Forests
Bond

October 2016
Contents

Overview of IFC
Forests Bond
Expected Impact
Overview of Voluntary Carbon Markets
Contacts
Forest Conservation through Financial Innovation

• **IFC Forests Bond** - First-of-its-kind, principal protected fixed income instrument issued under IFC’s AAA-rated program that will aim to pay a coupon in the form of carbon credits to bondholders

• It is intended that the coupon will support forest conservation in Kenya and offer an option to deliver REDD credits to bondholders

• The supported Project is expected to reduce deforestation, protect endangered plant and animal species, and develop sustainable economic opportunities for communities in Kenya

• The Forests Bond will aim to provide measurable environmental and social returns

• Investors will have 4 options for their coupon:
  1. to receive the coupon in cash;
  2. to receive the coupon partly in cash and partly in carbon credits
  3. to receive the coupon in carbon credits and retire them to offset corporate greenhouse gas emissions; or
  4. to receive the coupon in carbon credits and sell the credits in the carbon market.
Overview of IFC
The World Bank Group

Five Institutions, One Group

Twin goals:

- **End extreme poverty**: the percentage of people living with less than $1.25 a day to fall to no more than 3% globally by 2030

- **Promote shared prosperity**: foster income growth of the bottom 40% of population in developing countries

**About IFC**

- Owned by 184 member countries, IFC is a legally distinct entity with its own articles of agreement, balance sheet and staff.
- IFC does not pay dividends or taxes; profits are channeled back into investments in developing member countries.
- Almost 60 years of experience providing loans, equity and treasury services to private sector companies in emerging markets.
- Global presence in more than 100 countries and working with over 2,000 private sector clients.
- Approximately 65% of capital is held by AAA/AA sovereigns.

IFC

International Finance Corporation

Provides loans, equity, and advisory services to private sector in developing countries.

Issues Bonds under: IFC

International Bank for Reconstruction and Development

Provides loans to middle-income and credit-worthy low-income country governments.

Issues Bonds under: World Bank

International Development Association

Interest-free loans and grants to governments of poorest countries.

Multilateral Investment Guarantee Agency

Guarantees of foreign direct investment’s non-commercial risks.

International Centre for Settlement of Investment Disputes

Conciliation and arbitration of investment disputes.
Uniquely Positioned Issuer

- Consistently rated AAA/Aaa
- 0% risk weighting under Basel framework
- Only supranational institution with fully paid in capital
- Well capitalized: capital and retained earnings represent almost 1/4 of $90 billion balance sheet
- Consistently recorded operating profits every year since its founding
- Annual funding program of $17 billion for FY17

All figures in this document are in USD unless otherwise stated
# What We Do

## Client Solutions

<table>
<thead>
<tr>
<th>Investment Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Loans</td>
</tr>
<tr>
<td>• Equity products</td>
</tr>
<tr>
<td>• Syndicated loans</td>
</tr>
<tr>
<td>• Trade finance</td>
</tr>
<tr>
<td>• Structured finance</td>
</tr>
<tr>
<td>• Guarantees</td>
</tr>
<tr>
<td>• Risk management products</td>
</tr>
<tr>
<td>• Local currency financing</td>
</tr>
</tbody>
</table>

## Advisory Services

| • Financial sector |
| • Investment climate |
| • Public-private partnerships |
| • Agribusiness      |
| • Energy and resource efficiency |

## Asset Management

| • Wholly-owned subsidiary of IFC founded in 2009 |
| • Invests third-party capital in a private equity format |
| • Allows outside equity investors to benefit from IFC’s expertise in achieving strong equity returns as well as development impact |

$18.9 billion committed in FY16  
$52 billion committed portfolio  

over $200 million in advisory services income annually  

$8.9 billion under management  

*Figures for fiscal year ended 30 June 2016*
Sustainability: Key to IFC’s Mission

All projects financed must adhere to IFC’s stringent environmental and social requirements focusing on transparency and accountability. Specific performance standards cover:

