



# Green Bond

## FOURTH ANNUAL INVESTOR UPDATE 2012

**“Climate change threatens development gains.  
We work with client countries to prevent this outcome.”**

**Gloria M. Grandolini**  
Country Director for Colombia and Mexico, World Bank

### **What is the difference between the World Bank Green Bond and regular World Bank bonds?**

The credit quality of World Bank Green Bonds is the same, but the allocation of proceeds is different. World Bank bonds generally finance activities in areas such as health, education, gender equality and infrastructure. World Bank Green Bonds support the financing of projects that help mitigate climate change and help countries adapt to the effects of climate change.

### **Which countries receive project loans supported by the World Bank Green Bond?**

Any member country that borrows from IBRD (International Bank for Reconstruction and Development, known as “World Bank” in the capital markets) for a climate change project that meets the World Bank Green Bond project selection criteria is eligible for support from World Bank Green Bond proceeds (see last page of newsletter for more details). IBRD lends to middle income member countries across the world, i.e., countries with per capita income over a certain level (currently US\$1,195).

Countries with lower per capita income receive concessional loans or grants from the International Development Association (IDA) – the World Bank Group entity that finances projects in poorer countries and is funded directly by donor countries.

### **How many countries have projects eligible for support from World Bank Green Bonds?**

There are currently about 20 countries that are being financed through the World Bank that are eligible for support from green bonds.

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New Developments

# Growing the Global Green Bond Market

Over the last year, World Bank Green Bonds have been distributed by a growing group of banks, including Bank of America Merrill Lynch, Daiwa Securities, Deutsche Bank, JP Morgan, Mitsubishi Securities, SEB, and TD Securities. The World Bank has now raised about US\$3.2 billion through 49 green bond transactions in 17 currencies and has attracted new as well as previous investors. World Bank Green Bond investors include California State Treasurer's Office, New York State Common Retirement Fund, and State Street Global Advisors (SSgA) (see more below). The California State Treasury gave the lead order for a US\$510 million green bond, making it the largest World Bank Green Bond transaction to date.

Other New Developments

**State Street Global Advisors (SSgA)**, State Street's investment management business, launched a new High Quality Green Bond strategy during 2011 that offers investors a way to direct fixed income investments to climate solutions through a portfolio of green bonds managed by SSgA, and opened an institutional commingled vehicle in July 2012.

World Bank Green Funds managed by **Nikko Asset Management Europe Ltd**, a UK-based asset manager, have raised more than US\$500 million from Japanese retail investors and US\$40 million from European & US institutional investors in the two years since their launch. Notable investors include Silicon Valley Community Foundation and Truestone Impact Investment Management. Nikko AM is now considering launching a third vehicle to help US investors overcome the challenges of investing in a Luxembourg domiciled fund.

**Bank of America Merrill Lynch** and **SEB** have partnered to build up investor demand for larger USD denominated World Bank Green Bonds.

For an updated list of green bond transactions, see:

- World Bank "Bonds and Investment Products" <http://treasury.worldbank.org/cmd/htm/GreenBondIssuancesToDate.htm>
- Bloomberg "IBRD" <Go>

## World Bank Green Bonds in the News

Media

**Investment & Pensions Europe**, "World Bank rates green bonds" by Nina Röhrbein (September 2012). [http://www.ipe.com/magazine/world-bank-rates-green-bonds\\_47194.php?issue=](http://www.ipe.com/magazine/world-bank-rates-green-bonds_47194.php?issue=)

**Business News Network Canada (BNN)**, "Headline with Howard Green" interviewed Sean Kidney (Chairman and Co-Founder, Climate Bond Initiative) and Heike Reichelt (Head of Investor Relations and New Products, World Bank) about the issuer perspective (May 2012). [http://www.bnnprodown.com.edgesuite.net/2012/05/25/20120525\\_HL\\_4FIX.mp4](http://www.bnnprodown.com.edgesuite.net/2012/05/25/20120525_HL_4FIX.mp4)

**The European**, "World Bank to issue larger green bonds" by Jeff Coelho (February 2012). <http://www.the-european.eu/story-170/world-bank-to-issue-larger-green-bonds.html>

**The WealthManagement.com Resource Network** "Save the Earth, Buy Green Bonds" by Rosalyn Retkwa (August 2011). <http://wealthmanagement.com/fixed-income/save-earth-buy-green-bonds>

**3BL Media, LLC**, "The CSR Minute" highlighted Bank of America Merrill Lynch's offering of World Bank Green Bonds for its wealth management investors (June 2011). <http://3blmedia.com/theCSRfeed/CSR-Minute-Bank-America-Merrill-Lynch-World-Bank-Offer-Green-Bonds-Investors-Fair-Trade>

Events

**Environmental Finance**, "Capital Markets and the Green Economy" (London, February 2012), "Green Bond Summit" (London, March 2012), and "Environmental Bonds 2012" (New York, May 2012) – Michael

Interview

Gloria M. Grandolini

World Bank Country Director for Colombia & Mexico



Gloria M. Grandolini, World Bank Country Director for Colombia & Mexico, since September 2009.

