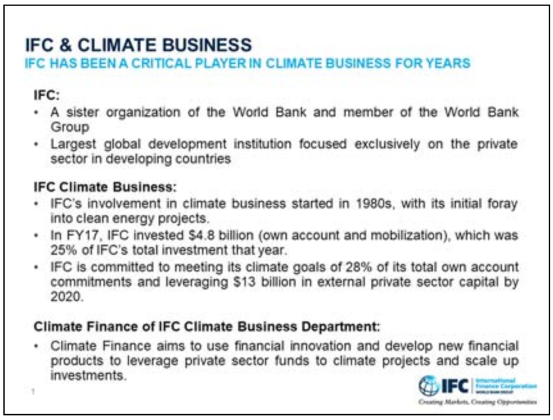
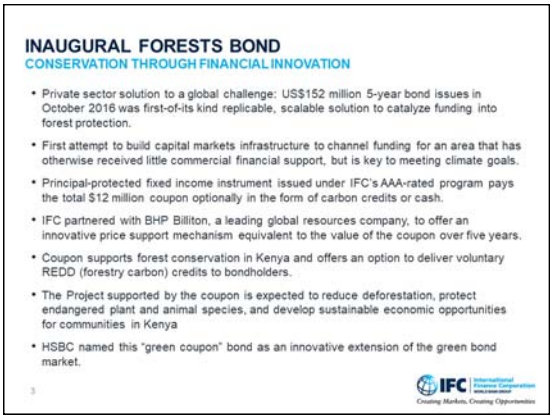
Financial Innovation: How to Mobilize Private Sector Funds to REDD+

Kiyoshi Okumura (International Finance Corporation (IFC))



Here is a brief introduction about my organization IFC.

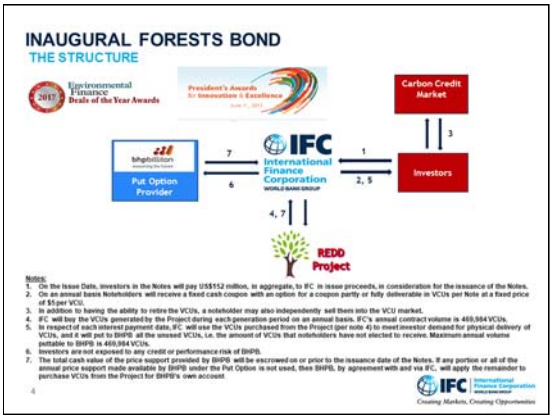
IFC Forest Bonds



I would like to explain why we are focusing on forests and REDD+. The supply of investment is clearly lacking compared to the demand for finance for REDD+. Regarding IFC Forest Bond, we made use of the capital markets to get private sector funding for forest protection. It is one of the first such schemes in the world.

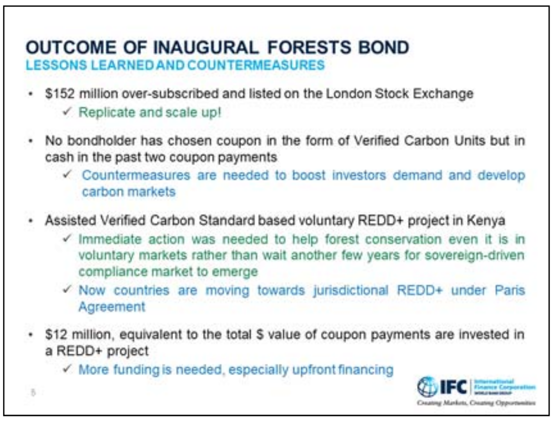
The IFC Forest Bond is a US $152 million 5-year bond issued by IFC in October 2016. It is the first attempt to use capital markets infrastructure to channel private sector funding for forest protection, an area that has otherwise received little commercial financial support so far. Specifically, it is a principal-protected bond issued under IFC's AAA rated program that pays a total of 12 million coupons over 5 years either in the form of carbon credits or cash.

To achieve such a structure, IFC partnered with a global resources company BHP Billiton[1] which provided a price-support mechanism equivalent to the value of the coupon over the 5-year bond redemption period. $12 million, an amount equal to the total coupon was used to support the Kasigau REDD+ project in Kenya through a purchase of voluntary REDD carbon credits for 5 years. The investment bank HSBC[2] called this 'green coupon bond' as an innovated extension of the green bond market.



