Öko-Institut e.V.
Institut für angewandte Ökologie
Institute for Applied Ecology

perspectives climate change
a Point Carbon company

Universität Zürich
Institut für Politikwissenschaft

Design of the post-2012 climate regime: Sectoral approaches for GHG reduction

Incentives for mitigation investments

Post-2012 Market Mechanisms
Side Event at COP17, Durban, South Africa, 30 November 2011

Dr. Martin Cames
Head Energy & Climate (Berlin)
Schicklerstr. 5-7, 10179 Berlin, Germany
Tel.: +49 (30) 40 50 85-383, Fax: -388
e-mail: m.cames@oeko.de

Project overview

- Discussion paper: Incentives for mitigation investments
  - Perspectives GmbH, Hamburg
    - Björn Dransfeld
    - Axel Michaelowa
  - Öko-Institut, Berlin
    - Martin Cames
    - Sean Healy

- Research project funded by the German Federal Environmental Agency (Umweltbundesamt)

  Design of the post-2012 climate regime:
  Sectoral approaches for greenhouse gas mitigation

- **http://www.uba.de/uba-info-medien-e/4145.html**

Background

- **Aim of sectoral approaches**
  - Provide a bridge for the transition to a global carbon market
  - Overcome the flaws of project-based mechanisms:
    - High transaction costs
    - Lack of environmental integrity
    - Limits in addressing all kinds of mitigation measures

- **Role of host country governments**
  - Project-based: supervising, economic responsibility remains with the project developer
  - Sector-based: more active role, ensure that the emission reductions are actually achieved

Differences to project-based

- **Cover all activities or installations within a certain sector boundary**
  - Increase the mitigation potential
  - Enhance the portfolio of technical mitigations measures
  - Increase environmental integrity by reducing the risk of leakage
  - Reduce transaction costs because the determination of a baseline only has to be carried out once
  - Mitigation activities would only be initiated at activities with the worst emission performance although all activities will be covered

- **Require governments to play a different role**
  - Private entities cannot take responsibility for an entire sector
  - Host country government needs to take that responsibility
  - Needs to ensure that the envisaged greenhouse gas mitigation is actually achieved
  - Sectoral approaches are closer to IET than to the CDM

Potential challenges

- **Free-riding and sectoral underperformance**
  - May specifically apply to sectoral crediting with a no-lose target
  - Only if the entire sector meets the target, will credits be issued
  - Uncertainty as to whether competitors contribute to achieving the target
- **Ex-ante investments/ex-post credits**
  - Investments to reduce emissions are required prior to the crediting period
  - Credits can only be issued once emission reductions have been MRV-ed
- **Lack of experience**
  - Investors might doubt whether they receive incentives in the case of underperformance
  - In particular foreign investors might act cautiously

Addressing challenges

- **Lack of experience**
  - Host countries would need to provide guarantees for investors
  - Without effective regulation thresholds will not be met
  - CDM with 10 years of experience cannot be directly compared with a newly established markets-based mechanism
- **Ex-ante investments/ex-post credits**
  - Emission reduction purchase agreements (ERPAs)
  - Upfront payment but rebate on the credit price
  - Revenues can be used to cover costs for incentives or measures
- **Free-riding and sectoral underperformance**
  - Free-riding: only if non-reducing activities also receive incentives
  - No-lose target: domestic regulation may need to be mandatory
  - Private entities can be involved directly, indirectly or not at all

Options for direct involvement

- **Guaranteed sectoral credit revenues**
  - Activities would receive internationally fungible units for emission reductions below their baseline
  - Governments would need to buy units in the case of a shortfall due to activities with emissions above their baseline
  - Emissions above the baseline may be penalised

- **Domestic mandatory emissions trading scheme**
  - Domestic cap would be set at the sectoral threshold
  - Domestic units can be exchanged for futures of sectoral credits
  - Exchanged units would have to be cancelled
  - Domestic ETS would need to accept internationally fungible units for compliance to ensure that the domestic price does not exceed global carbon prices

Options for direct involvement

- **Tradable intensity standard** (as suggested by CCAP)
  - Host country governments establish a domestic benchmark equal to the sectoral intensity threshold
  - Activities which beat the benchmark would receive internationally recognised credits
  - Activities which exceed the benchmark would have to purchase internationally recognised units
  - Government would receive
    - Sectoral credits for emissions below the benchmark
    - International fungible units for emissions above the benchmark
  - Both together would allow for the sectoral threshold to be met exactly

Other options for providing incentives

- **Subsidies**
  - Feed in tariffs or investment subsidies for renewables
  - Renewable would replace fossil generation
  - Sectoral credits can be used to cover the costs
- **Taxes and subsidy reductions**
  - Emissions above the baseline or all emissions could be taxed
  - Tax and sectoral credits revenues could be redistributed
  - Redistribution should not disincentivise emission reduction
- **Standards and regulation**
  - Mandatory requirement to install emission mitigation equipment
  - Credit revenues could be used to subsidise investment
  - Only if marginal mitigation costs are similar across the sector

Conclusions

- Under sectoral approaches host country governments need to take economic responsibility for achieving the thresholds
- Sectoral approaches are therefore more similar to international emissions trading than the CDM
- How to provide incentives to private entities is at the host country’s discretion
- Even under a no-lose target at UNFCCC level, mandatory policies may be required at the domestic level
- Several options are available in terms of how incentives for mitigation investment could be provided to private entities
- These options may include direct or indirect integration of private entities in the international carbon market and pure domestic regulations such as standards, subsidies, feed-in tariffs, taxes, etc.

Öko-Institut e.V.
Institut für angewandte Ökologie
Institute for Applied Ecology

perspectives climate change
a Point Carbon company

Universität Zürich
Institut für Politikwissenschaft

Design of the post-2012 climate regime: Sectoral approaches for GHG reduction

Thanks for your attention!

Öko-Institut e.V.
Schicklerstr. 5-7
10179 Berlin
Germany
Tel.: +49 (30) 40 50 85-80
Fax: +49 (30) 40 50 85-88
http://www.oeko.de

Perspectives GmbH
Fenglerstrasse 9a
22041 Hamburg
Germany
Tel.: +49 (40) 399 99 069-1
Fax: +49 (40) 39 99 90 69-8
http://www.perspectives.cc

IPZ Institut für Politikwissenschaften
Universität Zürich
Affolternstrasse 56
8050 Zürich
Switzerland
Tel.: +41 (44) 634-38 41
Fax: +41 (44) 634-49 25
http://www.ipz.uzh.ch

Umwelt Bundes Amt
For our Environment

This study was prepared on behalf of the Federal Environmental Agency within the framework of the environmental research plan (reference no. 3710 41 134) and financed with means from the federal budget.