“From south to north, east to west, climate change efforts need to be more inclusive and sustainable.”

Robert B. Zoellick
The World Bank Group President
in Mexico City, Mexico, July 2010

What is a World Bank Green Bond?
World Bank Green Bonds are fixed income products that offer investors the opportunity to support the financing of projects that help mitigate climate change and help countries adapt to the effects of climate change.

Why do investors buy World Bank Green Bonds?
World Bank Green Bonds provide an opportunity to invest in climate solutions. Investors benefit from the Aaa/AAA credit strength of the World Bank. Additionally, repayment of the bonds is not linked to the credit or performance of the projects, so investors do not assume the specific project risk. With World Bank Green Bonds, investors can rely on the World Bank to conduct due diligence to identify and monitor projects. This way, investors can focus on financial aspects of their investments (currency, size, coupon, and maturity) and support climate change solutions at the same time.

What else does the World Bank finance?
The World Bank raises approximately US$30 billion annually in the capital markets. It finances activities in areas such as health, education, gender equality, environmental protection, sustainable agriculture, infrastructure, and climate change activities. The overriding goal of its activities is to achieve major sustainable improvements in standards of living worldwide.
### US$1.6 billion raised through World Bank Green Bonds

World Bank Green Bonds have now raised about US$1.6 billion. Since the first World Bank Green Bond was issued under two years ago in collaboration with SEB, the World Bank has issued 22 transactions in 15 different currencies. Investor interest in World Bank Green Bonds has already captured the attention and imagination of other issuers, including governments that recognize green bonds as a way to tap private capital to support their own climate change mitigation and adaptation efforts.

#### Transactions to date

<table>
<thead>
<tr>
<th>Date</th>
<th>Volume</th>
<th>Coupon</th>
<th>Maturity Date</th>
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<td>April 24, 2009</td>
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<td>SEB</td>
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<td>March 5, 2010</td>
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<td>March 2, 2010</td>
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### Interview

**Stuart Kinnersley, CIO**
Nikko Asset Management Europe Ltd.

In February 2010, Nikko Asset Management set up two new World Bank Green Funds with ten World Bank Green Bonds in ten different currencies. One fund was set up for investors in Japan and the other for investors in Europe and the Middle East. These funds invest in World Bank Green Bonds.

1. **Can you tell us more about the rationale for setting up these World Bank Green Funds?**

While the World Bank provided the bridge to the financing gap required to address climate change in the coming years through the issuance of green bonds, Nikko AM provided an additional vehicle through which green bonds can flow to the bonds, which will further enable both small and large investors to help reduce the financing gap. I see this as potentially a lifestyle choice for individuals. On a personal basis, individuals already make conscious decisions about recycling garbage, minimizing the use of water, and less extensively using fossil fuels. This fund extends these lifestyle choices to the realms of personal finance. I am hoping these green funds mark a watershed in giving investors a greater voice on how their money is actually invested in future.

2. **What has the response been from investors for these funds? What types of investors seem most interested?**

Although green bonds are a relatively new instrument, there has been a groundswell of interest to the launch of these funds. Part of this has been due to the uniqueness of the fund and part because the majority of environmental or ethical investors have focused on stocks and shares. There appears to be a genuine appetite for these funds both from institutional investors and retail investors. In terms of institutional investors, those that have a strong ethical basis appear to be very interested, and in Europe, this appears to be the main source of interest.

3. **How are these funds being distributed?**

The distribution of these funds is through a number of different channels. In Japan, they are being distributed through various regional banks. In Europe, we are hopeful that broader investment platforms, which distribute funds or fund-of-funds with a bias towards SRI investment, will become more actively involved. In the UK, we already have investors with an ethical bias invested in the fund.

4. **Funds mark the second time that you have worked together with the World Bank to create open-ended investment trusts, following on from the highly successful World Supporter Fund in Japan. How has your approach here been different?**

Our approach to distributing and marketing these funds in Japan has been very similar to the World Supporter Fund. We have begun to sign up a number of distribution partners and anticipate this list will grow as time goes by. The World Supporter now has more than 40 distributors selling the fund and we see this large and ever increasing number of distributors as the key to the success of the green fund. In Europe, we are contacting institutions directly and in many cases talking to companies that have never invested in World Bank products before or even know the workings of the World Bank. We believe part of our job is to help educate the investors about the objectives of the World Bank in general and its efforts in the environment sector in specifically.

5. **What do you expect for the future?**

The initial success of the green funds leads me to believe that these funds will gain further momentum and will increase investor awareness both about the World Bank and its mission in the environment sector. We have already had inquiries from different sources about the funds and believe that as more institutions sign up to the product, the general awareness of Green Bonds will spread further in the market place. We believe this increased awareness can only lead to a broader demand for World Bank Green Bonds from investors who previously had limited or no exposure to World Bank debt.
World Bank-funded eco-farming project in China empowers rural communities with access to free renewable energy

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 most. The Eco-Farming Project in rural China demonstrates how five provinces are working with the national government and the World Bank to access free energy and increase agricultural output through efficient farming processes.

