Adaptation Finance Primer
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What is Adaptation Finance?

- Finance that reduces social vulnerability to climate risks (e.g. post-disaster financing for relief efforts);
- Finance that is used for climate mainstreaming and resilience building (e.g. finance spent on enhancing the strength of power lines and their resistance to high wind speeds) – transforming existing financial flows rather than increasing financial flows; and,
- Finance used for risk reduction and “pure” adaptation projects (e.g. financing mangrove rehabilitation to enhance the resilience of a coastline to storm surges and coastal flooding).
- (Kamilshah Pillay C40)
Why is mobilizing adaptation finance so difficult?

Carney warns of risks from climate change 'tragedy of the horizon'

Bank of England governor tells Lloyd’s insurers that ‘challenges currently posed by climate change pale in significance compared with what might come’
Why is mobilizing adaptation finance so difficult?

“Climate change is the Tragedy of the Horizon.

We don’t need an army of actuaries to tell us that the catastrophic impacts of climate change will be felt beyond the traditional horizons of most actors – imposing a cost on future generations that the current generation has no direct incentive to fix.

The horizon for monetary policy extends out to 2-3 years. For financial stability it is a bit longer, but typically only to the outer boundaries of the credit cycle – about a decade.

In other words, once climate change becomes a defining issue for financial stability, it may already be too late.
What are the barriers experienced during AF programmes and projects

- Scientific uncertainty and the frequency of impacts
- Accounting measures
- Political uncertainty and competing demands
- Matching risk reduction to adaptation measures (cost benefit analysis)
- Income streams: ability to pay & willingness to pay

(Kamilshan Pillay C40)
Building blocks of financial instruments

• Grants
• Loans & Concessionary Loans
• Equity
• Guarantees
• Insurance
Municipal Budget

- Cost-benefits analysis can prove that preventive measures to reduce flooding (e.g. EbA) is more cost effective than direct and indirect costs of flood damages

- Can be used to fund (not to finance) an infrastructure project
  - Financing: obtaining the funds to build infrastructure
  - Funding: used to payback financing and to operate infrastructure

- Instruments include user fees, development charges, value capture, air rights

- Critical issues: SDBIP, IDP, MTEF multi-year budgeting, intergovernmental transfers
Green Fund

The Green Fund is a unique, newly established national fund that seeks to support green initiatives to assist South Africa’s transition to a low carbon, resource efficient and climate resilient development path delivering high impact economic, environmental and social benefits.

The Fund is managed by the Development of Bank of South Africa (DBSA) on behalf of Department of Environmental Affairs.

- National budget allocation to PSF (grant funding): USD 200 millions
- Local governments can receive funds for infrastructure development, water resources management, restoration of natural ecosystems, etc.
- Application process, incl. investment criteria such as vulnerability, participation, poverty, cost effectiveness
Adaptation Fund

- The Adaptation Fund (AF) was established by the Parties to the Kyoto Protocol of the United Nations Framework Convention on Climate Change (UNFCCC), as a mechanism to finance concrete adaptation projects and programmes in developing country parties.
- The fund is capitalised mainly from a percentage of proceeds of the Clean Development Mechanism. Future capitalisation in discussion.
- Adaptation Fund resources are accessed via Multilateral Implementing Entities (MIEs) and National Implementing Entities (NIEs).
  Initial country cap of USD10 million – but under revision
- SANBI is South Africa’s National Implementing Entity (NIE) of the Adaptation Fund
Green Bonds: Cape Town

Bond Details
• Bond Value = R1billion
• Amortised bond (interest + capital repayment) over 10 years

Financial Results
• Issued at R186 (treasury 10 year bond) rate + 1.33% = approx 10.13% (similar non-green South African Municipal bond issued a day earlier at +1.75%)
• 4x oversubscribed – demonstrating market appetite
• Comparable to current cost of capital (from other sources including concessionary loans) @ 9.95%

Non-financial benefits
Publicity/awareness of “Green Credentials” Conversations with new mix of asset managers
Linked to launch of our Climate Change Policy – “greening” of treasury department
Awareness of Standards to develop future projects

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Certification Process

1. Development of Framework
   - Identification of Projects; associated budgets and develop reporting process

2. Assessment of Project against standards
3. Appointment of Assurance Providers
4. Assurance Opinion
5. Submission to CBI
6. Pre-Issuance Certification by CBI
7. Issuance
8. Post-Issuance Assurance

- Moody's Opinion
- Transactional Advisor Support
- Reporting
- Roadshow
- Allocation of Funding
Bilateral Agencies

French Development Agency (AFD)
- provides direct loans to municipalities for infrastructure projects
- uses financial intermediaries to support small and medium sized municipalities in basic infrastructure investments
- Cape Town: AFD funded adaptation solutions through the Cities and Climate Change in Africa programme

US Agency for International Development's (USAID) Credit Authority offers partial credit guarantees, using risk-sharing agreements to mobilize local private capital to fill financing gap

Many other bilateral agencies offer technical assistance.
Private Sector Solutions

Engaging the private sector in GIZ EbA project in Cartagena, Colombia

- EbA to minimise flooding events, e.g. restoration and maintenance of forests, conservation of mangroves
- Compensation fee for hardening and sealing green areas (reduction of rainwater runoff that often causes flooding)
- Specific fee for conferences and events in Cartagena (awareness of environment, reduce pressure on water use)
- Revenue fed into endowment fund, administered by municipality

