

## **World Bank Emission Reduction-Linked Bond Uses Voluntary Carbon Market to Provide Clean Water to Children in Vietnam**

### **QUESTIONS & ANSWERS**

#### **How does the bond work?**

The Emission Reduction-Linked Bond is a USD 50 million 5-year principal protected bond issued by the International Bank for Reconstruction and Development (“IBRD” or the “World Bank”) with a unique feature, whereby investor return is linked to the issuance of Verified Carbon Units (“VCUs”) from a water purification project in Vietnam (the “Project”).

With the bond, investors do not receive ordinary coupon payments that are usually paid by regular bonds. Instead, an amount equal to the cash flows that would have been paid as coupons on a regular bond are “frontloaded” and - through a hedge transaction with Citi - used to support the financing of the Project. The Project aims to improve the quality of drinking water in schools and institutions throughout Vietnam in a climate friendly manner, and in doing so to generate and issue VCUs on the Verra Registry. The bond investors will receive variable coupon payments based on the number of VCUs issued from the Project from time to time.

#### **Who is the issuer of the bond?**

The bond is issued by the International Bank for Reconstruction and Development (“IBRD” or the “World Bank”).

#### **Will the bond be listed?**

The Bond will be listed on the Luxembourg Stock Exchange.

#### **Will the bond be rated?**

The bond is expected to be rated AAAP by Standard & Poor’s.

#### **Who are the target investors?**

Institutional investors who are looking for innovative capital market instruments that:

- i) support projects with positive climate and development impacts such as a reduction in greenhouse gas emissions, improvement in air quality and public health, a reduction in deforestation, creation of jobs and projects with positive gender impacts
- ii) offer investors direct project exposure and associated financial reward if projects are successful in achieving the target performance.

#### **What is the maximum return investors can expect?**

The bond was issued below par providing investors with a minimum guaranteed return of 0.52%. In addition, if the Project is successful and generates the expected target number of VCUs, investors can expect to earn a total return of approx. 4.84% on the bond.

#### **Will the bond give carbon credits to investors?**

No. The bond will pay investors a VCU-Linked Interest Amount from time to time based on the number of VCUs generated by the Project.

#### **How will the bond proceeds be used?**

The bond issuance proceeds will be used for the World Bank's sustainable development activities. World Bank bonds support the financing of a combination of green and social, i.e., "sustainable development", projects, programs, and activities in IBRD member countries. See [IBRD's Sustainable Development Bond Framework](#) for examples of eligible projects, programs, and activities. The water purifier Project is not a World Bank project.

**How does IBRD hedge the VCU exposure?**

IBRD has entered into a Forward Flow Agreement (FFA) with Citi. Under the FFA, IBRD will transfer to Citi amounts needed by the Project developer to finance the manufacturing and distribution of the water purifiers and for water purifier maintenance. The transferred amounts are equivalent to that which IBRD would pay as ordinary coupons on a regular bond. Under the FFA, Citi will pay IBRD the same amounts as the VCU-Linked Interest Amount under the bond.

**What risks are investors in the bond exposed to?**

Irrespective of the VCUs issued by the project, investors will receive their principal investment back at maturity plus a minimum return from the World Bank, providing investors a AAAP-rated investment with the potential for an additional return if the Project is successful.

If the Project generates fewer carbon units than expected, Citi fails to make any payments to IBRD under the FFA, or the FFA is terminated due to certain events as disclosed in the bond prior to maturity, the VCU-Linked Interest Amount paid to investors will be lower than expected. These risks and other risks investors return is exposed to are explained in more detail in the bond documentation under the section titled "Additional Risk Factors".

**Are investors exposed to carbon credit price risk?**

No. Bond investors are not exposed to carbon credit price risk since the VCU-linked Interest Amount payable to investors are entirely driven by the number of VCUs issued on to the Verra Registry by the Project. Bond investors return is exposed to other risks, which are explained in more detail in the bond documentation under the section titled "Additional Risk Factors".

**What are VCUs and who is responsible for the verification of carbon units generated by the Project?**

"VCUs" means a unit issued into the Verra Registry, with each unit representing a reduction or removal of one ton of carbon dioxide equivalent (CO<sub>2</sub>e) from the atmosphere. Verra is a not-for-profit organization that administers the Verified Carbon Standard ("VCS"), which enables the validation of greenhouse gas projects and programs, and the verification of emission reductions and removals. VCUs generated by the Project will be issued into the Verra Registry in accordance with VCS Rules and Registry Rules. The World Bank is not affiliated with Verra.

**What is the contractual relationship between IBRD and the Project developer?**

There is no relationship between IBRD and the Project developer. Citi, through a purchase agreement with the Project developer, transfers funds to the Project and receives VCUs.

**What Project is Being Supported?**

**THE PROJECT IS NOT FINANCED BY IBRD AND THEREFORE IBRD'S POLICIES AND PROCEDURES RELATED TO PROJECTS IT FINANCES DO NOT APPLY TO THE PROJECT.**

The Project developer is a Vietnamese company called Sustainability Investment Promotion and Development Joint Stock Company. The purpose of the Project is to improve the quality of drinking water through the manufacture and distribution of water purifiers to selected schools and other institutions throughout Vietnam. The water purifiers minimize the use of non-renewable biomass or fossil fuels used in the traditional boiling of water to purify it for drinking. The Project is expected to contribute both to a reduction in GHG emissions (with estimated annual emission reductions of 582,900 tCO<sub>2</sub>e/year) and improved public health. As associated benefits, the Project is expected to create jobs, help reduce deforestation, improve the educational environment for students and reduce fuel costs for the beneficiary schools and institutions.

The Project aims to manufacture and distribute 300,000 water purifiers to 8,000 schools and other institutions in Vietnam. The schools and other institutions include kindergartens, nurseries, primary schools, secondary schools, high schools, as well as community homes. These institutions were selected by the Vietnam Ministry of Education and Training, which is also responsible for the distribution of the water purifiers. The water purifiers are manufactured in Vietnam and distributed free of charge to the recipient institutions.

#### **How do the water purifiers work?**

The water purifiers are designed to be simple to use and due to their ceramic water filter provide water that can be safely drunk directly from the device without the need for boiling. A ceramic water filter in the device reduces and prevents intestinal disease from drinking unsafe water. With the device, water can be stored safely for a long time without being re-contaminated thanks to the continuous release of silver ions (Ag<sup>+</sup>). The water filter can deodorize chlorine and retain essential mineral components in the water Ca<sup>2+</sup>/Mg<sup>2+</sup>. The Project establishes the replacement of the ceramic water filters after 2-years, so that the water purifiers continue to provide the same level of water quality throughout the life of the Project.

#### **What is the potential for replication of similar outcome-linked bond structures connected to carbon credits?**

Verifiable emission reductions and effective carbon markets are likely to be important tools to help organizations meet their voluntary emissions goals. To meet the expected increased demand for this offtake of carbon credits, there will be need for additional financial tools to provide up-front financing to support the origination and operation of projects globally, and particularly in emerging market and developing countries. The World Bank's Emission Reduction-Linked Bond structure separates the carbon price and delivery risks from the underlying project implementation risk. Through the bond, the risk that a designated climate mitigation outcome will be achieved is borne by capital market investors, bringing in a new source of financing to support specific climate action activities.

**Disclaimers:**

*Net proceeds of the bonds described herein are not committed or earmarked for lending to, or financing of, any particular World Bank projects or programs. Payments on the bonds are not funded by any particular World Bank project or program.*

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