

# Border carbon adjustment: Implications for trade and national emissions

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## Introduction

- ASEAN Economic Community (AEC) planned to be established in 2015;
- Regional Comprehensive Economic Partnership (RCEP) launched in May 2013 among ASEAN+6;
- Achieving SD should be the overarching goal guiding the regional integration process;
- Concerns from developing countries: green protectionism
- Concerns from developed countries: differences in national environmental policies and potential free riding;
- Regional integration: more trade opportunities, equity, social and environmental inclusiveness.

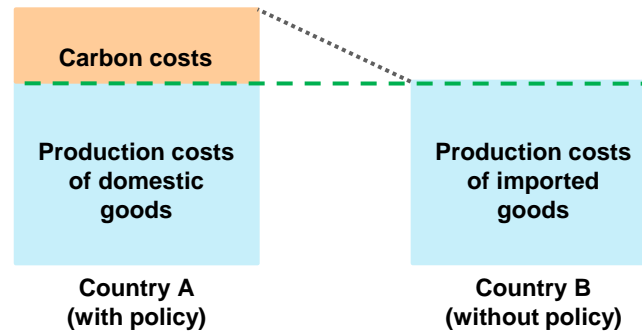
## Introduction

- Kyoto Protocol and asymmetric domestic climate policies;
- Carbon pricing policy in developed countries (carbon tax or emissions trading system) and the impacts on domestic production costs and on the terms of trade;
- Two concerns: industrial competitiveness and carbon leakage (production channel, investment channel and energy channel);
- Energy intensive and trade exposed (EITE) sectors: ferrous metals (iron and steel), non metallic mineral products (in particular cement), non-ferrous metals (in particular aluminium), pulp and paper, and chemicals.

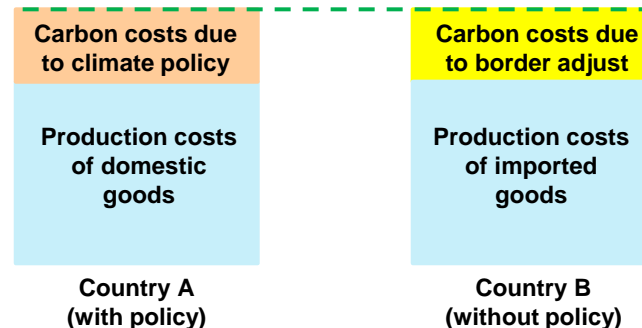
### Introduction

- Border carbon adjustment (BCA): border tax adjustment (import tariffs and export rebate, etc.)