- Assessment and management of environmental and social risks and impacts
- Labor and working conditions
- Resource efficiency and pollution prevention
- Community, health, safety and security
- Land acquisition and involuntary resettlement
- Cultural heritage
- Biodiversity conservation and sustainable management of living natural resources
- Indigenous peoples
Socially Responsible Bond Programs

Green Bonds
IFC has played a pioneering role in creating investment opportunities which support climate change-related projects

- Since its inaugural issue in 2010, IFC has raised $5.6 billion through its green bond program as of early FY17, including the market’s first benchmark-sized green bonds issued in February and November 2013

Banking on Women Bonds
Funding IFC’s Banking on Women program which supports women-owned small and medium enterprises in emerging markets

- The Banking on Women bond program was launched in 2013 with a 5-year dual tranche bond denominated in AUD and TRY that raised $165 million equivalent

Inclusive Business Bonds
Attractive investment proposition to support private enterprises that incorporate the world’s poorest people into their business models and supply chains

- IFC’s Inclusive Business program was launched in October 2014 with a 4-year BRL denominated bond that raised US$105 million equivalent
IFC’s Overall Development Impact

Development Impact indicators are measured on a calendar basis.

In 2014, IFC’s 2,000 private sector clients provided:

• **2.5 million jobs**
• power, water, and gas distribution to more than **102 million customers**
• more than **US$ 250 billion in loans** to micro, small, and medium enterprises
• medical **treatment to 17 million patients**
• education to **3.5 million students**
Forests
Bond
Forests Bond

Structure: Cash coupon with option for a coupon partly or fully deliverable in VCU

[5 Year up to $150M Notes]

Notes:
1. On the Issue Date, investors in the Notes will pay up to US$150 million, in aggregate, to IFC in issue proceeds, in consideration for the issuance of the Notes.
2. On an annual basis Noteholders will receive a fixed cash coupon with an option for a coupon partly or fully deliverable in VCU per Note at a fixed price of $5 per VCU.
3. In addition to having the ability to retire the VCU, a noteholder may also independently sell them into the VCU market.
4. IFC will buy the VCU generated by the Project during each generation period on an annual basis.
5. In respect of each interest payment date, IFC will use the VCU purchased from the Project (per note 4) to meet investor demand for physical delivery of VCU, and it will put to BHP Billiton all the unused VCU, i.e. the amount of VCU that noteholders have not elected to receive.
6. Investors are not exposed to any credit or performance risk of BHP Billiton.
7. The total cash value of the price support provided by BHP Billiton will be escrowed on or prior to the issuance date of the Notes. If any portion or all of the annual price support made available by BHP Billiton under the Put Option is not used, then BHP Billiton may, via IFC, apply the remainder to purchase VCU from the Project for BHP Billiton’s own account.
Value to Investors in the IFC Forests Bond

- Offset corporate carbon emissions through direct investment in forest protection
- Have full principal protection
- Incur no additional costs of due diligence on Project supported by the Bond
- Ability to receive a coupon in the form of carbon credits issued from REDD Project
- Ability to diversify Socially Responsible investment portfolio
- Anticipated measurable environmental and social returns from yearly evaluation and due diligence on the supported Project
- Project is required to meet IFC’s strict environmental, social and governance performance standards and carry VCS and CCB Gold accreditation
- Cash coupon price in line with IFC’s vanilla curve
The Supported Project: Kasigau, Kenya

**ELIGIBLE PROJECT MUST**

- Meet IFC’s strict environmental, social and governance performance standards
- Be approved by national or state government actively developing a jurisdiction-wide REDD+ framework
- Be registered under VCS and CCB (or equivalent) standards
- Sign conditional contract with IFC prior to bond issuance.
- Achieve specific milestones/results to receive payments for delivered REDD credits
- Conservation International is providing input to BHP Billiton with respect to conservation and REDD matters, and will facilitate the exchange of lessons learned and best practices on REDD projects.

