



**UNFCCC Regional Collaboration Centres**  
Promoting Action Against Climate Change

# Financing and use of the CDM



Grant A. Kirkman – SDM



**SUSTAINABLE  
DEVELOPMENT GOALS**  
17 GOALS TO TRANSFORM OUR WORLD

## Historical background

- ✓ **CMP.1** (3/CMP.1, Annex, para B 4(d)): COP/MOP shall *assist in arranging funding* of CDM project activities, as necessary
- ✓ **CMP.1** (3/CMP.1, Annex, para C 5(i)): CDM-EB shall make publicly available information on *projects needing funding* and *investors seeking opportunities*
- ✓ **CMP.11** (6/CMP.11, para 8): encouraged the Board to explore opportunities for *financing the CDM through international financing institutions*, such as the GCF\*
- ✓ **EB-88, EB-90, EB-91, EB-94, EB-97** *initiated neutral, unbiased, non-commercial support for several activities* and added several additional
- ✓ **CMP.12** (3/CMP.12, para 4): encouraged the Board to continue its *activities* in response to CMP.11 above
- ✓ **CMP.13** (3/CMP.13, para 2): encouraged the Board to continue its *cooperation with financial* institutions in response CMP.11 above



\*The Board **hosted a half-day in-session workshop** during SB44 (as per 6/CMP.11, para 9), a report is available online.

# Representation globally

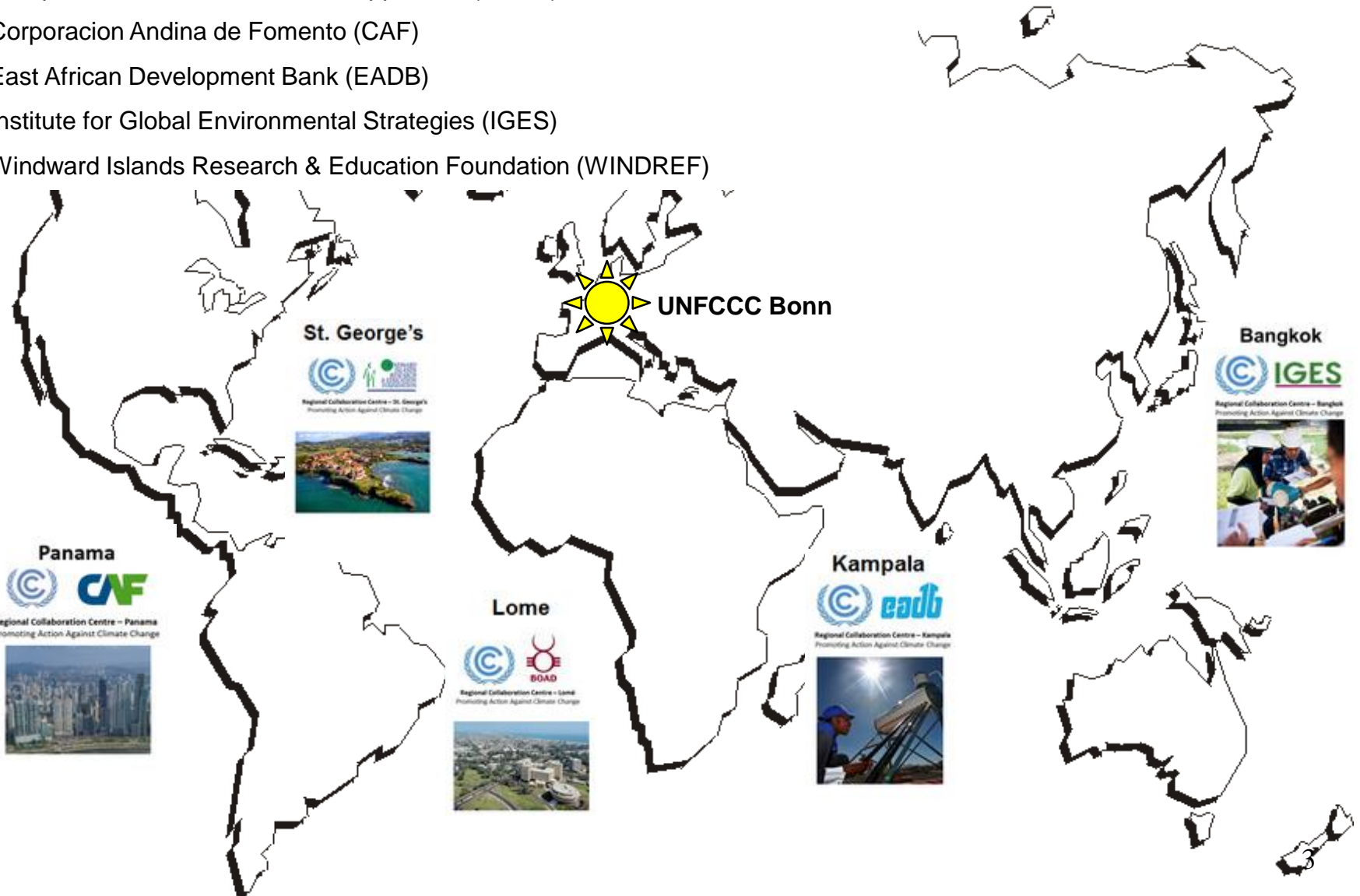
Banque Ouest Africaine de Développement (BOAD)

