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R E G I O N A L F O R U M

SESSION 5: Gas Flaring Reduction Project Development Vehicles
Tuesday, 11 May 2010- 10.15 am

The Carbon Partnership Facility

Gaël Grégoire

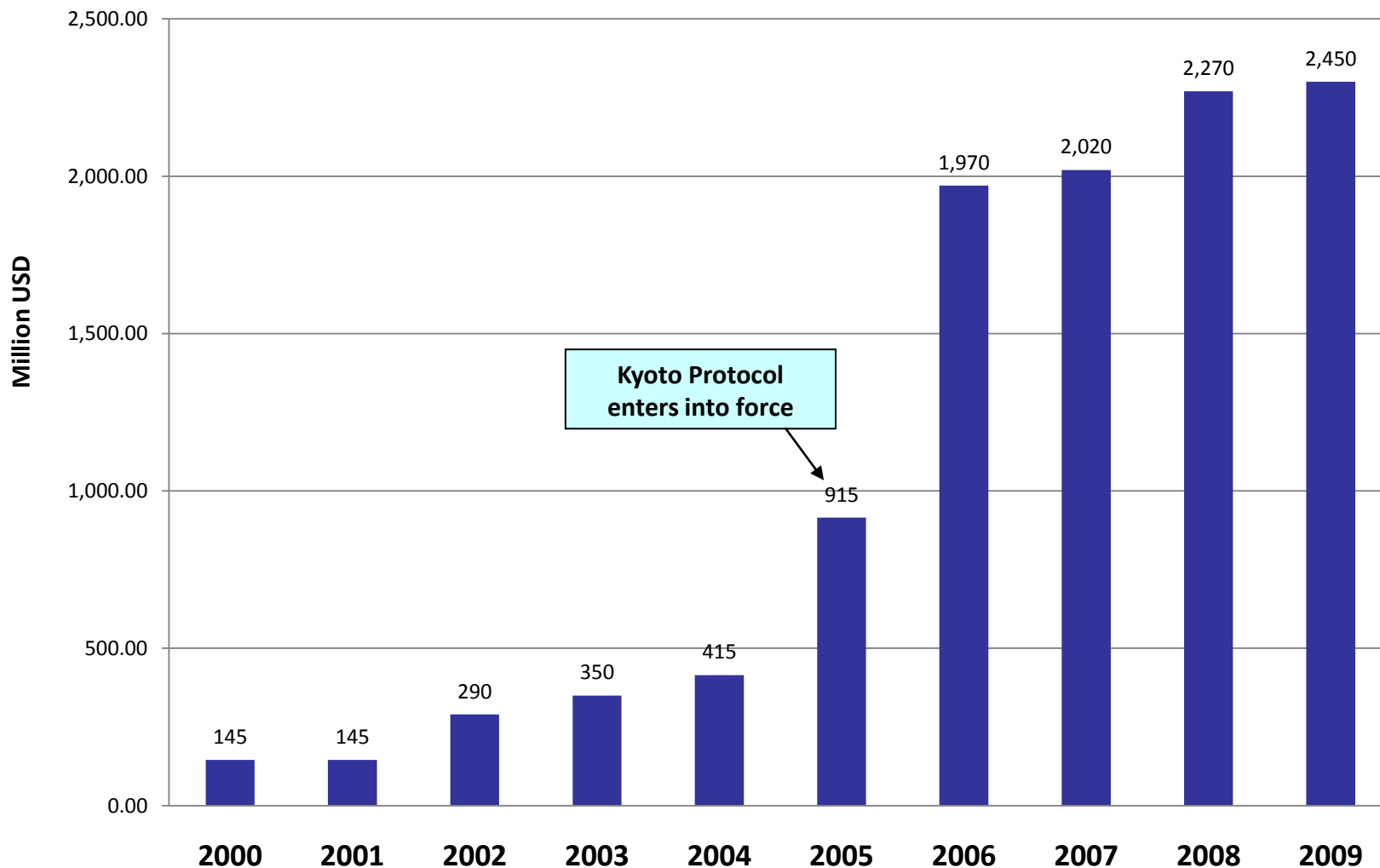
Regional Carbon Finance Coordinator

World Bank

World Bank in the carbon markets

- Bank pioneered early development of the project based mechanisms and carbon markets – Prototype Carbon Fund
- Developed about 30% of CDM methodologies
- Builds capacity in developing countries
- Mobilizes funding – 12 carbon funds
- Knowledge sharing/market development
 - State and Trends of Carbon Markets report
 - Carbon Expo

