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Financing mitigation and adaptation: What scale of resources is required, where should the funds come from and how should they be delivered?

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Outline

Part I What scale of resources is required?

- Range of estimated global costs & EU share
- Potential share of public finance
- Developing countries' needs

Part II Where should the funds come from and how should they be delivered?

- Shifting investment flows and raising additional revenues
- Different types of funding instruments
- Recent proposals for a future finance model

Part I

What scale of resources is required?

11 Studies Taken into Account

UNFCCC	2007
World Bank	2006a, 2006b
Oxfam	2006
UNDP	2007
OIES	2008
Stern Review	2006
Vattenfall	2007
OECD	2008
European Commission	2007
IPCC	2007

Studies are Hard to Compare

- Absolute global (incremental) costs in €
- Relative global costs in % of future GDP
- Emissions reduction targets
- Time horizon
- Level of depth

- NEED TO GENERALISE

Studies: Some Similarities

- Global macro approach
- Differentiation between mitigation and adaptation
- Wide range of estimated costs
- Lack of detail

Costs: Order of Magnitude

- Examples of global cost estimates:
  - UNFCCC: €199-306bn
  - World Bank: €56-80bn (up to €193bn)
  - EC: 0.5% of GDP = €193bn
  - Stern Review: 1% of GDP = €385bn
  - UNDP: 1.6% of GDP = €617bn
  - OECD: 2.5% of GDP = €923bn
- Expected range between €200 billion and €1 trillion per year

EU27 Share in Global Costs

- 4 methodologies
  - 2 based on current emissions
  - 2 based on historical emissions and economic capability
- EU27 share between 11% and 32%

  Source: Table 5, Behrens (2008), p.11
- Until 2030: €20-195bn (>€50bn) p.a.
- In 2050: €41-305bn (>€100bn)

Share of Public Finance

- Not analysed in studies but some indications
  - UNFCCC: 14%
  - World Bank: 33%
- Globally: €30-300bn
- EU27: €3-100bn (more realistically between €7-64bn until 2030)
- Substantial contribution of private sector

Role of Developing Countries

- UNFCCC: 46% of mitigation investments (€75bn); 40-60% of adaptation investments (€23-45bn)
- World Bank: 50-80% of global costs to decarbonise the power sector (up to €24bn); €8-32bn to climate proof development
- UNDP: €68bn annually until 2015
- Oxfam: Adaptation costs of more than €40bn
- OIES: €1.6-14 for non-Annex 1

Conclusions

- Variety of diverging studies makes comparison very difficult
- Wide range of estimates renders many studies politically irrelevant
- Beneficial for structuring the debate
- Global macro approach needs to be complemented by detailed sectoral studies
- Important role of private sector

Part II

Where should the funds come from and how should they be delivered?

Quantity and quality of finance

- **The challenge of 'filling the financial gap'**
- What the Convention says (Art 4.3)
  - **New** and **additional**
  - the agreed **full incremental costs**
  - **adequacy** and **predictability**
  - **Appropriate burden sharing**

→**Not only quantity but also quality** of financial resources

Where should the funds come from?

- Shifting investment flows
  - CDM, JI, new post-2012 mechanisms e.g.REDD
  - Green Investment Scheme (GIS)
  - Multilateral funds
  - Sectoral No-Lose Targets (SNLTs)
- Raising additional revenues
  - Revenues from auctioning
  - Levy on aviation, bunker fuel
  - Proceeds of credit transactions

Types of funding instruments

- **Grants and loans=ODA-type**
- **New instruments** (e.g. guarantees, investments, inducement prizes, technical assistance)
- **Carbon market instruments** (e.g. project credits)

Disbursement

- **Types** of disbursement
- **Modes** of disbursement
- Disbursement considerations
- **Access** considerations

Recent proposals for a future finance model

- **G77** and **China**
- The **AOSIS**
- **India**
- **Switzerland**
- **Norway**
- **Mexico**

For further discussions

- Link between the **revenue base** and **emissions**
- The most promising **revenue sources**
- **Earmarking of auctioning revenues; auctioning modalities**
- **Integration or coordination** with existing or proposed funds
- **Predictability, stability** and **timeliness**
- **Governance**

Publications

Behrens, A. (2008), "Financial impacts of climate change: What scale of resources is required?" ECP Report No.6, October.

http://shop.ceps.eu/BookDetail.php?item_id=1743

Fujiwara, N., A. Georgiev, and C. Egenhofer (2008), "Financing mitigation and adaptation: Where should the funds come from and how should they be delivered?" ECP Report No.7, December.

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Thank you for your attention

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