Corporacion Andina de Fomento (CAF)

East African Development Bank (EADB)

Institute for Global Environmental Strategies (IGES)

Windward Islands Research & Education Foundation (WINDREF)



# Supporting the CDM-EB since 2016

Board approved activities:

**Green Bond** support development of CDM project financing via green bonds

**Crowd-finance** for projects via crowd-investing & -funding platforms

**EADB** support to the East African Development Bank

**BOAD** support to the West African Development Bank

**IDBZ** support to the Infrastructure Development Bank of Zimbabwe

**UDB** support to the Uganda Development Bank

**ASEAN\*** loans and bonds for CDM projects in south east Asia

**Baker  
McKenzie.**

ClimateMundial



**IGES** Institute for Global Environmental Strategies



# Climate for finance (F4C)

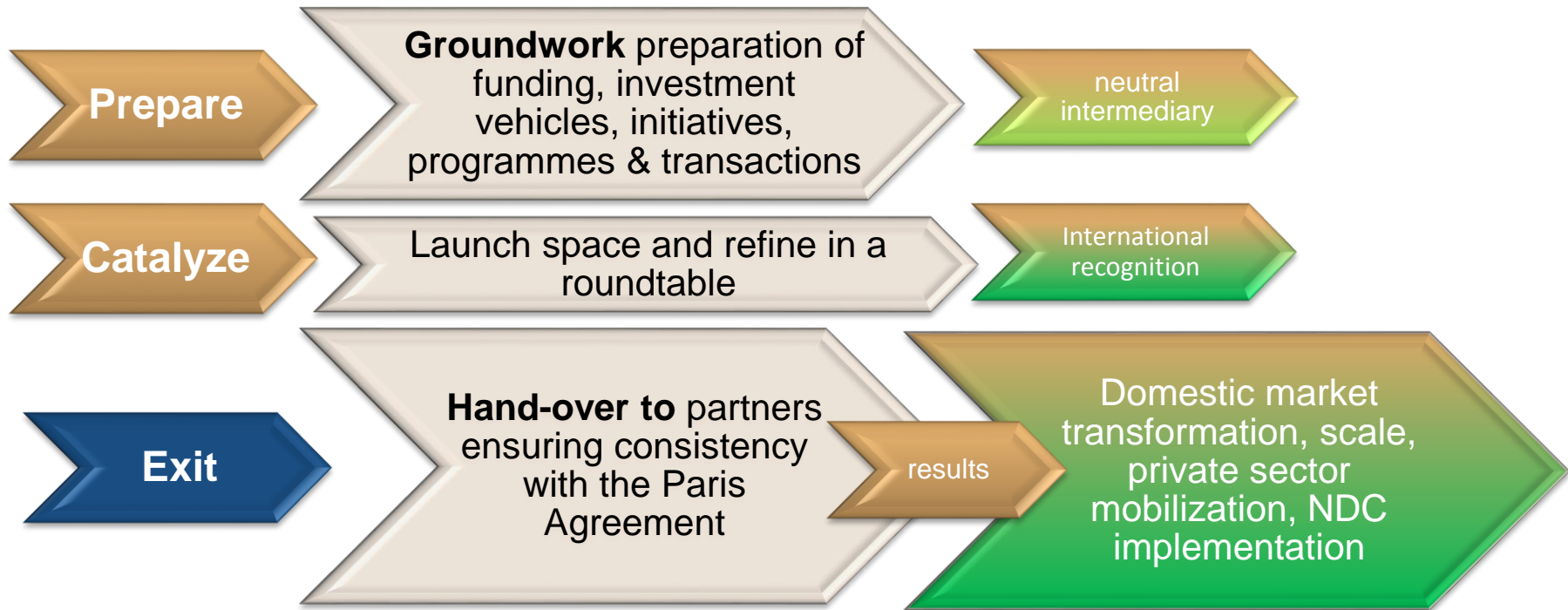
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- ✓ Works with **governments** actively promote **low carbon and climate resilient investments** in their countries and **disseminate information on their enabling investment environments** to investors and other market players
- ✓ Works with **financiers** to find markets, identify **co-financiers to form consortia**, access project **development funding** to support investment-mature projects, **provide access to risk mitigation instruments**, help **structure projects and financing along the Paris Agreement**
- ✓ Works with **project owners** to provide increased **visibility for their projects**, making it easier to **identify relevant financiers, advisors, service providers** for specific needs and **enable targeted and relevant engagements**
- ✓ Works with **financial institutions** in particular **bilateral funds, regional, multilateral development banks** on **mobilizing private capital**, assisting on **guarantees platforms**, and supporting **infrastructure** investment

The **Green Investment Catalyst** is a key tool



# GIC theory of change



*Pre-Paris finance meant the transfer resources from financial contributor(s) to recipient(s)*

*Post Paris finance means consistent achievement a common set of measurable results with the private sector*



# Objective

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- ❑ **GIC** focuses squarely on *implementation*, each GIC cycle is designed to catalyse several investment or finance vehicles e.g. debt (loans), equity (working capital), risk-sharing (guarantees, first-loss funds) or creditworthy intermediaries
- ❑ **GIC** connects the dots on finance for climate, by bringing together sources of finance with investment ready projects while ensuring implementation that supports alignment with a below 2-degree pathway
- ❑ **GIC** provides a *platform* for effective translation of policies, NDCs and national roadmaps into investment plans, producing integrated pipelines of bankable green and climate projects for long term capital market investment

To:

- ❑ Ensure demonstration effect – can others follow, and capital market take over
- ❑ Ensure additionality of finance - would the investment have otherwise occurred
- ❑ Ensure reduction of GHG emissions and resilience – does it contri

✓ VERiFiED



# Approach

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**GIC** is a three phase process executed with pre-selected partners:

## ❑ Phase 1: Prepare

- ✓ Laying the **groundwork** through preparation of funding or investment vehicles finance, and/or programmes that are NDC aligned - with a dedicated expert in country for 6-12 months

## ❑ Phase 2: Catalyse

- ✓ The neutral intermediary **space** where these programmes are refined, **catalysed**, and launched via a roundtable format or a similar event, supported by a large team

