

World Bank & Carbon Finance

Carbon finance in the Bank has expanded from a prototype engagement in an emerging trade of emission reductions to an increasingly mainstream activity for supporting sustainable development. In December 2005, the Board of Executive Directors of the World Bank endorsed a *Carbon Finance Approach* that aims primarily at enabling developing countries to participate actively in the growing carbon market.

The World Bank Carbon Finance Unit (CFU) uses money contributed by governments and companies in OECD countries to purchase project-based greenhouse gas emission reductions in developing countries and countries with economies in transition. The total fund pledged is US\$ 2.03 billion from 13 governments and more than 65 companies, under 11 Carbon Funds and Facility. The emission reductions are purchased through one of the CFU's carbon funds on behalf of the contributor, and within the framework of the Kyoto Protocol's Clean Development Mechanism (CDM) or Joint Implementation (JI).

Unlike other World Bank development products, the CFU does not lend or grant resources to projects, but rather contracts to purchase emission reductions similar to a commercial transaction, paying for them annually or periodically once they have been verified by a third party auditor. The selling of emission reductions - or carbon finance - has been shown to increase the bankability of projects, by adding an additional revenue stream in hard currency, which reduces the risks of commercial lending or grant finance. Thus, carbon finance provides a means of leveraging new private and public investment into projects that reduce greenhouse gas emissions, thereby mitigating climate change while contributing to sustainable development.

The Bank's carbon finance operations have demonstrated numerous opportunities for collaborating across sectors, and have served as a catalyst in bringing climate issues to bear in projects relating to rural electrification, renewable energy, energy efficiency, urban infrastructure, waste management, pollution abatement, forestry, and water resource management.

The World Bank's carbon finance initiatives are an integral part of the Bank's mission to reduce poverty through its environment and energy strategies. The threat climate change poses to long-term development and the ability of the poor to escape from poverty is of particular concern to the World Bank. The impacts of climate change threaten to unravel many of the development gains of the last several decades. The Bank is therefore making every effort to ensure that developing countries can benefit from international efforts to address climate change.

A vital element of this is ensuring that developing countries and economies in transition are key players in the emerging carbon market for greenhouse gas emission reductions. The role of the Bank's Carbon Finance Unit is to catalyze a global carbon market that reduces transaction costs, supports sustainable development and reaches and benefits the poorer communities of the developing world.

Developing a Carbon Finance project with the World Bank

We are able to work with you hand-in-hand to prepare all the carbon documentation for CDM and create the carbon asset. We are able to advance funds for the preparation of this documentation if you wish and would cap them in our Letter of Intent, which would provide with certainty and limit any unforeseen risks or costs. We would recover the costs of preparing the CDM documentation from our future carbon payments to the project.

We give you the option of buying VERs (Verified Emission Reductions) or CERs (Certified Emission Reductions). When we purchase VERs, we will pay for the emission reductions when we complete our process of creating the carbon asset (upon an independent validation and issuance of a yearly or periodic verification reports), independent of how long it might take the UNFCCC to certify, issue and register the emission reduction. This constitutes a low-risk carbon cash flow to the project which the project can count on from a credit-worthy

carbon buyer paying in hard currency. Unlike many Certified Emission Reduction (CER) contracts, the project is not penalized for regulatory delays outside their control. When the regulatory risk is low, ie. in projects where applicable baseline and monitoring methodologies have already been approved, or in sectors where the approval of the methodology is highly likely, you may elect to sell CERs to us, which would obtain a better price than VERs. However in those cases, payment depends on certification, issuance and registration by the UNFCCC and its bodies.

Since some projects may be somewhat marginal in terms of IRR, our value proposition also includes:

- A carbon payment stream beyond 2012 to ensure the viability of the project (most other buyers only buy carbon until 2012 when we purchase VERs)
- Up to 25% of the ERPA value payable upfront and undiscounted, i.e. at identified benchmarks after financial closure, in cases where it can be demonstrated that such advance payment is absolutely necessary.

Some Carbon Finance projects under the World Bank Development in China and East Asia Pacific Region.

China

- Shanxi Qingshui Coal Mine Methane
- Shanghai Sludge
- Shanghai Laogang Landfill
- Several Iron & Steel E/E (Meishan, Luoqing COREX, Bao Tou)
- Shandong Poultry Biogas (methane for energy)
- Xinjiang Aksu Livestock
- Hubei Eco-farming house-holds

Other EAP

- Fiji Renewable Energy Umbrella
- Indonesia 2 Landfill Gas (Bekasi, Makassar)
- Indonesia Lahendong Geothermal
- Malaysia Inno Integrasi Palm Waste
- Malaysia LF composting
- Mongolia District Heating
- Phil Burgos Wind Power
- TH livestock
- TH CCGT EE
- Phil Manila TR
- Phil Waste-water

For more information please visit <http://www.carbonfinance.org>

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