GREEN FINANCE

workshop for project developers and fund seekers

Olha Krushelnytska, GEF workshops, 2019

ABOUT

This workshop provides a broad overview of green finance issues

FROM THE PROJECT-DEVELOPER AND FUND SEEKER PERSPECTIVE

and provides examples of how to access private financing:

30 min	PART 1: CONCEPTUAL OVERVIEW: FINANCING NEEDS, ACTORS, CONSTRAINTS, INSTRUMENTS AND PARTNERSHIPS
30 min	Q&A
30 min	Break
30 min	PART 2: PROJECT EXAMPLES AND TEMPLATES
Remaining	Discussion

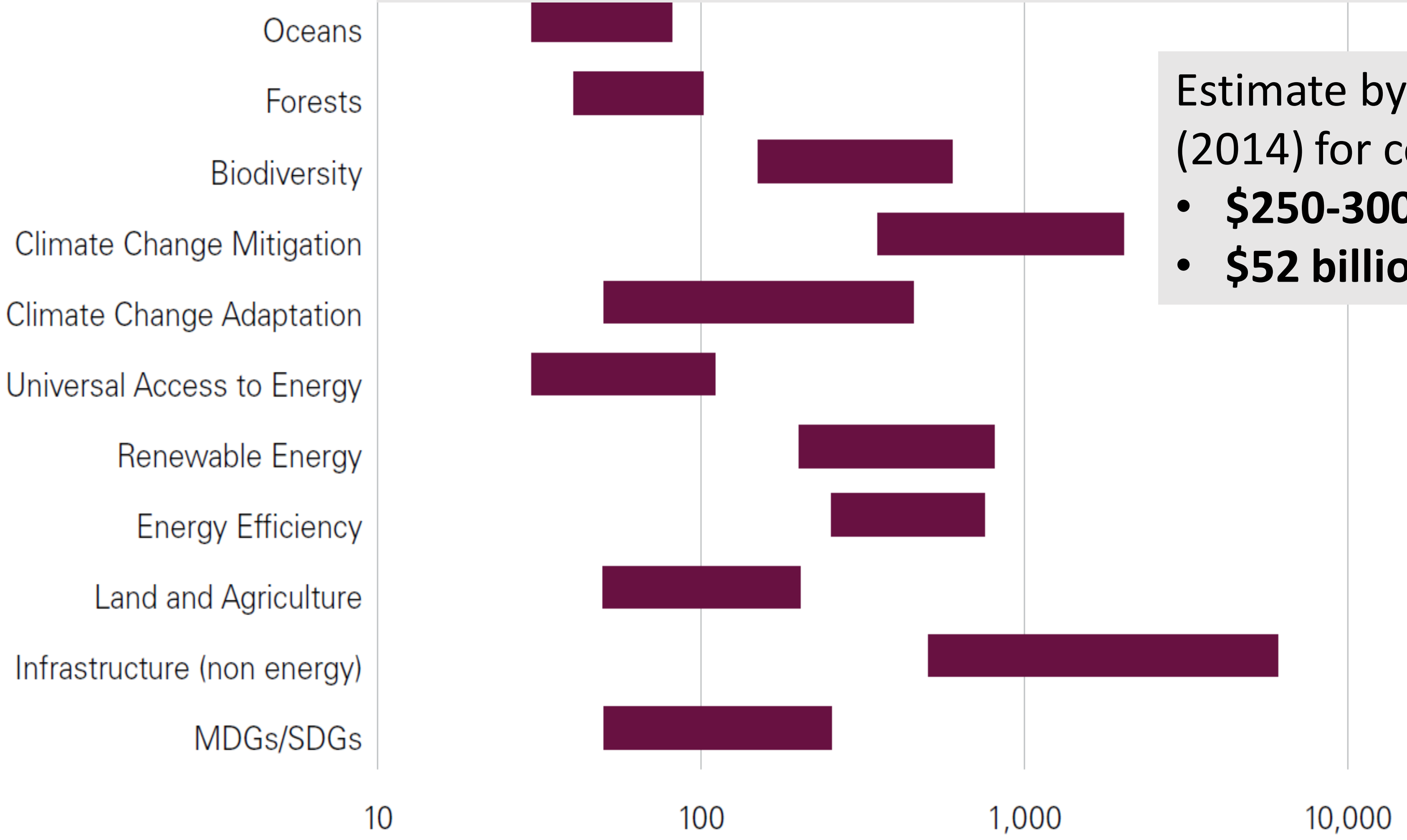
GREEN FINANCE: use of financial products and services (loans, bonds, private and public equity, insurance instruments) in 'green' (eco-friendly) projects. Green finance is more than climate finance: it includes land, forests, water, oceans, etc.

1. CONTEXT:
NEEDS, ACTORS, CONSTRAINTS AND INSTRUMENTS

FINANCING NEEDS: $400-600 BILLIONS / YEAR

Investment requirements: ranges of estimates in $ Billions per year

UNTT working group on Sustainable Development Financing (2013)



Estimate by Credit Suisse, WWF & McKinsey (2014) for conservation finance:

- **$250-300 billion per year needed**
- **$52 billion was available** in 2014

PUBLIC FUNDS CAN COVER < 15% OF THE GAP → LESS THAN 1% OF PRIVATE FUNDS CAN MEET THE GAP

FINANCING NEEDS: CLIMATE ONLY

USD 30-100 billion/year to 2050

Developing country adaptation

Source: WDR 2010

USD 140-175 billion/year over 20 yrs

Developing country mitigation

Source: WDR 2010

USD 5-30 billion/year

Current needs for adaptation in Africa

Source: UNEP

USD 1 trillion/year to 2050

Global energy sector transition to stabilize at 2ºC

Source: IEA

INVESTMENT TYPES AND ACTORS

SUSTAINABILITY SMILE

by Patrick Drum, Saturna Capital (2016)

