



Food and Agriculture Organization  
of the United Nations

# INTERNATIONAL TECHNICAL CONFERENCE ON CLIMATE CHANGE, AGRICULTURAL TRADE AND FOOD SECURITY

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CLIMATE CHANGE, AGRICULTURAL TRADE AND FOOD SECURITY

# BORDER MEASURES IN THE CONTEXT OF ADAPTATION AND MITIGATION TO CLIMATE CHANGE

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16 November 2017



# COVERAGE

1. Border measures and domestic mitigation policies
2. Use of standards and carbon labeling
3. Climate measures in bilateral and regional trade agreements
4. Border measures and adaptation to climate change
5. Special and differential treatment

Primary focus is on **technical** issues/challenges



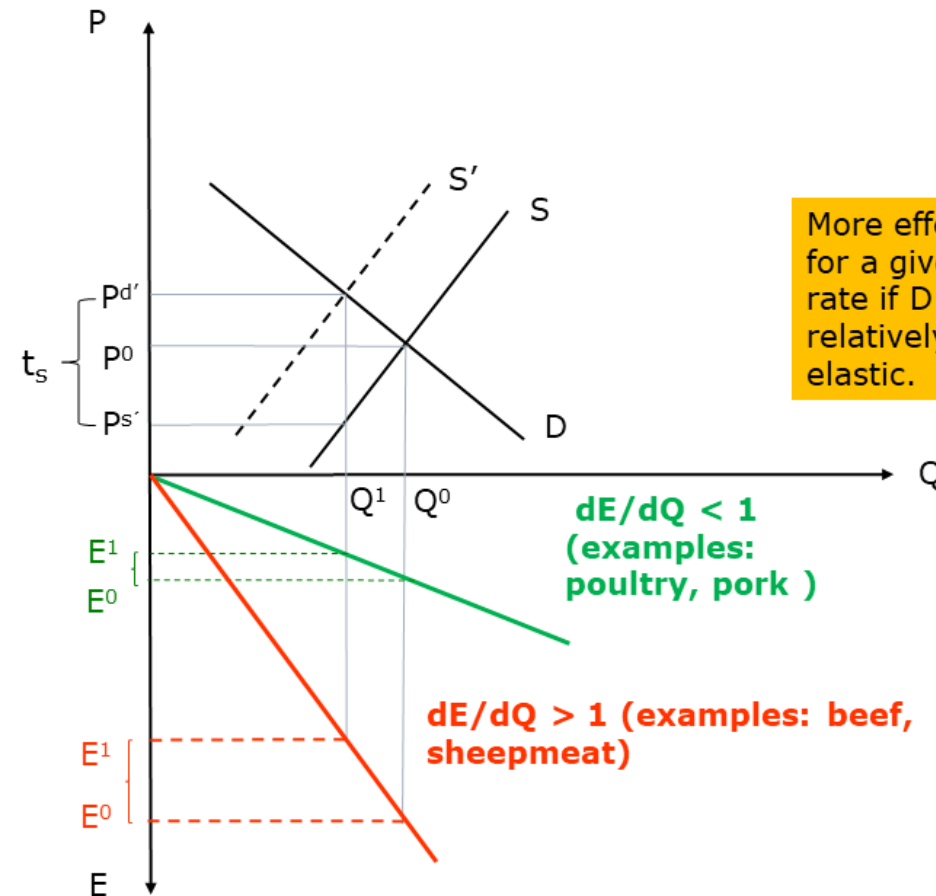
# MITIGATION POLICIES

- **Internalization of emissions costs** in production/consumption through taxation, regulation or mixed approach (cap-and-trade)
- **Inducements** (financial incentives) for adoption of low-emission practices and production/consumption of low-emission products
- **Behavioral change** through information, education, knowledge transfer

# Internalization – Closed Economy

## Production or consumption tax

- Tax should be based on global carbon price
- Mitigation impact depends on emissions intensity of domestic products



More effective  
for a given tax  
rate if D is  
relatively  
elastic.

