AIT Seminar on Sustainable Urban Development and Climate Change AIT, Bangkok, Thailand

# **Overview of Climate Finance**

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## 1. Paris Agreement (Article 10.5)

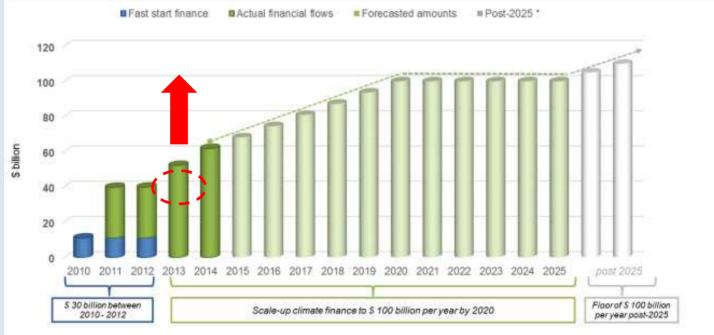
5. Accelerating, encouraging and enabling innovation is critical for an effective, long-term global response to climate change and promoting economic growth and sustainable development. Such effort shall be, as appropriate, supported, including by the Technology Mechanism and, through financial means, by the Financial Mechanism of the Convention, for collaborative approaches to research and development, and facilitating access to technology, in particular for early stages of the technology cycle, to developing country Parties.



## 1. Paris Agreement

'Strongly urges developed country Parties to scale up their level of financial support, with a concrete roadmap to achieve the goal of jointly providing USD 100 billion annually by 2020 for mitigation and adaptation.

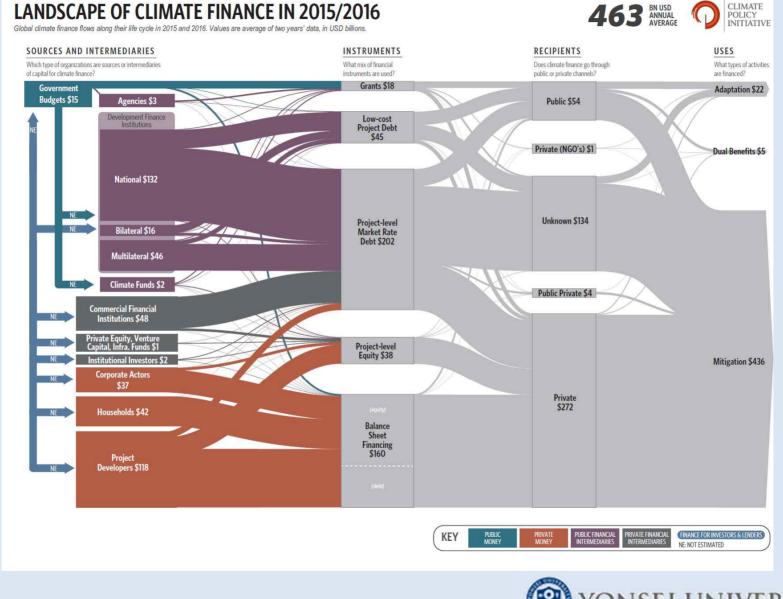
#### Identifying the gap



\* Note: A common framework for tracking climate finance flows is currently missing. The presented data on actual flows was sourced from the UNFCCC "Biennial Assessment and Overview of Climate Finance Flows Report" with respect to 2010-2012 and the OECD report on "Climate Finance in 2013-2014 and the USD 100 billion goal" for the period of 2013-2014. Future forecasts are based on pledges confirmed in the Paris Agreement.

Source: GCF and the Paris Agreement (2016)