INSTITUTIONAL INVESTORS
Environmental, Social and Governance (ESG) reports

Carbon Divestment Campaign
Greening supply chains
Negative screening

IMPACT INVESTORS
GREEN VENTURE CAPITAL
GREEN BANKS
green bonds

CONSTRAINTS

1. POLICY, INSTITUTIONS AND REGULATIONS

- Legal and regulatory framework
- Financial markets and Institutional development

2. PROJECT-LEVEL

- Lack of bankable projects (return), management track record (risk), scale

→Blended Finance

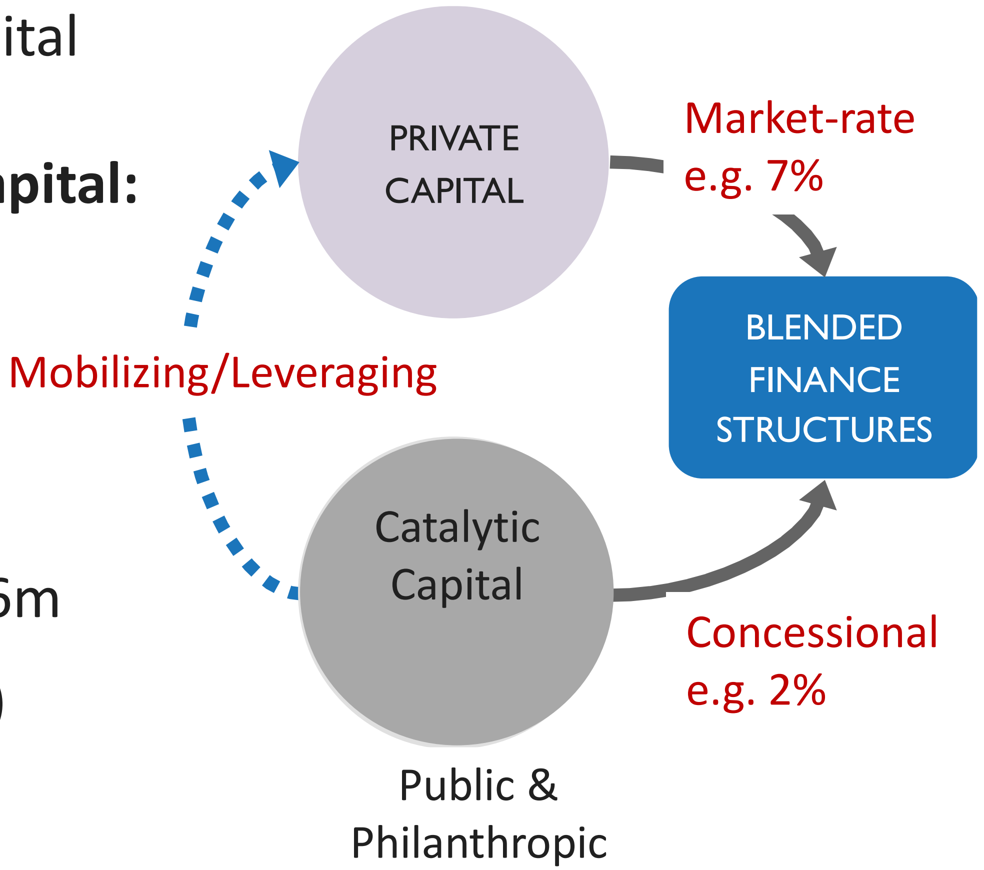
DEFINING BLENDED FINANCE

- **Use of catalytic capital** from public/philanthropic sources to increase private sector investment for developmental impact

- **Structuring approach** that allows different types of capital

Reducing cost of credit by blending Public & Private capital:

- Project generates 6%
- Private funder needs 7% on $8m credit
- Public funder accepts 2% on $2m credit (concessional)
- Total: $10m, project generates 6%, $10m x 1.06 = $10.6m
- Private funder receives: 1.07 x $8m = 8.56 (7% on $8m)
- Public funder receives: 1.02 x $2m = 2.04 (2% on 2m)



MAIN FINANCIAL INSTRUMENTS IN CONSERVATION

DEBT

Loan: private transaction, interest payment, specific time, collateral

Bond: public (min $100m)

Seniority matters:

- Debt is senior to Equity
- Senior vs junior debt
- Senior: safer, lower %

EQUITY

Ownership in the business
$ = Capital gain + Dividends

Seniority matters:

- Preferred vs common (junior) shares in liquidation
- Dividends different/greater

