



Green Bond

THIRD ANNUAL INVESTOR UPDATE 2011

“In today's world, action on climate change is essential for effective long-term poverty reduction.”

Andrew Steer
World Bank Special Envoy for Climate Change
Washington, D.C., September 2011



What kind of projects do World Bank Green Bonds help support?

World Bank Green Bonds support the financing of projects that help mitigate climate change and help countries adapt to its effects. Projects include, but are not limited to: solar and wind installations; waste (methane emission) management and construction of energy-efficient buildings; and carbon reduction through reforestation and avoided deforestation.

How do these World Bank green projects help alleviate poverty?

Climate change is hitting developing countries hard and could reverse recent gains in the fight against poverty, hunger, disease and efforts to improve the livelihoods of people. This is because the changes in temperatures, rainfall, sea levels, and the frequency of weather-related disasters pose profound risks for agriculture, infrastructure, food and water supplies. Developing countries are also expected to see the greatest increase in greenhouse gas emissions in the coming decades, making it critical that investments today support their shift to low carbon and climate resilient development paths.

Does the return on the bonds depend on the performance of the project?

No. The credit quality of World Bank Green Bonds is the same as for any other World Bank bonds. Repayment of the bonds is not linked to the credit or performance of the projects, and investors do not assume the specific project risk. Investor exposure is to the AAA/Aaa credit of the World Bank.

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New Developments

Expanding the green bond investor base

Over the last year, World Bank Green Bonds have been distributed by **Bank of America Merrill Lynch, Daiwa Securities, JP Morgan, Mitsubishi UFJ Securities, SEB, and TD Securities**. The World Bank has now raised almost US\$2.5 billion with 42 green bond transactions in 16 currencies and has expanded the green bond investor base. For an updated list, see <http://treasury.worldbank.org/cmd/htm/GreenBondIssuancesToDate.html>

World Bank Green Funds managed by **Nikko Asset Management Europe Ltd**, a UK-based asset manager, continued to grow. Nikko Asset Management invests in World Bank Green Bonds denominated in a variety of emerging market and other currencies for these funds. The Nikko AM World Bank Green Funds have attracted a variety of investors new to World Bank Green Bonds. In Japan, the fund is distributed by more than 20 banks, securities and insurance firms. In the UK and elsewhere in Europe, another fund offers investors shares in USD, GBP, and EUR. Notable European investors include **Cazenove Capital Management, Co-operative Asset Management, Rathbone Greenbank Investments, Rathbone Unit Trust Management Ltd., Towry, and WAY Group** (through their WAY Green Portfolio).

After the introduction of World Bank Green Bonds to US investors at the annual **SRI in the Rockies Conference** in November 2010, the first World Bank Green Bond designed specifically for distribution in the US was launched through **Skandinaviska Enskilda Banken (SEB)**. The audio version of the presentation can be found on the SRI in the Rockies Conference webpage at <http://www.sriintherockies.com/2010/audio/B-08.mp3>.

Calvert Asset Management initiated a green bond fund by way of a separate account that includes World Bank Green Bonds, and **Trillium Asset Management, LLC** purchased World Bank Green Bonds for its clients, including the Green Century Balanced Fund for which Trillium is the subadvisor.

Bank of America Merrill Lynch has started arranging and offering World Bank Green Bonds to investors through the Merrill Lynch Global Wealth Management platform. So far, two World Bank Green Bond transactions have been distributed through this network – the first in June 2011, and the second in August 2011.

State Street Global Advisors (SSgA) has hosted green bond summits in Boston and London to raise awareness and discuss topics relevant for a green bond market, including environmental standards, financial characteristics of green bonds, and the policy context. SSgA is actively exploring the market for green bonds.

FMO, the international development bank of the Netherlands, gave the lead order for a EUR 20 million green bond, making it the first time a development institution purchased World Bank Green Bonds for their own portfolio.

From Japan, there was special interest for World Bank Green Bonds from **Japanese financial institutions**. These banks are also interested in communicating their support to fight climate change through the purchase of the bonds. A total of about US\$200 million was raised through these transactions.

Awards and Publications



Christopher Flensburg, Winner of the 2011 Environmental Finance "Personality of the Year" award

In August 2011, **Christopher Flensburg**, Head of Sustainable Products and Product Development at **Skandinaviska Enskilda Banken (SEB)**, won the "Personality of the Year" award from Environmental Finance for his role in helping design the inaugural World Bank Green Bond launched in 2008 for Scandinavian pension funds and other institutional investors, and for tirelessly promoting the concept of green bonds and working to expand the market to mobilize private sector financing for climate change.