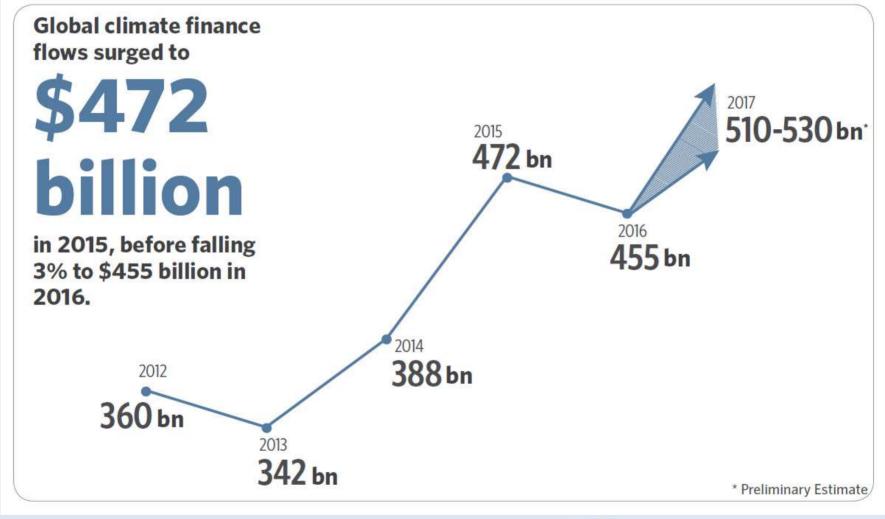




Source: CPI. 2018. Global landscape of Climate Finance



Figure 1: Amount of global climate finance 2015-2017\* (\*estimate)



Source: CPI. 2018. Global landscape of Climate Finance



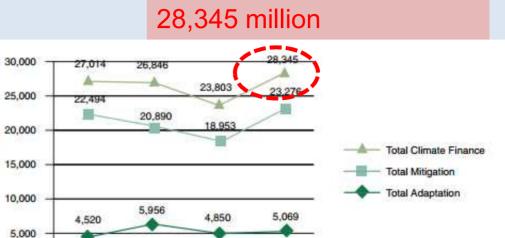
#### **Climate Finance Actors**





#### Public source/ MDB

Split of MDB Climate Adaptation and Mitigation Finance, 2014 by MDB respectively (USD millions)



2014

**MDBs Total Climate Finance** 



2012

7.000 6,000 USDm 5,000 4,000 2,856 3,000 2,000 2,137

USDm

0

9,000

2011

8,000 6.122 5.214 4,111 2,461 2,558 5.083 1,916 3,882 3,108 1,160 2.352 2,540 1,000 0 AfDB FBBD EIB IDB IFC WB ADB Adaptation Finance Mitigation Finance

Total MDB Mitigation and Adaptation Finance (USD millions)

Source: 2014 Joint Report on MDB's Climate Finance, World Bank, 2015

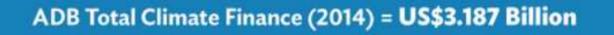


9,229

#### Asian Development Bank



ASIAN DEVELOPMENT BANK





Source: ADB Homepage





Source: ADB Homepage

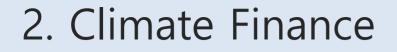




#### **Green Climate Fund**

Under the UNFCCC, heads of state of developed countries committed to jointly mobilize funds to advance the global paradigm shift towards low-emission and climate-resilient development pathways.