## ❑ Phase 3: Exit

- ✓ The post-event **continuity** where the Phases 1 and 2 are followed-up and handed-over to result in tangible investments and projects on the ground that are consistent with the objectives of the Paris Agreement





# Results – Africa

Established a high level advisory council of permanent secretaries of state (environment, finance, energy)

Development of a green finance framework & guidelines

IDBZ Climate Finance Division & demonstration projects, issuance of a first domestic green bond

Address capital markets issues and open up to international markets

Established a green finance (loan and bond) framework for Zimbabwe with the aim to encourage sustainable financial products such as green sustainable bonds and loans. Green finance frameworks will act as an investment promotion instrument to implement the NDC



*Empowered lives.  
Resilient nations.*



Konrad  
Adenauer  
Stiftung



**WORLD BANK**

**Climate Bonds** INITIATIVE



# Results – Africa

## Establishment of a Climate Finance Division at the Infrastructure Development Bank of Zimbabwe



Initiation of Green Climate Fund Accreditation Process **(February 2016)**

Expression of Interest to collaborate with UNFCCC on ClimFin. opportunities **(September 2016)**

Nomination of IDBZ for accreditation to the GCF, by NDA **(November 2016)**

CDM Board Decision to provide Technical Support for IDBZ ClimFin. Activities **(May 2017)**

Approval of GCF Readiness Funding for completion of Gap Assessment towards Accreditation **(October 2017)**

Incorporation of Climate Finance Pillar in IDBZ 2018-2020 Work Programme and Budget Framework **(November 2017)**

Engagement of Financial Sector players for First Zimbabwe Green Investment Catalyst Roundtable **(December 2017)**

IDBZ Board Approval for formation of Climate Finance Division (CFD/Climate Desk) **(December 2017)**



Ongoing technical assistance with partners



# Results – Africa

## A Climate Finance Facility (CFF) at the Development Bank of Southern Africa

### Catalytic role with blended finance approach

CFF will address market constraints, **playing a catalytic role with a blended finance approach**, to increase climate related investment in the southern African region.

### Subordinated debt/first loss + Tenor extension

CFF will focus on two main instruments: **subordinated debt / first-loss** and credit enhancements such as **tenor extension**

### Leveraging private investment

CFF is designed to **leverage private investment** with co-funders to reach an overall portfolio leverage ratio of **1:5** (project leverage ratios will vary within this range).

### Multiple co-funding sources

**CFF will raise co-funding from multiple sources** to be deployed in innovative structures and products, to support projects across southern African (SADC) countries



FP-0090 @ B.20



A launch with 200 private sector and public debt capital market representatives including targeted financial sector partners and government