**1. Who makes the decision about financing specific projects? How does that process work?**

We first agree with the countries on a "partnership strategy" guiding our development assistance. Our teams then work with ministries to prepare climate change projects. For example, the urban transport projects we've supported in Colombia are part of a broader government National Urban Transport Program.

**2. What are some of the challenges the World Bank and the country face when addressing climate change?**

Key challenges include figuring out how actions (or inaction) today can cause severe consequences in the future and getting everyone to mitigate emissions and learn about adapting to climate impacts.

**3. How receptive have Mexico and Colombia been in working towards overcoming these challenges?**

Since these countries are highly prone to natural disasters and already suffer from acute floods and droughts, they have been highly receptive: they are curbing greenhouse gas emissions by investing in renewable energy sources and promoting energy efficiency, supporting cleaner and efficient urban transport, and adapting to climate risks.

**4. Who monitors the projects and who determines what is monitored in a project?**

The client government owns, implements, and monitors the projects. In addition, when the World Bank supports a project or program, the government agrees with our mandate to supervise project implementation, including that procurement practices and environmental and social safeguard policies are followed.

**5. Where do you see support to Colombia and Mexico on climate change going in the future?**

We are extremely proud of our partnerships with Colombia and Mexico in implementing national climate change programs. Both countries have been very active in developing domestic programs and participating in the global climate discussions. The World Bank will continue supporting the implementation of existing programs and deepening policies for reducing emissions and better prepare the countries to adapt to climate change.

**6. How does the World Bank green bond program support climate change projects in Mexico and Colombia?**

Mexico and Colombia benefit from the World Bank's green bond program in various ways, including by building awareness within the investor community of their commitment to being part of the solution to one of the greatest development challenges of our time. We hope this helps mobilize more private sector financing for climate change programs.

Bennett (Lead Financial Officer, World Bank) and Judith Moore (Senior Environmental Specialist, World Bank). <http://www.environmental-finance.com>

**Ceres Investor Network on Climate Risk** and the **UN Foundation**, "Investor Summit on Climate Risk & Energy Solutions" – Andrew Steer, (World Bank Special Envoy on Climate Change) spoke about mobilizing climate change finance from the private sector (New York, January 2012). <http://www.ceres.org/incr/investor-summit/agenda>

**The United Nations Environment Programme's Finance Initiative (UNEP FI)**, "Global Roundtable" – Heike Reichelt introduced World Bank Green Bonds as an opportunity for investors to support climate projects (Washington, DC, October 2011).

**The International Corporate Governance Network (ICGN)** – Heike Reichelt shared an issuer's perspective about developing green bonds (Paris, September 2011).

PHOTO: © THE WORLD BANK

# Notable Green Projects

## Tunisia



### Fourth Northwest Mountainous and Forested Areas Development

**IBRD Financing: US\$41.6 million**

The mountains and forests of Tunisia's Northwest cover 1.2 million hectares and support watersheds supplying 75% of the water consumed in the country. Pressure from unsustainable farming practices, naturally poor soils, and heavy winter precipitation combine to make soil erosion and forest degradation serious threats to this vital natural resource. Climate change is exacerbating the problem with increasing flash floods and droughts. The Fourth Northwest Mountainous and Forested Areas Development Project is designed to conserve soil and water by improving agriculture and pasture practices and management of forest resources. It will also improve the socio-economic conditions of rural populations in the Northwest region (about 318,000 people) through better access to potable water, and dissemination of climate-appropriate agricultural practices that reinforce livelihood and agro-ecosystem resilience.

For details, [click here](http://www.worldbank.org/projects), or go to <http://www.worldbank.org/projects> and search by project ID number **P119140**.

## China

### Huai River Basin Flood Management and Drainage Improvement

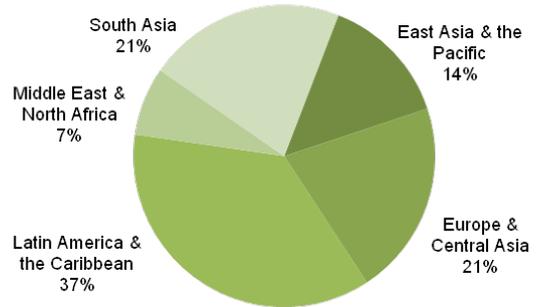
**IBRD Financing: US\$200 million**

The Huai River Basin is the third largest river basin in China with a population of 165 million people in its watershed. Severe flooding and associated disasters occur every three to five years with extraordinary human and economic consequences, and climate change is estimated to increase average precipitation in the summer season over the next 50 years. The project supports improved flooding and drainage infrastructure (e.g., better dikes, drainage channels, maintenance) and institutional strengthening for disaster assessment and management. When the project is completed, about 9,500 km<sup>2</sup> of rural and urban areas will be better protected from flooding, affecting about 6.6 million people.

