

FINANCIAL INNOVATION: HOW TO MOBILIZE PRIVATE SECTOR FUNDS TO REDD+

IFC Forests Bond & Climate Bonds for Forests



Creating Markets, Creating Opportunities

REDD+ International Seminar
Tokyo, Japan
February 6, 2019

IFC & CLIMATE BUSINESS

IFC HAS BEEN A CRITICAL PLAYER IN CLIMATE BUSINESS FOR YEARS

IFC:

- A sister organization of the World Bank and member of the World Bank Group
- Largest global development institution focused exclusively on the private sector in developing countries

IFC Climate Business:

- IFC's involvement in climate business started in 1980s, with its initial foray into clean energy projects.
- In FY17, IFC invested \$4.8 billion (own account and mobilization), which was 25% of IFC's total investment that year.
- IFC is committed to meeting its climate goals of 28% of its total own account commitments and leveraging \$13 billion in external private sector capital by 2020.

Climate Finance of IFC Climate Business Department:

- Climate Finance aims to use financial innovation and develop new financial products to leverage private sector funds to climate projects and scale up investments.

WHY FORESTS? WHY REDD+?

PROTECTING FORESTS IS CENTRAL TO ADDRESSING CLIMATE CHANGE

- Each year, the world loses an area the size of Costa Rica in forests. Deforestation and forest degradation account for up to 20% of the world's greenhouse gas emissions—more than all cars, trucks, ships, planes and trains combined.
- Halting deforestation is essential to meet the global community's climate goals and keep global warming to 2 degrees Celsius. Just halving deforestation will require \$75 billion to \$300 billion in investment in the next decade.
- Climate finance focuses mostly on energy efficiency and renewable energy investments. Capital market mechanisms can offer efficient ways to channel funds into protecting forests.
- The multi award-winning inaugural IFC Forests Bond issued in October 2016 was a first-of-its-kind mechanism to channel private funds toward forest protection.



INAUGURAL FORESTS BOND

CONSERVATION THROUGH FINANCIAL INNOVATION

- Private sector solution to a global challenge: US\$152 million 5-year bond issues in October 2016 was first-of-its kind replicable, scalable solution to catalyze funding into forest protection.
- First attempt to build capital markets infrastructure to channel funding for an area that has otherwise received little commercial financial support, but is key to meeting climate goals.
- Principal-protected fixed income instrument issued under IFC's AAA-rated program pays the total \$12 million coupon optionally in the form of carbon credits or cash.
- IFC partnered with BHP Billiton, a leading global resources company, to offer an innovative price support mechanism equivalent to the value of the coupon over five years.
- Coupon supports forest conservation in Kenya and offers an option to deliver voluntary REDD (forestry carbon) credits to bondholders.
- The Project supported by the coupon is expected to reduce deforestation, protect endangered plant and animal species, and develop sustainable economic opportunities for communities in Kenya
- HSBC named this “green coupon” bond as an innovative extension of the green bond market.

INAUGURAL FORESTS BOND

THE STRUCTURE



Environmental
Finance
Deals of the Year Awards

President's Awards
for Innovation & Excellence

June 1st, 2017



Notes:

1. On the Issue Date, investors in the Notes will pay US\$152 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 VCUs per Note at a fixed price of \$5 per VCU.
3. In addition to having the ability to retire the VCUs, a noteholder may also independently sell them into the VCU market.
4. IFC will buy the VCUs generated by the Project during each generation period on an annual basis. IFC's annual contract volume is 469,984 VCUs.
5. In respect of each interest payment date, IFC will use the VCUs purchased from the Project (per note 4) to meet investor demand for physical delivery of VCUs, and it will put to BHPB all the unused VCUs, i.e. the amount of VCUs that noteholders have not elected to receive. Maximum annual volume puttable to BHPB is 469,984 VCUs.
6. Investors are not exposed to any credit or performance risk of BHPB.
7. The total cash value of the price support provided by BHPB 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 BHPB under the Put Option is not used, then BHPB, by agreement with and via IFC, will apply the remainder to purchase VCUs from the Project for BHPB's own account