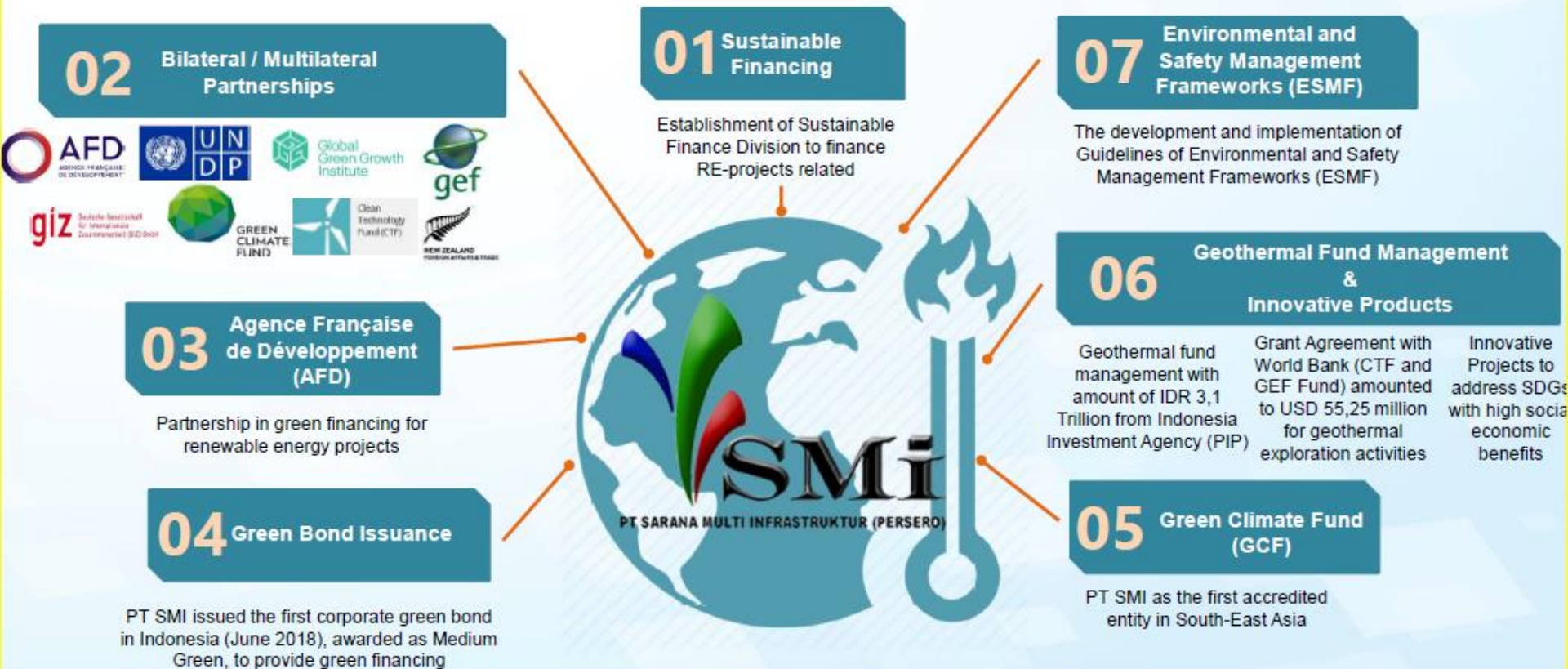
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# PT Sarana Multi Infrastruktur (Persero) - Indonesia



## PT SMI's Concrete Steps to Resolve Climate Change Issues



# Results – Asia

*Sustainability Bond Facility for Micro Finance Institutions (SBFMFI) – A bond facility for financing on lending to micro finance institutions in the region*

## Sustainability Bond Facility for Micro Finance Institutions

SBFMFI: Multi-tranche USD denominated sustainable bonds for MFI co-financing in CLMT

All terms are for illustration purposes only

Version June 2018

### Terms and Conditions

Issuer	SBFMFI, Sustainable Bond Facility for Micro-Finance Institutions in Cambodia, Laos, Myanmar, and Thailand																								
Project company:	SBFMFI, a joint venture company established in Thailand. The company serves as a vehicle for issuance and disbursement of funds to designated country fund manager																								
Structure type:	Sustainability Bonds backed by loan guarantees providing a local AAA rating to provide low cost loan, funding for MFI on-lending to the poorest																								
Underlying investments:	Underlying sustainable and green projects towards smallholder farmers and urban lenders, channeled through MFI's. Include: sustainable irrigation, fertilizers, crop seed, community solar lighting, sustainable housing, sustainability related insurance products.																								