Solution: In 1998 Wildlife Works (WW) established the Rukinga Wildlife Sanctuary on 30,000 hectares of now protected land that led to the return of many species that had left the diminishing forest. More recently, WW launched Rukinga as the first REDD project which now provides income to the community and local landowners for protecting their land instead of destroying it. Not only does the program create jobs directly in conservation, it allows WW to develop eco solutions for harmful practices such as cutting down whole trees for charcoal or unsustainable farming.

The protection area has now expanded to 200,000 hectares, which are expected to offset 1.4 million tons of CO₂ emissions per year for the next 30 years. With the dryland Acacia-Commiphora forest under protection and its original biodiversity restored, the Kasigau Corridor REDD Project was awarded the Gold level status by the Climate, Community and Biodiversity Alliance for exceptional biodiversity and climate benefits.

**Kasigau, Kenya**

With little economic alternatives, the community surrounding the Kasigau Corridor region in East Kenya, ravished their own forest just to meet their survival needs. Their cattle had grazed the fields into dust and they had clear-cut much of the dryland Acacia-Commiphora forest for firewood and farmland.

http://www.wildlifeworks.com/saveforests/forests_kasigau.php
Expected Impact
Moving the REDD+ Agenda forward to make a difference to climate change:

- Proof of concept. An innovative, replicable approach to climate financing using fixed income markets
- In line with green bond principles, the Forests Bond will directly support a climate-smart project in Kenya; Conservation International is providing input to BHP Billiton with respect to conservation and REDD matters, and will facilitate the exchange of lessons learned and best practices on REDD projects; and IFC expects to deliver measurable environmental and social results to investors on a yearly basis
- Aims to stimulate investor demand for results-based approaches for measurably reducing deforestation in developing countries
- Forests Bonds can catalyze investment into forest protection at scale and brings the global deforestation challenge to the forefront of the climate agenda
- The Forests Bond, as an alternative fixed income investment, can help catalyze carbon markets in support of climate change mitigation
Fixed income investments will be able to support climate mitigation and protect forests and sustainable landscapes in emerging markets by enabling the IFC to:

- Support selected Project that aims to reduce deforestation pressures and uses local resources more sustainably in Kenya
- The Project provides alternative sources of livelihood to local communities in order to discourage agricultural encroachment and illegal charcoal production in the project area, such as eco-factories, Wildlife Works rangers, organic greenhouses, eco-tourism, and eco-charcoal pilot project
- The Project implements community development activities under the benefit sharing plan, such as construction of classrooms, provision of furniture and books for schools and educational programs
- The Project contributes to the conservation of the local wildlife
Voluntary Carbon Markets
Forests, Climate, and REDD

• We believe that the consequences of global warming will be devastating unless the global temperature increase is limited to 2 degrees Celsius over pre-industrial levels over the next 30 years

• We believe that this will be practically impossible to achieve without reducing emissions from deforestation and forest degradation

• Deforestation and forest degradation account for up to 20% of global carbon emissions. This is more than the emissions from all cars, trucks, planes, and ships combined*

• About 30% of the earth’s landmass is covered by forests; 5.5 million hectares of tropical forest area is lost each year. This area is approximately the size of Costa Rica

• Estimated financing required to reduce deforestation by 50% by 2020 is approximately $75 billion to $300 billion, but less than 1% is currently achieved**

• Reducing Emissions from Deforestation and Forest Degradation (REDD+) is a mechanism negotiated within the UN to create financial incentives for developing countries to:
  • reduce emissions from deforestation and forest degradation; conserve and enhance forest carbon stocks; sustainably manage forests; and, enhance biodiversity conservation and contribute to sustainable community livelihoods

• The definition of what constitutes a REDD+ project is open to interpretation and in some contexts the terms ‘REDD’ and ‘REDD+’ have been used interchangeably. In the market, the term ‘REDD+’ is often used to describe a REDD project which incorporates community benefits and sustainable management practices

* Source: Conservation International.

** Source: Conservation International.
Voluntary Carbon Market Overview

- Voluntary carbon markets emerged in the mid-1990s, are self-regulated, and exist separately from carbon markets set up by governments in response to the 1997 Kyoto Protocol.

