



World Bank Experience: Potential of the Flexible Mechanisms

**Journalist Training
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The Kyoto Protocol

Compliance with their Kyoto commitments:

→ a total reduction of about 5.0-5.5 billion tonnes of CO₂e over the 2008-2012 period.

Kyoto targets may be achieved by:

- Industrialized countries reducing domestic emissions
- Trading emission permits (“allowances”) among companies and Assigned Amounts Units (“AAUs”) among governments
- Purchasing emission reductions credits from projects
 - In developing countries (Clean Development Mechanism – CDM)
 - In economies in transition (Joint Implementation – JI)

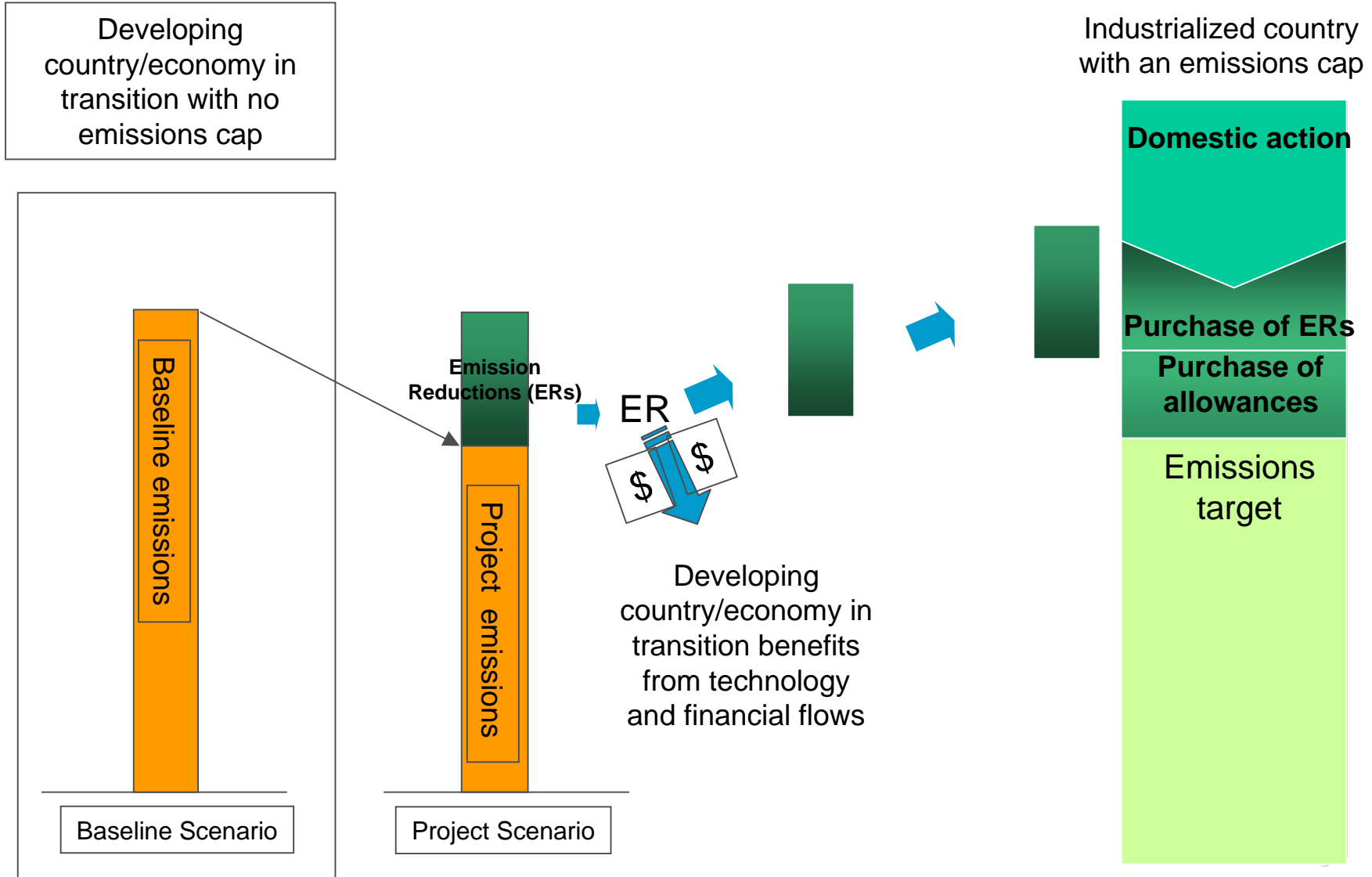
Carbon Funds

Market created mainly as a result of regulatory commitments.

The Bank is a pioneer in the CDM/JI segment of the carbon market with 10 years of experience.