Borrowers:	Microfinance Institutions in Thailand, Cambodia, Myanmar and Laos with an established track record																								
Tenor, issuance indicative size and coupon (example only):	<table><tr><th>Class Amount</th><th>Amount (in USD million)</th><th>Repayment Type</th><th>Tenor / WAL (in years)</th><th>Rating</th><th>Coupon p.a. (%)</th></tr><tr><td>AAA</td><td>50</td><td>Amort</td><td>5</td><td>AAA</td><td>3</td></tr><tr><td>B1a</td><td>25</td><td>Amort</td><td>5</td><td>BBB</td><td>4</td></tr><tr><td>B1b</td><td>25</td><td>Bullet</td><td>5</td><td>BB</td><td>5</td></tr></table>	Class Amount	Amount (in USD million)	Repayment Type	Tenor / WAL (in years)	Rating	Coupon p.a. (%)	AAA	50	Amort	5	AAA	3	B1a	25	Amort	5	BBB	4	B1b	25	Bullet	5	BB	5
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AAA	50	Amort	5	AAA	3																				
B1a	25	Amort	5	BBB	4																				
B1b	25	Bullet	5	BB	5																				
Issue Price	100.0%																								
Interest Payments	Quarterly																								
Listing	Thailand (SET) market																								
Potential partners:	<ul style="list-style-type: none"><li>Credit Guarantee and Investment Facility or GuarantCo (Credit enhancement)</li><li>Twin Pine (Consulting partner on arrangement)</li><li>Netafim/Mexicehm (Technology provider)</li><li>UNCDF (fund manager)</li><li>Vigeo Eiris (External reviewer)</li></ul>																								

