



Carbon Finance at the World Bank

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WB's CF Objectives

1. Ensure CF contributes substantially to sustainable development, beyond global environmental efforts

- Supporting developing countries in enabling them to receive the maximum capital transfers for sustainable development from carbon finance
- Ensuring all carbon projects promoted by the Bank have additional sustainable development benefits beyond the reduction of carbon emissions by applying the Bank's environmental and social safeguards and adding sustainable development value



WB's CF Objectives

2. Assist in building, sustaining, and expanding the international markets for emission reductions, and its institutional and administrative structure
 - Supporting the regulatory framework – developing new tools, collaboration with the regulator
 - Expanding the capacity of other financial and development institutions through cooperation with other development banks
 - Participating with the private sector in international associations and providing opportunities for purchases by the private sector
 - Increasing market liquidity by creating projects with large volumes with a portion available to the private sector



WB's CF Objectives

3. Strengthen the capacity of developing countries to benefit from the emerging market for emission reduction credits

- \$12m Bank-administered multi-donor trust fund for capacity building and technical assistance established in FY05
- Assists interested developing countries and economies in transition to develop CDM projects
- 3 to 5 year program to develop sound structures, where local institutions gain the capacity to prepare and review projects for approval
- Market facilitation through Carbon Expo, GHG Forum, etc.



Growth in WB CF Business

UCF



World Bank CF Products (\$1.8B)



Prototype Carbon Fund: \$180m, multi-shareholder

Community Development Carbon Fund:
Multi-shareholder. Tranche I \$128.6m



Bio Carbon Fund: Tranche I \$53.8m; multi-shareholder

Netherlands \$170m – Government



Italian Carbon Fund - Multi-participant - \$45m

Netherlands \$40m - EITs only (JI with IFC)



Spanish Government; \$220m - will be open to private sector

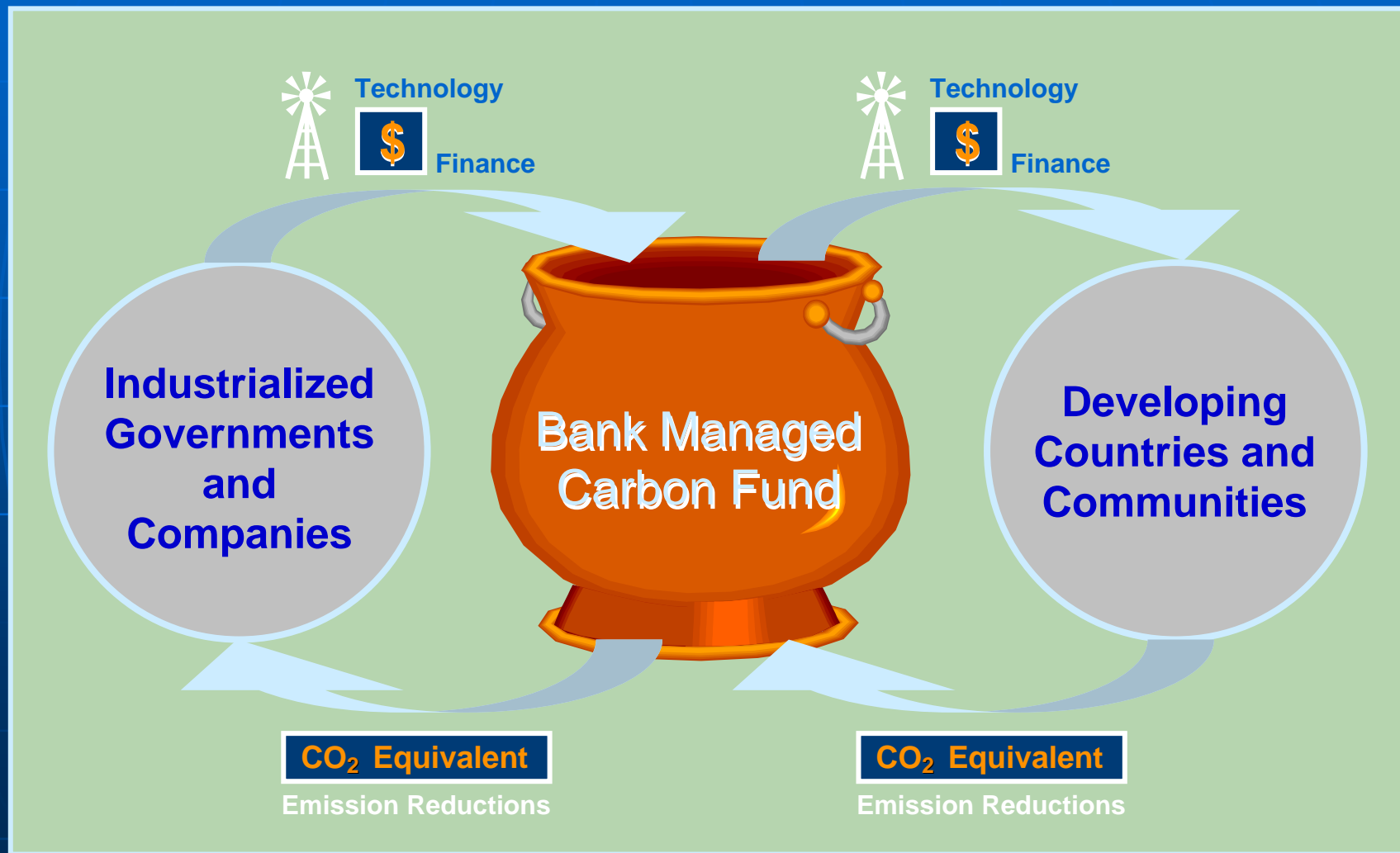
Danish Carbon Fund multi-participant \$75m