RISK MNGT INSTRUMENTS

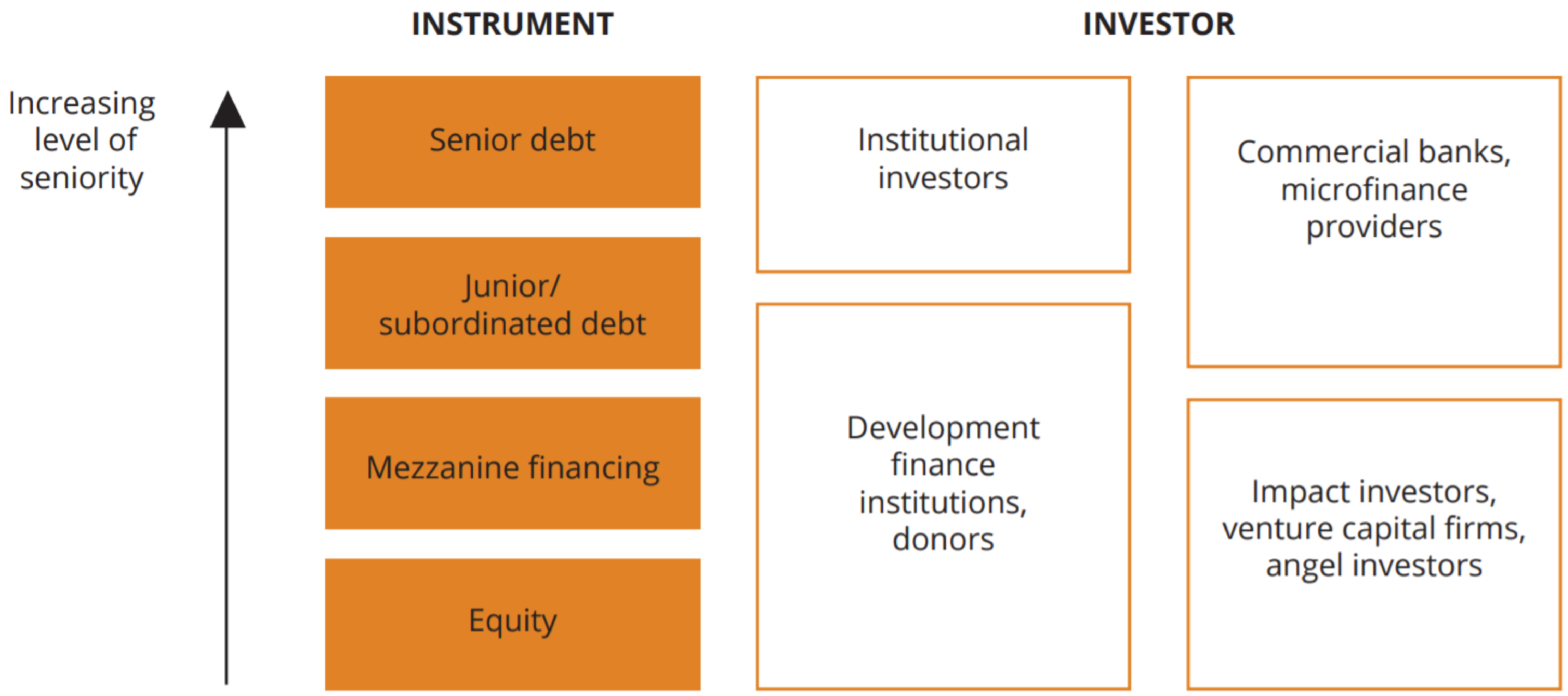
GUARANTEES / INSURANCE / DERIVATIVES

Guarantee - the guarantor will take the first “hit” (up to a predefined limit) in exchange for a fee

Credit guarantee – covers non payment by private borrowers

Performance guarantee - for the contractor to perform the obligations

TYPICAL SENIORITY OF DIFFERENT FINANCIAL INSTRUMENTS AND THEIR INVESTORS



GLOBAL SUCCESS OF BLENDED FINANCE REQUIRES SIGNIFICANT PARTICIPATION FROM KEY STAKEHOLDER GROUPS

DEVELOPMENT AGENCIES

Global Affairs Canada
USAID FROM THE AMERICAN PEOPLE
European Commission
Department for International Development
aecid
Sida
JICA
Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra
AFD
Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung

MULTILATERAL DEVELOPMENT BANKS AND NATIONAL DEVELOPMENT FINANCE INSTITUTIONS

IFC
Banque Africaine de Développement / African Development Bank
European Investment Bank The EU bank
gef
CDC Investment works
OPIC
EDFI European Development Finance Institutions
ADB
FinDev Canada
FMO Entrepreneurial Development Bank
KFW DEG

PRIVATE INVESTORS

Deutsche Bank
UBS
Allianz
storebrand
BNP PARIBAS
AXA
Christian Super adding values to money
citi
Cordiant
JPMorgan Chase & Co.

PHILANTHROPIC FOUNDATIONS

Bill & Melinda Gates foundation
MacArthur Foundation
The Rockefeller Foundation
ON Omidyar Network
Ford Foundation
DOEN Foundation
Calvert Foundation
Shell Foundation
ACCION
Aga Khan Foundation An agency of the Aga Khan Development Network

BLENDED FINANCE - SIMPLE EXAMPLES

FORESTRY FUND – EQUITY

- Forestry companies need capital. Private investors reluctant to invest: long payback periods, lack of track record, uncertainty over product prices
- The Fund will provide long-term equity funding to 5-6 existing projects to scale them up, so they can further attract debt financing from financial institutions
- The GEF has taken a lower return/higher risk position in the fund, which helps lower risks for private sector investors
- The interests of private sector equity investors are closely aligned with those of the other shareholders: they want to add value by ensuring effective governance and high environmental & social standards of funded companies.

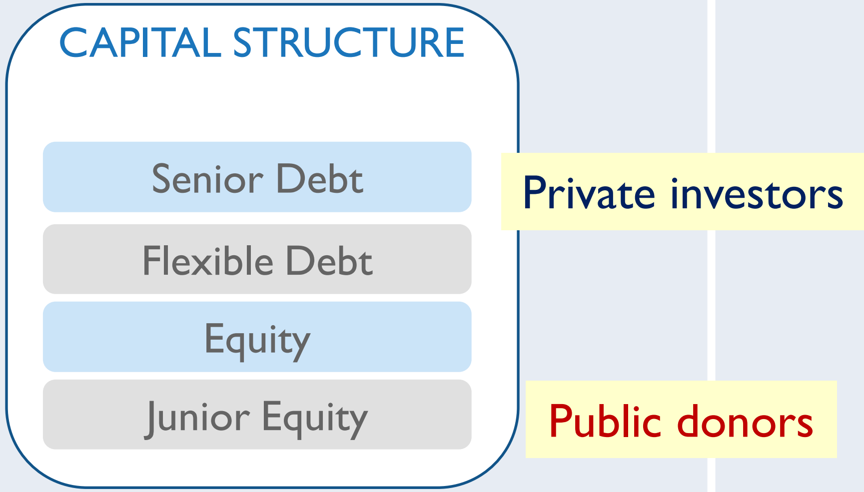
FISHERIES FUND – DEBT

- Fund for sustainable small-scale fisheries will provide long term financing: debt and equity investments to community fisheries operating in the sustainable seafood
- Capital to be used for the acquisition of fixed assets
- GEF invests in loans of 5-7 years and expects to earn 10-15% return

