

# Carbon credits: CDM/JI - Status and Potential



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GBF-Workshop III Emissions Trading  
London, Thursday 11 October 2007**

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## Content

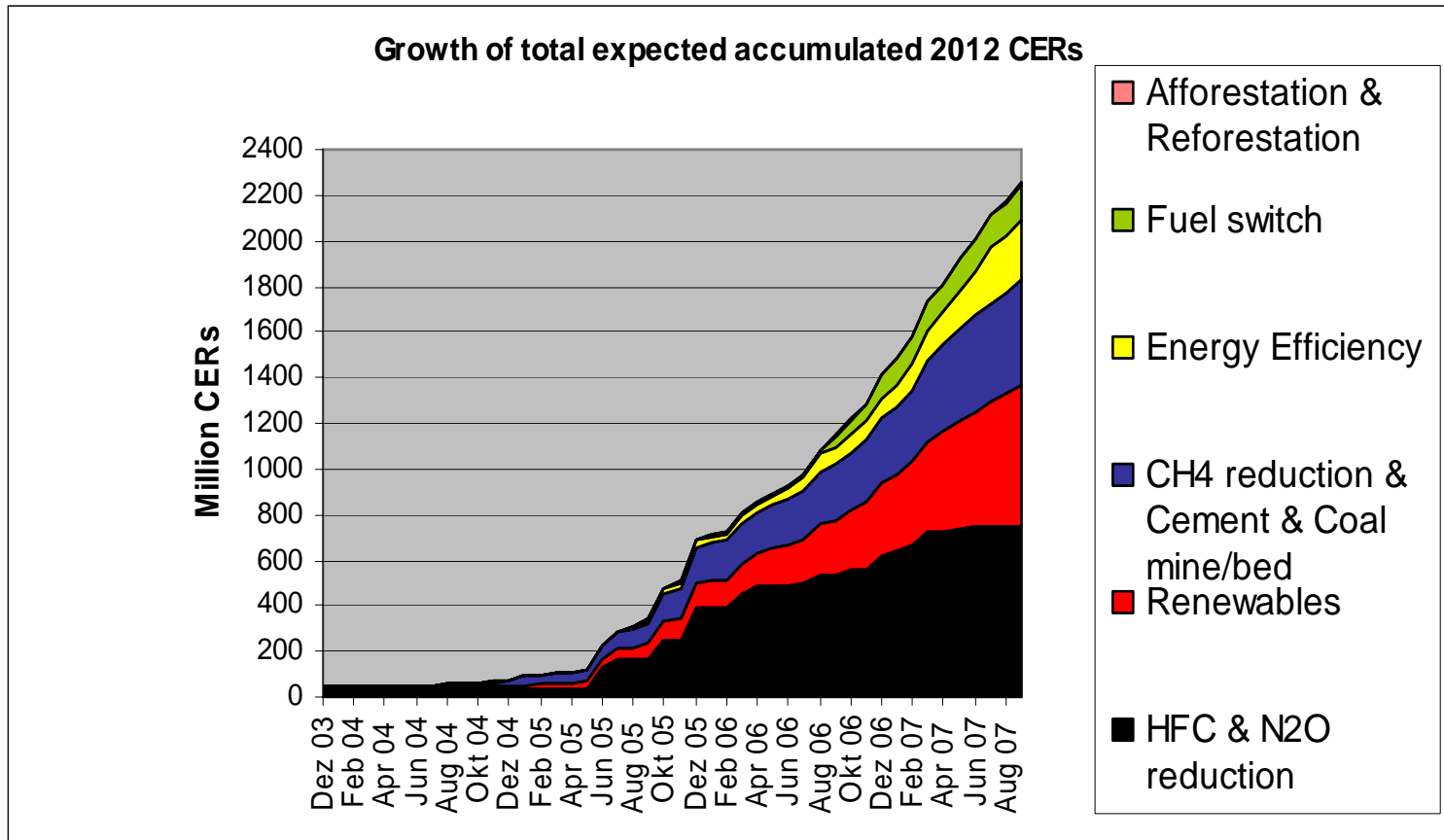
- CDM/JI key to achieve Kyoto targets
- CDM successful and fast growing
- CDM: Perspectives
- JI: Status, Barriers, Relevance
- Market imperfections and limitations
- Need and potential for improvement and for new approaches