Umbrella Carbon Facility \$930m Tranche I



How Carbon Funds Work





WB Policy on Carbon Finance

- Pay market prices corrected for risk, purchase either VERs or CERs
- Always contribute beyond the purchase of the CDM emission reductions
- Build capacity of clients through support and training
- Give full information – maintain transparency and integrity
- Bring the full instruments (loans, grants, TA) of WB Group to support clients



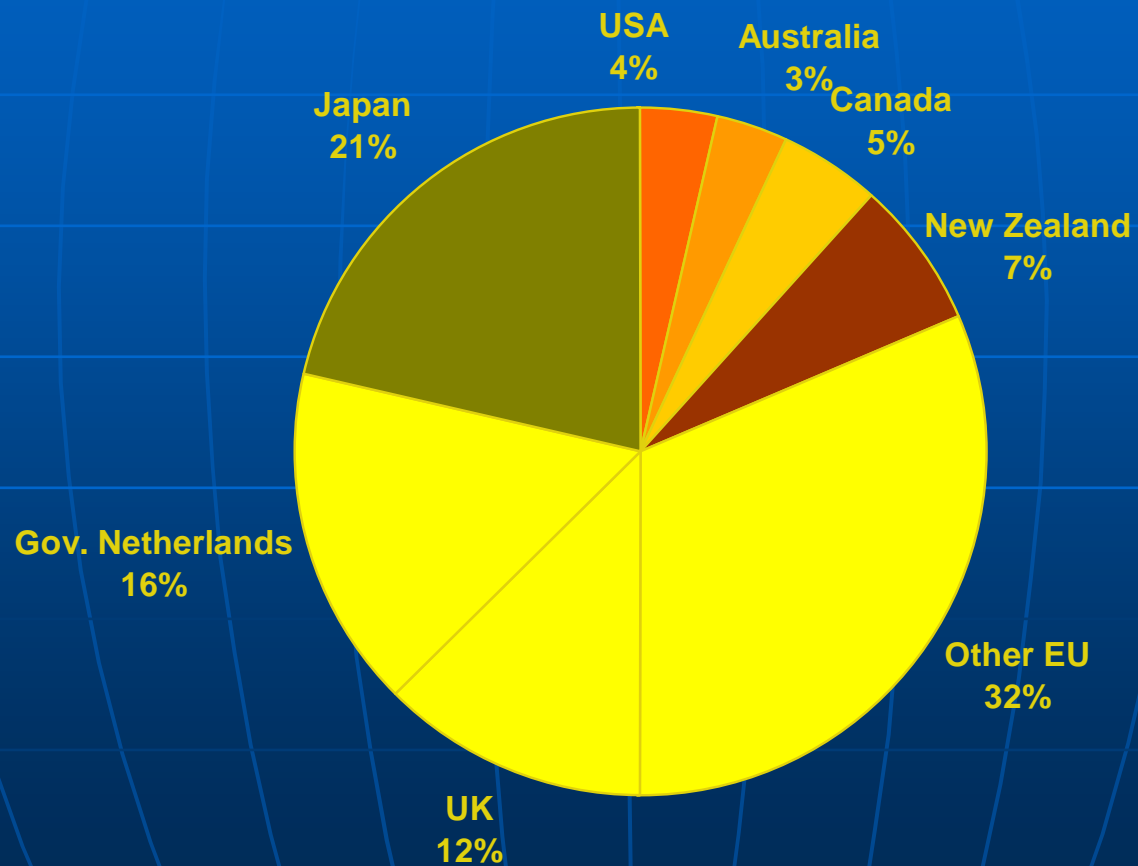
Key Features of WB Carbon Finance

- **Both public and private capital** – new and additional sources for sustainable development financing