OUTCOME OF INAUGURAL FORESTS BOND

LESSONS LEARNED AND COUNTERMEASURES

- \$152 million over-subscribed and listed on the London Stock Exchange
 - ✓ Replicate and scale up!
- No bondholder has chosen coupon in the form of Verified Carbon Units but in cash in the past two coupon payments
 - ✓ Countermeasures are needed to boost investors demand and develop carbon markets
- Assisted Verified Carbon Standard based voluntary REDD+ project in Kenya
 - ✓ Immediate action was needed to help forest conservation even it is in voluntary markets rather than wait another few years for sovereign-driven compliance market to emerge
 - ✓ Now countries are moving towards jurisdictional REDD+ under Paris Agreement
- \$12 million, equivalent to the total \$ value of coupon payments are invested in a REDD+ project
 - ✓ More funding is needed, especially upfront financing

NEXT STEP: CLIMATE BONDS FOR FORESTS PROGRAM

PROGRAM GOALS

- 1) *Help host countries meet international goals under Paris Agreement*
- 2) *Provide additional funding to support private sector REDD+ activities*
- 3) *Boost investor demand by developing market for forestry Emission Reductions (ERs)*

THE CLIMATE BONDS FOR FORESTS (CBF) PROGRAM

HOW TO ATTAIN THE GOALS?

Support Jurisdictional Framework

- Align with Forest Carbon Partnership Facility (FCPF) program managed by World Bank
- Capacity Building to enhance work done by FCPF, with focus on improving benefit sharing with private sector activities and avoiding double counting

Additional Funding to Private Sector REDD+ Activities

- Build capital markets infrastructure to channel funding to forestry sector
- Buy ERs from private sector activities
- Extend upfront debt finance to private sector activities

Boost demand and ER Markets

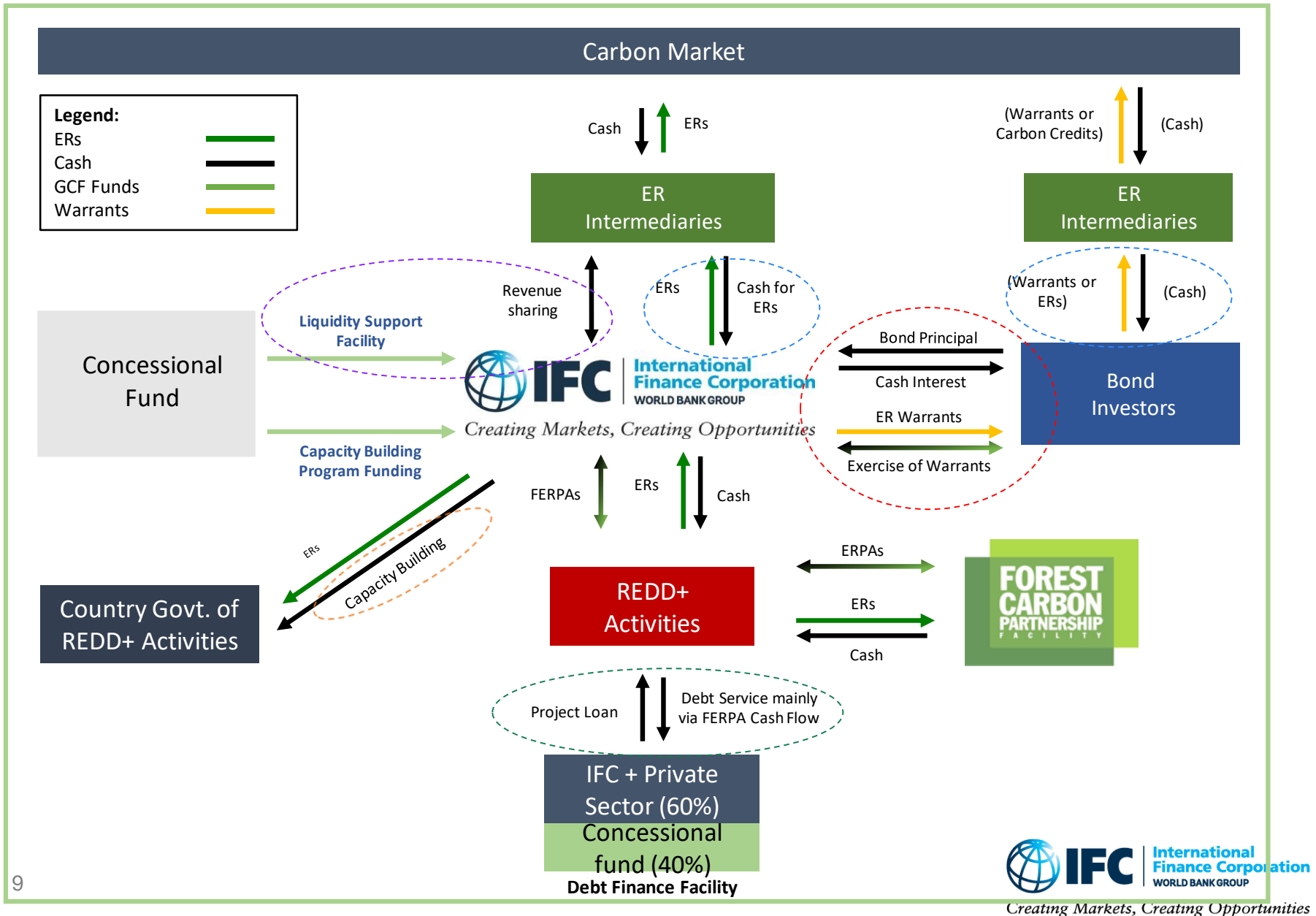
- Boost investor demand by marketing ERs through Intermediaries
- Build and support ER markets in anticipation of implementation of the Paris Agreement