A structural diagram for this bond, the investors will buy IFC's bond, and during the time for payment of coupon each year, the investors can choose either carbon credits or cash payments. To make that possible, a 5-year fixed price contract is entered into between IFC and the Kashigau project for purchase of emission reductions. If the investors want to receive the coupon as carbon credits, then IFC will transfer these credits to the investors, but if they choose not to receive carbon credits, then the IFC will transfer the credits to BHP Billiton. BHP will ensure the same price to IFC which will use the money to pay the cash coupon to the investors.

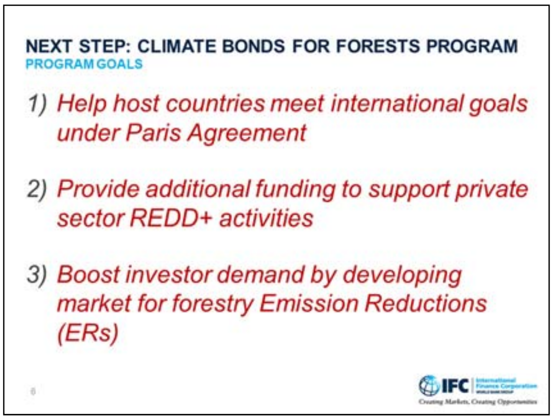
Lessons Learned and Countermeasures Sought

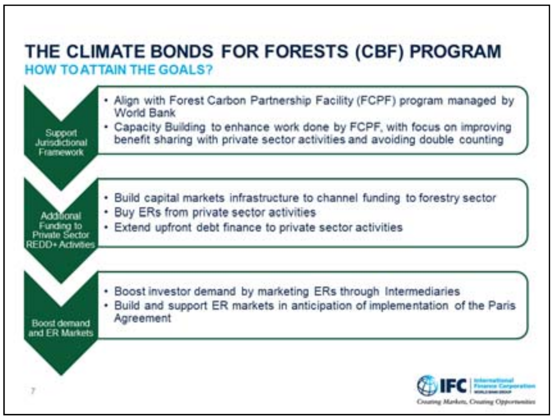


1 https://www.bhp.com/
2 https://www.hsbc.co.jp/en-gb

In terms of lessons learnt from IFC Forest Bond, in October 2016, firstly, the $152 million IFC Forest Bond was oversubscribed and sold out immediately. So we are now trying to replicate and scale up such a mechanism. Secondly, there were coupon payments made over the 2 years, but no bond holders chose to get their coupon as verified carbon units. As a countermeasure, there is a need to boost investor demand for carbon credit and to develop the carbon markets. Thirdly, the Forest Bonds supported projects in the voluntary market. As of October 2016, the sovereign-driven compliance market had not emerged yet. It was felt that rather than waiting several years for that emerge, immediate forest conservation actions were required. That is why we made this a voluntary market-based project. However, at present, under the Paris Agreement, host countries are working towards establishing jurisdictional REDD+. Fourthly, the $12 million equivalent to the coupon payment was invested in the REDD+ project. However, naturally that funding is not enough. There is a need for upfront financing for such projects.

Goals of Climate Bonds for Forests Program





What actions are required next? The IFC is considering a program called the Climate Bonds for Forests. Based on the learnings as I mentioned earlier, we have set three goals: Firstly, the program should help host countries meet international goals under the Paris Agreement. Secondly, it should provide additional funding to support private sector REDD+ activities. Thirdly, it should boost investor demand by developing the market for forestry emissions reductions.

How are we going to achieve these three goals? Regarding the first goal, the IFC will be working with World Bank's Forest Carbon Partnership Facility (FCPF), and our activities will complement the activities of FCPF and carry out capacity building in the host countries. We will promote improved benefit sharing with the private sector activities and avoiding double counting. For the second goal, we will use the Forest Bond scheme of the previous bond to purchase emission reductions from REDD+ projects by private sectors every year, and we will also provide upfront financing. For the third goal, we will establish intermediaries who will sell the emission reductions in the market. That is a new innovation this time.

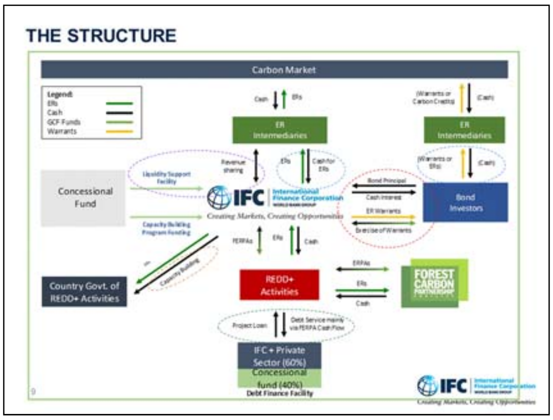
Five Elements of the Climate Bond for Forest Program