## Carbon market - CDM/JI - Kyoto target



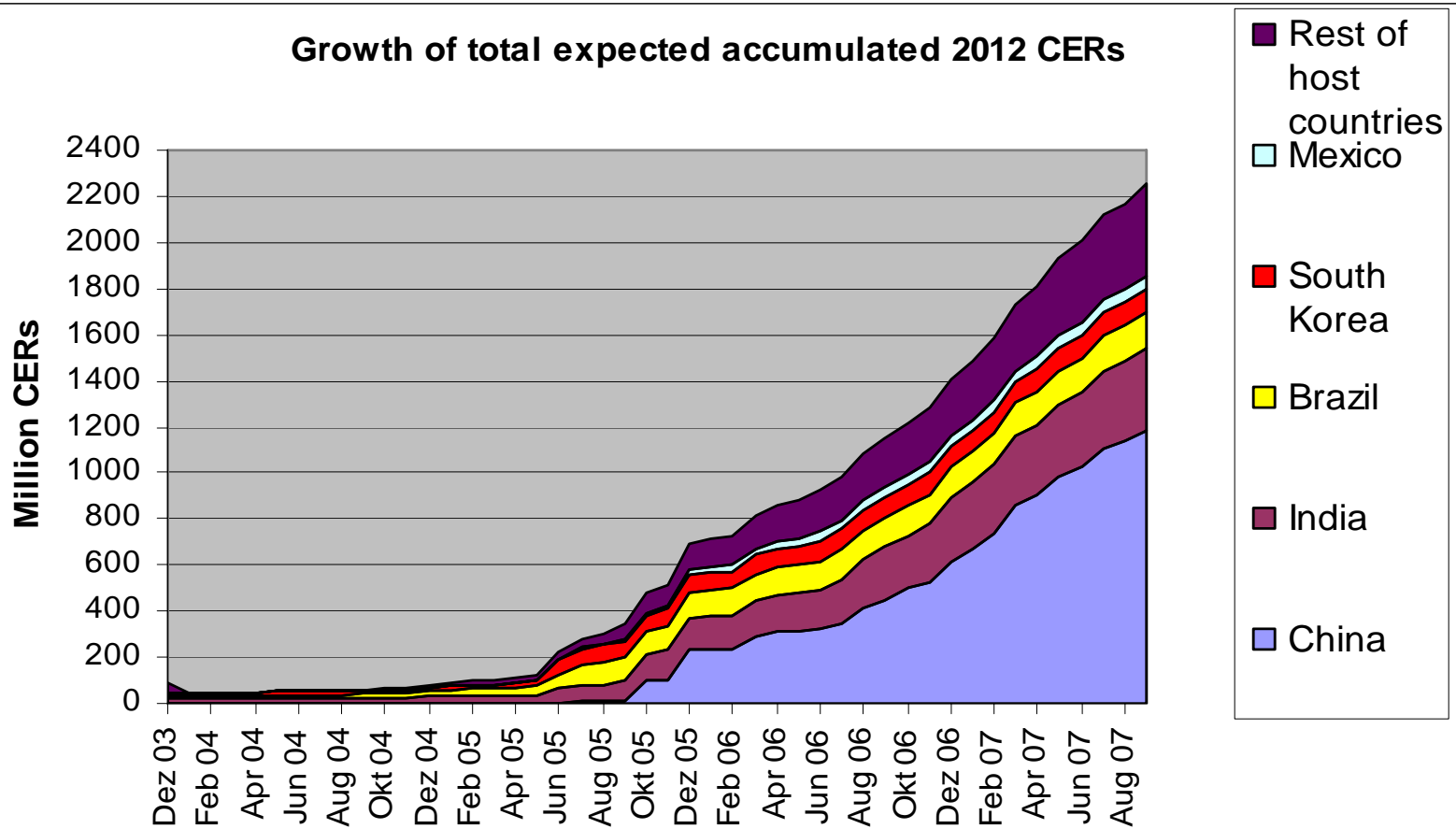
- Carbon market: cost efficient reductions, global scale:
  - Cap and trade: emission allowances (AAUs, EAUs): developed countries, big emitters.
  - Baseline and credit: carbon credits (CERs, ERUs): developing countries, can address small emitters.
- Expected emission reductions out of CDM/JI 2008-12: >400 Mio t CO<sub>2</sub>e p.a. (more than 90% CDM).
- Kyoto compliance gap EU-J-C (2005 data): 600 Mio t CO<sub>2</sub>e p.a.
- CDM: 2.500 projects, investment volume 40 bn EUR, expected revenues out of CERs: 4 bn EUR p.a.