Carbon trade



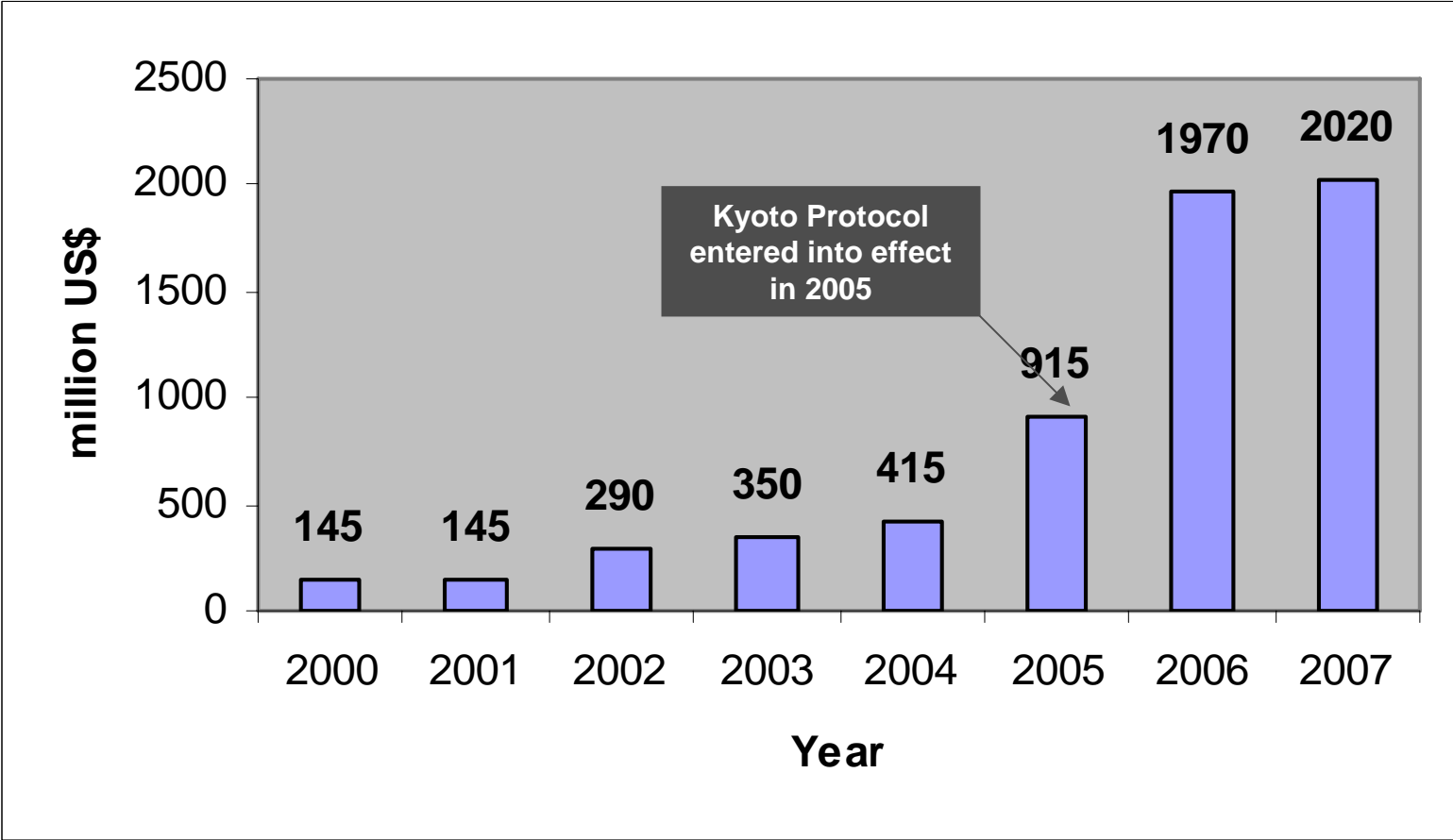


Objectives: The first 10 years

- *Climate change hurts poor countries, undermines their development.*
- Catalyze the carbon market.
- Learning by doing:
 - Provide information for negotiating Parties.
 - Develop business models in carbon market.
 - “Crowd in” private sector.
- Promote sustainable development and flow of new financial resources.
- Buy emission reductions for compliance.