MAIN ARCHETYPES & INSTRUMENTS USED IN BLENDED FINANCE

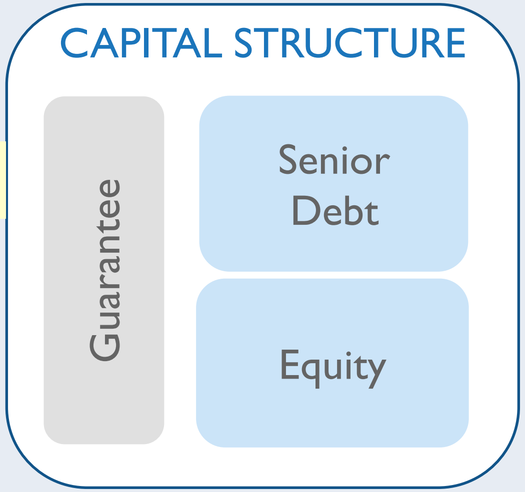
DEBT OR EQUITY

- Public/ philanthropic investors are concessional within the capital structure
- Subordinate and/or junior terms compared to co-investors



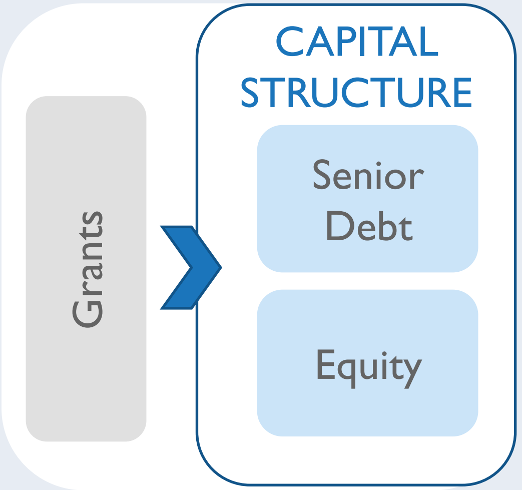
RISK MNGT INSTRUMENTS

- Risk reduction tools that protect investors against capital losses
- Helps to narrow gap between real and perceived risk



PREPARATION FUNDING GRANT

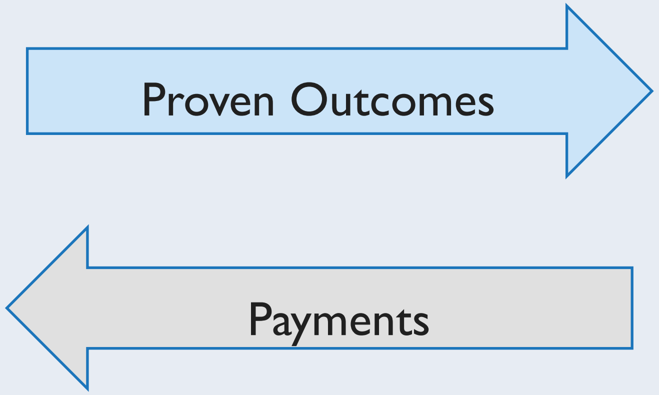
- Grant funding that supports costs and activities that lead to bankability of projects (e.g. Project Dev Facility)
- Typically provided by those who have a higher risk tolerance (eg: foundations)



MAIN ARCHETYPES & INSTRUMENTS USED IN BLENDED FINANCE

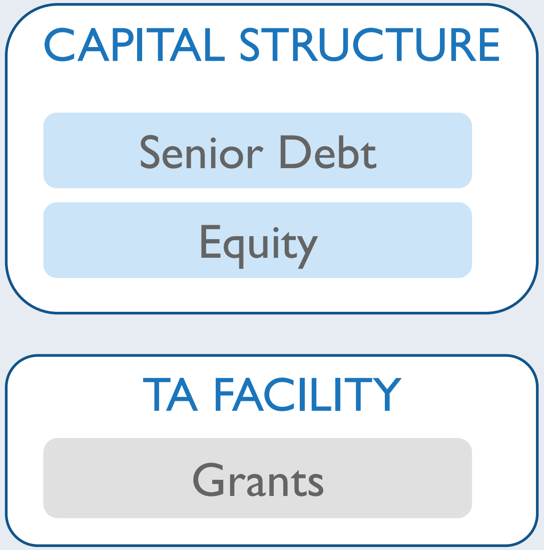
OUTCOMES BASED PAYMENTS

- Approach that ties the payment for service delivery to the achievement of measurable outcomes
- Typically the payor for outcomes (usually governments or foundations), agrees to provide funding if and when the services delivered achieve a pre-agreed upon result
- Examples include Development Impact Bonds and Social Impact Incentives



TECHNICAL ASSISTANCE GRANT

- Funds to supplement the capacity of investees
- Aim of technical assistance is to maximize the quality of project implementation - e.g. policy reform




BREAK

1. CONTEXT:
NEEDS, ACTORS, CONSTRAINTS AND INSTRUMENTS

2. PROJECT EXAMPLES & TEMPLATES

GEF NON-GRANT INSTRUMENT (NGI)