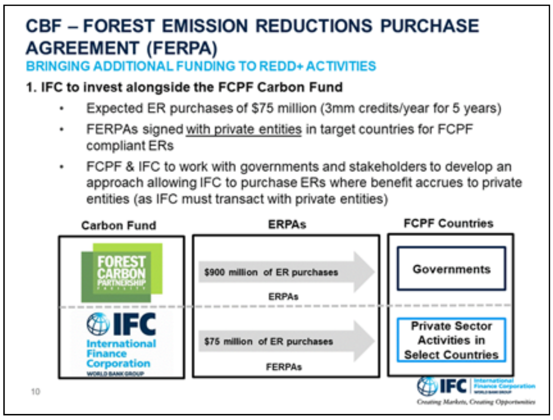
CBF PROGRAM COMPONENTS

FIVE COMPONENTS

Components	Objectives
Climate Bonds for Forests ($450 million)	• Use AAA-rated capital markets instrument to channel private sector investment to forest conservation • $75 million (equivalent to the total value of annual interest payments) will be invested in forest conservation • $450 million Bond proceeds will be invested in IFC climate projects
Debt Finance Facility ($30 million)	• Provide upfront debt finance to forest carbon positive activities implemented by private sector entities
Carbon Market Commitment ($11.25 million)	• Intermediary commits to pay a floor price and sells a portion of ERs to international investors taking the role of boosting ER markets. • Intermediary helps bond investors monetize ERs.
Liquidity Support Facility ($63.75 million)	• Provide some price support to reduce the downside risk for Intermediary that sells a portion of ERs
Capacity Building ($7.5 million)	• Assist host countries to incorporate private sector REDD+ activities in jurisdictional REDD+ and share benefits in a manner that includes private sector • Assist host countries to meet international climate goals by technically supporting integration activities (e.g. nesting)

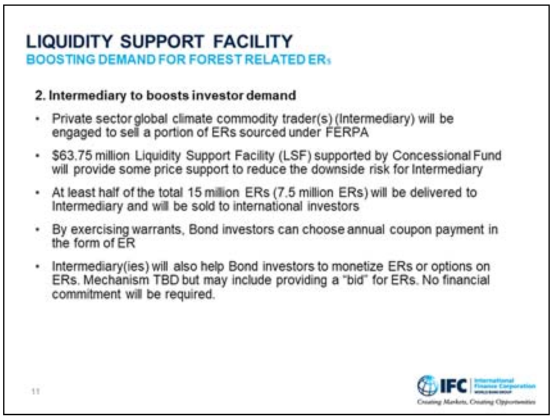
Specifically, the Climate Bond for Forest program will incorporate the following five elements. Firstly, a bond will be issued that will be an AAA-rated 5-year bond with a multiple coupon payment options. One improvement is that the bond proceeds will be used by the IFC for investments in climate projects as a green bond. Secondly, upfront loans will be provided from a debt-finance facility to support private sector REDD+ projects. Thirdly, intermediaries will be introduced. The intermediaries are expected to be traders in environment-related commodities. Upon receipt of the emission reductions from the IFC, the intermediaries will pay a floor price which is less than IFC purchase price. The intermediaries will sell these emission reductions on the market. Fourthly, liquidity support facility will be introduced. This facility will help to reduce the price risk when intermediaries selling emission reductions on the market. Lastly, capacity building will be carried out to assist host countries to incorporate private sector REDD+ activities and to promote benefit sharing and nesting in a manner that includes the private sector.



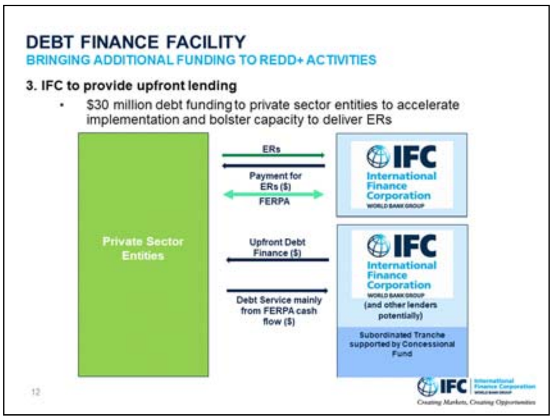


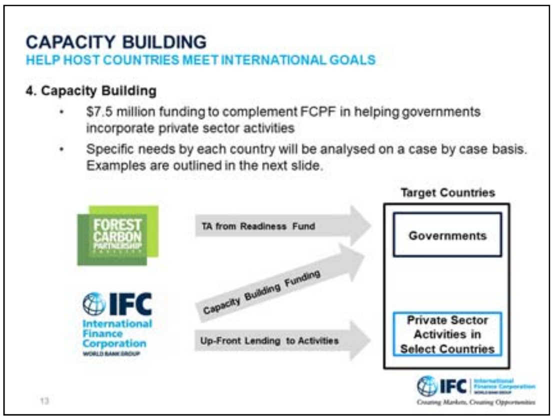
This slide explains the structure of this bond incorporated five components I mentioned about. It is quite complex, so I will not go into the details. Each of the components has been color coded, so comparing with previous slide may be easier to understand.