Interview

Andrew Steer, World Bank Special Envoy for Climate Change



Andrew Steer
World Bank Special Envoy
for Climate Change

Andrew Steer was appointed as the Special Envoy for Climate Change for the World Bank in July 2010 in response to developing countries' demands to address development and climate change as interlinked challenges. His responsibilities include guiding the World Bank's external work on climate change, strengthening the World Bank's internal capacity for climate analysis and response, and helping mobilize climate financing.

1. What does climate change have to do with development and the World Bank's commitment to fight poverty?

Addressing climate change is about combating poverty. Developing countries will bear the brunt of the negative impact of changing weather patterns, water shortages, and rising sea levels, and they are the least equipped to deal with them. Hard won gains in poverty reduction during the past decades are at serious risk. Four out of five countries we work with list climate change among the top priorities for their anti-poverty plans, and demand is exploding from countries for a low carbon future.

2. What is the World Bank's role in addressing climate change?

The World Bank is actively engaged with about 130 countries, supporting their analytical, planning, and investment efforts to adapt to and mitigate climate change. Key sectors affected by climate change include health, water supply and sanitation, energy, transport, industry, mining, construction, trade, tourism, agriculture, forestry, fisheries, environmental protection, and disaster management.

3. What is the World Bank doing to promote adaptation to climate change?

The World Bank is helping its member countries find ways to adapt to the changes that have begun by supporting the integration, through World Bank-financed projects, of climate adaptation analysis into the national, sectoral, regional, and local planning processes. Development of drought-resistant crops, managing scarce water supplies, protecting forests and coastal ecosystems, and improving access to energy today are all part of helping vulnerable groups survive in coming decades.

4. With so many countries committed to fighting climate change why are green bonds needed?

For developing countries, the financing solutions to fight climate change include public and private sources, grants, loans and new tools, such as the carbon markets. The World Bank Green Bond is an excellent model of the type of innovation that we need. At the end of the day, it will be the US\$ trillions equivalent in private investments that the international community makes in the coming years that will shape the difference between manageable and catastrophic warming.

In November 2010, **Nikko Asset Management** won the 'Most Innovative Development in ESG Award' for its World Bank Green Fund at the annual Investment and Pensions Europe - TBLI ESG Leaders Awards Ceremony.

In June 2011, the **California Municipal Treasurers Association (CMTA)** published the World Bank article "World Bank Green Bonds: Mobilizing funds from fixed income investors to tackle the climate change challenge" in its Spring 2011 newsletter, Dollars & Sense. The article can be found on the CMTA website at http://www.cmta.org/associations/11265/files/newsletters/cmta_news_spring_11.pdf.

World Bank-funded project generates clean and efficient transportation in Colombia's cities

World Bank green projects, like all World Bank projects, are designed to reduce poverty and improve local economies. But they specifically focus on tackling climate change issues that directly impact developing countries. The Integrated Mass Transit Systems in Colombia demonstrates how the Colombian government and the World Bank are working together to provide Colombia's urban population access to efficient, safe, and clean public transportation while reducing carbon emissions formally associated with its outdated bus system.



Modernized transit systems such as Bogotá's TransMilenio (as seen in the photo above) are helping reduce Colombia's carbon emissions by retiring and replacing older buses with modernized and fuel efficient new ones.

Colombia sustainable urban transport

IBRD Financing: US\$300 million

75% of Colombia's population currently lives in cities and most of these urban residents rely entirely on the public transportation system. Yet, public transportation is the cause of many of these cities' problems, including serious traffic congestion, high incidences of accidents and crime, unhealthy air, and pollutants responsible for 62% of Colombia's carbon emissions.

In 1998, the Colombian government began modernizing its transit system as a solution to transit inefficiency by developing a rapid bus system called TransMilenio in Bogotá. Funded by the World Bank through the Bogotá Urban Transport Project, the TransMilenio soon became an internationally recognized model for efficiency, improved speed, safety, and reduced urban traffic.

The Colombian government and the World Bank are continuing to work together through the World Bank-funded Integrated Mass Transit Systems Second Additional Financing, which is designed to improve transport efficiency and accessibility, and allow for less fuel use per kilometer and fewer air pollutant emissions. It will also reduce fuel consumption as old buses are retired and replaced with modernized and fuel efficient new ones. The government continues to see this new transit system as an important contributor to climate change mitigation and is analyzing how further improvements to urban transport systems may contribute to reducing Colombia's carbon footprint.

For details, [click here](#), or go to <http://www.worldbank.org/projects> and search by project ID number **P114325**.