CBF PROGRAM COMPONENTS

FIVE COMPONENTS

| Components | Objectives |
|--|--|
| Climate Bonds for Forests (\$450 million) | <ul style="list-style-type: none">• 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) | <ul style="list-style-type: none">• Provide upfront debt finance to forest carbon positive activities implemented by private sector entities |
| Carbon Market Commitment (\$11.25 million) | <ul style="list-style-type: none">• 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) | <ul style="list-style-type: none">• Provide some price support to reduce the downside risk for Intermediary that sells a portion of ERs |
| Capacity Building (\$7.5 million) | <ul style="list-style-type: none">• 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) |

THE STRUCTURE

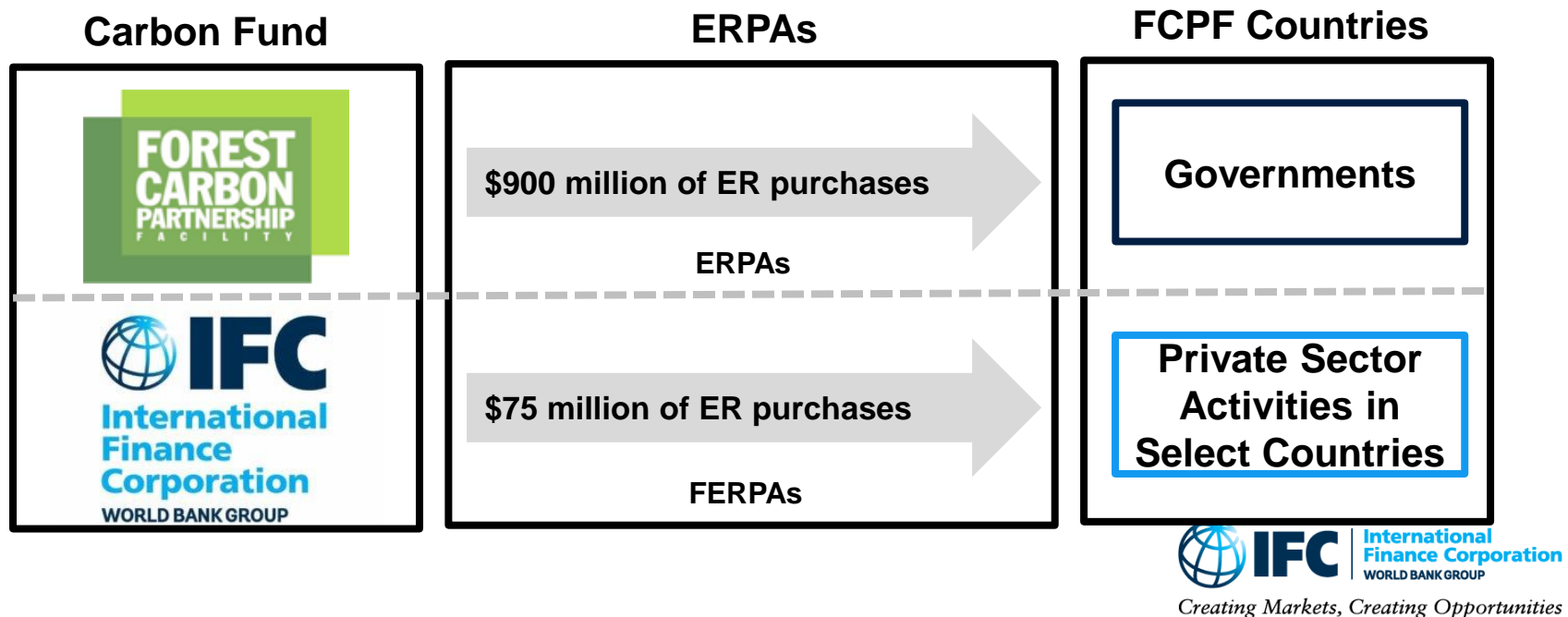


CBF – FOREST EMISSION REDUCTIONS PURCHASE AGREEMENT (FERPA)

BRINGING ADDITIONAL FUNDING TO REDD+ ACTIVITIES

1. IFC to invest alongside the FCPF Carbon Fund

- Expected ER purchases of \$75 million (3mm credits/year for 5 years)
- FERPA signed with private entities in target countries for FCPF compliant ERs
- FCPF & IFC to work with governments and stakeholders to develop an approach allowing IFC to purchase ERs where benefit accrues to private entities (as IFC must transact with private entities)