- **Payment on Delivery** – payments are made upon annual independent verification that emissions reductions have occurred.
 - **Unlike most buyers in the market, Participants in Bank Funds agree to take Kyoto regulatory risk:** Hence, our carbon fund contracts are “bankable”, allowing more projects to get financing than if regulatory risk remained open.
- Payment stream is in hard currency, reducing financing risk for foreign lenders



Main Buyers: EU Govts & Firms

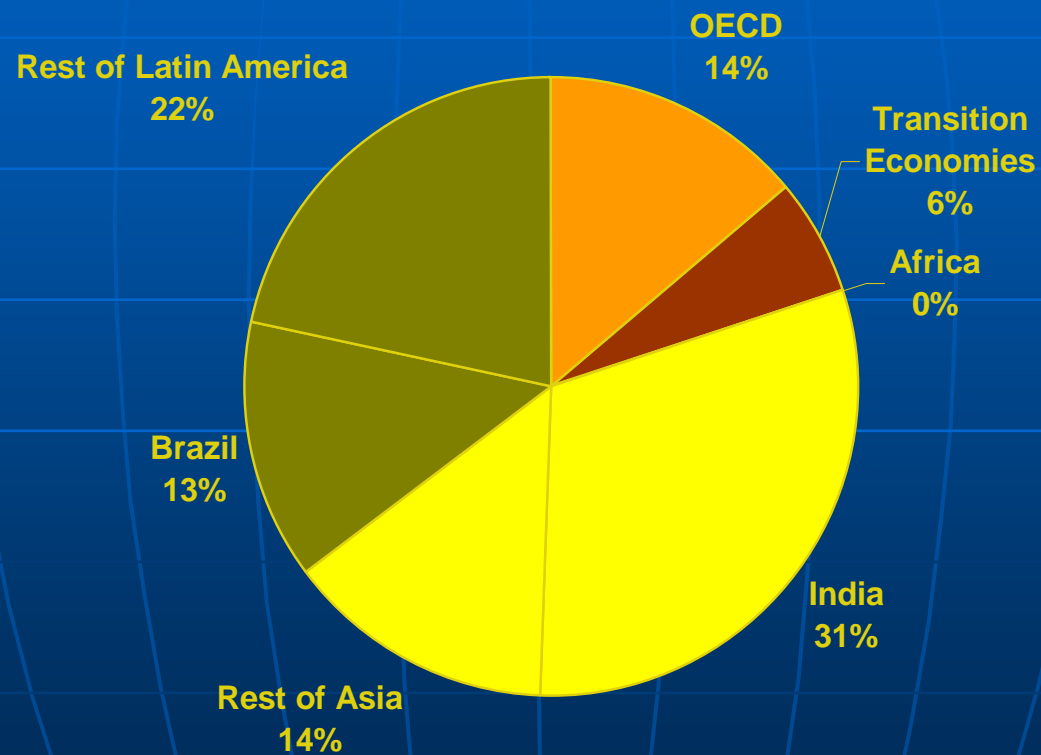
(% of volume purchased From Jan'04 to Apr'05)