Other notable projects

Egypt: Wind Power Development

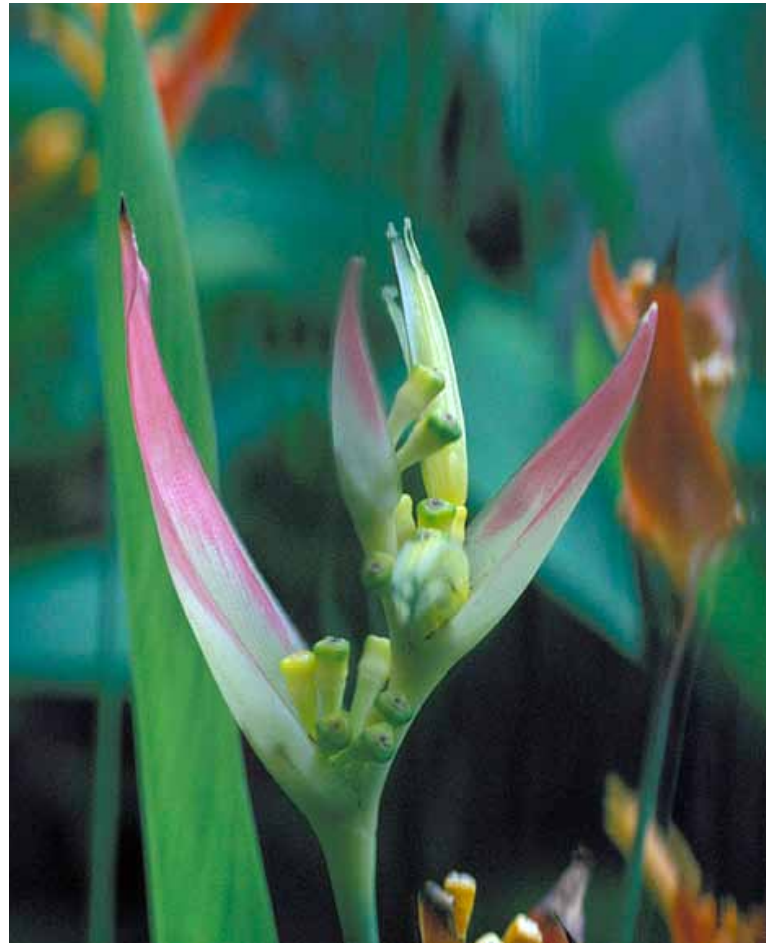
IBRD Financing: US\$70 million

Egypt ranks among the 11 countries in the world showing the fastest growth in greenhouse gas emissions due to the expanding economy's energy demand. It also has some of the world's best wind power resources, especially near the Gulf of Suez and the Nile River. The Egyptian government has been actively pursuing large scale development of its wind energy to engage its private sector, help stimulate the economy, and reduce greenhouse gas emissions. The Wind Power Development Project will help Egypt strengthen its power transmission system, encourage commercially competitive wind farm development, and install 2,500 megawatts of wind capacity. **For details, [click here](#), or go to <http://www.worldbank.org/projects> and search by project ID number P113416.**

Turkey: Private Sector Renewable Energy and Energy Efficiency Project

IBRD Financing: US\$500 million

Turkey's energy supply is mostly fossil-fuel based. But with the increase in electricity demand, the country faces high costs and more greenhouse gas emissions. Even though the private sector began to implement more alternative energy projects using renewable energy resources (mostly hydro and wind), financial constraints limit industries' ability to maximize all available renewable energy resources (including biomass, geothermal, and solar). The Private Sector Renewable Energy and Energy Efficiency Project will increase energy production from renewable sources within Turkey's market-based framework, enhance energy efficiency investments in industries such as iron and steel, and will reduce Turkey's projected greenhouse emissions. **For details, [click here](#), or go to <http://www.worldbank.org/projects> and search by project ID number P112578.**