GEF-7

- $136 million
- Debt, equity or risk guarantees
- Max $15 million per project, exceptions possible

GEF-6

- 11 projects • $99.5M from GEF • $1.79B co-financing

GEF-6 NGI: JUNIOR EQUITY FOR RENEWABLE ENERGY

GEF invested in $15m junior equity, co-financing $190m
Development Bank of South Africa

- The Equity Fund for the Small Independent Power Producers
- **Barrier:** high capital costs for small-scale producers
- **Solution:** GEF accepts below-market return
- DBSA will help resell initial investments after projects have begun power production
- Result: **reduce capital costs for small-scale producers** and **attract private capital**
- **Revenues: i**nstallation of close to 100MW of renewable energy

GEF-6 NGI: JUNIOR EQUITY FOR AGRO-FORESTRY

GEF invested in $12m junior equity, co-financing $50.8m
African Development Bank

- Moringa Agro-Forestry Fund for Africa
- Managed by the AfDB
- Fund: 5-6 replicable agroforestry projects in sustainable land management
- Burkina Faso, Cote d'Ivoire, Kenya, Mali, Tanzania, Zambia, Congo DR
- **Barriers:** private sector Investors reluctant to invest in agro-forestry due to long payback periods, lack of track record, product price uncertainty
- **Solution:** GEF takes junior equity position - lowers risks for private investors
- **Activities/revenues:** plantation forestry and agricultural products

GEF-6 NGI: GUARANTEES & SUBORDINATED DEBT FOR LAND RESTORATION

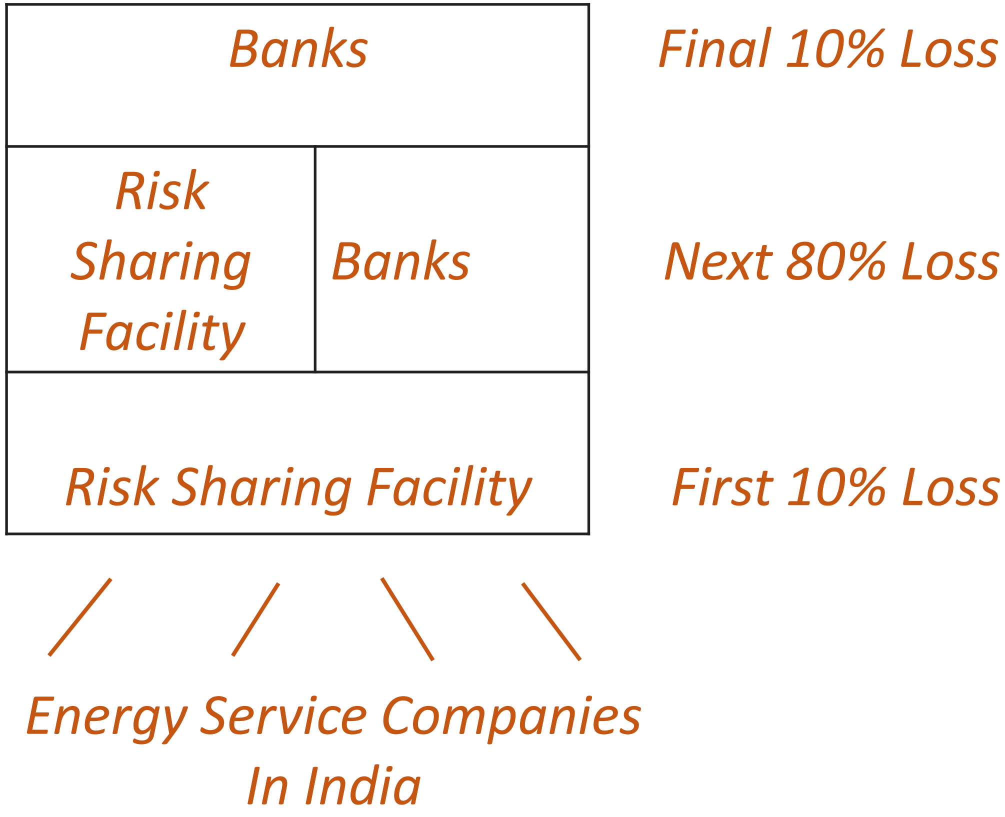
GEF $15m used as guarantees and subordinated loans, co-financing $120m
Inter-American Development Bank

- Private sector seeks investments in the restoration to bring lands into production
- **Barriers:** longer payback periods, various types of high financial risk
- **Solution:** GEF funds used as guarantees and subordinated loans – reducing perceived risk – catalyzing PS investments
- **Activities/revenues:** land restoration, landscape regeneration; intercropping; shade-grown systems; high-value forest products; silvo-pastoral systems

GEF-5: GUARANTEES FOR ENERGY EFFICIENCY PROGRAM

GEF $18m as guarantees, co-financing $152m World Bank

- Energy Service Companies - private enterprises that implement improvements to reduce energy consumptions - seek lending for equipment and process improvements
- **Barriers:** companies lack access to commercial credit - high collateral required by the banks
- **Solution:** credit enhancement guarantee program, including Partial Risk Sharing Facility to share risk with commercial banks



HOTELS INSURE CORAL REEFS

Swiss Re + The Nature Conservancy + Government of Mexico

- Hotels + local org dependent on tourism + gov of Mexico pay premiums in a collective insurance pot - fund backed by the gov and managed by Swiss Re
- Premiums: between $1m-$7.5m per year
- Insurance policy: 60km stretch of reef and beach, monitored
- If storms damage the reef system, the insurer (Swiss Re) will pay out around $25m-$70m in any given year
- Payouts will be used for restoration of the reef