Let us look at each of these five components in more detail. First is the emission-reduction purchase agreement associated with the bond. The program will be carried out by the IFC in collaboration with the FCPF. When the FCPF Carbon Fund enters into an emission-reduction purchase agreement with a host country, the IFC will enter into a forest emission reduction purchase agreement (FERPA) with private entities in that country. The FCPF and IFC will work with host countries to develop an approach to allow such transactions. Specifically, they will enable private entities to gain the rights to purchase and sell emission reductions, or at least to benefit from payments from the IFC.



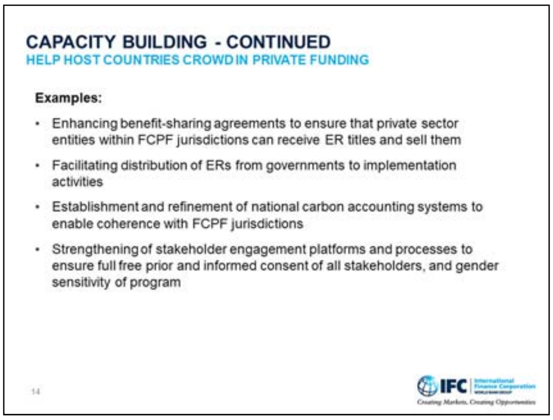
With respect to the liquidity support facility, a portion of the emission reduction purchased by IFC under the FERPA will be transferred to the traders and the environment-related intermediaries. At least, half of the emission reductions will be transferred to intermediaries. The intermediaries will buy the emission reductions from IFC and sell them on the market bearing the market price risk. The liquidity support facility plays the role of mitigating the price risk for the intermediaries. With support of the facility, the intermediaries can acquire the emission reductions from the IFC at a floor price which is less than the IFC's purchase price.





I will explain about the debt finance facility. The IFC will enter into private sector players to purchase credits called FERPA. The future cash flow to be paid up on receipt of the emission reductions will be used as the basis to provide upfront loans to private sector REDD+ projects proponents. This will be carried out by the debt finance facility. Consequently, private sector REDD+ project proponents with limited access to credits will be able to benefit from loans and conduct REDD+ activities in an uninhibited manner.

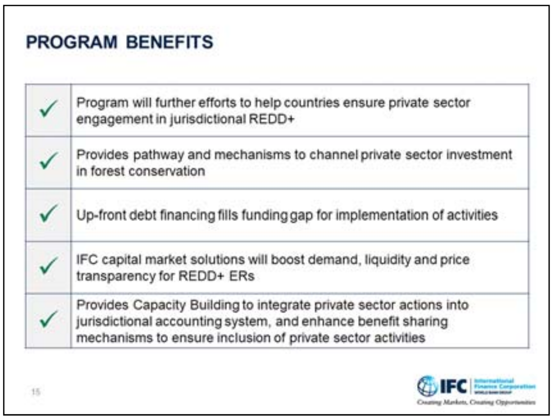
The Climate Bonds for the Forest program will provide capacity building that complements the technical assistance provided by the FCPF Readiness Fund to host countries. In particular, it will help host countries to incorporate private sector activities in the jurisdictional activities.



First, it will provide support for establishing benefit-sharing agreements to ensure that private sector entities can receive emission reduction titles and sell them.

Other examples are facilitating distribution of emission reductions from the host governments to the private sector REDD+ proponents. It will also support the establishment of national carbon accounting and help strengthen stakeholder engagement platforms we think.

Benefits of Climate Bonds for Forests Program



In summary, let me explain the benefits of this program. Firstly, the program will help countries to ensure private sector engagement in jurisdictional REDD+. Secondly, it will channel private sector investment in REDD+. Thirdly, upfront debt-financing will provide new financial support for activities of private sector REDD+ proponents. Fourthly, IFC capital market and emission trading solutions will boost demand, liquidity, and price transparency for REDD+ emission reductions. Lastly, capacity building will promote integration of private sector actions into jurisdictional REDD+ systems.