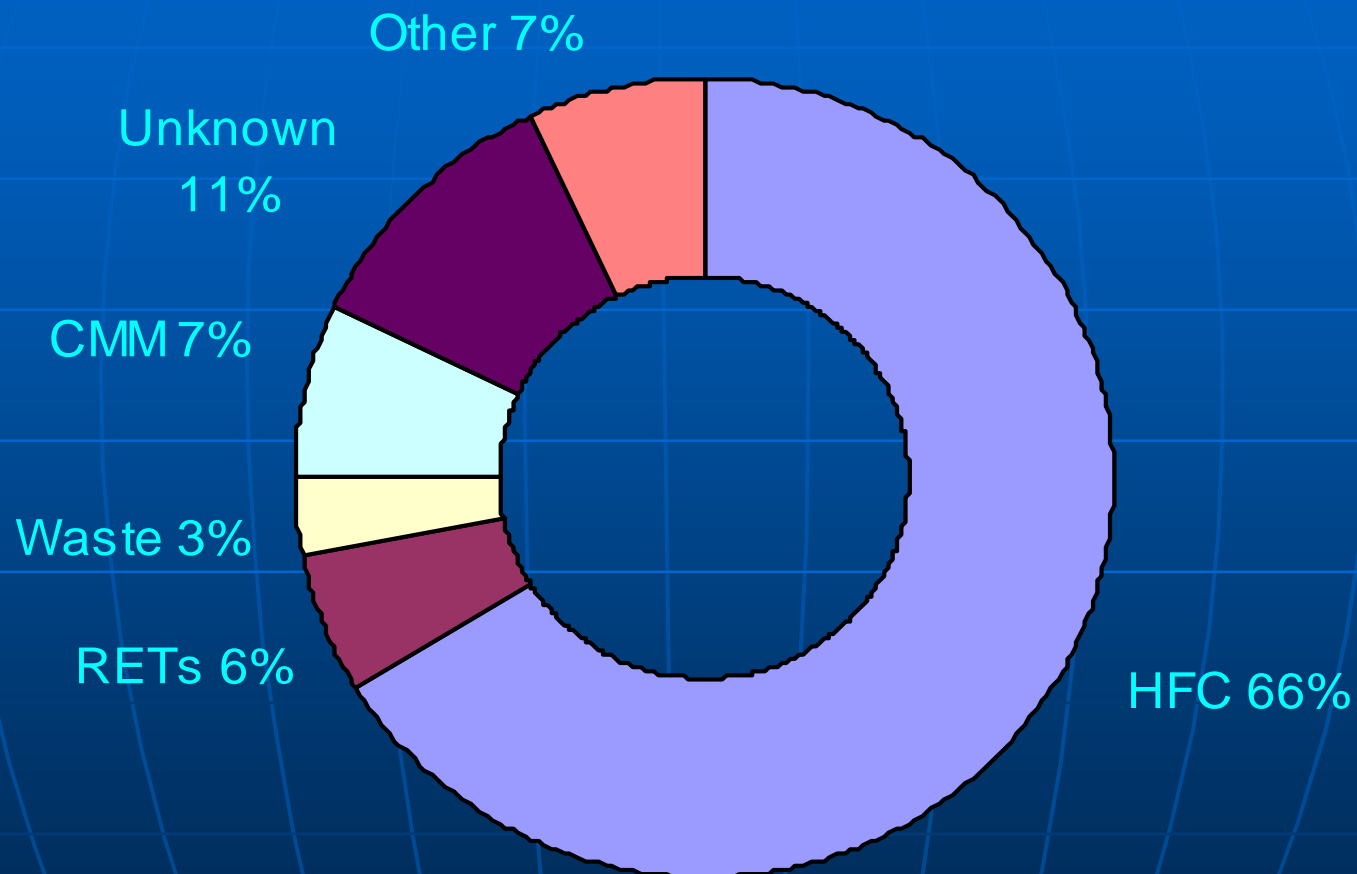
Supply from Middle-Income Countries

%of volume (Jan '04 to April '05)