#### Green Climate Fund

#### GCF Resource Mobilization (as of April 2018)

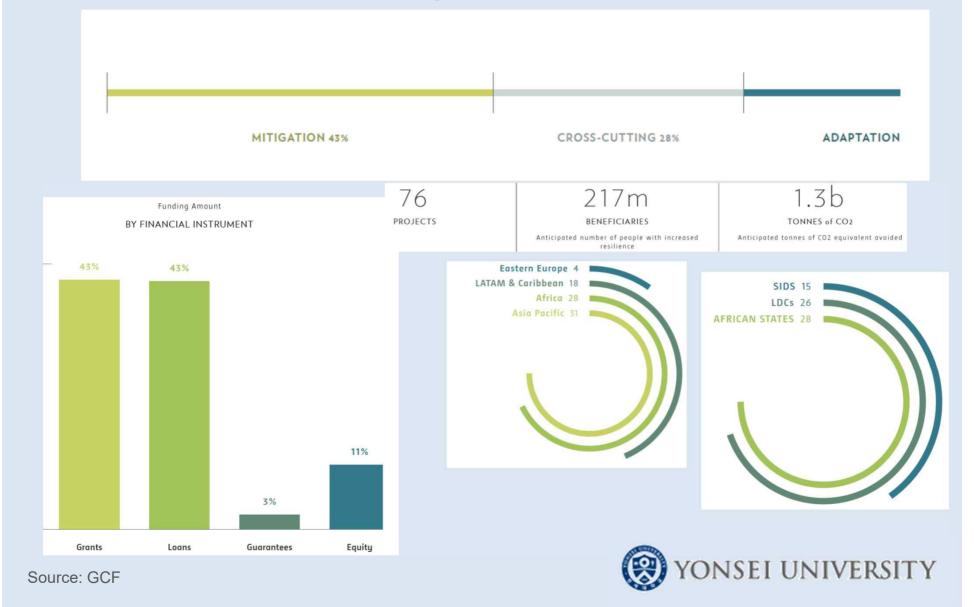
#### PORTFOLIO DASHBOARD



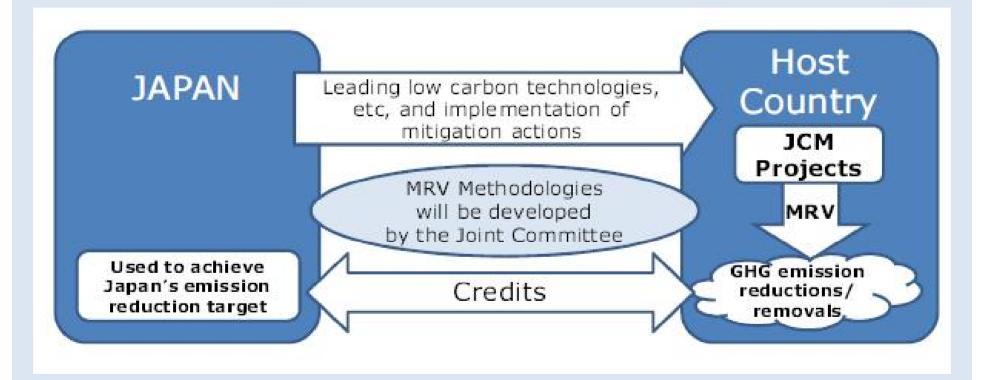
Source: GCF official website



#### 2. Climate Finance GCF Project Allocation



## Bilateral Climate Financing (Japan) - Joint Credit Mechanism -

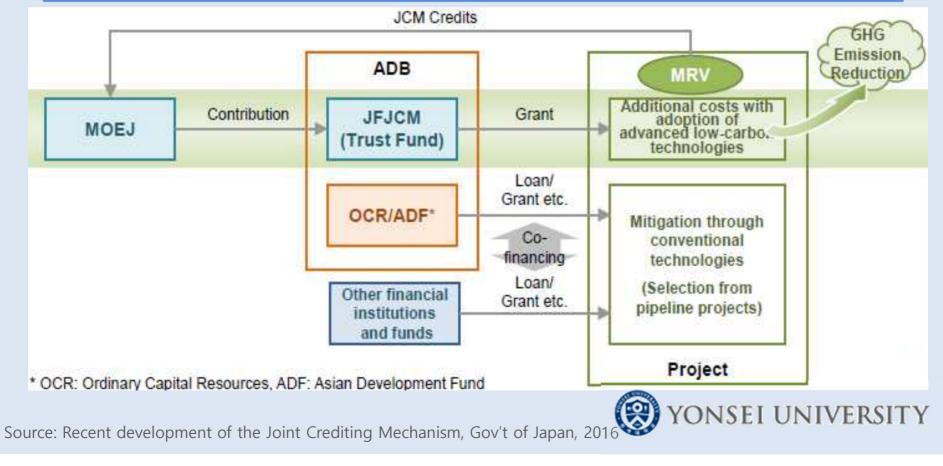


Source: Carbon Forum Asia 2013, Overseas Environmental Cooperation Centre, Japan



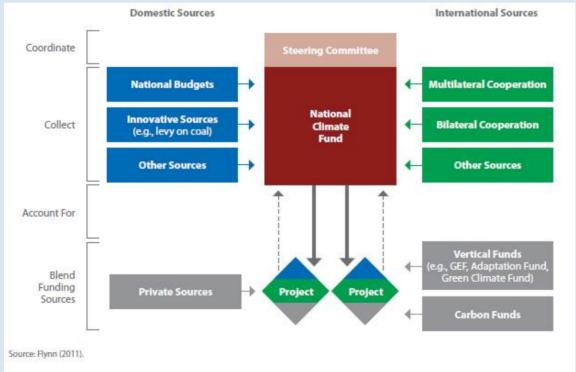
# 2. Climate Finance Bilateral Climate Financing (Japan) - Joint Credit Mechanism -