Total Cumulative Volume of Carbon Funds Managed by the World Bank





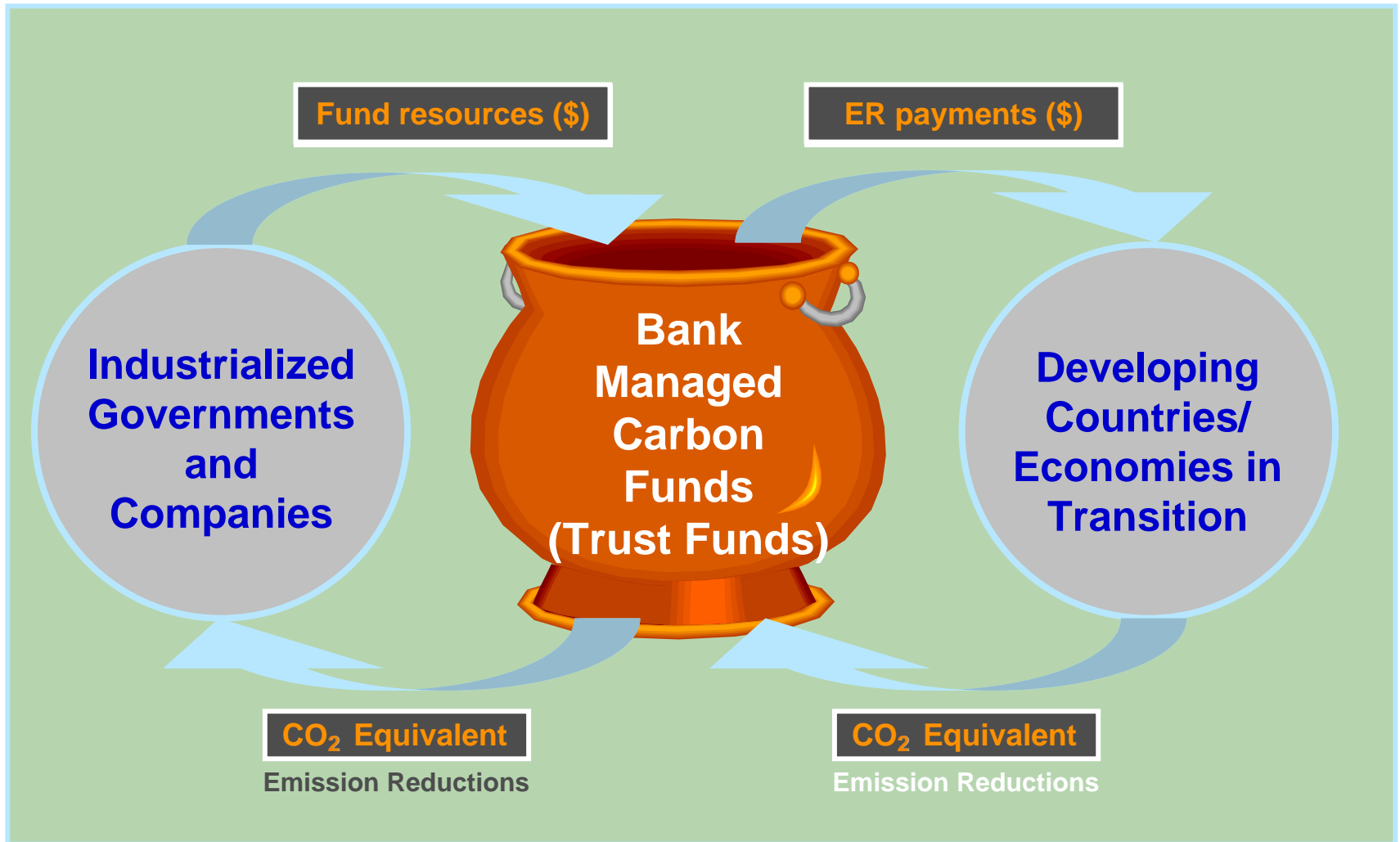
WB Carbon Funds and Facilities

Total funds pledged = US\$ 2.02 billion (16 governments, 65 firms)

Fund	Size (\$million)	Participant(s)	Focus
Pioneering Fund			
Prototype Carbon Fund	180.0	Multi-shareholder	Multi-purpose
Specialized Funds			
Community Development Carbon Fund	128.6	Multi-shareholder	Small-scale projects that generate social benefits
BioCarbon Fund Tranche 1	53.8	Multi-shareholder	Land Use, Land-Use Change, and Forestry (LULUCF) projects
BioCarbon Fund Tranche 2	20.6		
Country Funds			
Netherlands Clean Development Mechanism Facility	268.3	Netherlands Ministry of Environment	CDM projects
Netherlands European Carbon Facility <i>(Jointly managed with IFC)</i>	56.6	Netherlands Ministry of Economic affairs	JI projects
Spanish Carbon Fund	282.4	Multi-shareholder (Spain)	Multi-purpose
Italian Carbon Fund	155.6	Multi-shareholder (Italy)	Multi-purpose
Danish Carbon Fund	69.4	Multi-shareholder (Denmark)	Multi-purpose
Carbon Fund for Europe <i>(Jointly managed with EIB)</i>	65.0	Multi-shareholder	Multi-purpose
Umbrella Fund			
Umbrella Carbon Facility	737.6	Multi-shareholder	Tranche 1: Two HFC-23 projects in China



