Capacity-building on Climate Finance

Building Knowledge and Capacity for Climate Change Finance and Investment
26th January 2017, Kathmandu, Nepal
Session One

Landscape of climate finance
Aims of today’s event

• Show that access to climate finance is much bigger agenda than matching climate projects to funding sources and includes policy coherence, integration into budgeting, basic project finance, blending instruments, catalyzing private finance

• Provide in-depth insights into GCF, international climate funds and funding modalities

• Dissect together what are the reasons that countries are experiencing difficulty accessing climate finance and share experiences and success stories, address solutions
Outline of Session One

1. Paris Agreement, national priorities for climate change, long-term emissions pathways and sustainable development goals
2. Overview of climate finance
3. International climate finance
   a) Development Finance Institutions (bi-/multilateral)
   b) International climate funds, carbon market instruments and results-based finance (Session 4 in the afternoon)
4. Domestic climate finance
   a) Mainstreaming into national budgeting
   b) Domestic climate funds: on- vs. off-budget
   c) National DFIs, green investment banks
   d) Role of private sector, barriers to overcome and policy mix
   e) Green finance
1. PARIS AGREEMENT, NATIONAL PRIORITIES FOR CLIMATE CHANGE AND LONG-TERM PATHWAYS
Nationally Determined Contributions

• NDCs are primary means for countries to communicate their climate change priorities
• Reflect countries’ ambitions for reducing emissions, adapting to climate change, given unique circumstances/capabilities, ‘nationally determined’
• Subject to ‘enhanced transparency framework’ and global stocktake
  – to assess implementation towards stated targets
  – to track progress towards long-term climate goal
  – to ratchet up ambition over 5-year cycles and ensure that latest climate science taken into account
### Number of Parties that referred to an area as a priority, as communicated in the INDC's

<table>
<thead>
<tr>
<th>Finance and Markets</th>
<th>Maldives, Sri Lanka, Pakistan</th>
<th>5 LDCs (Cambodia, Nepal, Bangladesh, Bhutan, Afghanistan)</th>
<th>Iran</th>
<th>India</th>
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<tbody>
<tr>
<td>Access to finance</td>
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<td>Climate change fund</td>
<td>1</td>
<td>2</td>
<td>4</td>
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<td>Carbon pricing and MRV</td>
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<td>Early-warning, risk assessment</td>
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<td>Mainstreaming into national planning</td>
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<th>Adaptation Impact studies and response measures</th>
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<td>Water</td>
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<td>Agriculture</td>
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<td>Health</td>
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<td>Ecosystems</td>
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<td>Infrastructure</td>
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<td>Forestry</td>
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<td>Energy</td>
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<td>Disaster risk reduction</td>
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<td>Food security</td>
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<td>Coastal protection</td>
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<td>Fisheries</td>
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<td>Energy</td>
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<td>Industry</td>
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<td>Transport</td>
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<td>AFOLU</td>
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<tr>
<td>Waste</td>
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<tr>
<td>Buildings/cities</td>
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<td>Air pollution</td>
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<tr>
<td>REDD</td>
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<tr>
<td>Long-term low-emission</td>
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<td>Link to sectoral policy</td>
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<td>National Adaptation</td>
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<td>National Adaptation Plans (NAPs)</td>
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<tr>
<td>Technology Needs Assessment (TNA)</td>
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<tr>
<td>Clean Development Mechanism (CDM)</td>
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Long-term pathways and policy coherence

• Beyond NDCs, long-term development strategies are needed to connect short-term actions (5-year time horizon) to long-term structural change needed to achieve low-carbon, climate-resilient economies

• Climate change priorities should be embedded in country-led national development plans, clear national climate policy goals and sectoral strategies, and implementation (prioritization/sequencing) of SDG agenda to achieve developmental co-benefits

• Necessary to explore consequences of climate policy choices in terms of integrated, cross-sectoral socio-economic objectives and SDGs through appropriate modelling efforts
Aligning finance flows with low-carbon climate-resilient national development

- PA: make ‘finance flows consistent with a pathway towards low GHG emissions and climate-resilient development’
- Requires large-scale shift of investment of private capital from high- to low-carbon sectors and climate-proofing of existing infrastructure
- Focus on increasing adaptation finance and maximise synergies between mitigation and adaptation (co-benefits analysis)
- Scale-up of climate finance flows for implementation suggests shift to programmatic, sectoral and even multi-country approaches and emphasises importance of domestic policy reform
Climate-proofing infrastructure to counter impacts

**FLOODING AND EROSION**
More infrastructure assets will be at high risk of flooding due to heavier rainfall and rising sea levels.