Payment for ecosystem-services

- Private sector makes a direct/indirect payment to provider of ecosystem services
Private Sector Solutions

Engaging the private sector in South Africa
- BBBEE Scorecard
  - Enterprise Development
  - Corporate Social Investment
- Property Development and Asset Maintenance Funds
- Special Rating Areas
- ‘Stewardships / Conservances
- Legislative Compliance
Insurance: Resilience Bonds

Resilience Bonds

- Innovative variation of catastrophe bond
- City wants to insure assets against flooding events
- Build new seawall, but lacks funds
- Insurer takes expected impact of planned investment into account and lowers the premium the city has to pay
- Cost saving to be used to fund seawall construction
- Premium discounts to incentivize long-term decision-making is typical concept in the personal insurance industry
Multilateral Climate Funds

Green Climate Fund, Adaptation Fund, GEF, etc.
- Provision of grants or loans
- Cities cannot apply directly but have to go through accredited entity
Mulilateral Development Banks (MDBs)

- IDB, AfDB, ADB, EBRD, EIB
- Instruments: (concessional) loans
- World Bank with Cities Resilience Programme, technical assistance for project preparation
- Tanzania: project preparation (grant) and construction (loan) of flood resilience measures

![Figure 1. Total reported MDB climate finance commitments, 2011-17 (in US$ million)](image-url)
Philanthropy

Corporate Social Responsibility Funds
- Companies spend 1 - 5% of average profit on CSR activities, which can include climate change adaptation

Stewardship approaches
- Companies support water stewardship programme, e.g. cleaning of rivers that has clear adaptation benefits

Technical assistance & small financial contributions
- 100 Resilience Cities Program by Rockefeller Foundation: Financial support for establishing Chief Resilience Officer in municipality
Crowdfunding / Crowd-investing

Local Level
- Guided by principle: residents want to take forward and invest into project
- Funding from diverse donor pool, incl. matching fund from municipality
- A way to realise small initiatives in the context of adaptation, such as green roofs / facades, street gardens

International level
- Investors looking for sustainable investments
- www.clime-it.com or www.ecoligo.com
South Africa
Climate Change Flagship Programmes and South Africa’s Climate Change Response

South Africa’s Nationally Determined Contribution to the UNFCCC

South Africa’s GCF Country Programme and Investment Framework

South Africa’s NDC to UNFCCC

South Africa’s NAMA Portfolio

National GCF Country Programme

South Africa’s Portfolio of Nationally Appropriate Mitigation Actions (NAMAs)
Current DBSA Involvement in Climate Finance Activities

DBSA

GF
The Green Fund is managed by the Development Bank of South Africa (DBSA) on behalf of Department of Environmental Affairs.

Current portfolio:
- 8 capacity development projects
- 16 R&D projects
- 31 Investment projects

GCF
DBSA’s accreditation to GCF allows the bank to access GCF funds in order to support innovative and risk-sharing approaches in projects that contribute towards low-carbon and climate-resilient development.

Current Pipeline:
- 3 project approved (1 FP, 1 PPF & 1 readiness support)
- 6 being prepared for GCF board consideration, pipeline being developed.

GEF
The DBSA is also accredited as a National Project Agency (NPA) for the Global Environment Facility (GEF) in 2014.

Current Pipeline:
- 6 projects approved
- Pipeline of projects being prepared for GEF 7

IDFC
DBSA is an active member of the International Development Finance Club, IDFC, formed in 2011. IDFC is a network of 23 leading national, regional and international development banks from across the planet that share a similar vision of promoting of low-carbon and climate resilient futures.

GILFCC (The Lab)
DBSA is a member of the Global Innovation Lab for Climate Change, whose mandate is to support the identification and piloting of climate change financing instruments and products to catalyze private sector money into Climate Change mitigation projects in developing countries.
Key Agencies partnered with DBSA

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The Adaptation Finance Value Chain:

1) **Sourcing** Adaptation Finance:
   - sources of Adaptation Finance (private, public and donor: nationally and globally)
   - key SA intermediaries and accredited agencies
   - donor funding cycle
   - criteria requirements and application processes
   - application submissions including technical studies, cost benefit analyses etc
The Adaptation Finance Value Chain:

2) Packaging Adaptation Finance:
embracing Adaptation Finance in municipal programming and planning cycles,
integration and alignment with municipal IDP, SDBIP, policy and strategy
capital & operating budget alignment
capacity building
crowding in of other sources of finance (co funding)
The Adaptation Finance Value Chain

3) Delivering Adaptation Finance Projects & Programmes:
   - project management,
   - project cycle,
   - governance structures and partnerships.

4) Monitoring, Reporting and Evaluation:
   - Indicators
   - quality control,
   - reporting systems
   - impact assessment.
Towards a Financial Framework

**Challenge #1:** integrating multiple funding sources & streams across dozens of big and small projects over many years to meet three core needs:

1. **Green and grey infrastructure** (canals, culverts, gabions, floating wetlands, pocket parks)
2. **River management services** (e.g. Sihlanzimvelo)
3. **Human & business capability development** (capacity building, business support, partnerships, skills development)
Towards a Financial Framework

**Challenge #2**: Synchronising disparate institutional cycles

1. Donor Funding and M&E Cycle
2. Business budget cycle
3. Municipal IDP, Budget & SDBIP Cycle
4. Project Cycle
Towards a Financial Framework

**Challenge # 3**: Integration & alignment mechanisms

- