

# Incentives for mitigation investments

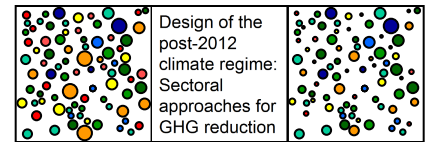
## Post-2012 Market Mechanisms

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# Project overview

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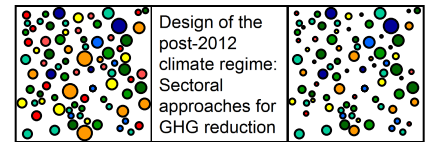
- Discussion paper: Incentives for mitigation investments
  - Perspectives GmbH, Hamburg
    - Björn Dransfeld
    - Axel Michaelowa
  - Öko-Institut, Berlin
    - Martin Cames
    - Sean Healy
  
- Research project funded by the German Federal Environmental Agency (Umweltbundesamt)

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

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

# Background

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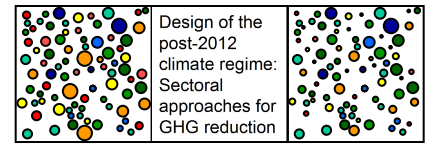
- **Aim of sectoral approaches**

- 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**

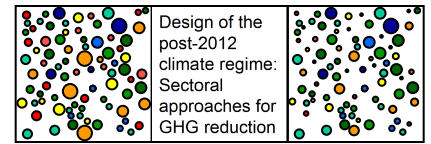
- Project-based: supervising, economic responsibility remains with the project developer
- Sector-based: more active role, ensure that the emission reductions are actually achieved

# Differences to project-based



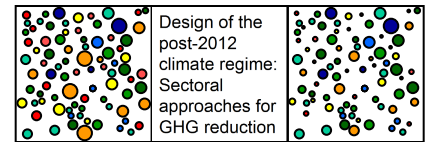
- **Cover all activities or installations within a certain sector boundary**
  - Increase the mitigation potential
  - Enhance the portfolio of technical mitigations measures
  - Increase environmental integrity by reducing the risk of leakage
  - Reduce transaction costs because the determination of 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



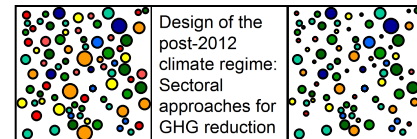
- **Free-riding and sectoral underperformance**
  - May specifically apply to sectoral crediting with a no-lose target
  - Only if the entire sector meets the target, will credits be issued
  - Uncertainty as to whether competitors contribute to achieving the target
  
- **Ex-ante investments/ex-post 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



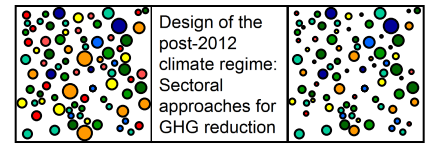
- **Lack of experience**
  - Host countries would need to provide guarantees for investors
  - Without effective regulation thresholds will not be met
  - CDM with 10 years of experience cannot be directly compared with a newly established markets-based mechanism
  
- **Ex-ante investments/ex-post credits**
  - 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

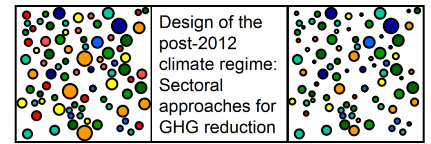
# Options for direct involvement



- **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

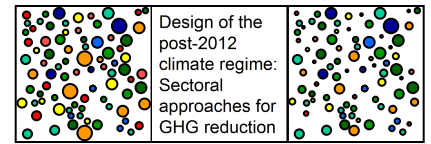


# Other options for providing incentives

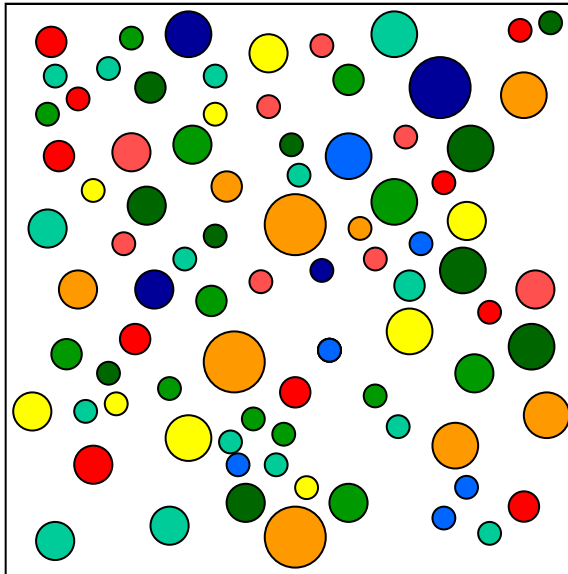


- **Subsidies**
  - Feed in tariffs or investment subsidies for renewables
  - Renewable would replace fossil generation
  - Sectoral credits can be used to cover the costs
  
- **Taxes and subsidy reductions**
  - Emissions above the baseline or all emissions could be taxed
  - Tax and sectoral credits 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

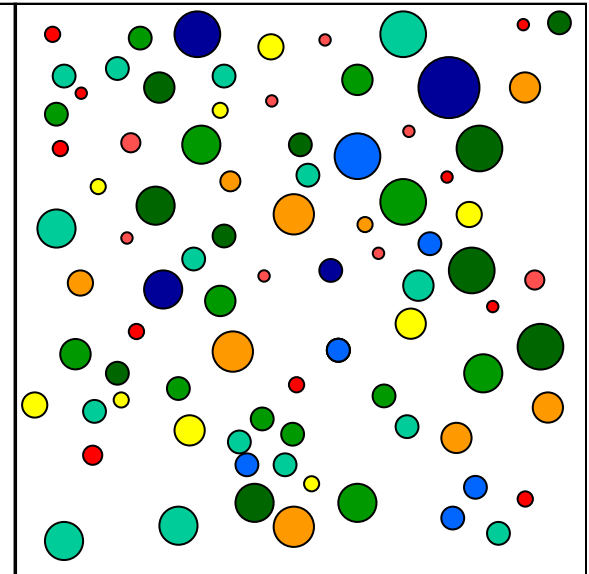
# Conclusions



- 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.



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



# Thanks for your attention!

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