**HIGHER TEMPERATURE EXTREMES**
Railways, roads, telecommunication and electricity networks will be more vulnerable to heat extremes.

**INFRASTRUCTURE NETWORKS RELY ON EACH OTHER**
As weather extremes increase, heavier rainfall could cause more rail embankment failures.

**HEAVIER RAINFALL**

**...SO DISRUPTIONS TO ONE HAVE AN IMPACT ON OTHERS**
More powerful storms could increase disruption to transport networks and overhead power and communication cables.

**STRONGER WINDS**

Committee on Climate Change

Estimated cumulative investment needed to stay within 2° (in US$ tn)

NCE (whole economy, by 2030)

IEA (energy sector only, by 2035)
Infrastructure capital spend is 1% lower in a low-carbon scenario.


Base case: $89
Additional energy efficiency (buildings, industry transport): +$9
Additional low-carbon tech for power generation: +$5
Reduced capex in fossil fuels: -$6
Reduced electricity transmission & distribution: -$0.3
Reduced capex in compact cities: -$3
Low-carbon scenario: $93

Indicative figures only. High rates of uncertainty.

Including operating expenditures would make a low-carbon transition even more favourable, leading to a further reduction of US$5 trillion, for overall potential savings of US$1 trillion.

Footnote: Net electricity transmission and distribution costs are decreased due to higher energy efficiency lowering overall energy demand compared with the base case. This efficiency effect outweighs the increased investment for renewables integration. Source: Climate Policy Institute and New Climate Economy analysis based on data from IEA, 2012, and OECD, 2006, 2012.
Approximate cumulative infrastructure investment for low-carbon scenario across sectors (in 2010 US$tn)

Total: US$ 92.7tn

- Energy end-user use (transport, buildings, industry), 32.2 (35%)
- Water, waste, 19.5 (21%)
- Rail, air, sea transport, 7.5 (8%)
- Road transport, 5.7 (6%)
- Energy Oil and gas, 8.5 (9%)
- Energy Coal, 0.3 (0.3%)
- Energy power generation, 8.5 (9%)
- Energy T&D, 4.0 (5%)

Source: Global Commission on the Economy and Climate (2014) and ESCAP calculations.
2. GLOBAL LANDSCAPE OF CLIMATE FINANCE
Sources of climate finance

• Public sources, 38% of total, include:
  – Governments: either direct or, overwhelmingly, through public financial intermediaries
  – Public financial intermediaries: DFIs (national, bi- and multilateral), climate funds and bilateral aid agencies

• Private sources make up 62% of total, include:
  – Project developers, corporates and households
  – Financial intermediaries: banks, private equity, venture capital, infrastructure funds, institutional investors
Magnitude of climate finance by source

Public climate finance
(US$148bn)

Private climate finance,
(US$243bn)
Main instruments

• Main financial instruments are:
  – Balance sheet financing
  – Project-level market rate debt
  – Project-level concessional debt
  – Project-level equity
  – Grants
  – Risk management instruments (guarantees)

• Strong relationship between sources and instruments used
Mapping of sources to instruments

- Grants (4%)
- Equity (6%)
- Non-concessional debt (26%)
- Concessional debt (18%)
- Balance sheet (46%)

Categories: Private, Public
Share of climate finance to mitigation and adaptation

<table>
<thead>
<tr>
<th>Source</th>
<th>Mitigation</th>
<th>Adaptation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFI (national)</td>
<td>88</td>
<td>11</td>
</tr>
<tr>
<td>ODA direct</td>
<td>9</td>
<td></td>
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<tr>
<td>Climate funds</td>
<td>1</td>
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</table>

Adaptation by instrument (in %)