Terms of trade **before** border adjustment

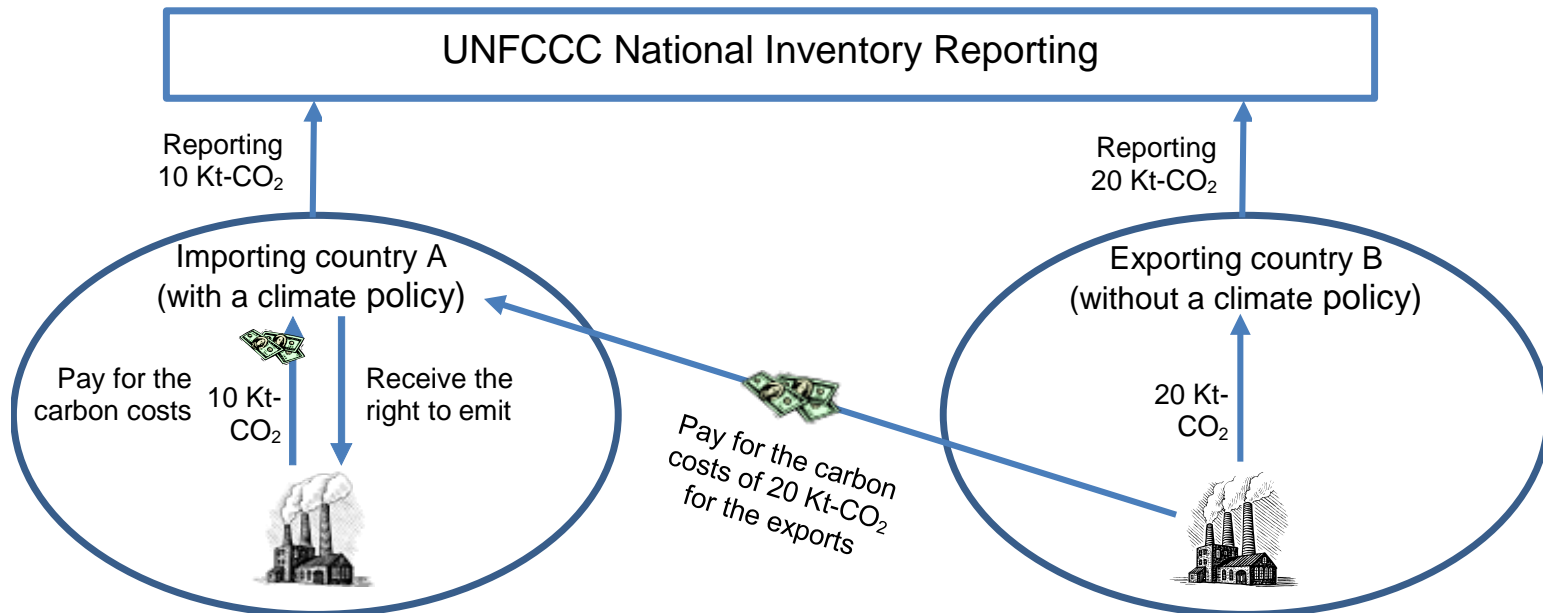


Terms of trade **after** border adjustment



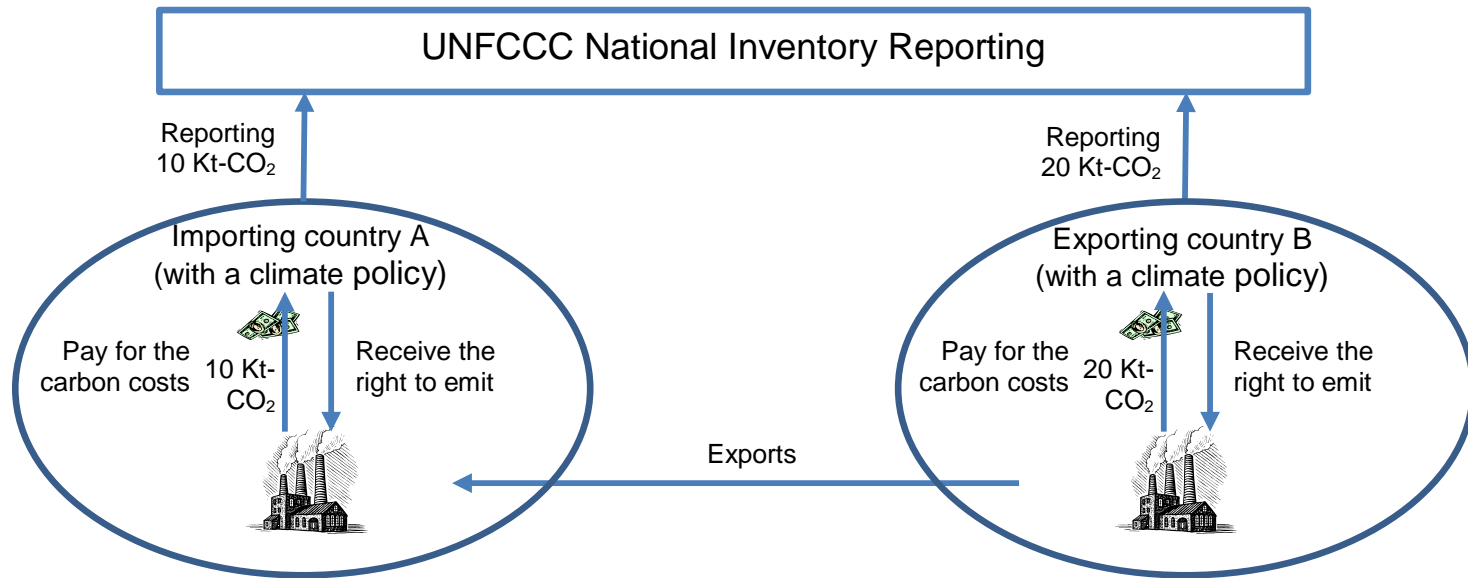
### Inequality issue

- Current national inventory approach of the Kyoto Protocol requires countries to report “emissions and removals taking place within national territories...” (UNFCCC, 1998).
- Emissions related to exports are reported in the national inventory of the exporting countries.



