising from carbon pricing policies; and
 - by acting as a forum to discuss trade-related issues and increase the transparency

Indicative list of areas for further work



- Areas for further work to enhance international co-operation in the area of carbon pricing include:
 - The measurement of effective carbon prices
 - Equivalence of carbon prices and other policies
 - Measuring the carbon content of trade
- The needs of developing countries and LDCs should be part of the discussions on carbon pricing approaches, as they face special challenges and may therefore require additional support from the international community.