- Concessional loans: 52%
- Grants: 11%
3. INTERNATIONAL CLIMATE FINANCE
Components of International Climate Finance

- Climate Funds
- ODA ‘direct’
- DFI bilateral
- DFI multilateral
- Project developers (PS)
- Private equity, venture capital, institutional investors (PS)
International climate funds

• International climate funds represent 1% of public climate finance but still important source of financing for very vulnerable countries

• Should be targeted to catalyze private investment, especially for adaptation

• Defer detailed discussion of international climate funds to session 4
Development Finance Institutions (bilateral, multilateral)

• DFIs (represent 44% of public climate finance) have mainstreamed climate change into their investment decision-making

• Have used three broad categories of tools to screen projects and investment opportunities, assess impact of projects on emissions and resilience and assess exposure of projects to physical and climate policy-related risks:
  – Positive-list
  – Volumetric
  – Exposure-based
<table>
<thead>
<tr>
<th></th>
<th>Qualitative or List-Based</th>
<th>Quantitative or Volumetric Impact</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome of assessment</td>
<td>Projects, companies and/or activities are classified as contributing to, neutral or counter-productive to climate change objectives.</td>
<td>Impact of projects and activities on climate change (GHG emissions, other quantifiable indicators for climate change)</td>
<td>Exposure of projects and or activities to direct and indirect:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Physical impacts of climate change</td>
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<td></td>
<td></td>
<td></td>
<td>- Impacts of climate policy and regulation regulatory impacts (energy-related costs, regulations standards, etc.);</td>
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<td></td>
<td></td>
<td></td>
<td>- Market behavior evolutions</td>
</tr>
<tr>
<td>Required definitions and methodological frameworks for data collection and analysis</td>
<td>• Qualitative definitions to classify “climate” projects</td>
<td>Quantitative methodologies:</td>
<td>Methodologies to calculate:</td>
</tr>
<tr>
<td></td>
<td>• Check-list criteria (such as company ESG screening methods)</td>
<td>• GHG emissions</td>
<td>- Country-level vulnerability</td>
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<td></td>
<td></td>
<td>• Energy use</td>
<td>- Project level physical impact</td>
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<td></td>
<td></td>
<td>• Resource efficiency (energy savings, water use, etc)</td>
<td>- Exposure to climate policy and regulatory changes</td>
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<tr>
<td>Potential Data Inputs</td>
<td>Specifications allowing to identify: sectors and sub-sectors of activity</td>
<td>Data allowing to quantify:</td>
<td>Context related information:</td>
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<tr>
<td></td>
<td>• involved technologies and techniques</td>
<td>• Energy use</td>
<td>• Energy data (consumption, fuel mix, price)</td>
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<tr>
<td></td>
<td>• physical context</td>
<td>• GHG Emissions (potentially including all scopes)</td>
<td>• Technologies and techniques in use (efficiency, externalities)</td>
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<tr>
<td></td>
<td>• company or asset-issuer descriptive information</td>
<td>• Quantitative sector and country specific information</td>
<td>• Costs to users and consumers</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>• Cost of externalities</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Projected climate and economic scenarios</td>
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<tr>
<td></td>
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<td>• Adaptation-related data on vulnerability and resilience</td>
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<tr>
<td>Baseline scenarios, thresholds and criteria for contextualization and comparison</td>
<td>• Guidelines and qualitative criteria for screening and exclusion for sectors and technologies</td>
<td>Baseline scenarios and thresholds for acceptable levels of:</td>
<td>Thresholds for acceptable exposure levels from projects to:</td>
</tr>
<tr>
<td></td>
<td>• Thresholds for exclusion based on company ESG criteria</td>
<td>• Energy use</td>
<td>• Physical risks</td>
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<tr>
<td></td>
<td></td>
<td>• GHG emissions</td>
<td>• Economic value at risk</td>
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<td>• Other forms of resources use and efficiency</td>
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Prioritisation tools used

- Distinguish between upstream level and downstream analysis
  - **Upstream**: through portfolio-wide targets, climate finance tracking methodologies, projects with significant emissions reductions and improved resilience are prioritized
  - **Downstream**: link co-benefits from low-carbon, climate-resilient development with other issues, e.g. local air pollution, water quality, or introduce shadow carbon price into economic/financial analysis of projects
# DFI climate change targets