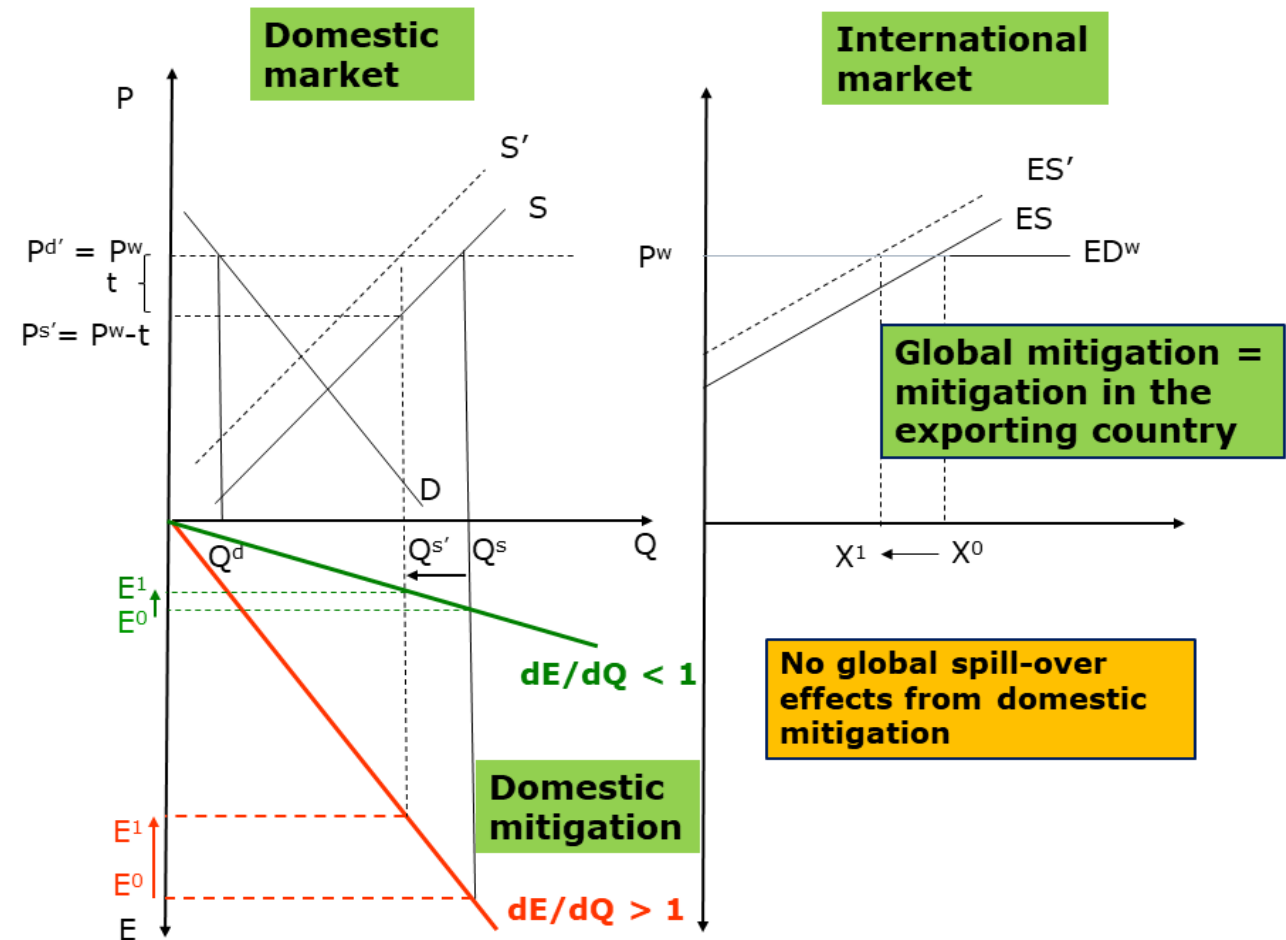
$dE/dQ < 1$   
(examples:  
poultry, pork)

$dE/dQ > 1$  (examples: beef,  
sheepmeat)

# Internalization – Open Economy

## EXPORTER

- Production tax case
- Mitigation impact depends on emissions intensity of domestic products
- Consumption tax requires equivalent export tax to prevent spill-over effect due to increased exports