#### **Domestic sources**

#### National climate fund landscape



- Fundraising
- Provide a mechanism for Managing partnerships
- Coordinated project approval and implementation structure
  - Important source of knowledge and information management



## 2. Climate Finance Green Investment Bank (GIB): UK



This allows us to recycle our capital, raise funds and invest even more to achieve a greater green impact. We will have **financed a** large number of green projects across the UK.



#### **Our business model works**

And, we will have generated a profit for UK taxpayers.



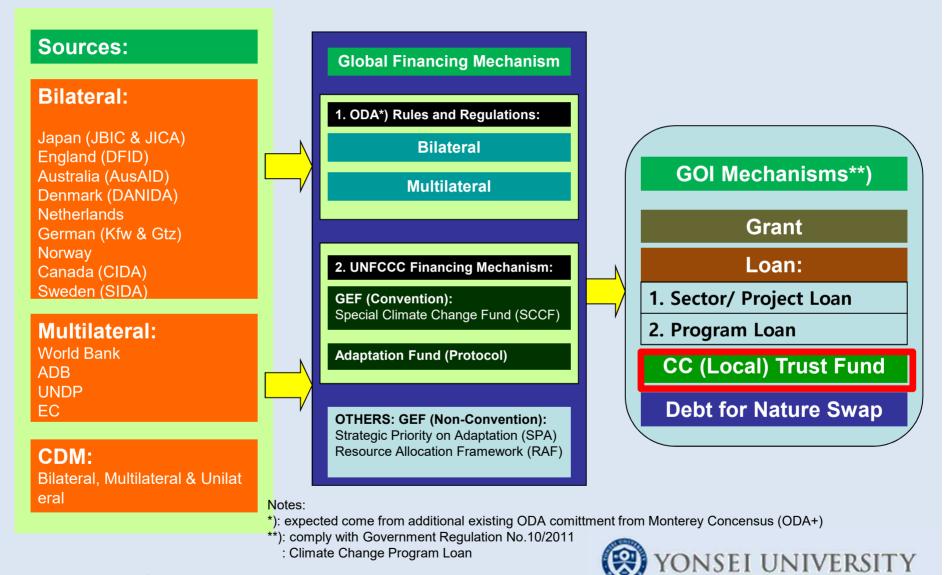
We will have brought innovative new technologies to the UK and created new, innovative financial solutions. They will have offered a positive demonstration effect that others can follow and replicate, **mobilising additional investment.** 



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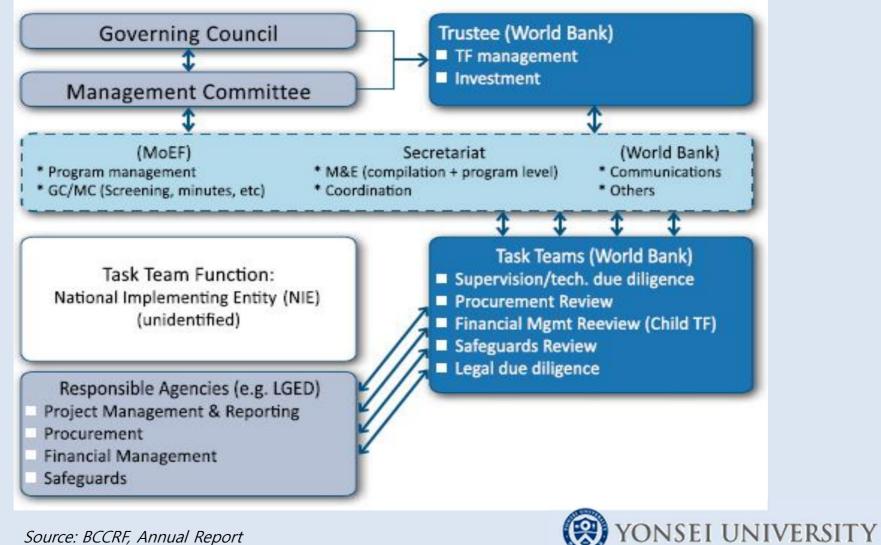
Source: GIB, Homepage