<table>
<thead>
<tr>
<th>Organization</th>
<th>Portfolio-wide GHG investment target</th>
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<tbody>
<tr>
<td>ADB</td>
<td>40% of Asian Development Fund’s operations; 50% for ADB’s operations</td>
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<td>AFD</td>
<td>50% of AFD’s global portfolio</td>
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<tr>
<td>EBRD</td>
<td>2012-14: 26-32m tons CO2 per year</td>
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<tr>
<td>EIB</td>
<td>Internally-established objectives: 25% of all investment activities to be climate-related</td>
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<td>IDB</td>
<td>25% of annual lending</td>
</tr>
<tr>
<td>IFC</td>
<td>Has recently doubled its current annual lending for climate committed to achieve 28 per cent target</td>
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4. DOMESTIC CLIMATE FINANCE
Finding from global landscape analysis

% Total climate finance
- Domestic flow: 26%
- International flow: 74%

% Private climate finance
- Domestic flow: 92%
- International flow: 8%
Main components of domestic climate finance

- Domestic budgets
- Households (PS)
- Corporates (PS)
- DFI national
- Financial intermediaries (PS)
Mainstreaming climate change into domestic budget and investment plans

- Budget is key instrument for policymakers to make decisions on prioritizing investments
- Critical to integrate climate change considerations into existing planning and budgeting processes
- Climate Public Expenditure and Institutional Reviews (CPEIRs) main tool used to assess role of climate change within national budgets – e.g. Fiji CPEIR 2015
- CPEIRs found that 2-18% (Fiji 3.5%) of budgets dedicated to climate change spending. Additional to previous analysis.
- CPEIRs show majority of additional climate finance disbursed outside national budgetary procedures, through extra-budgetary funds or project finance!
Domestic climate funds: BCCT, BCCRF, ICCTF

• BCCT: created by Government from own resources to finance CC projects. Under 2010 Climate Change Trust Act, Bangladesh Climate Change Trust (BCCT) was constituted.

• BCCRF: coordinated financing mechanism by Government, development partners and WB to address CC impacts. Channels US$188million grant funds Bangladeshis to build their resilience to the effects of climate change.

• ICCTF: Coordinated financing mechanism by Government (Indonesia) from domestic resources, international funds and funding by development partners. ICCTF has also been increasing its engagement with private sector.
On-budget vs. off-budget treatment

• Off-budget expenditures can contribute to loss of budgetary/financial control
• May not be subject to regular budgetary monitoring and evaluation, and coding, although this could be introduced separately
• Could negatively affect prioritisation
• Delinks climate from national development priorities considered through the budget
Prioritise adaptation response

• Step 1: Identify/integrate CC strategic priorities into SEDP
• Step 2: Classify actions according to urgency screening. Level I = urgent & immediate action
• Step 3: Grade Level I actions following multi-criteria analysis taking into account expected adaptation benefits, synergy with mitigation, social consequences, environmental consequences, economic feasibility
• Step 4: Ranking within each sector and budget allocation
Step 2: Urgency screening

<table>
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<tr>
<th></th>
<th>Immediate / short term Impacts: going to occur within 5 years or already observable</th>
<th>Medium / Long Term Impacts - Certain</th>
<th>Medium / Long Term Impacts - Uncertain</th>
</tr>
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<tbody>
<tr>
<td>High level of consequence (critical to the country)</td>
<td>top priority concerns</td>
<td>top priority concerns</td>
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<tr>
<td>Low/Medium level of consequence</td>
<td>top priority concerns</td>
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Development finance institutions (national)

• National DFIs have very important role to play in climate finance. Deserves to be examined more closely in a given country context
  – Make up 45% of public climate finance
  – Provide largest share of adaptation finance (88%)

• Should be used to catalyze private sector investments

• National DFIs typically governed by MOF
Green investment banks

• Have been successfully operated in at least twelve national, subnational jurisdictions
• GIBs are publicly capitalized entities to help mobilise private LCCR infrastructure investments
• Can play supportive role in overcoming remaining investment barriers by leveraging impact of public resources/de-risking
• Some GIBs have also focused on mobilizing institutional investment in green infrastructure
PRIVATE SECTOR FINANCING
Barriers to adaptation investment