LIQUIDITY SUPPORT FACILITY

BOOSTING DEMAND FOR FOREST RELATED ERs

2. Intermediary to boosts investor demand

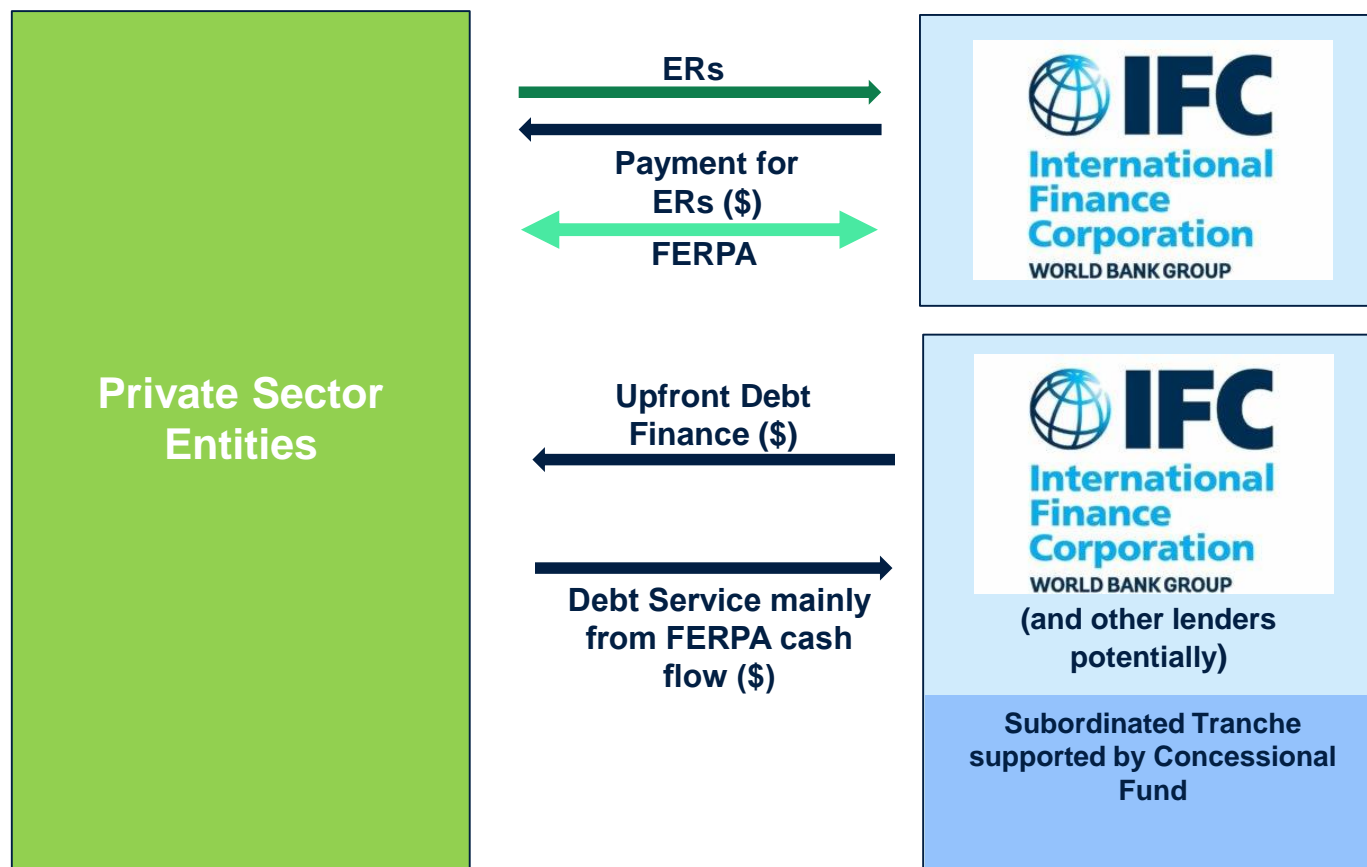
- Private sector global climate commodity trader(s) (Intermediary) will be engaged to sell a portion of ERs sourced under FERPA
- \$63.75 million Liquidity Support Facility (LSF) supported by Concessional Fund will provide some price support to reduce the downside risk for Intermediary
- At least half of the total 15 million ERs (7.5 million ERs) will be delivered to Intermediary and will be sold to international investors
- By exercising warrants, Bond investors can choose annual coupon payment in the form of ER
- Intermediary(ies) will also help Bond investors to monetize ERs or options on ERs. Mechanism TBD but may include providing a “bid” for ERs. No financial commitment will be required.

DEBT FINANCE FACILITY

BRINGING ADDITIONAL FUNDING TO REDD+ ACTIVITIES

3. IFC to provide upfront lending

- \$30 million debt funding to private sector entities to accelerate implementation and bolster capacity to deliver ERs