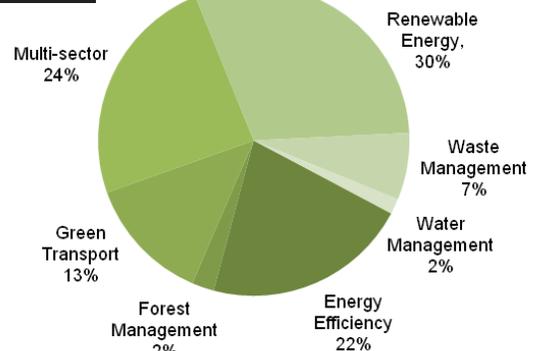
For details, [click here](http://www.worldbank.org/projects), or go to <http://www.worldbank.org/projects> and search by project ID number **P098078**.

## Green Project Portfolio Breakdown by Geography and Sector FY 2012

### BY GEOGRAPHY



### BY SECTOR



As of June 2012, almost US\$3 billion has been allocated to green projects across the world. These graphs illustrate the geographic and sector breakdown.



### Update on the China Eco-Farming Project

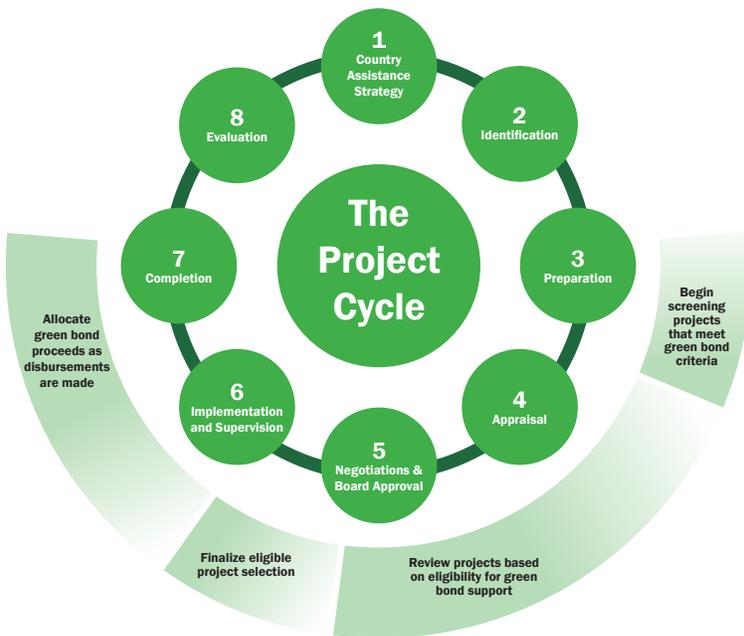
The second World Bank Green Bond Investor Update (2010) featured China's Eco-Farming project, which provides farming households in five Chinese provinces with the capacity to convert methane from livestock waste into biogas fuel. This biogas fuels their daily energy needs, including cooking, lighting, and heating, while reducing the amount of methane emissions associated with the country's agricultural sector. Since the project's implementation, which began in 2009, a total of 490,000 tons of CO<sub>2</sub>e has been reduced annually, and living conditions in the project villages have significantly improved through biogas-operated stoves and manure management.

For details, [click here](http://www.worldbank.org/projects), or go to <http://www.worldbank.org/projects> and search by project ID number **P096556**.

# 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](http://www.worldbank.org/projectcycle), or go to [www.worldbank.org/projectcycle](http://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 188 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:

- 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:

- 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

"The World Bank Green Bond is an innovative, high-quality fixed-income instrument. As an investor, it allows us to demonstrate our commitment to environmental stewardship while receiving a positive financial return. We are pleased to make them a part of our fixed income portfolios."

Mark Regier  
Director of Stewardship Investing  
Everence and Praxis Mutual Funds

"We are proud to have been one of the first investors in the World Bank Green Bond and are happy to be a part of an increasingly growing program that shares our vision of sustainable action in the fight against climate change."

Eva Halvarsson, CEO  
AP2 - Second Swedish  
National Pension Fund

### More World Bank Green Bond Investors

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

Information on the World Bank web site:  
<http://treasury.worldbank.org/greenbonds>  
<http://www.worldbank.org/climatechange>

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