**National**
- Capital in lower-income countries too scarce to cover required adaptation investment
  - Solution Options: Develop instruments deepening international adaptation financing channels

**Public**
- Returns to national adaptation investment are public in nature – won’t attract sufficient private action
  - Solution Options: Increase private returns to adaptation investment through an “adaptation” credit market

**Behavioral**
- Private actors likely to overestimate adaptation investment costs and underestimate benefits
  - Solution Options: Reduce transaction and start-up costs for private resilience-building ventures
Example: Imperfect capital market, low liquidity in long-term debt market

• Adaptation action may face substantial payback periods -> lack of liquid market for long-term debt (supply of finance)

• Corrective policy instrument: DFIs directly providing long-term debt; on-lending, in combination with senior debt to improve security for senior lender

• Concrete solution: flood prevention barrier built around private industrial estate with Government supplied 15 year concessional loan
Example: Lack of climate information

• No climate date available -> leads to reduced demand and supply of adaptation related activities
• Corrective instrument: technical assistance grants for data collection, research or capacity-building
• Concrete solution: TA grant to SME/corporate to support climate risk data collection and implement low-cost, no-regret adaptation measures
• Concrete solution: DFI finances feasibility study on climate risks to port, creating demand for investment in resilience
Example: No price on water

- Demand for water > supply for water due to bad water pipes
- Market imperfection: no market price for water
- Concrete solution: introduce market price for water, making investment in water infrastructure more attractive
- Concrete solution: keep subsidized water price, make investment in water infrastructure more attractive through concessional finance
Private sector financing instruments

Private sector finance:
- Bank loans (including project finance, corporate lending)
- Private equity/venture capital
- Mezzanine

Capital markets:
- Bonds (green bonds, corporate, thematic bonds)
- Stocks
Green Finance Study Group (GFSG)

• Under China’s G20 Presidency in 2016, Green Finance Study Group (GFSG) established

• To **identify institutional and market barriers to green finance**, and develop options to enhance ability of financial system **to mobilize private capital for green investment**

• Focus on action by commercial banks, central banks (banking regulation), development banks, stock exchanges, securities and exchange commissions, institutional investors, and rating agencies
Five Thematic Areas

1. Green **banking system**: Absence of “green” performance measurement \(\rightarrow\) deters banks from incorporate environmental dimension into decision-making

2. Green **bond market**: Lack of clear, comparable definitions, uncertainty and high costs of verification \(\rightarrow\) prevents critical mass of green bond issuance

3. Green **institutional investment**: Lack of disclosure requirements/weak environmental impact assessment capacity prevent environmental considerations being factored into investment decisions \(\rightarrow\) results in poor risk management, excess caution over green investments
Five Thematic Areas

4. **Risk analysis**: Market/institutional failures prevent incorporation of environmental risks into financial decision-making by banks, insurers and other institutional investors → short-termism, misaligned incentives, underdeveloped risk assessment methodologies

5. **Measuring progress**: Facilitating green capital flows requires good definitions and indicators for measuring progress on green finance activities, policy targets, and designing and implementing policy incentives
Green Banking

Many developing countries are taking action, both to mobilize finance and to mainstream sustainability through banking system. **Sustainable Banking Network** established in 2012 and now includes regulators from 20 countries, of which 12 have launched national policies, guidelines, principles, or road maps focused on sustainable banking.

Emerging experience shows that voluntary approaches can be effective in encouraging risk based environmental due diligence, incentives, but public support or mandatory requirements are also needed to mobilize funding into specific green investment areas.
International Initiatives on Sustainable Finance

- **The Task Force on Climate Disclosure (TCFD)** convened by FSB to develop recommendations on disclosure of physical, liability and transition risks associated with climate change. By the end of 2016, task force is expected to publish for consultation its recommendations for voluntary disclosure principles and leading practices. [www.fsb-tcfd.org](http://www.fsb-tcfd.org)