Total value of carbon funds managed by the World Bank



Carbon Funds

4 Specialty funds/facilities



Prototype Carbon Fund:
Pioneering Kyoto mechanisms since 2000



Community Development Carbon Fund: Small projects that measurably benefit poor communities



BioCarbon Fund: Land use, land-use change and forestry projects



Umbrella Carbon Facility – Tranche 1: Focused on two China HFC 23 projects

6 Country funds/facilities



Netherlands Clean Development Mechanism Facility



Netherlands European Carbon Facility (*jointly managed with IFC*)



Spanish Carbon Fund



Italian Carbon Fund



Danish Carbon Fund



Carbon Fund for Europe (*jointly managed with EIB*)

Contribution of project-based CDM

- Carbon markets and CDM have proven effective in leveraging private investments and mobilizing resources for thousands of projects
- However, project-based CDM has limitations:
 - Backlogs in registration and issuance
 - Not effective in catalyzing energy efficiency, transport or land use/forestry ERs
 - Does not include reducing deforestation and land degradation (REDD)
 - Not conducive to systematic approaches across sectors/industries
 - Difficult to scale up further under post-2012 framework

Financing Climate Change Mitigation

- Scale of financing needs for mitigation estimated by UNFCCC at \$200 billion annually
- Concessional resources are very limited for low carbon investments in developing countries
 - Clean Technology Fund -- \$5 billion
 - Post-Copenhagen mitigation/technology fund?
- Mobilizing private sector finance is crucial
 - Market mechanisms can play a central role
 - \$6.8 billion in project-based carbon finance transactions in 2008 alone
 - Carbon finance transactions leverage investments on average at a ratio of 1:4 and for renewable energy at a ratio of 1:9

Carbon Partnership Facility (CPF)



- Carbon finance for the post-2012 world
- Support systematic approaches to low-carbon growth
 - Support country initiatives to catalyze public and private investment in clean technologies
 - Include carbon finance as part of integrated financing packages
 - Utilize programmatic approaches to scale up emission reduction programs
 - Promote innovative methodologies and technologies
 - Engage where the private sector cannot succeed alone

