

#### **CONTEXT:** Climate Change and South East Asia



Direct Losses in SE Asia from natural hazard caused disasters

More than 133 billion 1988 - 2017

More vulnerable than most of the world. If no action taken for CC may lose upt o

11% of GDP by 2100

Fastest worldwide emitter of GHG emissions between 1990-2010

Nearly 5% p.a.

Per capita emissions near world's average. If no actions:

GHG Estimated 60% higher in 2050 vs 2010

Mean Temperature increase already evident

0.14 – 0.20 degrees C per decade since 1960

### IMPACTS FROM UNMITIGATED CLIMATE CHANGE IN SEA:

River Flooding & Sea Level Rise
Increased Water Stress
Increased cyclones / storms
Reduced Agricultural & Labour
Productivity
Reduced Human Health

**Collapse of Coatal Ecosystems** 



### THE CHALLENGE

### Finance Flows Needed from ALL Sources



Table 3: Estimated Infrastructure Investments and Gaps, 25 DMCs, 2016–2020 (\$ billion in 2015 prices)							
	Estimated	Baseline Estimates			Climate-adjusted Estimates		
	Current Investment (2015)	Annual Needs	Gap	Gap (% of GDP)	Annual Needs	Gap	Gap (% of GDP)
Total (25)	881	1,211	330	1.7	1,340	459	2.4
Total without PRC (24)	195	457	262	4.3	503	308	5.0
Selected Central Asia Countries (3)	6	11	5	2.3	12	7	3.1
Selected South Asia Countries (8)	134	294	160	4.7	329	195	5.7
Selected Southeast Asia Countries (7)	55	147	92	3.8	157	102	4.1
Selected Pacific Countries (5)	1	2	1	6.2	2	2	6.9
India	118	230	112	4.1	261	144	5.3
Indonesia	23	70	47	4.7	74	51	5.1
PRC	686	753	68	0.5	837	151	1.2

PRC = People's Republic of China.

Numbers in parentheses refer to the number of selected countries.

Note: The gap as a % of GDP is based on the annual average of projected GDP from 2016 to 2020. The 25 DMCs covered here are listed in Annex Table 2.

Source: ADB (2016a); Country sources; Investment and Capital Stock Dataset, 1960–2015, IMF; Private Participation in Infrastructure Database, World Bank; World

Bank (2015a and 2015b); World Development Indicators; World Bank; ADB estimates.

## MASSIVE Financing Gaps

\$ 157 bn vs 102 bn needed p.a. in selected SE Asia ALONE

# (incl. MDBs) Cannot Meet These Needs

Over 92% of A-P
Infrastructure from Public
Sector at present

### SUBSTANTIAL PRIVATE CAPITAL

Needed to meet the Gap Approx. 60% of total gap ADB Responding To The Challenge

To Catalyse Funds to ASEAN Region Projects





INNOVATIVE FINANCE HUB



To Accelerate Green & Climate Resilient ASEAN Projects



To build knowledge and capacities

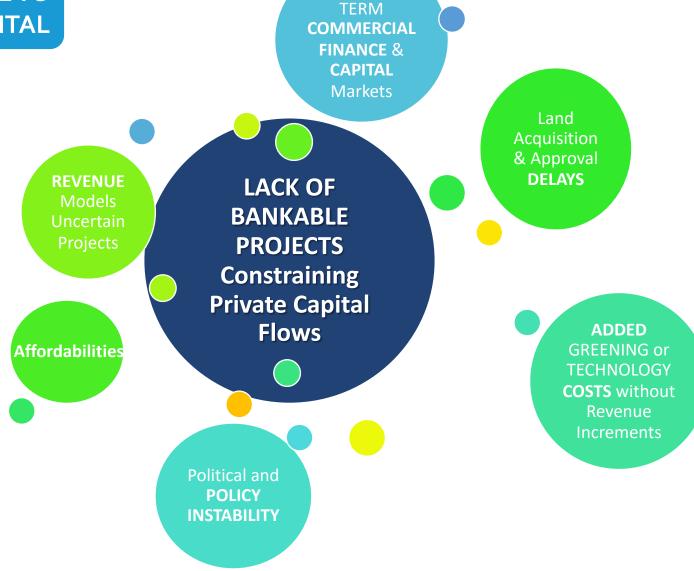


INNOVATIVE FINANCE HUB

THE CHALLENGE TO PRIVATE CAPITAL



SE Asia - ambitious climate
stabilization has substantial initial
costs but leads to large co-benefits
and larger benefits from avoided
climate damage



**LACK** of LONG



#### **KEYTHRUST AREAS**



Objective: Develop IF Approaches that **can Leverage 1...2...3.....6**\$ 1 Public/MDB Funds for \$ 6 Private Capital

Capacity & Knowledge Development

Roundtables & Training

Concepts Formulation Proactively

Innovative Finance Mechanisms & Models Demonstration Pilots

Innovative Finance Projects

Regional or National Green De-risking Funds **Rapid Response** 

On-tap expert team

GIF TA: Green & Innovative Finance

**Technical Assistance** 

**Grant Window** 

AICOE TA: PPP Development Technical Assistance

**Grant Window** 

Funds: The ASEAN
Catalytic Green Finance
Facility

Two-Stepped Funds Window

#### **EMERGING CONCEPTS**

 De-risking & Diversification using public funds

> Green Finance Pooled Vehicles

Asset Recycling Approaches

To reduce sovereign burdens

Blended Public
 & Private Funds
 Risk Sharing
 Structures

First Loss
Approach For
Urban Transit
Structures

Minimum Revenue
Guarantees for
Elderly Care &
Social Sectors

ADE

Transition Funds - VGF plus Access for low rated projects

Credit Enhancement for Bonds





Theme 1: Green Finance



Theme 2:
Blended
Finance



Theme 3: Blue Finance

OVERVIEW OF THEME

PANEL DISCUSSION

**AUDIENCE INTERACTION** 



### **FOR INQUIRIES**

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