- **The UNEP Finance Initiative (UNEP FI)** is a global partnership between UNEP and the financial sector. Over 200 institutions, including banks, insurers and fund managers, work with UNEP to understand the impacts of environmental and social considerations on financial performance. [www.unepfi.org](http://www.unepfi.org)

- **The Vulnerable 20 (V20)** was established in 2015 when Finance Ministers from climate vulnerable states came together for high-level policy dialogue on economic and financial issues in relation to enabling climate-resilient and low-emission development. [www.v-20.org](http://www.v-20.org)
International Initiatives on Sustainable Finance (continued)

- **Alliance for Financial Inclusion (AFI)**: Global network of financial policymakers from developing countries to increase access to financial services for poor. Members from >90 countries including central banks, other financial regulatory institutions. [www.afi-global.org](http://www.afi-global.org)

- **Principles for Responsible Investment (PRI)**: Developed in 2005 by group of world’s largest institutional investors. Institutions responsible for US$69tr of assets committed to principles to understand implications of sustainability for investors. [www.unpri.org](http://www.unpri.org)

- **Principles for Sustainable Insurance (PSI)**: Launched in 2012 for insurance industry to address environmental, social, governance risks. 83 organizations adopted Principles, including insurers representing 20% of world premium volume and US$14tr in assets under management. UNEP now developing Sustainable Insurance Policy Forum. [www.unepfi.org/psi](http://www.unepfi.org/psi)
The Sustainable Banking Network (SBN)

**Purpose**: brings together financial sector regulators and banking associations interested in establishing enabling frameworks for environmentally and socially sustainable finance

**Key Agency**: IFC

**Country Members**: Bangladesh, Brazil, Cambodia, China, Colombia, Honduras, Indonesia, Jordan, Kenya, Lao PDR, Mexico, Mongolia, Morocco, Nepal, Nigeria, Pakistan, Paraguay, Peru, the Philippines, Thailand, Turkey and Viet Nam

**Approach**: Commonalities in different country experiences have emerged that offer lessons for others to apply, including flexible approach with policy support and industry-led initiatives at different stages of sustainable banking development in given country.

Multi-stakeholder consultation and awareness raising have been critical first steps, followed by capacity building and guidance for regulators and financial institutions, inter-agency collaboration and development of incentives and systems for monitoring and assessing implementation, including key performance indicators.
Institutional Investors

- Institutional investors increasingly important due to development of second-pillar pension reforms (privately managed savings accounts) -> rapid growth of assets under management of institutional investors in developing economies, albeit from small base

- Examples from Africa:
  - Ghana’s pension industry expected to expand 400% 2014 to 2018
  - Pension assets now equate to some 80 per cent of GDP in Namibia and 40 per cent in Botswana
  - In Kenya, there are efforts to increase coverage of pension savings, including through “micro-pensions” in informal sectors. Individual membership in retirement benefits plans in Kenya increased by 250 per cent between 2010 and 2012
Greening Institutional Investment

- Stock exchanges in developing countries developing sustainability strategies and requirements and have joined Sustainable Stock Exchanges Initiative.
  - Nigeria, Mauritius introducing voluntary sustainability reporting guidelines
  - Key driver relates to demands of international institutional investors, and desire to demonstrate international best practice in corporate governance
  - Encouragement towards sustainability reporting has led to companies adopting environmental and ethical management standards and practices

- The Sustainable Stock Exchanges Initiative (SSE) learning platform to explore how exchanges – with investors, regulators and companies – can enhance sustainability. 48 exchanges have joined (www.sseinitiative.org).
Climate-aligned bonds

• Major instrument to finance transition to low carbon, climate-resilient infrastructure
• CBI has tracked global cumulative total of US$ 694bn from 3590 climate-aligned bonds by 780 issuers. Asia-Pacific 44 per cent of this.
• To date, still mainly mitigation-related (transport, energy)
• Huge growth potential, for adaptation, and region, possibly as a pooled mechanism
Global climate-aligned bonds (cumulative since 2005, US$ bn)

<table>
<thead>
<tr>
<th>Total bonds</th>
<th>Labelled green bonds</th>
<th>Unlabelled green bonds</th>
</tr>
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<tbody>
<tr>
<td>92,000</td>
<td>118</td>
<td>576</td>
</tr>
</tbody>
</table>