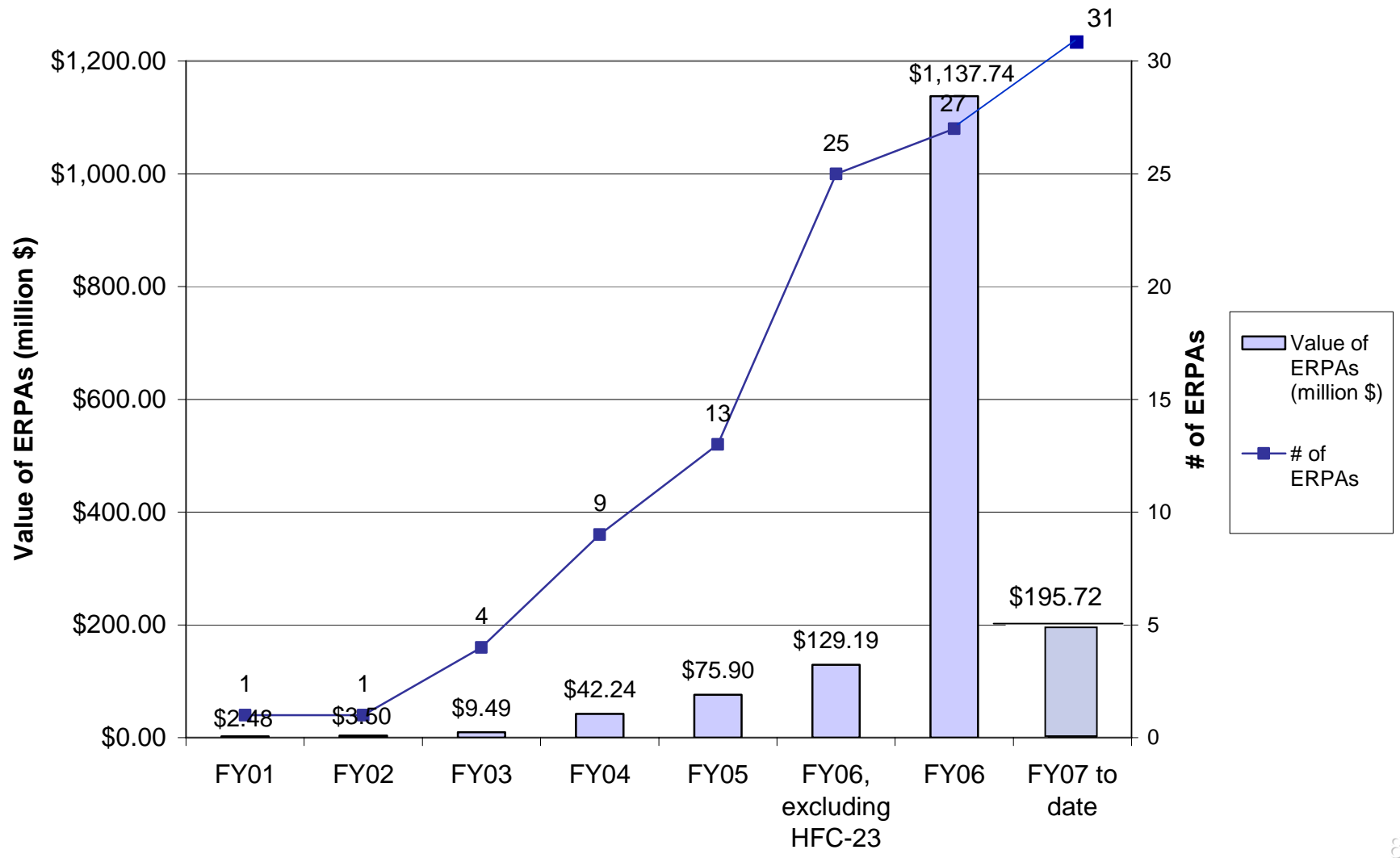
How Carbon Funds Work





WB CFU Signed ERPAs

World Bank Carbon Finance Signed ERPAs (Annual)