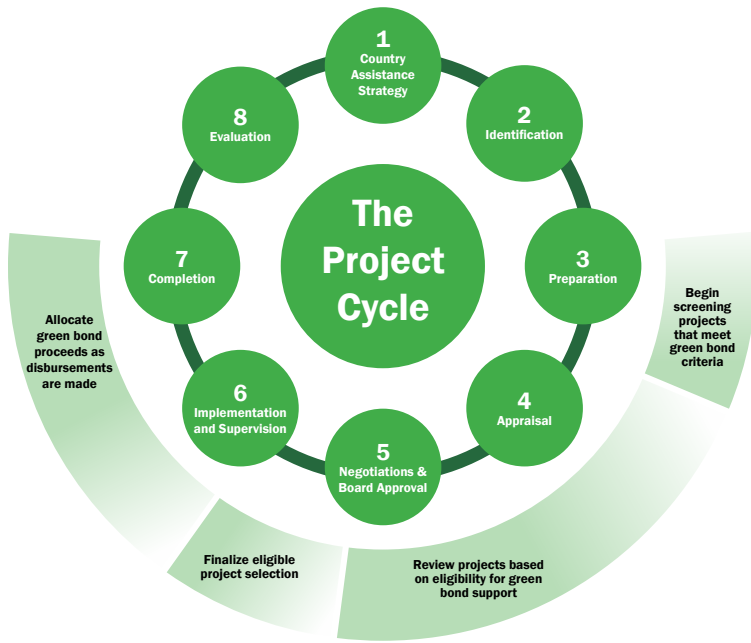


PHOTOS (FROM LEFT): © THE WORLD BANK © CURT CARMEMARY/THE WORLD BANK

Understanding the Green Bond Project Cycle

There are eight stages to the lifecycle of a project financed by the World Bank (IBRD), as illustrated by the light green circles in the project cycle graph shown below. World Bank-financed projects that meet the green bond criteria follow the same stages as all other projects and are subject to the same due diligence and monitoring process as other World Bank-financed projects. However, they go through additional steps as described in the graph below.

Climate analysis plays a role in every stage of the project cycle, starting with the country assistance strategy. As early as the preparation stage for each project, environmental specialists at the World Bank carefully determine whether a project targets climate mitigation or adaptation to select projects eligible for green bond support (see examples of eligible mitigation and adaptation projects in box). During the project implementation stage, disbursements are made to finance projects. Disbursements are often made over a period of several years, depending on when each project milestone is reached. As disbursements are made for projects that meet the green bond criteria, corresponding amounts are deducted on a quarterly basis from the account created to support the allocation of World Bank Green Bond proceeds to eligible projects. **For more information on the World Bank project cycle, [click here](#), or go to www.worldbank.org/projectcycle.**



About the World Bank: The World Bank (International Bank for Reconstruction and Development, IBRD), rated Aaa/AAA (Moody's/S&P), operates as a global development cooperative owned by 187 member countries. It provides its members with financing, expertise, and coordination services so they can achieve equitable and sustainable economic growth in their national economies and find effective solutions to pressing regional and global economic and environmental problems.

World Bank Green Bond Project Selection Criteria

Examples of eligible mitigation projects are:

- Solar and wind installations;
- Funding for new technologies that permit significant reductions in greenhouse gas (GHG) emissions;
- Rehabilitation of power plants and transmission facilities to reduce GHG emissions;
- Greater efficiency in transportation, including fuel switching and mass transport;
- Waste management (methane emissions) and construction of energy-efficient buildings;
- Carbon reduction through reforestation and avoided deforestation.

Examples of eligible adaptation projects are:

- Protection against flooding (including reforestation and watershed management);
- Food security improvement and implementing stress-resilient agricultural systems (which slow down deforestation);
- Sustainable forest management and avoided deforestation.

What investors said

"Green bonds are the first fixed-income investment I know of that allows the investor to actively increase the funding for carbon footprint reduction and improved energy efficiency."

Cheryl Smith, CFA
Managing Partner and Senior Portfolio Manager
Trillium Asset Management, LLC

"Sustainability is key to FMO's strategy. We are delighted to take part in the global environmental initiative alongside the World Bank with our treasury investments. This fits within our mission of working towards the sustainable development of the private sector in Africa, Asia, Eastern Europe and Latin America."

Sheila Codamus-Platel, Treasury Officer
FMO (Netherlands Development Finance Company)

More World Bank Green Bond Investors

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|---|---------------------------------|
| AP2 - Second Swedish National Pension Fund | New York Common Retirement Fund |
| AP3 - Third Swedish National Pension Fund | Rathbone Greenbank |
| Adlerbert Research Foundation | SEB Ethos rantefund |
| California State Treasurer's Office | SEB Fonden |
| Church of Sweden | SEB Trygg Liv |
| CalSTRS | Sarasin |
| Calvert Investments | Skandia Liv |
| FMO (Netherlands Development Finance Company) | Trillium Asset Management, LLC |
| LF Liv | UN Joint Staff Pension Fund |
| MISTRA | WWF-Sweden (Världsnaturfonden) |
| Everence Financial | ZKB (Zürcher Kantonalbank) |

Links to information on the World Bank web site:

- <http://treasury.worldbank.org/greenbonds>
- <http://www.worldbank.org/climatechange>
- <http://go.worldbank.org/LFS55Z7LLO>

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