- Carbon credits are transacted over-the-counter, and often directly between project developer and buyer, in voluntary carbon markets.

- Voluntary credits are not eligible for compliance under the Kyoto Protocol or the EU Emissions Trading System and cannot be used in other equivalent schemes (for example, the New Zealand Emissions Trading Scheme).

- The major voluntary standards – the Verified Carbon Standard (VCS) and The Climate, Community and Biodiversity (CCB) Standard – follow an asset creation process resembling the one developed for the Kyoto Protocol.


- The Kyoto Protocol established a cap-and-trade system that imposes national caps on the greenhouse gas emissions of countries that ratified the Protocol. To help countries achieve their emission reductions targets, the Protocol introduced two market-based-mechanisms for climate mitigation - Clean Development Mechanism (CDM) and Joint Implementation (JI).
Overview of Voluntary Carbon Markets

- Voluntary buyers have spent nearly $4.6 billion on transacted offsets over the last decade
- 994 million tonnes of CO$_2$e transacted over the last decade
- As transactions are bilateral, lack of transparency in the voluntary market complicates price discovery and creation of a reliable forward price curve

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2014*</th>
<th>% CHANGE</th>
<th>ALL YEARS**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VOLUME:</strong></td>
<td>84 MtCO$_2$e</td>
<td>77 MtCO$_2$e</td>
<td>+10%</td>
<td>0.99 GtCO$_2$e</td>
</tr>
<tr>
<td><strong>VALUE:</strong></td>
<td>$278 M</td>
<td>$298 M</td>
<td>-7%</td>
<td>$4.6 B</td>
</tr>
<tr>
<td><strong>AVERAGE PRICE:</strong></td>
<td>$3.3/tonne</td>
<td>$3.8/tonne</td>
<td>-14%</td>
<td>$4.6/tonne</td>
</tr>
</tbody>
</table>

Avoided Deforestation Stays Large, However It Is not Enough

- REDD was the top-selling offset project type in 2013 and 2014
- Only wind with 12.7 MtCO2e in sales was larger than REDD in terms of volume transacted in 2015
- REDD retained high average prices in 2015, however, receiving more value than wind at $37.5 million despite the lower sales volume of 11.1 MtCO₂e

REDD: Growing Demand

- REDD and wind have nearly equal volumes between 2007 and 2014, but REDD has historically higher average prices.
- Demand for REDD offsets accelerated after the Bali climate negotiations (2007) brought REDD to the international stage, with the general expectation that demand would come, sooner or later, in the form of compliance offset markets.

Cumulative Value and Average Price of Top 7 Project Types, 2007-2014

- Avoided deforestation: $442 M, $5.2/t
- Wind: $384 M, $4.6/t
- Landfill methane: $285 M, $5.9/t
- Hydropower: $170 M, $4.1/t
- Tree planting (A/R): $270 M, $7.7/t
- Clean cookstoves: $162 M, $10.2/t
- Forest Mgmt.: $113 M, $8.4/t

Note: Based on 412 MtCO$_2$e of transacted offsets associated with a project type, 2007-2014.

REDD Prices 2014-15; REDD at risk

- REDD prices dropped to $3.3/tCO₂e in 2015 from $4.3/tCO₂e in 2014
- REDD offsets derived from avoided planned deforestation sold for an average of $3.1/tCO₂e in 2014, while REDD offsets from avoided unplanned deforestation were priced at $5.2/tCO₂e
- There is currently an oversupply of REDD projects delivering VCU’s relative to demand
- The sheer volume of supply available far outpaces private buyers’ appetites
- Lack of demand is impacting the ongoing viability of REDD projects and therefore compromising one of the paramount opportunities to mitigate serious climate change