Impact of carbon finance in different sectors



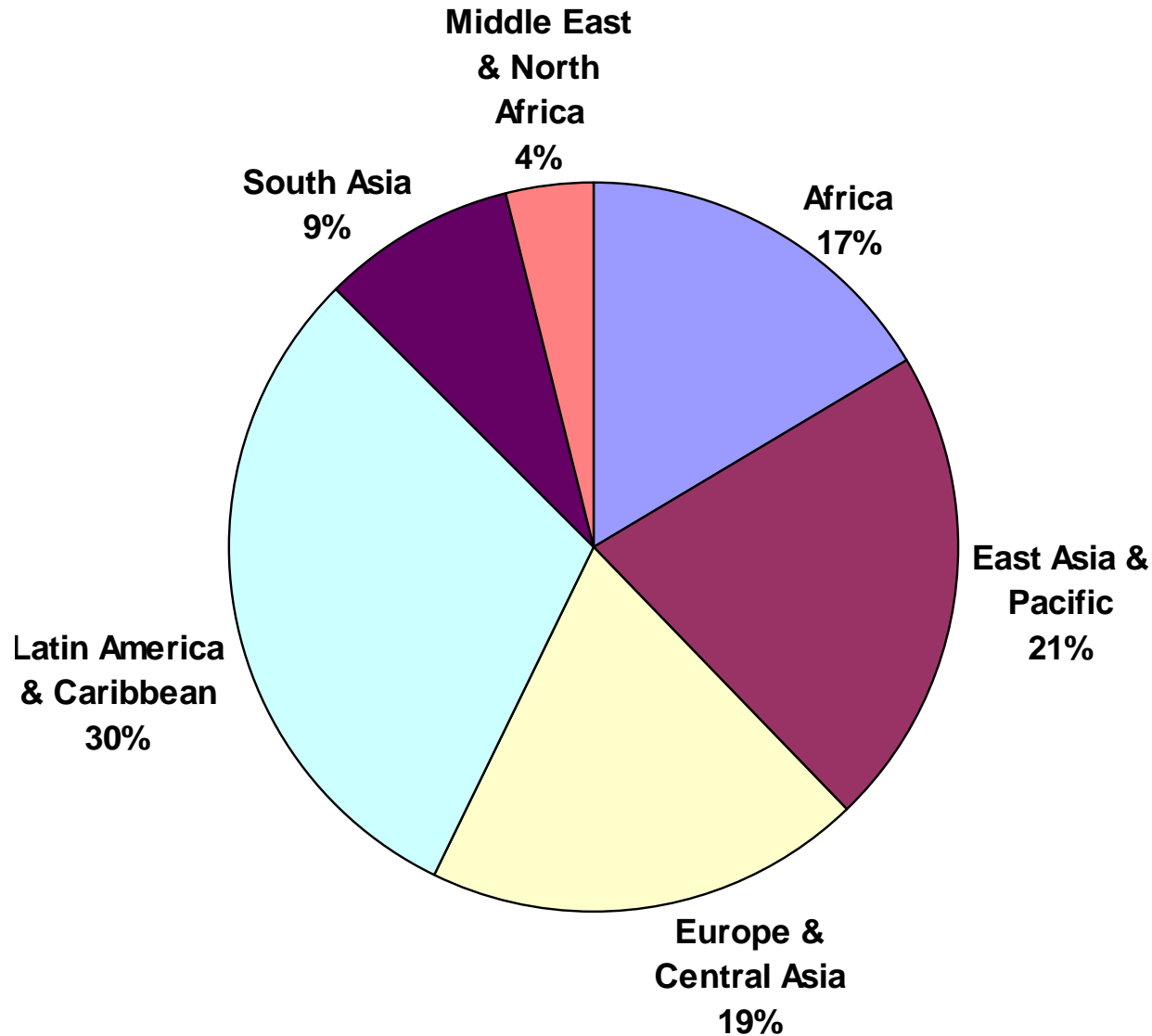
Summary Sensitivity Analysis*

Incremental IRR Results – Contribution of Carbon Finance

Sector	Impact (% range)
Landfill	5.5 - 50
CH4 from coal	7.0 - 12.0
Biomass	2.0 - 8.0
Forestry	0.5 - 7.0
Renewable energy	0.2 - 3.0
District Heating	0.5 - 1.0

* Simulation for different prices (US\$3-9) and contract tenure (5-21 years)