China eco-farming
IBRD Financing: US$120 million

In December 2008, the World Bank approved a US$120 million project loan to help five Chinese provincial governments provide rural households access to renewable energy by converting methane from animal waste into biofuel. China, the largest producer of methane, has been capturing greenhouse gases to use as fuel for many years. The government even launched a rural biogas program in 2001, which enabled almost 7 million rural households to cook with biogas. However, many parts of rural China were still unequipped to take part in this new energy revolution. Instead, millions of farmers still relied on finding and burning wood for cooking, a process that is time consuming and a cause of serious health issues due to carbon emissions.

The World Bank’s US$120 million loan will continue to have positive impacts for many years, even beyond the conclusion of the project. Over half a million farming households in Anhui, Hunan, Guangxi, Hubei, and Chongqing provinces will have received subsidized methane digesters, kitchen stoves, lights, and pig sheds. Through this project, access to free energy will continue to accumulate generous household savings. Farmers will be able to increase agricultural output by reusing animal waste mixed with water as fertilizer for crops, and villages across these provinces will receive training, assuring long-term sustainability after the project’s completion. Above all, this project sets a good example on how greenhouse gas emission reduction battles climate change and contributes to economic sustainability for the developing world.

For details, click here, or go to http://www.worldbank.org/projects and search by project ID number P096556.

Other notable projects

Solid waste management in Amman
IBRD Financing: US$25 million

There are problems with Amman’s waste management system—high costs of providing collection and transport services, and inadequate disposal practices considering the expected growth in waste flows from Amman’s 2.2 million inhabitants. Through the World Bank Amman Solid Waste Management Project, which serves as a model for the rest of the municipalities, the government is working to environmentally upgrade and expand the existing municipal solid waste landfill. This will allow the percentage of municipal solid waste that is properly managed in a sanitary landfill to increase from 0% to 80% and generate 160,000 MWh of electricity from landfill gas by 2013. The project will also improve the cost effectiveness and cost recovery of the existing municipal solid waste collection and transport system. For details, click here, or go to http://www.worldbank.org/projects and search by project ID number P104960.

Emergency recovery and disaster risk management in the Dominican Republic
IBRD Financing: US$80 million

In 2007, the Dominican Republic was hit by two unexpected tropical storms that left thousands of families homeless, crops damaged, and large portions of the country’s roads, bridges, electricity infrastructure, and irrigation systems destroyed. With the help of World Bank funded Emergency Recovery and Disaster Management Project, the national government is rebuilding the country’s national electricity, irrigation, and water supply sectors. The project also aims to make the infrastructure more resilient to future storms, while strengthening its government agencies’ capacity to manage water and electricity resources in order to mitigate potential effects of future emergencies. As these agencies update contingency plans and increase their risk management capacity, this project is illustrative of climate adaptation support in tropical areas. For details, click here, or go to http://www.worldbank.org/projects and search by project ID number P109932.

Second water sector investment in Tunisia
IBRD Financing: US$30.6 million

Tunisia has been able to capture and use more than 80% of the usable water, but climate change may exacerbate scarcity problems and reliance on already-stressed groundwater. The project promotes improved efficiency in water use in irrigation and increased capacity for climate adaptation. For more details, click here, or go to http://www.worldbank.org/projects and search by Project ID number P096947.

Power system development in India
IBRD Financing: US$600 million

The project will provide underserved areas access to renewable energy. It will also contribute to the clean energy initiative through both the ability to transfer surplus hydro energy to power deficit regions in India and the avoidance of building additional coal-based generation. For more details, click here, or go to http://www.worldbank.org/projects and search by Project ID number P101053.
Understanding the Green Bond Project Cycle

There are eight stages to the life of a World Bank (IBRD) project. Climate finance is playing a role in every stage of the project cycle starting with the country assistance strategy. Climate change specialists carefully determine whether the project meets the mitigation or adaptation criteria set out for the World Bank Green Bond program (see “World Bank Green Bond Project Selection Criteria” box on this page). During the implementation stage, as disbursesments are made for eligible projects, the corresponding amounts are deducted on a quarterly basis from an account created to support the allocation of World Bank Green Bond proceeds to eligible green projects. Disbursements for projects are often made over a period of years depending on when each project milestone is reached. Green projects are likely to be supported by various green bond issues. This is how investors benefit from the due diligence done over the course of the project cycle. For more information on the World Bank project cycle, click here, or go to www.worldbank.org/projectcycle.

The Project Cycle

1. Country Assistance Strategy
2. Identification
3. Preparation
4. Appraisal
5. Negotiations & Board Approval
6. Implementation and Supervision
7. Completion
8. Evaluation

World Bank Green Bond Project Selection Criteria

Examples of eligible mitigation projects are the following:
- 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 the following:
- 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

“Buying these green bonds makes financial sense for California. It strengthens our portfolio’s diversity while adding a sound investment with a triple-A rated issuer. And it tells the world that when it comes to battling climate change, California is prepared to contribute not just its policies, but its money, too.”

Bill Lockyer
California State Treasurer

“For us as long-term investors, it is important to find responsible investments targeted at the global climate challenges. The green projects supported by the World Bank Green Bond are an important step in that direction.”

Christina Kusoffsky Hillesøy
Head of Communication and Sustainable Investments
AP3 – Third Swedish National Pension Fund

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.

Links to information on the World Bank web site:
http://treasury.worldbank.org/greenbonds
http://www.worldbank.org/climatechange
http://go.worldbank.org/LFS55Z7LL0