2005 Total Distribution (CDM/JI)

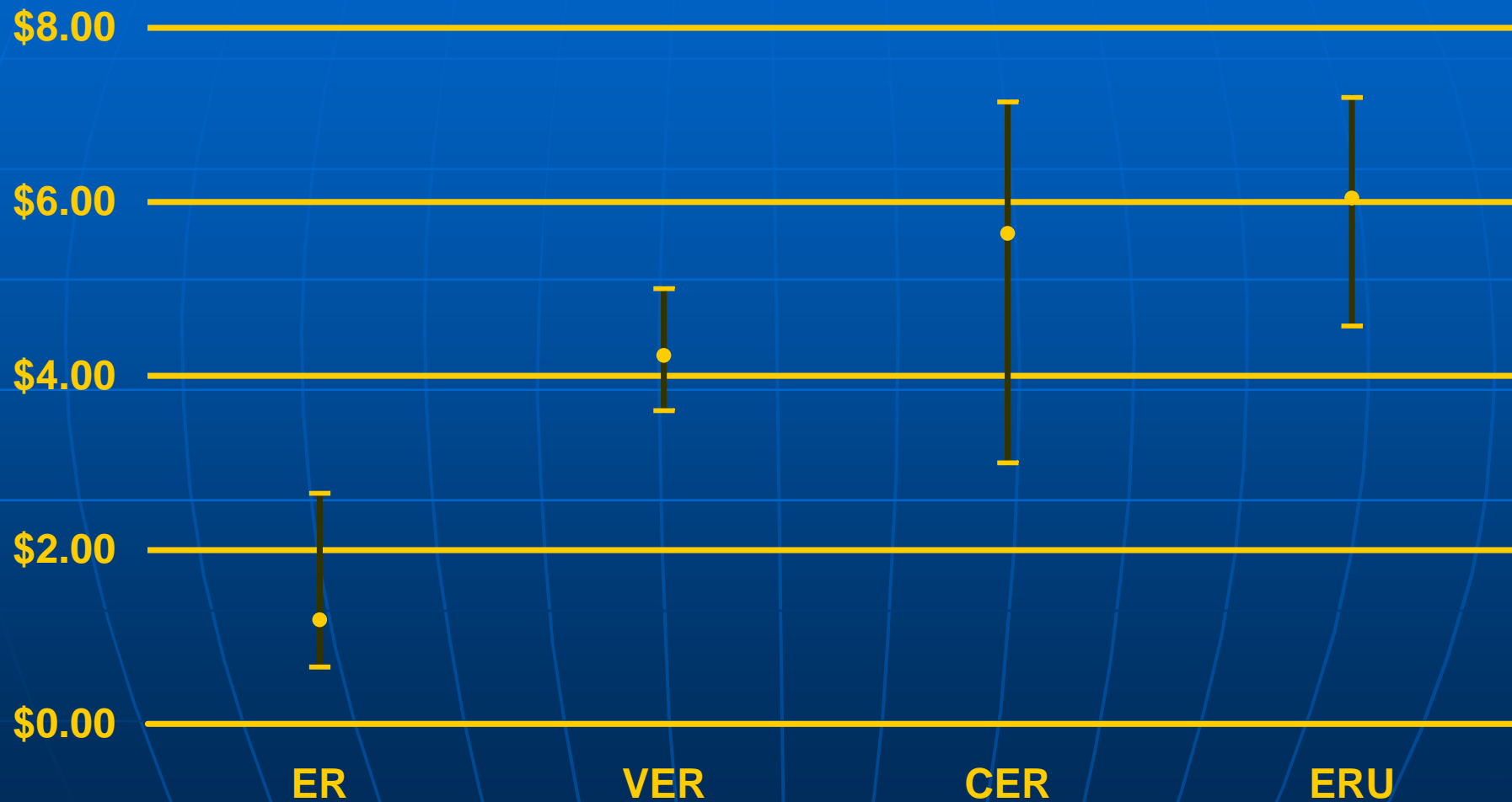


Source: Point Carbon 2006