OUTCOMES-BASED FINANCING FOR RHINO CONSERVATION

- Impact Investors pay → SPV → NGO to increase rhino population
- SPV (special purpose vehicle): to channel funds + account losses/profits
- Based on indicators achieved: full or partial repayment:

  Donors (Outcome payers) repay → SPV → Impact Investors
- Result: risk transfer + efficiency + + Gov will have more money later to repay

Implementing agent:

Supporters:

Implementing partners:

CPIC CONSERVATION INVESTMENT TEMPLATES

- **Public-Private Partnership for Marine Conservation**
- **Forest Conservation Easements**
- **Forest Resilience Bond**
- Smallholder Cocoa Renovation & Rehabilitation
- Environmental Impact Bond for Green Infrastructure

CPIC = Coalition for Private Investors in Conservation

TEMPLATE: PPP FOR MARINE CONSERVATION

Geography: Caribbean island states, South East Asia

Investments: loans to businesses (PPPs) for the management of MPAs

Revenue: Visitors fees + tourism activities: diving, snorkeling, tours, water sports

Revenue dependency: min 100k ‘blue’ tourists per year and 200k fee visitors

MPAs management via Special Purpose Entity (SPE):

- to receive loan from investors and invest in MPAs
- get user fees an pay back to investors
- to keep liabilities, taxation, and regulation as a distinct legal entity

Investment sought: average debt $2.5m per SPE, 8 year, 2 years grace period

Investors: DFIs, private impact investor funds, and national stakeholders (HNWIs)

TEMPLATE: FOREST CONSERVATION

Blended Finance: private equity invt + public funding (small business loans)

Revenue:

- Investors (timber companies) purchasing forests, or purchasing land and reforesting; sustainably manage it according to sustn certifications
- $ sale of land rights to Conservation Org via conservation easement
- Sustainable logging fees
- Carbon credits sold by land owners with sequestration commitment
- Permits from sportsmen club

Revenue dependency:

- Legislation allowing conservation easements for cash/tax credit (Africa: SA, Ghana, Kenya, Uganda, Tanzania)
- Conservation Org with sufficient capital
- Land with critical value/size

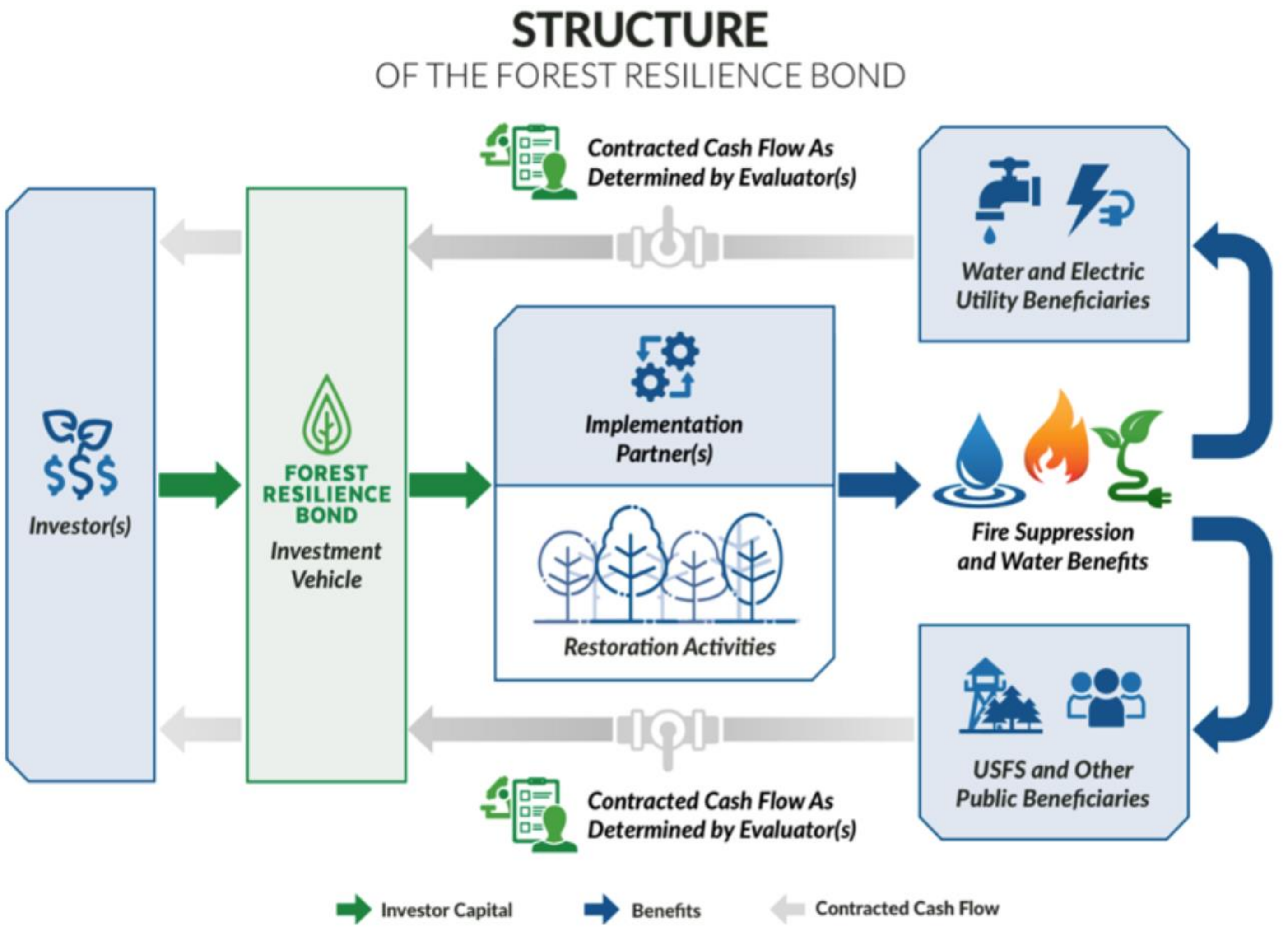
TEMPLATE: FOREST RESILIENCE BOND

- Metrics of success
- Investors - provide upfront capital
- Implement. partners - restoration
- Evaluators - measure success
- $: Beneficiaries → SPV → Investors

