

Policy Department  
Economic and Scientific Policy

# Competitive distortions and leakage in a world of different carbon prices

Trade, competitiveness and employment  
challenges when meeting the post-2012  
climate commitments in the European Union

This study compilation was requested by the European Parliament's Temporary Committee on Climate Change.

Only published in English.

Responsible Administrator

Arttu MAKIPAA

Author - Chapter 1

Policy Department Economy and Science  
DG Internal Policies  
European Parliament  
Rue Wiertz 60 - ATR 00L006  
B-1047 Brussels  
Tel: +32-2-28 32 620, Fax: +32-2-28 46 929  
[arttu.makipaa@europarl.europa.eu](mailto:arttu.makipaa@europarl.europa.eu)

Author - Chapter 2:

Karsten NEUHOFF  
Faculty of Economics  
University of Cambridge  
Sidgwick Avenue  
Cambridge CB3 9DE, UK  
[karsten.neuhoff@econ.cam.ac.uk](mailto:karsten.neuhoff@econ.cam.ac.uk)

Authors - Chapter 3:

Ralph CZARNECKI, Michael MEHLING  
and Nils MEYER-OHLENDORF  
The Ecologic Institute  
Pfalzburger Str. 43-44,  
D-10717 Berlin,  
[ralph.czarnecki@ecologic.eu](mailto:ralph.czarnecki@ecologic.eu)

Authors - Chapter 4:

Stéphanie MONJON and Philippe QUIRION  
CIRED & SMASH  
45 bis avenue de la Belle Gabrielle  
F 94736 Nogent sur Marne cedex, France  
[monjon@centre-cired.fr](mailto:monjon@centre-cired.fr); [quirion@centre-cired.fr](mailto:quirion@centre-cired.fr)

Authors - Chapter 5:

Ulrike LEHR and Christian LUTZ  
Institute for Economic Structures Research (GWS mbh)  
Heinrichstr. 30,  
D-49080 Osnabrück, Germany,  
[lehr@gws-os.de](mailto:lehr@gws-os.de), [lutz@gws-os.de](mailto:lutz@gws-os.de)

Manuscript completed in July 2008

The opinions expressed in this document do not necessarily represent the official position of the European Parliament.

Reproduction and translation for non-commercial purposes are authorised provided the source is acknowledged and the publisher is given prior notice and receives a copy.

E-mail: [poldep-esc@europarl.europa.eu](mailto:poldep-esc@europarl.europa.eu).

# Table of Contents

<b>Executive Summary .....</b>	<b>iii</b>
<b>1. Introduction.....</b>	<b>1</b>
1.1 <i>The Rationale for this Study.....</i>	<i>1</i>
1.2 <i>Channels of competitiveness and leakage.....</i>	<i>1</i>
1.3 <i>The Content of the Study.....</i>	<i>2</i>
<b>2. The Political Economy of a World with Different Carbon Prices.....</b>	<b>9</b>
by Karsten Neuhoff, Faculty of Economics, University of Cambridge	
2.1 <i>Introduction.....</i>	<i>10</i>
2.2 <i>Classification of leakage concerns.....</i>	<i>14</i>
2.3 <i>State Aid or free allowance allocation to subsidise carbon intensive production.....</i>	<i>15</i>
2.4 <i>Sectoral agreements to address leakage.....</i>	<i>17</i>
2.5 <i>Border adjustments.....</i>	<i>19</i>
2.6 <i>Conclusions.....</i>	<i>21</i>
<b>3. International trade policy in a world of different carbon prices.....</b>	<b>23</b>
by Michael Mehling, Nils Meyer-Ohlendorf and Ralph Czarnecki, Ecologic - Institute of International and European Environmental Policy	
3.1 <i>Introduction: Climate Policy and International Trade.....</i>	<i>23</i>
3.2 <i>Solving Leakage Unilaterally: Border Adjustments and Other Trade-related Measures (TREM)s.....</i>	<i>24</i>
3.2.1 <i>TREM)s to Address Leakages.....</i>	<i>24</i>
3.3 <i>Currently Proposed TREMs.....</i>	<i>25</i>
3.3.1 <i>TREM)s proposed in the United States.....</i>	<i>25</i>
3.3.2 <i>TREM)s proposed in the European Union.....</i>	<i>26</i>
3.4 <i>Legal Assessment.....</i>	<i>26</i>
3.4.1 <i>Relevant General Provisions in WTO Law.....</i>	<i>27</i>
3.4.2 <i>Special rules for Countervailing Duties, Anti-dumping Duties and Quantitative Restrictions.....</i>	<i>29</i>
3.4 <i>Inter-dependencies with Other Environmental Regimes.....</i>	<i>31</i>
3.5 <i>Conclusions.....</i>	<i>34</i>
<b>4. Border Adjustments - Implications of design options.....</b>	<b>35</b>
by Stéphanie Monjon and Philippe Quirion, CIRED - SMASH	
4.1 <i>Introduction.....</i>	<i>35</i>
4.2 <i>The form of the border adjustment.....</i>	<i>37</i>
4.3 <i>The targeted products.....</i>	<i>37</i>
4.4 <i>The adjustment base.....</i>	<i>38</i>
4.4.1 <i>The targeted emissions.....</i>	<i>38</i>
4.4.2 <i>Evaluating the amount of emissions imputed to importations and exportations.....</i>	<i>39</i>
4.5 <i>Countries covered by the BA.....</i>	<i>40</i>
4.6 <i>Enforcement issues.....</i>	<i>41</i>
4.7 <i>The administration cost of the mechanism.....</i>	<i>41</i>

<b>5. Employment effects within the Climate Change Policy Framework.....</b>	<b>44</b>
by Ulrike Lehr and Christian Lutz , Institute of Economic Structures Research (GWS)	
5.1 Introduction .....	44
5.2 General impacts of policy on employment .....	45
5.3 Estimates of employment effects .....	48
5.3.1 Carbon trade.....	48
5.3.2 Carbon leakage.....	53
5.3.3 Renewable Energy .....	55
5.3.4 EU-wide studies .....	55
5.3.5 Single country studies .....	56
5.4 Conclusions .....	57
<b>Annex I - DG External Policies Study "What contribution can trade policy make towards combating climate change?" .....</b>	<b>61</b>















































































































