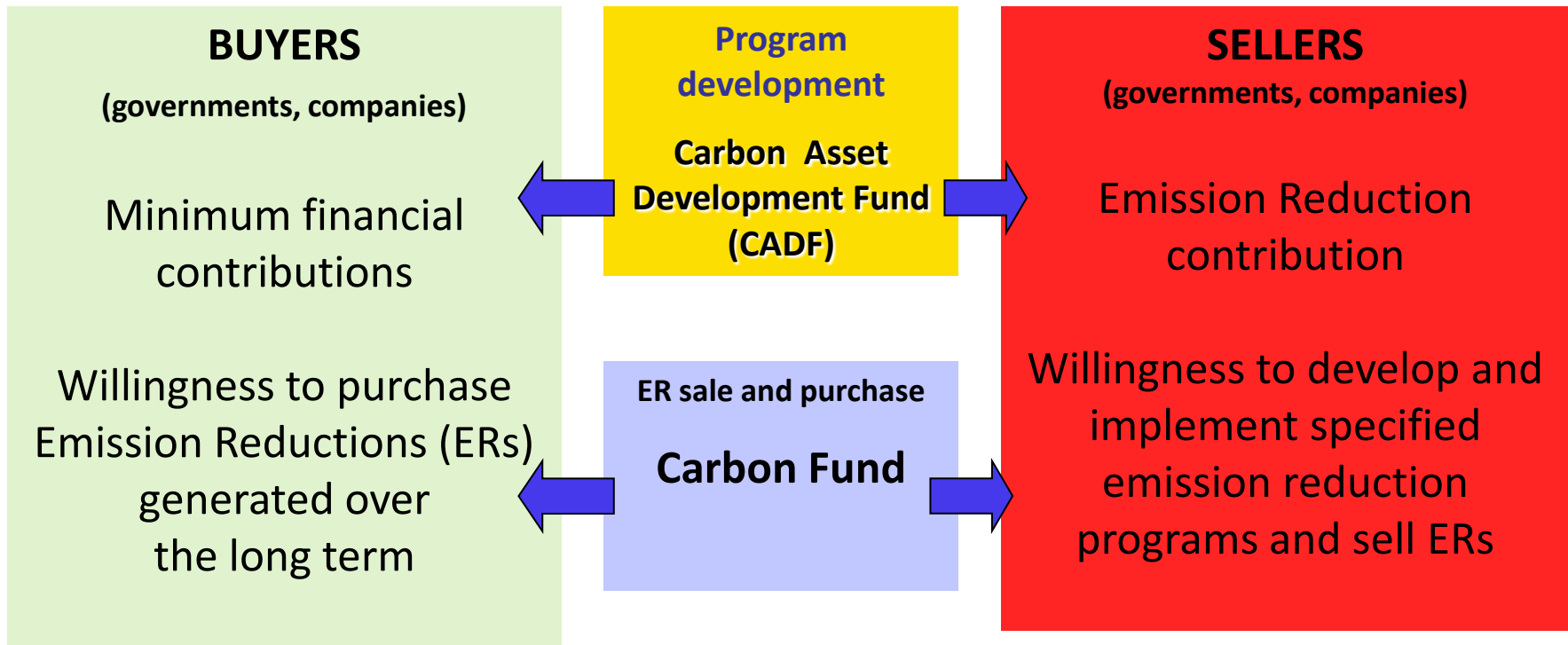
New Directions in Carbon Finance

- Scaling-up will require building on rich project experience and evolve towards programmatic approach.
- Starting with putting CDM Programmes of Activities (PoA) into practice:
 - Enables a single regulatory approval for program involving similar activities
 - Supports systematic approaches at scale
 - Broadens coverage of CDM to untapped areas, e.g., energy efficiency and urban transport
 - Works towards reducing transaction costs
- Able to respond to evolution of market mechanisms

Emission Reduction Programs

- Series of investment activities over time in a common implementation framework (utilizing the Program of Activities approach)
- Undertaken by a single entity or coordinated by an intermediary
- May utilize existing CDM methodologies but methodology development in priority areas such as energy efficiency and urban a key part of the CPF
- CPF might explore sector-based approaches/NAMAs
- Most programs expected to be linked to operations of the World Bank
 - Most ER Programs already under development have IBRD lending, GEF or Clean Technology Fund financing
- Will adapt to various national or regional regulatory schemes

CPF - Buyers and Sellers in a Partnership



Partners (Host Governments, other) and Donors

Carbon Asset Development Fund (CADF)



- Provides funds for:
 - Methodology work
 - ER program identification and development, carbon asset feasibility work
 - Project Design Document and monitoring plan preparation
- Includes direct preparation grants to Sellers and Host Countries
- Also covers all Facility costs for ER Program preparation and supervision functions
- Funded by:
 - Charge from Buyers due upon signing of Participation Agreement
 - Donor contributions of minimum €2 million per Donor

Carbon Fund

- Holds funds for Emission Reduction (ER) payments
- First tranche to provide carbon finance to several key sectors (e.g. power, energy efficiency, waste, transport, thematic/cross-cutting programs)
- Carbon Fund will buy part of CERs from programs, CPF can assist sellers with marketing additional CERs
- Buyers and sellers together as members of Partnership Committee will decide on ER pricing approach

Emission Reductions (ER) Program Development



- Signed agreements with sellers to start in-depth preparation of:
 - Morocco Solid Waste Management Program
 - Vietnam Renewable Energy Program
 - Brazil Solid Waste Management Program
- Working on programs in:
 - Several sectors, including power, energy efficiency, transport and oil & gas
 - China , Indonesia , Mexico, Nigeria, India, Egypt, Thailand, Jordan
- Integrated financing and support packages, including World Bank lending, Clean Technology Fund, and other instruments