### Business case

- MFI's in the region need to expand the demand for MF with lots of sustainable scalable projects available
- Expansion funds are limited and consisting of increasing deposits and external funds from dedicated bilateral-funds such as Nordfund, and DFIs such as FMO etc.
- Deposited funds are short term - few months while sustainable projects tenors are several years
- Currency risks, country specific regulatory requirements such as local currency lending, interest rate caps and ownership limitations, provide a challenging financing environment for MFIs
- Microfinance institutions that target rural households are particularly relevant and significant for smart and sustainable agriculture practice in the region
- MFIs that work towards the development of crop insurance will be included, to address resilience & adaption
- Urban microfinance schemes for energy efficiency and households will also be financed through the facility
- SBFMFI provides MFI's and investors a win-win proposition

### Key Aspects

- Transaction is a million multi-tranche senior secured fixed rate notes supported by a guarantee attracting various investor profiles
- Transaction is a sustainability bond facility to be aligned with the Sustainability Bond Guidelines, potentially an external review
- Issued in Stock Exchange of Thailand (SET), the bond intends to attract local investors familiar with the CLMT markets
- International investors targeted through AA rating sustainable bond tagging
- Underlying projects are identified and are aligned with sustainability criteria monitored and supported 'on the ground' by MFIs with KPIs
- Credit worthiness of MFI's, track record, governance issuance and funds disbursement to be handled by local partner due diligence
- Technical assistance for meeting sustainability criteria and for project implementation to be provided by donor funds or programme developers
- Potential for development of a standardized baseline emission factor for methane emission from rice in CLMT countries
- Potential for carbon finance to cover incremental costs for monitoring and reporting

### Underlying projects identified

- Smart irrigation for smallholder farmer rice fields as well as other crops – reduction of flood irrigation in the region
- GHG emission avoidance by reduced anaerobic decomposition of organic matter in rice cropping soils
- Project implementation with smallholder farmers to be done through MFI's distribution within the community
- Funding support channeled through MFI's from SBFMFI and technical support for implementation provided by the project developer and donor support.
- Others include: crop protection insurance with a local insurance companies supported by international re-insurance firms
- Solar rooftops and lighting as well as energy efficiency initiatives

### Next steps

- Gathering firm commitments by MFI's, establishing demand for facility
- Lining up clear underlying projects with technical support elements where required
- SPV Structure formation and regulatory discussions in countries where required.