Prices Depend on Risks

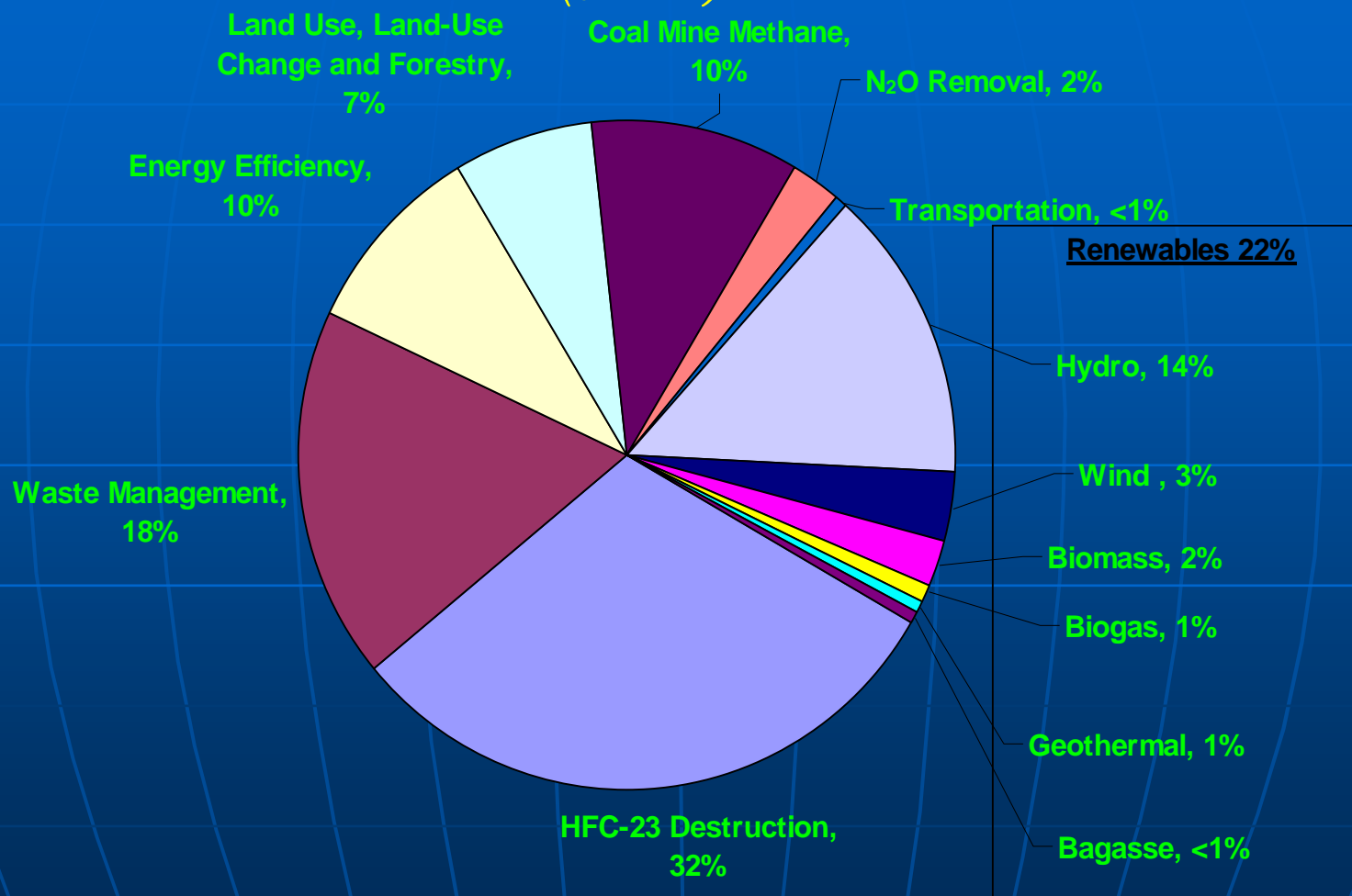
(Weighted average prices per tCO₂e – Jan'04-Apr'05)