Benefit: reduced risk of severe wildfire

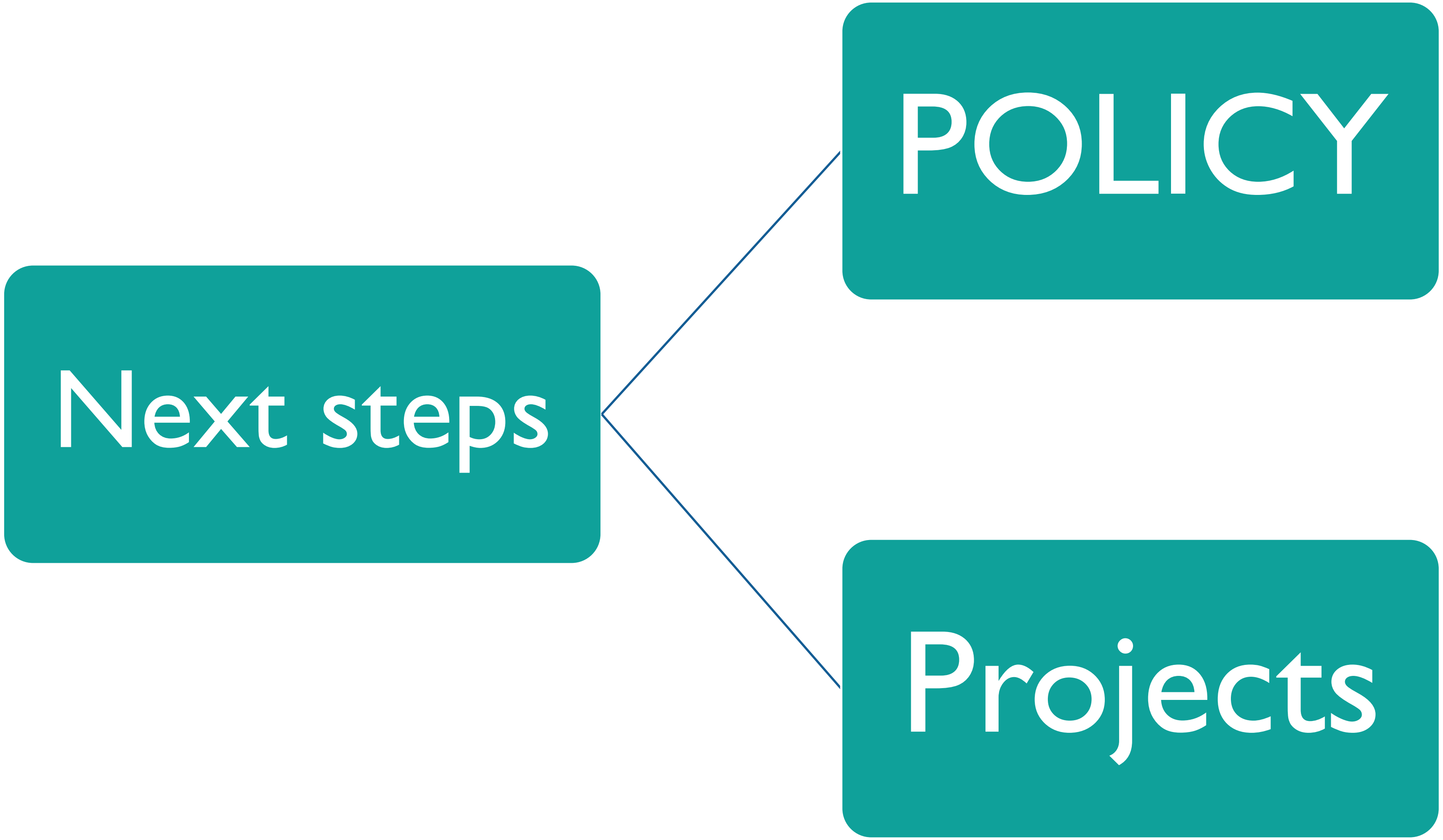
Beneficiaries:

- forest service
- water and electric utilities
- state and local governments
- private landowners
- water-dependent companies



Source: Blue Forest Conservation and Encourage Capital (2017)

WHAT DO WE DO NOW?



SELECTED PRIVATE GREEN FINANCE ACTORS

INSTITUTIONAL INVESTORS

- via CPIC or NaturVest at TNC (longer term)

IMPACT INVESTORS

- Mirova, NatureVest, Encourage Capital in Forest Bond example, Global Impact Inv Network
- Investisseurs & Partenaires - impact investing group for Sub-Saharan Africa

VENTURE CAPITAL

- WB InfoDev Climate Technology program: Kenya, Ghana, and South Africa
- GEF/UNIDO CleanTech Open

PARTNERSHIPS

- Coalition for Private Investors in Conservation (CPICfinance.com)
- Convergence - blended finance facility and database
- Green Banks: S.Africa, Indonesia, 5 in US, setting up in Rwanda & Colombia, 18 interested

QUESTIONS?