Cambodia, Laos, Myanmar and Thailand

# Results – Asia

**Syndicated Regional Green Lending Facility (SRGLF)** – A loan facility to provide mid-scale syndicated concessional loans to domestic banks in the s.e. Asian region

## Syndicated Regional Green Lending Facility

SRGLF: USD denominated multi-million equivalent for SMEs in CLMT

All terms are for illustration purposes only

Version June 2018

### Terms and Conditions

Facility	ⓘ	Syndicated Regional Green Lending Facility (SRGLF) for Cambodia, Laos, Myanmar and Thailand at phase I, expanding to ASEAN at Phase II					
Purpose:	ⓘ	SRGLF serves as a vehicle for syndication and disbursement of funds to local projects co-investing alongside identified local FI partners					
Structure:	ⓘ	Co-investment vehicle, allowing banks, investors to co-invest into local markets, through various debt instruments and equity					
Features:	ⓘ	Green loans or green credit notes for mid-size projects, \$5-15m, with long tenor of between 4-7 years and concessional terms tied to the green/climate impact					
Partners	ⓘ	Road show with partner's local banks and FI's in each in each country conducted, terms of engagement to be established					
	ⓘ	Potential partners include: <i>ANZ Bank, ING, SustainableAnalytics, GaurantCo</i>					
Green Loans tenors, indicative size and coupon (for illustrative purposes only):		Project	Amount (in USD million)	Repayment Type	Tenor (in years)	Loan guaranteed	Coupon p.a. (%)
		A	15	Amort	5-7	Yes	3
		B	10	Amort	5	yes	4
		C	5	Amort	5	Yes	5
		D	15	Debt	5	Yes	3
		D	5	Equity	N/A	N/A	N/A
Issue Price	ⓘ	100.0%					
Interest Payments	ⓘ	Quarterly, tied to impact performance					
Equity stakes	ⓘ	Equity stake is anticipated at 20% of syndicated deals when capitalization is required					

### Business case

- ⓘ Despite of global funds shift towards ESG, challenge remains to channel these funds into economies with less advanced financial markets, lacking liquidity and embedded currency risk.
- ⓘ Laos, Cambodia and Myanmar face such challenges - financing of climate and SDG aligned projects is lacking
- ⓘ Local financial institutions are not able to provide longer term funds (4 and above years) due to a deposit-lending mismatch liquidity concerns and external conditions.
- ⓘ Challenging financing environment: under developed local capital markets, currency risks, lower than investment grade credit rating or none, and country specific regulatory requirements such as local currency lending, interest rate caps, capital adequacy reclassification and ownership limitations.
- ⓘ Mid-size (\$5-15m) projects face the greatest financing challenge as mid-size transaction do not allow for offshore financing, syndications or tapping into regional capital markets. Green and climate aligned financing is even more of a challenge in these countries
- ⓘ A syndication facility (importantly with a low-cost structure) covers some inherent risks by diversification (project, sector, transaction type and country)
- ⓘ Blended finance elements will provide further risk support as well as credit enhancement

### Key Aspects

- ⓘ A medium size project (USD 5-15m) loan syndication facility to provide a mark based risk sharing approach
- ⓘ Full range offering: Longer term loans, revolving facility, project finance, senior tranches and equity
- ⓘ SRGLF partners are local banks with strong corporate/project lending and equity investment capabilities
- ⓘ Facility channels scalable green funds to identified projects utilizing external de-risking support mechanisms
- ⓘ Investment is made alongside local banks identifying and executing transaction
- ⓘ Technical assistance will be provided by facility partners and donor funds for meeting green criteria and for project implementation.
- ⓘ External reviewers to rate the green/climate impact in accordance with international standards and include continuous monitoring
- ⓘ The margin and terms of the loan or green credit notes are to be tied to the rating of the impact, providing concessionary terms.
- ⓘ Dialog with policy makers for enabling green regulatory market conditions is required
- ⓘ All loans to be compliant with the Asia Pacific Loan Market Association & LMA Green Loan Principals (GLP)
- ⓘ Potential for carbon finance to cover incremental costs for monitoring and reporting