Distribution across sectors (cumulative since 2005)

- Transport: 66%
- Energy: 19%
- Buildings & Industry: 8%
- Agriculture and Forests: 1%
- Water: 2%
- Waste: 3%
- Multisector: 1%
Capital Markets

- Capital markets still small, although many countries have established stock markets
- Bond market grew considerably in emerging markets since Asian financial crisis 1997; remains very concentrated in large economies, China, India, Malaysia
- Bond market often very small, with small number of participants but instruments can be pooled across a region
Insurance

- Insurance critical for financial inclusion, incentivizing risk management and boosting resilience to shocks
- <5 per cent of low income groups have access to insurance
- Insurance markets small but growing, demand focuses on health, life, agricultural, property and vehicle insurance, and catastrophe cover
- Micro-insurance for low-income groups growing
  - Example: In Philippines, micro-insurance for climate risk now issued by many community groups – church groups, community and professional associations, clubs – who use their membership to mutualize risk
  - Has vastly expanded pool of insured, especially among poor who are most vulnerable to climate-related disasters
CASE STUDIES
Case Study: Philippines

Policy instruments

Philippines is a member of the SBN. Regulations increasingly recognize that financial integrity and inclusion regulations can be complementary, thus Technology-Enabled financial innovation has been introduced:

- Cash and Smart money Mobile systems aim to bring together public and private investors
- “Follow the market” approach, consistent in approve operations in an ad hoc basis rather than trying to develop a comprehensive framework.
Case Study: India

Reserve Bank of India – Sustainability Initiatives in the Financial Sector

The RBI issued its first circular on banking and sustainable development in 2007, encouraging the adoption of best practices and greater transparency.

- **2007**: RBI circular
- **2008**: Launch of the S&P ESG India Index
- **2011**: Release of national voluntary guidelines on responsibilities of business
- **2012**: SEBI’s mandate for inclusion of business responsibility reports as part of the listed entity’s annual reports
- **2012**: Launch of the S&P BSE CARBONEX
- **2015**: Launch of the MSCI ESG India Index
- **2013**: The Companies Act of 2013 mandates 2% of profits towards CSR
- **2014**: Inclusion of renewable energy under Priority Sector Lending
- **2015**: Miniratna status granted to IREDA
- **2015**: IBA’s guidelines on responsible banking
- **2015**: Exim Bank of India issued a five-year US$500 million green bond
- **2016**: YES Bank issued the first INR-denominated green bond
- **2016**: SEBI proposed new norms for issuance and listing of green bonds
Case Study: India

**National Voluntary Guidelines (NVGs)**

The NVGs are a step towards creating a framework to ensure responsible investment behavior. They are designed to be used by all businesses irrespective of size, sector or location.
**Case Study: India**

**Informal Finance in India – Agricultural Middlemen**

**Purpose:** provide credit to farmers, offering fertilizers and pesticides on credit, and taking payment at harvest time.

Informal finance encompasses the wide range of financial activities and services that take place outside of a country’s formalized financial institutions and regulations. In contrast to formal finance, most informal providers focus on one service – savings, credit, money transfers or insurance – rather than offering a bundle of services. Some are mutual associations or self help groups that share and mutualize risks, others operate commercially making a profit from clients. Examples include:

- **Revolving savings fund** – Members meet monthly and deposit a certain amount of money into a common fund. The accumulated amount is then paid out to one of the members on a rotating basis.
- **Money lenders** – Unregistered and often illegal money lenders are the mainstay of lending to the informal sector. They typically charge high interest rates, but lend to people without collateral who are unable to obtain loans from the bank.
- **Agricultural middlemen (such as Arthis in India and Pakistan)** provide credit to farmers, offering fertilizers and pesticides on credit, and taking payment at harvest time.
- **Burial societies** are a common product of community-based informal insurance associations. Members pay in regularly and the association covers funeral expenses.
- **Hawawla/Hundi** (Middle East and South Asia) is a traditional means of transferring funds across borders and within countries, whereby funds are transferred by means of a network of brokers.
- **Susu collectors** (West Africa and parts of the Caribbean) take deposits – usually a saver agrees to deposit a specific amount determined for an agreed period of time (usually a month). At the end of the period, the accumulated savings are returned with the collector, keeping one day’s savings as commission.
Case Study: India