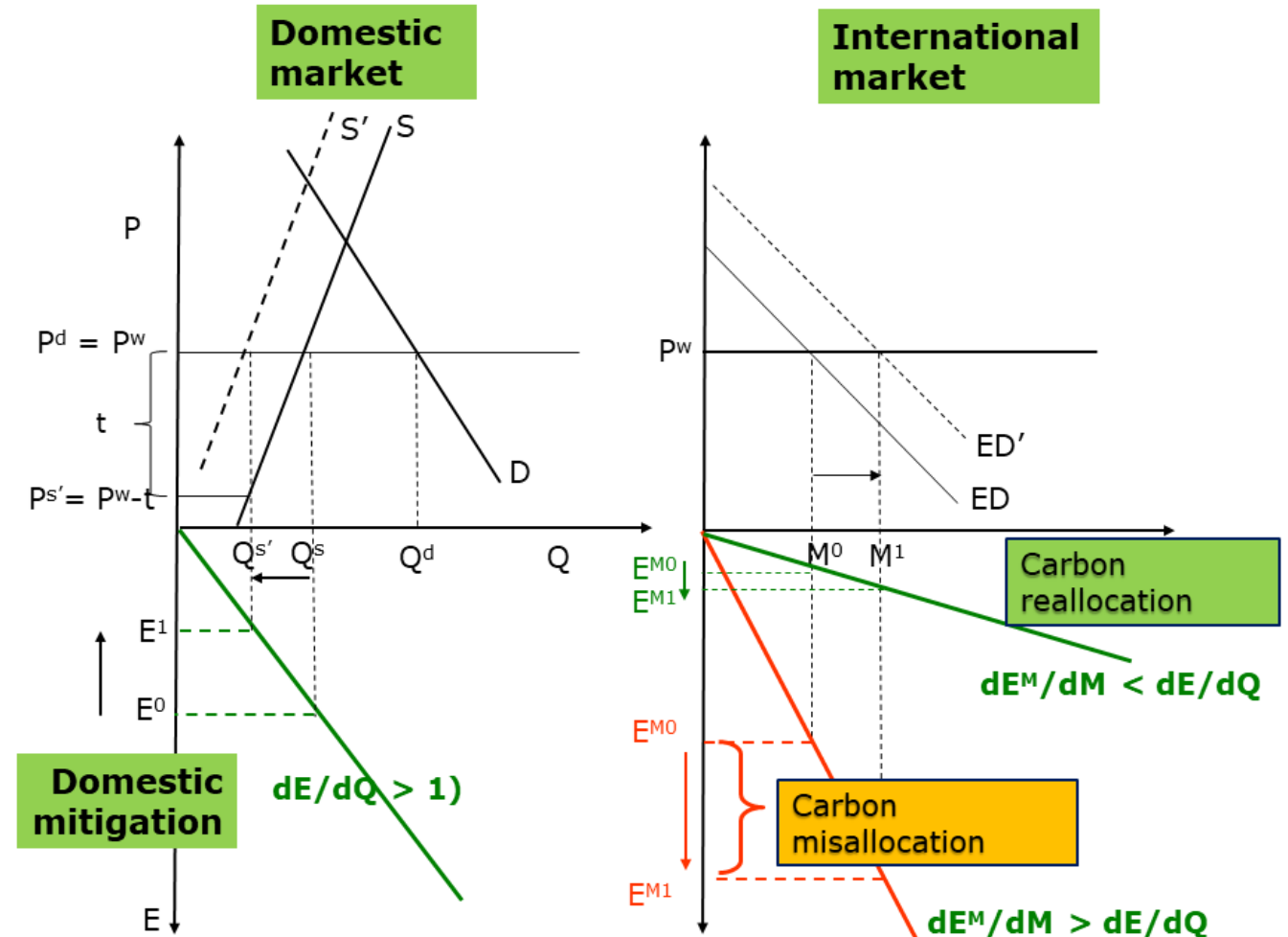


# Internalization – Open Economy

## IMPORTER

No border measures

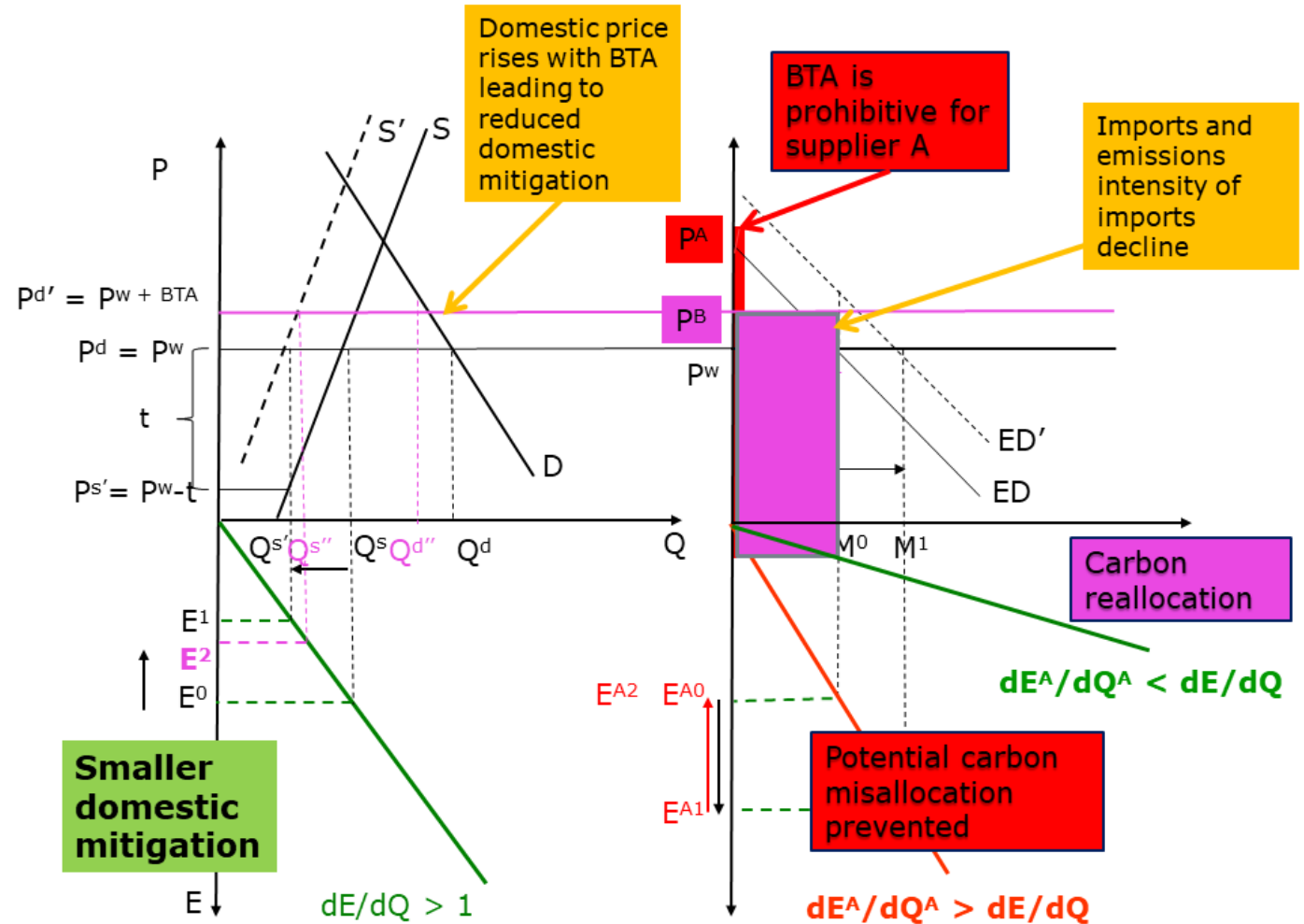
- Production tax case
- Carbon leakage
- Carbon reallocation versus misallocation
- Consumption tax requires application to both domestic products and imports



# Border tax adjustment (BTA)

## ISSUES

- Application at point of consumption possible with traceability
- Problematic if partial or complete internalization in import suppliers
- Rebate on exports could constitute 'carbon dumping'





## MITIGATION POLICIES – Trade policy issues

- Lack of **global carbon price** (“bottom-up” approach of Paris Agreement) poses challenges, nationally and internationally
- Border measures (tariffs, import restrictions, BTAs) cannot be used to **discriminate** between products with differing carbon footprints
- But products with differing carbon footprints are not “**like products**” in terms of their implications for mitigation
- Without specific **exemptions** (e.g., GATT Article XX) difficult to address “unlikeness” legally through border measures



## MITIGATION POLICIES – A way forward?

- **Carbon footprint labeling** based on LCA and internationally agreed approach (ISO?) might provide an alternative to border measures
- **Effectiveness** depends on consumer response but could intensify global mitigation if consumer choices are not based solely on price
- Environmental provisions in **regional trade agreements** could play a supporting role by fostering cooperation on mitigation measures (e.g., labeling)
- **Special and differential treatment (SDT)** could focus on promotion of low-carbon products from least-developed countries



# ADAPTATION AND BORDER MEASURES

- Focus on **international price variability** as a key trade policy issue
- Domestic and border measures can affect *transmission* of variability to international markets and *absorption* of international variability
- **International disciplines** are relatively weak (e.g. export restrictions and taxes)
- SDT role through expansion of **food aid** for least-developed countries



## FINAL TAKE-AWAY

- Climate policies that seem to make sense from a **national** perspective may not make sense from an **international** perspective
- Technical and legal issues make it complicated to **reconcile** climate policy and trade policy – the potential for conflict between them is high
- In general, global mitigation and adaptation is facilitated by **freer trade**, but national policies need to be consistent with that role



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# THANK YOU

For further information please contact [dblandford@psu.edu](mailto:dblandford@psu.edu)  
or visit [www.researchgate.net](http://www.researchgate.net) for many of my publications



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