Technological Distribution of WB Portfolio

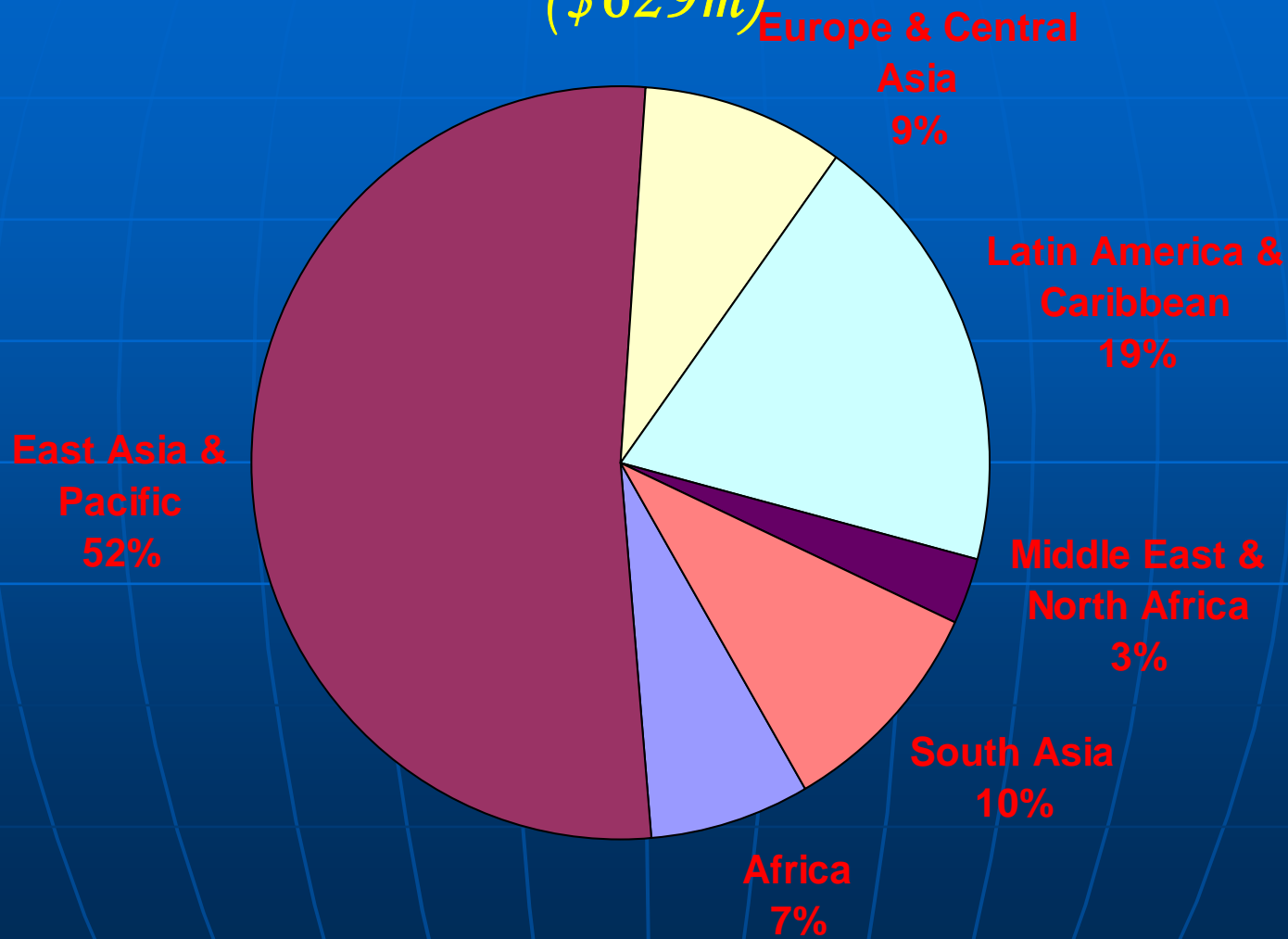
(\$629m)





Geographic Distribution of WB Portfolio

(\$629m)