**Mobilizing Green Finance through International Capital Markets**

- India is currently using Green Infrastructure Investment Coalition (GIIC) as a means for engaging with foreign institutional investors.
- The Green Climate Fund should be leveraged to provide funding to projects that enable a significant transformation towards a low carbon trajectory.
- Collaborative efforts with developed countries need to be put in place in order to support joint R&D projects and related technology transfer.
- The government of India envisions that the secretariat of the International Solar Alliance (ISA) will be a specialized body, which will help in promoting, disseminating and deploying renewable energy.
- The following policy measures to incentivize external commercial borrowings need to be taken to enable access international finance for domestic borrowers:
  - Exemption from Withholding tax payments on ECB interests payments
  - Replacement of construction finance and refinancing
  - Innovative hedging solutions
Case Study: Indonesia

**Indonesia’s Sustainable Finance Roadmap**

Indonesia’s financial regulator OJK launched its Roadmap for Sustainable Finance, the country’s first attempt to map out the developments needed to advance sustainable finance through 2019. The Roadmap covers banking, capital markets and non-bank financial services sector, and includes measures to increase the supply of sustainable financing through regulatory support and incentives, targeted loans and guarantee schemes, green lending models, green bonds, and a green index.

- **Purpose**: sustainability skills of professionals through a comprehensive work plan for promoting sustainable finance for the period 2015-2019
- **Implementers**: Indonesian Government & the Financial Services Authority (OJK)
Case Study: Mongolia

**Sustainable Finance Principles (Green Banking)**

**Purpose**: building a sustainable financial sector

**Implementers**: Mongolian Bankers Association (MBA), the Mongolian Ministry of Environment, Green Development and Tourism and the Bank of Mongolia, with international support from the Dutch development bank FMO and the IFC, through the Sustainable Banking Network.

**Other Details**: The Sustainable Finance Principles include commitments not only on environment, but also on people and communities, cultural heritage, green growth, financial inclusion, corporate governance, transparency and accountability. They have been backed by sector guidelines in areas such as mining, construction, manufacturing and agriculture. All banks have adopted the principles and sector guidelines including reporting annually on their progress in implementing the principles to the MBA.
Bangladesh Bank (BB) green finance lending requirements are used to direct investment. Green Banking guidelines have been established. BB incentives include:

- Support to rural enterprises and green finance;
- Establishment in 2011 of a mandatory environmental risk management for banks;
- A BDT2 billion (US$25.5 million) low-cost refinancing window to provide liquidity support to lenders for green financing in 11 specified categories;
- Macroprudential support measures, such as lower equity margin requirements;
- Better supervisory ratings for good performers; and
- Targeted refinancing lines to banks, refunding at reduced interest rates for loans given to priority areas such as renewable energy.
Case Study: Bangladesh

**Policy instruments**

In 2012 a Framework of metrics for measuring progress was issued, considering:

- The number of banks establishing green banking units and policies;
- The Environmental risk rating;
- How much green finance was mobilized;
- The value of publicly supported green refinancing; and
- The Technology-Enabled financial innovation that had been introduced i.e. bKash mobile money system aims to provide mobile financial services.

Main Challenges are:

- Poor governance at bank boards;
- inadequate credit information and lengthy legal procedures to resolve disputed loans, which undermines the general quality of intermediation.
Case study: Philippines

• Micro-insurance for climate risk is being issued by organized community groups:
  – Mutual Benefit Associations (MBAs) such as associations of farmers, teachers, drivers, market vendors

• Regulations ensure that all providers of informal insurance or insurance-like schemes to register themselves, or to partner with a registered mutual or commercial insurer

• Model combines elements of savings scheme and mutual risk pooling, and return dividends to their participating members:
  – Main product is credit-life insurance to underpin microloans and provide death benefits to families.
  – CARD MBA have created non-life micro-insurance specifically to address climate risks and natural hazards

• Compulsory insurance scheme, an initiative of the Philippine Insurance and Reinsurers Association, aims to develop a sustainable pilot catastrophe insurance pool.