### Underlying projects identified

- ⓘ Large scale modern irrigation systems working with municipalities. 5-7-year tenor project USD15m loan
- ⓘ Rural durable steel sustainable housing project with energy efficiency element \$10m scalable project involving a 5 years lending facility
- ⓘ Electric bikes manufacturer/ distributor, wishing to finance its retail/corporate customers via term green loans
- ⓘ Sustainable rice mill expansion and re-financing. \$5m equity and \$15m loan structure
- ⓘ Solar rooftops and lighting / energy efficiency initiatives
- ⓘ Energy efficiency projects pending new regulatory standards

### Next steps

- ⓘ Further focusing of facility is required based on investors' appetite.
- ⓘ Local banks partnering and underlying transaction identified.
- ⓘ Facility structuring - cost effective syndication and legal structure
- ⓘ Currency (non-domestic), political and credit risk cover
- ⓘ Green monitoring and implementation incremental cost support
- ⓘ Dialog with policy makers for country specific policy and regulatory requirements



Cambodia, Laos, Myanmar and Thailand



# Intelligent networking within finance districts

## Sustainable Finance Bangkok

BANGKOK FINANCE DISTRICT

AFTER WORK  
COCKTAIL  
RECEPTION

CLIMATE-CONSISTENT  
INVESTING

10 MAY, 2018



## Sustainable Finance Bangkok

The inaugural Sustainable Finance Bangkok event will explore {insert text}

May 10  
6 pm  
Venue

Sustainable  
Finance  
Bangkok



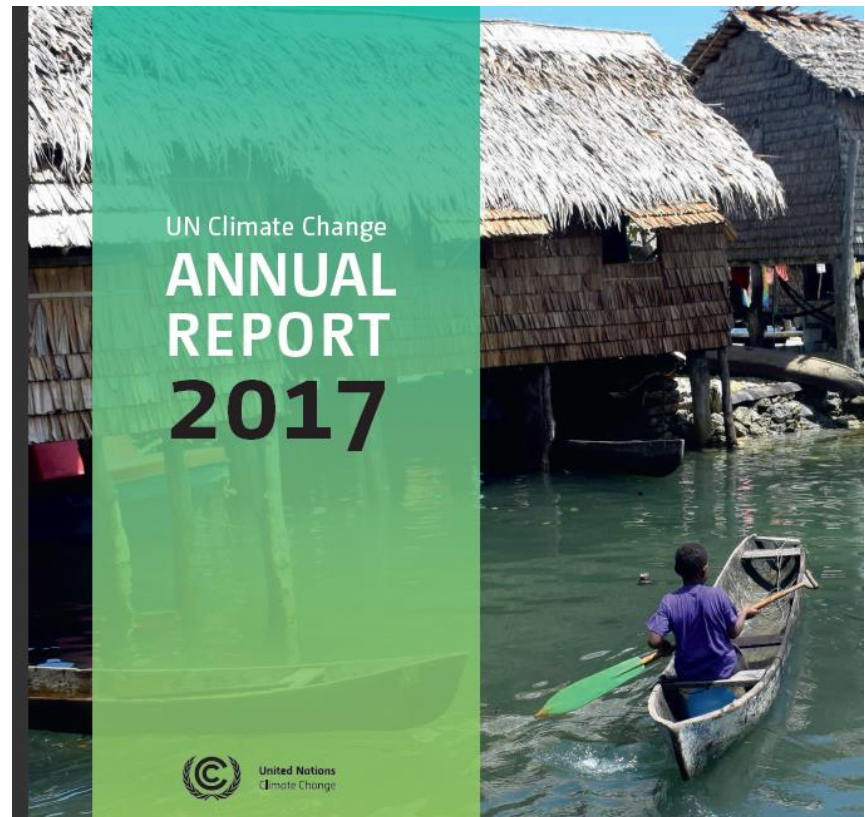
Regional Collaboration Centre – Bangkok  
Promoting Action Against Climate Change



*Raising awareness, identifying partners, catalyzing opportunities*



Thank you



**United Nations**  
Climate Change Secretariat