CARBON MARKETS



Growing pressure to address climate change has created multi-million dollar markets for carbon (CO_2) that are expected to reach billions of dollars in annual transactions within the next 10 years.

- Carbon market transactions have doubled in volume every year from 2001 to 2003, from nearly 13 million tons to more than 70 million tons of CO₂ equivalent, with **several hundred million US dollars** worth of trades made in 2003 alone.
- An estimated **US\$10-30 million** worth of carbon trades were solely related to forest sequestration, or protection, projects in 2003.
- The potential market for Kyoto Protocol-related offsets could rise to a total estimated 375 million tons of carbon (50% of required reductions) by 2012, worth **US\$1 to 10 billion**, with forestry projects accounting for a significant portion of this.
- DB estimates that from 2008 onwards the overall volume of the CO2 market will be at least **US\$60** billion.

Levels of greenhouse gas (GHG) emissions are currently at their highest in 440,000 years of the earth's recorded climate history. While the major source of GHG emissions is fossil fuel use, more than 20% of global GHG emissions are caused by the destruction of ecosystems, especially burning of tropical forests. Carbon markets have developed as a result of regulatory demands and the voluntary objectives of governments and industries to decrease GHG emissions.

- A key driver of carbon markets is the Kyoto Protocol, under which 38 industrialized countries agreed to cut their emissions of greenhouse gasses between 2008 and 2012 to levels that are, on average, 5.2 per cent below 1990 levels.
- A small but significant non-Kyoto market includes organizations seeking to meet local and national emissions reduction requirements, voluntary initiatives and smaller retail sub-markets that include socially-responsible companies and individuals wanting to become "climate neutral".
- A number of European governments are working on sequestration projects that may be included in the second period of the European Union's Emissions Trading System (ETS) starting in 2008.

Growing carbon markets offer solutions for regulatory, economic, investment and environmental needs.

- Corporations find flexible and cost-effective means of achieving GHG reduction goals.
 - A partnership among 27 organizations, including Cinergy Corporation, DTE/Detroit Edison, PacifiCorp, Wisconsin Electric Power Co., the UtiliTree Carbon Company, the Nature Conservancy and a Belize nongovernmental organization (Programme for Belize), are involved in the Rio Bravo Carbon Sequestration Program, which has sequestered an estimated 4.4 million metric tons of carbon since 1995.

- Investors can enter an emerging market that some say could become the world's largest commodity market.
- Multilateral funders, such as the World Bank, and many NGOs leverage carbon finance to develop projects that create biodiversity assets, support sustainable livelihoods and rural development, and reduce poverty.
 - The World Bank's new BioCarbon Fund intends to invest \$100 million in GHG sequestration and conservation systems in the developing world.
 - Through a US\$10 million project, the Nature Conservancy, with financing from US utility companies, will sequester an estimated 6-8 million tons of carbon emissions over 30 years in Bolivia's Noel Kempff Mercado National Park.
- Governments and policymakers cost-effectively reduce GHG emissions, garner business support and achieve broader sustainable development goals.
 - The Dutch, Canadian and Japanese governments are the largest purchasers of carbon offsets. The Dutch government alone accounted for 30% of the total carbon market in 2002-2003. Canada and Japan combined accounted for another 30%.
 - About twenty out of 50 states in the US have some form of GHG-related legislative law or proposal, in anticipation of future regulation. Five states have passed legislation mandating emission reductions (California, Maine, Massachusetts, New Hampshire and Oregon).
 - Australia's New South Wales carbon emissions trading system allows the use of forestry offsets for meeting regulated emissions reductions for the electricity sector.
- Paying landowners to preserve land for carbon sequestration has great potential for climate stabilization and can contribute significantly to the preservation of the world's forest ecosystems.
 - Reforestation in Brazil and Indonesia alone amounts to roughly four-fifths of the annual reduction in carbon emissions mandated by the Kyoto Protocol from 2008 to 2012. Primary forests in Brazil store, on average, over 170 tons of carbon per hectare.
 - In 2003, nine out of ten tons of emission reductions originated from carbon projects located in transition economies or developing countries. Latin America is the leading region in terms of volume, followed by Asia.
 - An estimated 20 million hectares of land is currently, or is being considered for, managing sequestration of carbon.

The Ecosystem Marketplace will provide the information and connections to help overcome obstacles, taking the carbon market to another level. The Ecosystem Market Place will:

- Add transparency to carbon markets by illustrating and evaluating transactions, contractual conditions and financial mechanisms that buyers and sellers need to create robust and active markets.
 - At present, there is a huge variation in what investors pay for carbon credits. Variation on carbon trading has ranged from US\$1 to US\$8 per ton of CO₂ equivalent for all projects, with afforestation projects averaging US\$3.60 per ton.
- Provide the world's communities with guidance and examples to facilitate increased participation in carbon markets, helping to bring buyers and sellers together.
- Help investors tap this under-appreciated contributor to global, regional, and local economies.
- Provide governments around the globe with examples of successful local, national and international regulations.