Olha Krushelnytska - okrushelnytska@thegef.org

RESOURCES

- 20+ studies on Private Sector Conservation Finance
  http://cpicfinance.com/resources
- Convergence database on Blended Finance transactions
  https://www.convergence.finance
- Green Finance Network on LinkedIn: 400+ global practitioners

ADDITIONAL CASES

GEF-6 NGI: REIMBURSABLE GRANT FOR RENEW ENERGY

GEF invested $10m, co-fin $25m AfDB, $920m (PDF)

- **Barrier:** lack of bankable projects and affordable funding
- **Solution:** GEF funds will support **Reimbursable Grant Project Preparation Facility** for RE in Africa
- **Activities:** Reimbursable grants for at least 10 RE project preparation to be repaid as project developers obtain financing; reflows

AGRICULTURE IN AFRICA

Transforming Agriculture

by Linking Technical Assistance to Blended Finance for Agriculture:

Trends and Lessons from Africa

Include publication: Transforming Agriculture by Linking Technical Assistance to Blended Finance for Agriculture

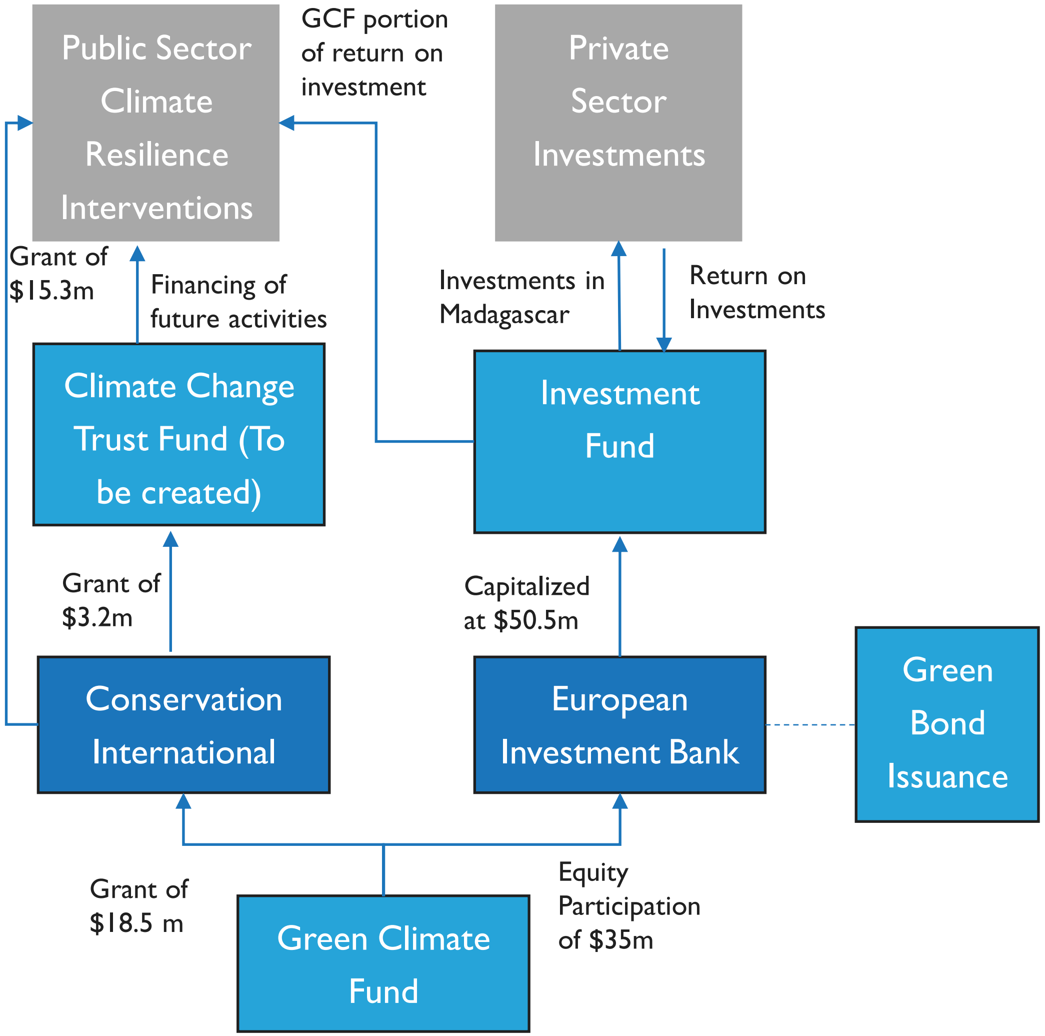
EXAMPLE OF A BLENDED FINANCE TRANSACTION - SUSTAINABLE LANDSCAPES IN EASTERN MADAGASCAR

- Project to enhance resilience of smallholders, reduce GHG emissions and channel private finance into climate smart investments; 562,000 direct beneficiaries targeted

- Adaptation/Mitigation activities implemented by public sector, funded through 1) GCF flow through grant of $15.3 m 2) GCF grant of $3.2 m for Climate Change Trust Fund

- Investment fund to target sustainable agriculture and renewable energy; capitalized by 1) GCF $35m equity participation 2) $10m raised through the private sector via forgone coupon on the issuance of EIB green bond 3) $5.5m from EIB's smallholder facility and fund manager

- Returns on GCF's equity participation to be recycled into Climate Change Trust Fund for adaptation/mitigation



GEF-6 NGI: SUBORDINATED, CONCESSIONAL DEBT FOR ENERGY EFFICIENT TRANSPORT

GEF invested $16m, Co-fin $155m, EBRD

- The Green Logistics Program by EBRD
- **Barrier:** high cost of capital (interest rate)
- **Solution:** GEF invests in subordinated debt → EBRD co-invests in projects that otherwise would be priced excessively +PS
- **Activities:** improved efficiency and productivity of freight transport in the Black Sea region