## National Climate Fund (ICCTF: Indonesia)



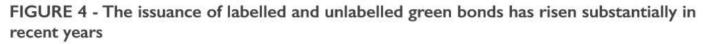
Source: www.icctf.or.id

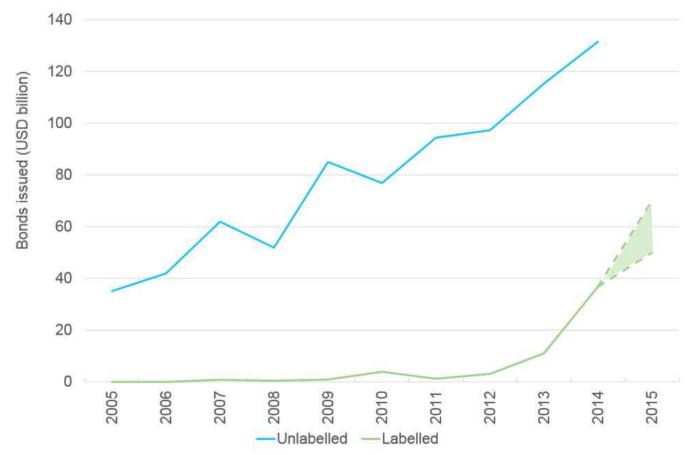
## Bangladesh Climate Change Resilient Fund (BCCRF)



Source: BCCRF, Annual Report

## 2. Climate Finance Green Bonds Trend





Source: Climate Bonds Initiative



## 2. Climate Finance Green and Climate Bonds

- The emergence of green bonds represents one of the most significant developments in the financing of low-carbon, climate resilient investment opportunities.
- Green bond issuance has grown rapidly in recent years: practically no green bonds in 2009, \$36 billion of labeled green bonds were issued in 2014.
- In the period to 2011, all labeled green bonds were issued by either development banks or local and municipal governments.
- These issuers played a crucial role in demonstrating proof of concept. However, the market is now developing rapidly with corporates, banks and green asset-backed securities collectively accounting for more than 40 % of issuance in 2014.1

## 3. Issues

## **Climate Financing Challenge**

- At least \$40 trillion will be needed to meet urban infrastructure needs in the next 20 years
- \$350 billion/yr for climate action probably a gross underestimate – it is based on a 2 degree world at end of the 21<sup>st</sup> century – discussions in Doha
- Green Climate Fund to save the day?
- Role of ODA- CIFs and GEF experience
- Crowding in innovative finance and private sector for low carbon mitigation projects



## 3. Issues

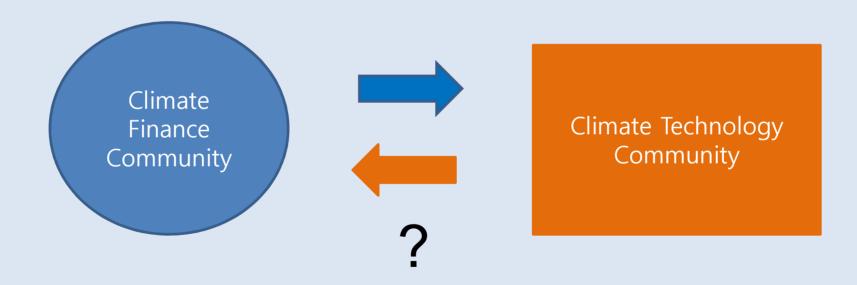
## **Climate Technology Challenge**

- How to secure innovative, adaptive climate technologies with reasonable and affordable prices for developing countries?
- How to assess appropriate climate technologies for developing countries? → Current CTCN/TEC are enough?
- How to invite private sectors who may have more sets of technology? → How to scale-up climate business?
- How to promote climate adaptation technology?





#### Linkage between Climate Finance & Technology





## Thank you