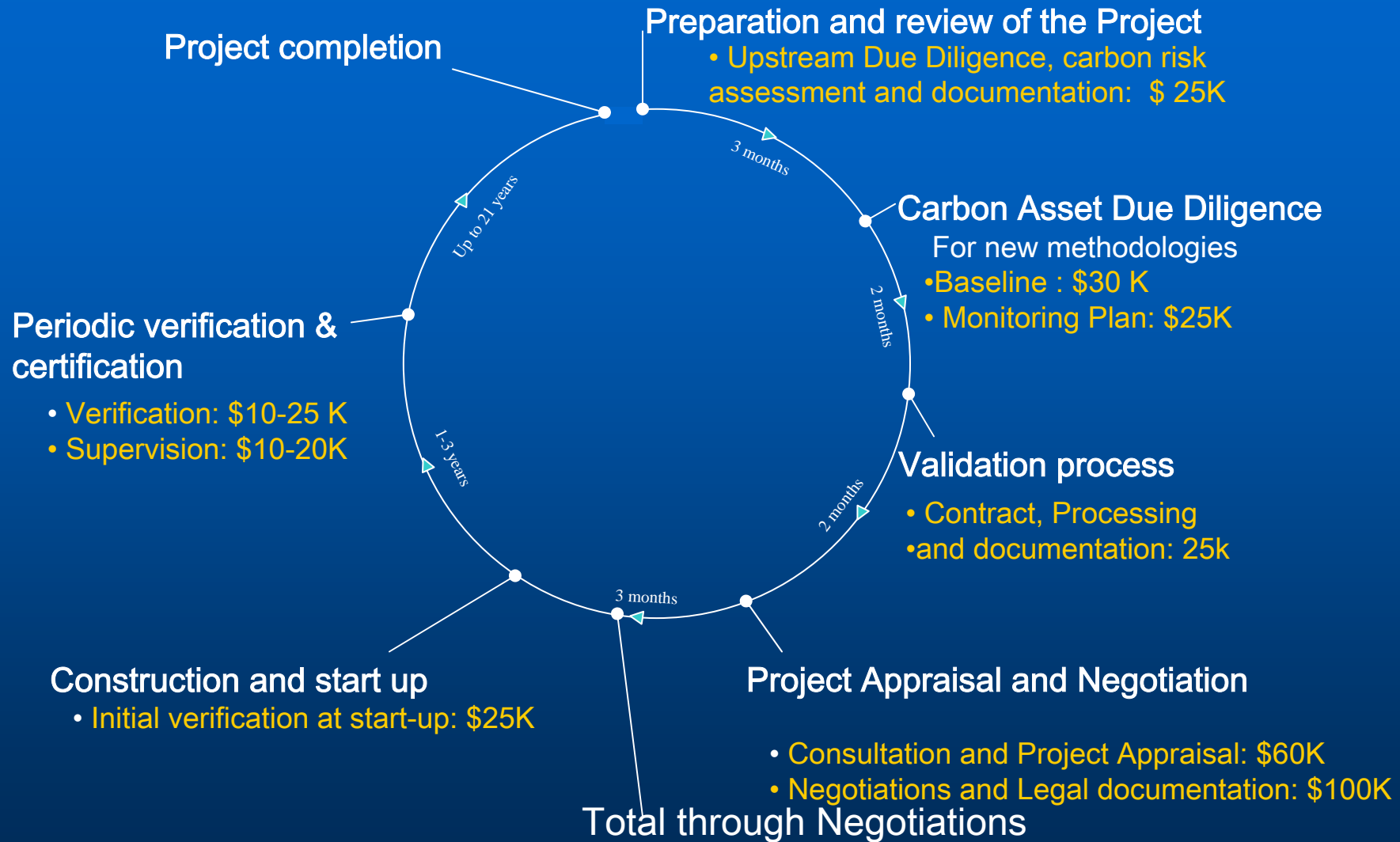


CF Impact on Projects

Project Name	Sector	IIRR
Brazil: Nova Gerar	Landfill	13.7%
South Africa: Durban		37.4%
Argentina: Olavarria		18.5%
China: Jincheng	CMM	1.5%
Bulgaria: Svilosa	Biomass	1.5%
Hungary: Pannonpower		0.9%
Brazil: Plantar	Forestry	0.8%
Romania: Afforestation		1.0%
Ecuador: Abanico	Hydro	1.3%
Peru: Poechos		0.4%
Columbia: Jepirachi	Wind	0.6%
Philippines: Northwind		0.2%
Bulgaria: Heating	District Heating	0.5%



Asset Creation Process and Costs based on Bank experience



All expenses:
\$265 K for regular size projects
\$150 K for small scale projects



Strategic Issues in CDM Market Development

Potentially Competing Interests

- CDM needs to deliver high volumes to keep cost of Kyoto compliance affordable
- Developing country government preferences in 2nd Commitment Period negotiations may be that CDM helps modernize and de-carbonize infrastructure
- “Sustainability” concerns constrains asset choice in many OECD governments, and some corporations

Market Inflection Points to Watch

- Post-2012 market signal by EU and/or KP Parties on long lead time assets
- Second phase ETS review of sequestration/LULUCF assets



WB's Continuing Role

- WB projects go beyond ER transactions
- WB assumes greater risks vis-à-vis other players
- WB conducts regular internal review of CF policies and strategies to fit with overall goals
 - Geographical expansion
 - Technology choices
 - Capacity building (CF-Assist)
- WB continues to play an active role in CC debate with all stakeholders



www.carbonfinance.org