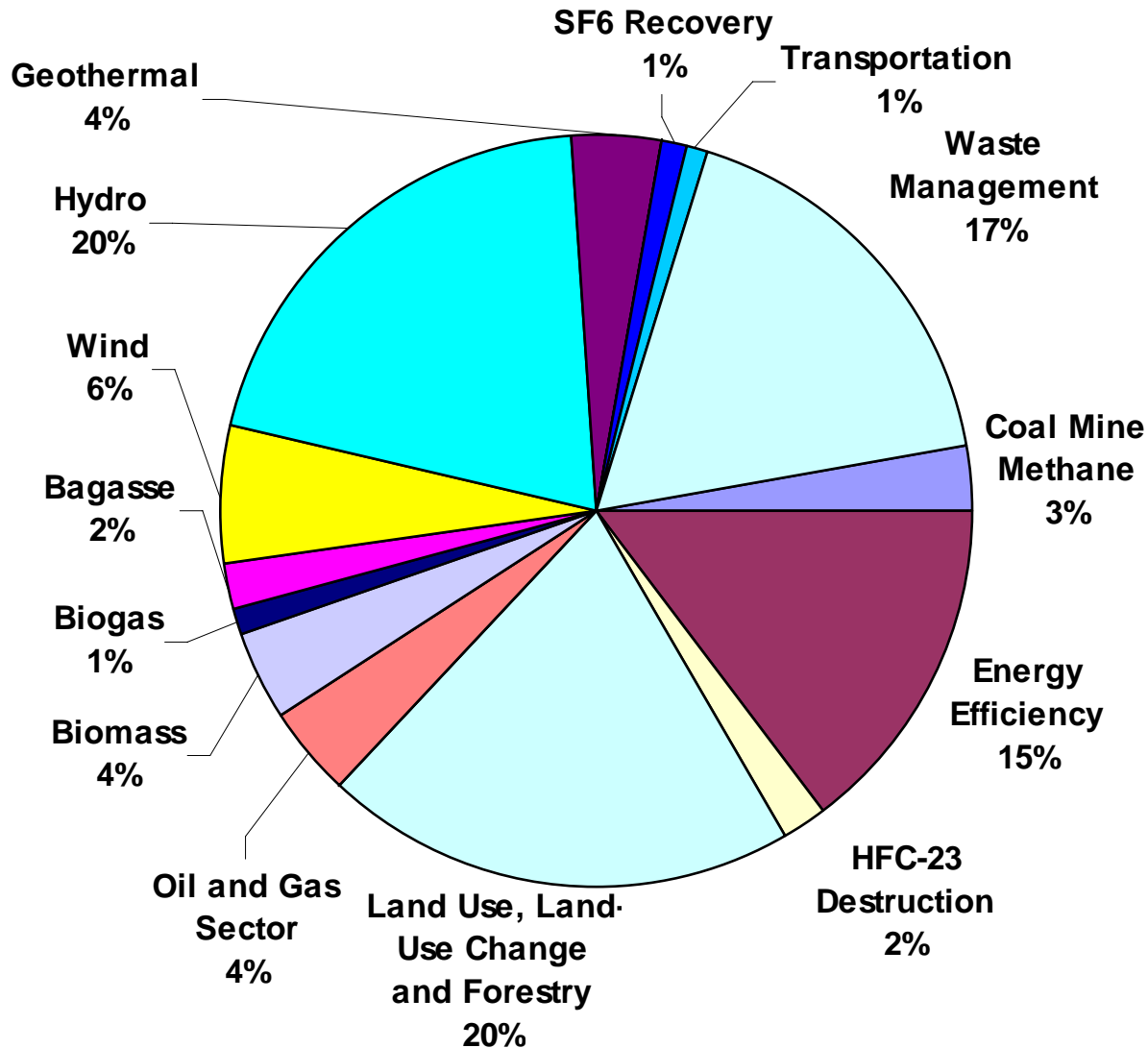
Regional distribution of CF portfolio (Number of projects)