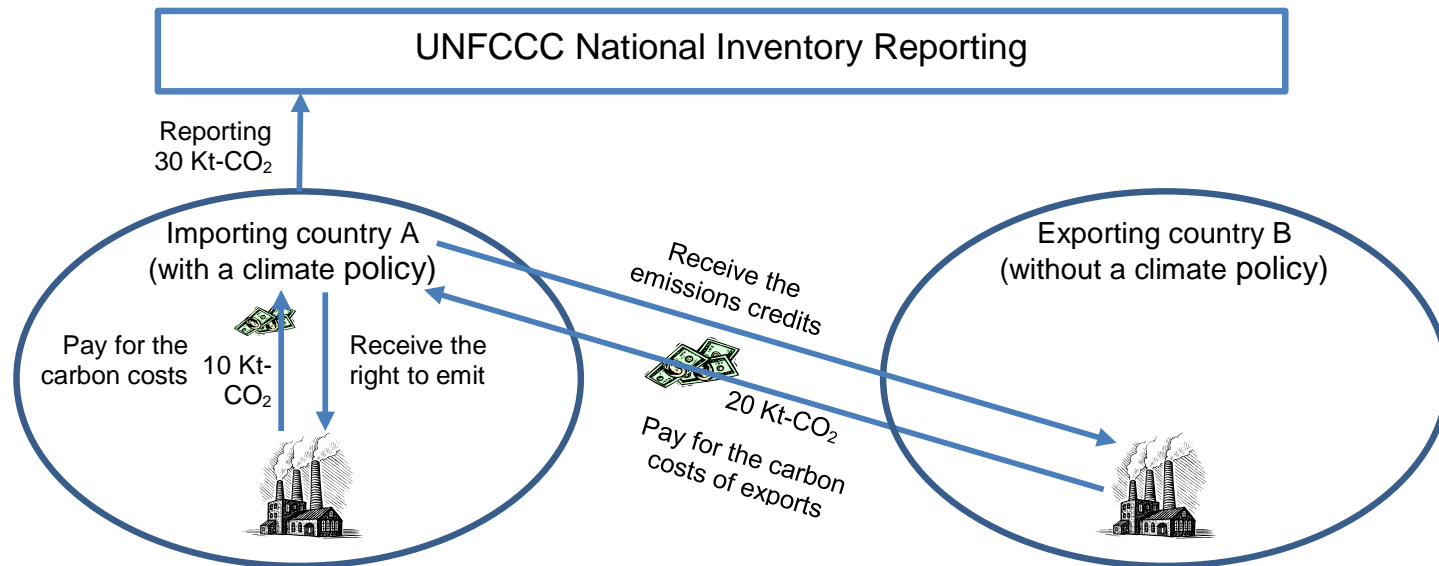
### Proposal for exemption

- Country B with a compatible climate policy in place should be exempted from the BCA of Country A



### Proposal for NIAfT

- National inventory adjustment for trade (NIAfT) for Country B without a compatible climate policy but paying the carbon costs at the border (similar to receiving the emissions credits).



## Implications for trade and emissions

- GTAPinGAMS, a multi-region computable general equilibrium (CGE) model, to assess the impacts of carbon tax policy in Japan, the introduction of BCA and the NIAfT.
- Carbon tax implemented in Japan can reduce domestic emissions and at the same time trigger the carbon leakage mechanism. However both effects are very small.
- BCA can be an effective measure to address the emissions out of the border and therefore effective to address carbon leakage;
- However when NIAfT is introduced, there is a strong negative carbon leakage, i.e. great increase in domestic emissions and great decrease in other countries out of the border.



## Implications for trade and emissions

- WTO compatibility: Ensure GATT Articles I, II and III on national treatment and the most-favoured-nation treatment and GATT Article XX requiring to prove substantial link between the trade measure and the stated climate change policy objectives.
- The inequality hidden behind a BCA by creating an playing field in favour of domestic producers cannot pass the national treatment clause.
- The strong negative carbon leakage can be contradictory to the stated objective of domestic climate policy which to address domestic emissions and be challenged by GATT Article XX.
- Other issues to address: Embodied emissions, hidden flow of resource use, biodiversity loss and eco-tax, etc.

**Thank you very much!**

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