

Smoothing the transition to Emission Trading Schemes:

Lessons learned from a decade of OECD analysis on competitiveness and climate change

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What is the international competitiveness issue in climate policy?

1. Production costs increase from carbon pricing policy →
2. Production and investment may shift to non-regulated sectors in other countries →
3. Loss of market share in regulated sector

Changes in production and trade flows may also lead to increased emissions in non-regulated sectors = “**carbon leakage**” (but leakage can also occur through energy market channels)

Recent OECD Policy Brief on competitiveness and climate change

- The first-best solution is to widen the scope of carbon pricing policies across sectors & regions
- At the macro level, leakage and competitiveness impacts seem limited
- Temporary compensating measures (BTAs, free allocation, output rebates, exemption, etc.) can smooth the transition, but are costly and not always effective
- Sector shifts are an intended consequence of green growth



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Addressing International Competitiveness in a World of Non-uniform Carbon Pricing: Lessons from a decade of OECD analysis

1. Introduction

While global leaders have recognized that tackling climate change is one of the crucial challenges of our time, the path to do so is not yet clear. A first step towards achieving a global policy response to this problem was the establishment of the UN Framework Convention on Climate Change (UNFCCC) and the subsequent Kyoto Protocol. Further progress was made through the development of the Copenhagen Accord in 2009, as noted by the UNFCCC, in which a goal to limit temperature increases to 2° Celsius was recognised and many countries announced domestic targets or actions to reduce greenhouse gas (GHG) emissions.

However, this patchwork of actual and proposed government policies to address climate change has led to growing concern among policymakers that the international competitiveness of domestic energy-intensive industries will be adversely affected if stringent emission reduction targets are adopted in some countries but not in others. These concerns have proven to be one of the principal hurdles to ambitious climate policies in many OECD countries. Yet delaying or reducing the ambition of action until a more globally-coordinated policy response to climate change, such as an international carbon market, can be agreed could be more costly than initiating fragmented regional action today (OECD, 2009a).

Key Messages

This policy brief highlights lessons learned from a decade of OECD and IEA policy analysis on the international competitiveness issue in climate policy. Key policy messages include:

- Adverse competitiveness impacts from climate change policy are generally limited to a small number of sectors representing a small share of economic activity in any national context.
- The first best option to address these concerns is to create a level playing field through the wide-spread adoption of climate policies across countries and sectors.
- Given the fragmented policy response to climate change that currently exists, policymakers are frequently urged by stakeholders to put in place measures to address these impacts.
- Targeted and time-bound measures that address these impacts can be viewed as a way of managing a transition to a low-carbon economy.
- Free allowance allocations, output-based revenue recycling and allocations, border tax adjustments, and industry exemptions are commonly promoted measures.
- Measures such as these should be scrutinised in terms of their economic efficiency, the incentives they create for GHG reductions, and their impacts on developing countries, in addition to their effectiveness in addressing competitiveness concerns. The domestic political economy aspects and the practicality of implementing measures also need careful consideration.

Principles for evaluating compensating measures

Principle	Indicators for Evaluation
Effectiveness in addressing international competitiveness impacts	<ul style="list-style-type: none"> • Sectoral output and employment • Sectoral profits and market share • International trade and investment flows • Emissions and leakage rates
Economic Efficiency	<ul style="list-style-type: none"> • Domestic welfare or GDP changes • Changes in carbon price • Cost per tonne of leakage reduced • Foregone government revenues
Incentives for GHG reductions and innovation	<ul style="list-style-type: none"> • Incentives for emissions reductions • Innovation impacts
International Political Economy	<ul style="list-style-type: none"> • International GDP or welfare changes
Domestic Political Considerations	<ul style="list-style-type: none"> • Impacts on affected stakeholder groups • Foregone government revenues
Implementability	<ul style="list-style-type: none"> • Estimates of implementation burden • The ability to obtain data needed to implement policy measures

Border Tax Adjustments can be costly and do not address competitiveness effects

Effect of countervailing import tariffs in the case of a 50% reduction in EU countries by 2050

	without countervailing tariffs	with countervailing tariffs
Leakage rates (%)	11.5	2.9
Output of EITs (% deviation from BAU)		
EU	-4.0	-4.6
World	-0.4	-0.6
GDP effect (% deviation from BAU)		
EU	-1.5	-1.8
Rest of the World	0.0	-0.1

Source: OECD (2009), *Economics of Climate Change Mitigation: Policies and Options for Global Action beyond 2010*.

For more information...

- Visit www.oecd.org and the OECD's website on climate change at www.oecd.org/env/cc
- Information on the economics of mitigation can be found at www.oecd.org/env/cc/econ
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