# CDM: CERs by project type (source UNEP-Riso)



# CDM: regional distribution (source UNEP-Riso)

**Growth of total expected accumulated 2012 CERs**



## CDM: Perspectives

### Programmatic CDM:

- Programs to promote energy efficiency and small scale renewable energy (e.g.: efficient appliances, equipment, vehicles, solar/biomass heating etc.).
- Program is CDM project, CDM revenues refinance program.
- pCDM recently approved by CDM EB
- **Sectoral/policy crediting:**
  - Sectoral/policy target, crediting of aggregated reductions.
  - Avoided deforestation: sectoral approach appropriate to avoid leakage effects, considerable political dimension, forest sector not integrated in industrial system.
  - Sectoral/policy crediting is not eligible under current CDM rules (post 2012 perspective).

## Jl: Status – Barriers - Relevance

- Jl follows CDM on lower level (<10% of CDM market).
- Similar market structure (dominance of non-CO2 projects) but methane avoidance (gas distribution) and energy efficiency more important than under CDM.
- More than 70% of ERUs from Russia/Ukraine.
- Barriers to Jl:
  - Overlap with European ETS (double counting).
  - Potential competition with AAU trading.
- Relevance of Jl:
  - Limits of cap and trade within EU: small emitters.
  - Stimulating private sector activity.

## CDM/JI Market

- Commodity market for emission reductions: dominance of forward contracts, payment on delivery.
- European private sector is most import CER buyer (90% market share in 2006, data: World Bank).
- European public sector still dominates JI market.
- CERs/ERUs can be used within ETS:
  - Companies are in fact allowed to cover complete expected ETS2 deficit out of CDM/JI.
  - EAU price became benchmark because of supply constraints for CDM/JI projects: price for primary CERs could increase above 10EUR/t (depending on project risks/regulatory risks).

## CDM/JI: Market Imperfections

- **Post 2012 Continuity Risk:** barrier to invest in CDM/JI projects.
- **CDM regulation:**
  - Lack of clear and transparent rules: difficult to build expectations: entry barrier on buyer and seller side.
  - Limited scope of CDM methodologies, long and burdensome approval process.
  - Limits of project-by-project additionality investigation.
- **Limits of current CDM concept and CDM/JI market:**
  - Single project approach (step forward: pCDM).
  - Commodity approach (cannot address major (financial and behavioral) barriers).

## Conclusion

- Kyoto Protocol: least cost emission reductions (flexible mechanisms) + technology development/deployment (supplementary principle).
- EU post-2012-proposal (-20% up to 2020) if based on same principles would require at least 10 times larger market for carbon credits: need to overcome imperfections of current CDM/JI.
- Improvement of regulation and broadening of carbon crediting mechanisms - in particular energy efficiency and forestry projects.
- Promotional support for market development - in particular: implementation of program based carbon crediting and development of market segments with entry barriers (buyer and seller side).

**Thank you**