Additional Programs under Development

- Latin America
 - Mexico Urban Transport (BRT mostly, CTF)
 - Mexico Energy Efficiency (CFLs, appliances, CTF)
 - Brazil Waste Management (lending)
- Middle-East and North Africa
 - Amman City (city wide methodology approach)
 - Concentrated Solar Power (multi-country, CTF)
 - Egypt -- several possibilities:
 - Irrigation pumping EE
 - Urban transport (CTF)
 - Wind RE (CTF)
 - SWM (DPL)
 - Lighting (CFLs, possibly also LED)

Additional Programs under Development

- East Asia
 - Indonesia Geothermal
 - China IGCC and Regional Biogas
 - Bangkok City (city wide approach)
 - Buildings EE (methodology development)
- South Asia
 - India solar thermal
 - Power grid (lending)
 - Urban sector programs
- Africa
 - Nigeria IPPs (DPL) / Gas Flaring
 - Ghana Oil & Gas Sector/Gas Flaring
 - South-Africa/Botswana power sector (lending, CTF)

CPF - Methodology Agenda

- Demonstrate efficacy of Program of Activities approach in a variety of situations
 - Design PoAs with incentives for private investment in individual project activities
 - Develop country level expertise in managing Coordinating Entities
- Urban GHG mitigation framework – power, energy efficiency, transport and waste management
- Innovative approaches to energy efficiency
 - Buildings, appliances, lighting
- Gas flaring reduction, Carbon capture and storage (CCS)
- Competitive industrial sectors
- Lay groundwork for sector-based approaches

Oil & Gas methodologies: Challenges and opportunities

- Explore and develop new methodologies consistent with the scope of practicable flaring reduction solutions
- Overcome current limitations :
 - Methodologies sometimes too specific
 - Integrated flaring reduction options not fully recognized
 - Dynamic nature/ risks of upstream not well accommodated
- Balancing technicalities and “generic” applicability
- Lessons learned from other CDM methodologies:
 - “Framework” approach (driven by ASM experience)
 - Combined approach (driven by ACM experience)



Oil & Gas methodologies: Ongoing activities

- CADF is a funding member of the Oil & Gas CDM/JI Methodology Workgroup led by GGFR
- Workgroup objectives:
 - Short term: to foster successful development and implementation of CDM/JI projects related to reduction of continuous production flaring
 - Prepare & submit request(s) for revision
 - Develop oil & gas CDM/JI glossary of terms
 - Recommend monitoring guidelines for CDM/JI projects
 - Mid-term: to expand coverage to new emission sources & approaches
 - Focus on other important mitigation options in O&G sector (e.g. CH₄ emissions & CO₂ venting),
 - Explore innovative approaches beyond project-specific activities

Potential new approaches: CPF agenda in Oil & Gas sector under and beyond CDM

- Unlock untapped potential of avoided gas flaring programs:
 - Incorporating carbon finance incentives into the policy & financial packages
- CPF might support development of benchmarking approaches :
 - Establishing comparable indicators for GHG emission intensity
 - Increasing flexibility of GHG mitigation actions within a sub-sector (combining different types of activities /GHG)
 - Assisting ex ante institutional effort to create conducive environment ex post
- Capacity building & sharing expertise to match the requirements of main supply & demand hubs of post-2012 markets

Conclusions

- Achieving progress on limiting greenhouse gases will require strong, sustained cooperation among industrialized and developing countries
- The World Bank, through a range of financial instruments and capacity building activities, is deeply engaged in this effort
- Carbon finance will continue to play a major role in catalyzing low carbon investments in developing countries
- Carbon Partnership Facility is positioned to play a pioneering role in the next generation of carbon finance

Thank You

Gaël Grégoire

Regional Carbon Finance Coordinator

World Bank – Washington DC

(+1) 202 458 1681

ggregoire@worldbank.org