Technological distribution of CF portfolio



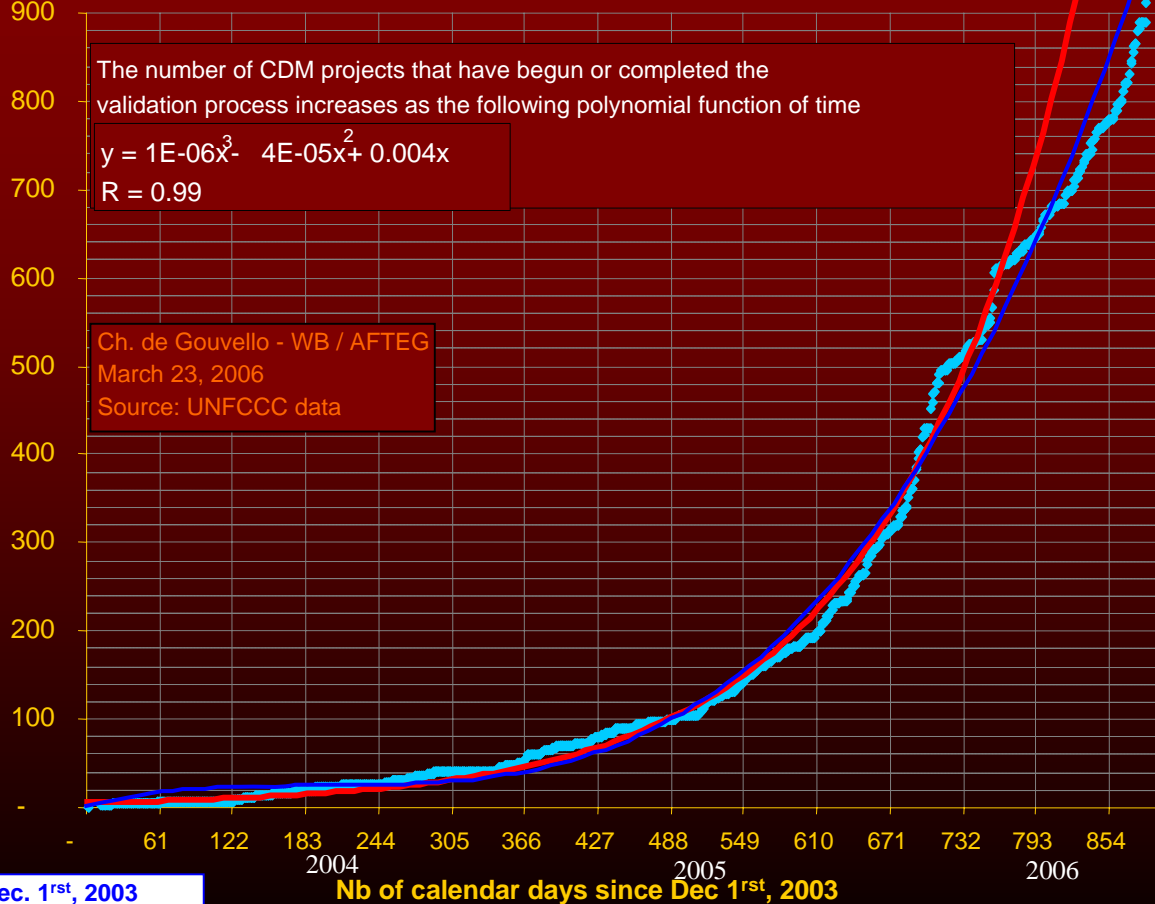
(Number of projects)



Oct 20, 2006
N=1,303

Number of CDM projects that have already applied for validation

Nb of Projects



Dec. 1st, 2003



(Project examples)



Latest CDM Statistic

- CDM project pipeline: > 2100
- Expected CERs until end 2012: 2.2 billion tCO₂e
- Registered projects: 765
- Projected CERs until end 2012: 1.02 billion tCO₂e

Source: UNFCCC CDM website

- Compare to 5.5 billion tCO₂e required reductions.

Some Lessons



Carbon markets / carbon finance can work, is here to stay.

- But the learning continues.

Careful attention to design details is important.

- Project-based: Methodology and regulatory system, sustainable development, integration in investments. – CDM t need to evolve further!
- Cap-and-trade: powerful system. - But allocation of allowances, reporting.
- Keep eye on objective: emission trends, not tons.

Continuity and long-term regulatory certainty needed to ensure impact on investments and technology.

Broad-based, large-scale, and flexible market needed, including linking of regimes, to address mitigation globally. Project-by-project is insufficient!

Carbon markets will always have a political dimension: there is rent seeking, sustainable development objectives, trade issues, ... all play a role.

Challenges: The next 10 years



→ Use the carbon market to tackle mitigation!

- Support long-term investments to support transition to low-carbon economy.
- Shift away from a project-by-project approach to programs of investments, and sectoral approaches.
- Create “enabling environment”.
- Provide incentives for development of low carbon technology.
- Systematically integrate carbon constraints / carbon finance into public and private investment decisions.
 - Including “mainstreaming” in International Financial Institutions.
- → In sum, we need to achieve greater impact on climate change mitigation and poverty alleviation through scaling up.



Thank you!

For more info:

www.carbonfinance.org