IFC’s Experience in the Carbon Markets Space

• Our experience covers both the global carbon market linked to the Kyoto Protocol and the markets for voluntary offsets:
  • IFC managed two facilities from 2002-2014 to purchase carbon credits for the benefit of the Government of the Netherlands which committed $135M in 12 transactions
  • From 2007-2013, IFC has also completed three innovative Carbon Delivery Guarantee transactions with structured carbon finance exposure for its own account
  • In 2011, IFC launched the €150 million Post-2012 Carbon Facility to be managed by IFC and in which IFC itself committed €15 million. The balance was raised from European private sector companies including Shell and JP Morgan
  • IFC is a shareholder in BioCarbon, a company established in 2011 to invest in projects in emerging markets to generate forest carbon credits that can be sold in the voluntary market
Contacts
IFC Team

**Treasury**

- **Jingdong Hua**
  - Vice President and Treasurer
  - +1 202 473 1650
  - JHua@ifc.org

- **Keshav Gaur**
  - Director Treasury Client Solutions
  - +1 202 473 5272
  - kgaur@ifc.org

- **Evelyn Hartwick**
  - Senior Financial Officer
  - +44 20 7592 8534
  - Ehartwick@ifc.org

- **Kannagi Ragunathan**
  - Financial Officer
  - +1 202 458 5064
  - KRagunathan@ifc.org

**Climate**

- **Christian Grossmann**
  - Director Climate Business
  - +1 202 458 0775
  - Cgrossmann@ifc.org

- **Vikram Widge**
  - Head Climate Finance and Policy
  - +1 202 473 1368
  - Vwidge@ifc.org

- **Lasse Ringius**
  - Senior Carbon Finance Specialist
  - +1 202 473 6381
  - LRingius@ifc.org

- **Kiyoshi Okumura**
  - Senior Investment Officer
  - +1 202 473 0157
  - KOkumura@ifc.org

**Legal**

- **Sebastiano Bottio**
  - Principal Counsel
  - +1 202 473 2027
  - SBottio@ifc.org

- **Flavia Rosembuj**
  - Global Lead for Blended Finance and Climate Business
  - +1 202 458 5410
  - FRosembuj@ifc.org

**Media**

- **Alexandra Klöpfer**
  - Senior Communications Officer
  - +1 202 473 4645
  - AKlopf@ifc.org

- **Sona Panajyan**
  - Senior Communications Officer
  - +1 (202) 473 9751
  - spanajyan@ifc.org
Disclaimer

This document has been prepared for informational purposes only, and the information herein may be condensed or incomplete. IFC specifically does not make any warranties or representations as to the accuracy or completeness of these materials. IFC is under no obligation to update these materials. The information relating to the securities described in this document is indicative and subject to change and is qualified in this document in its entirety by the information in the final issuance documents for the securities.

This document is not a prospectus and is not intended to provide the basis for the evaluation of any securities issued by IFC. This information does not constitute an invitation or offer to subscribe for or purchase any of the products or services mentioned. Under no circumstances shall IFC or its affiliates be liable for any loss, damage, liability or expense incurred or suffered which is claimed to have resulted from use of these materials, including without limitation any direct, indirect, special or consequential damages, even if IFC has been advised of the possibility of such damages. Potential investors should not subscribe for any securities referred to in this document except on the basis of the information contained in the final issuance documents to such securities.

This document contains forward looking statements which may be identified by such terms as “anticipates”, “believes”, “expects”, “intends”, “plans”, or words of a similar meaning. Such statements involve a number of assumptions and estimates that are based on current expectations, which are subject to risks and uncertainties beyond IFC’s control. Consequently, actual future results could differ materially from those currently anticipated.

VCUs are not suited for individuals to target as a short, medium or long-term investment.

For additional information concerning IFC, please refer to IFC’s current “Information Statement”, financial statements and other relevant information available at www.ifc.org/investors.

BHP Billiton plc, BHP Billiton Limited and their affiliates (together “BHP Billiton”) is not responsible for any information in this document. BHP Billiton specifically does not make any warranties or representations as to the accuracy or completeness of these materials. Under no circumstances shall BHP Billiton be liable for any loss, damage, liability or expense incurred or suffered which is claimed to have resulted from use of these materials, including without limitation any direct, indirect, special or consequential damages, even if BHP Billiton has been advised of the possibility of such damages.

October 2016