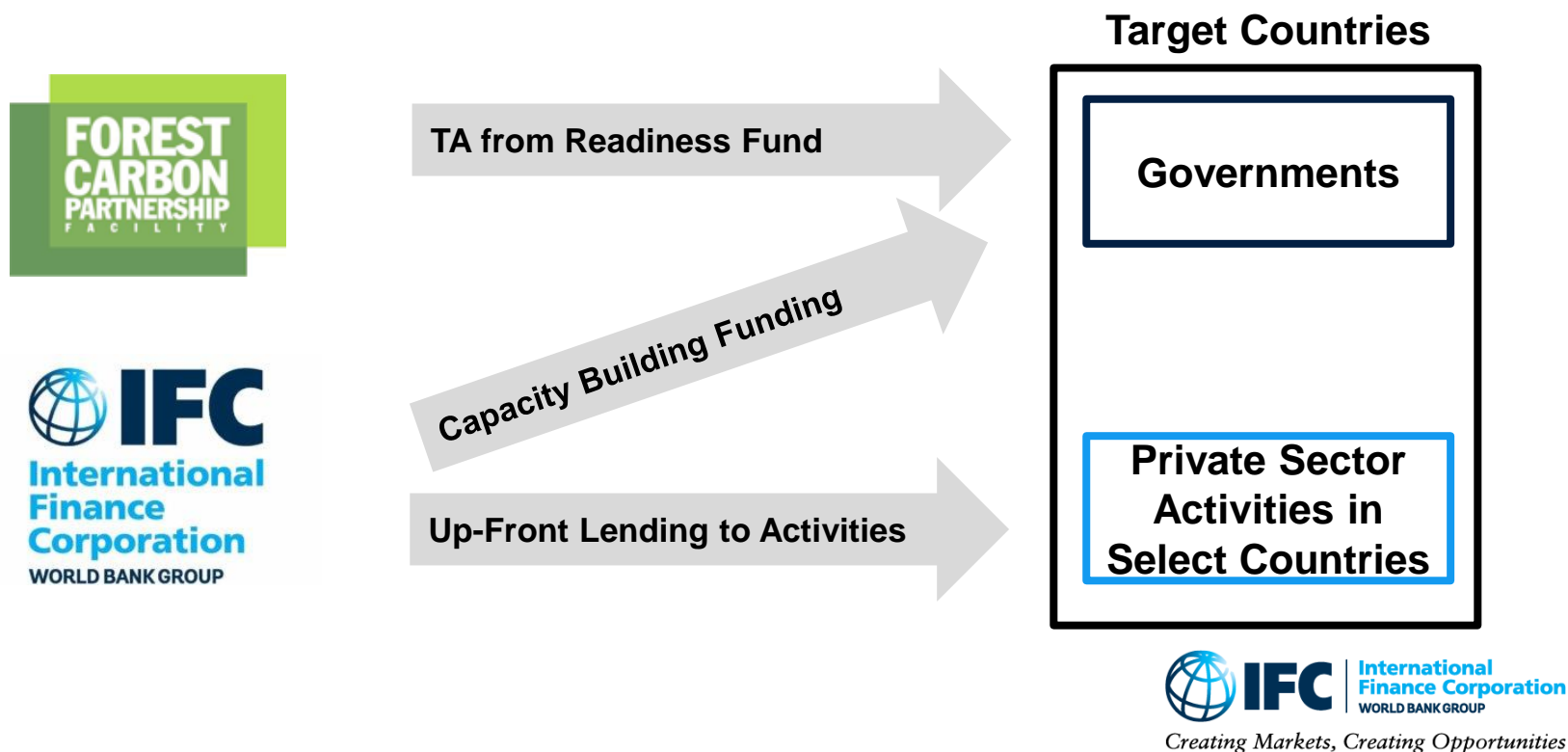


CAPACITY BUILDING

HELP HOST COUNTRIES MEET INTERNATIONAL GOALS

4. Capacity Building

- \$7.5 million funding to complement FCPF in helping governments incorporate private sector activities
- Specific needs by each country will be analysed on a case by case basis. Examples are outlined in the next slide.



CAPACITY BUILDING - CONTINUED

HELP HOST COUNTRIES CROWD IN PRIVATE FUNDING

Examples:

- Enhancing benefit-sharing agreements to ensure that private sector entities within FCPF jurisdictions can receive ER titles and sell them
- Facilitating distribution of ERs from governments to implementation activities
- Establishment and refinement of national carbon accounting systems to enable coherence with FCPF jurisdictions
- Strengthening of stakeholder engagement platforms and processes to ensure full free prior and informed consent of all stakeholders, and gender sensitivity of program

PROGRAM BENEFITS

| | |
|---|---|
| ✓ | Program will further efforts to help countries ensure private sector engagement in jurisdictional REDD+ |
| ✓ | Provides pathway and mechanisms to channel private sector investment in forest conservation |
| ✓ | Up-front debt financing fills funding gap for implementation of activities |
| ✓ | IFC capital market solutions will boost demand, liquidity and price transparency for REDD+ ERs |
| ✓ | Provides Capacity Building to integrate private sector actions into jurisdictional accounting system, and enhance benefit sharing mechanisms to ensure inclusion of private sector activities |

THANK YOU!



Kiyoshi Okumura, CFA
Senior Investment Officer
Climate Business Department
International Finance Corporation
kokumura@ifc.org
+1 (202) 473-0157

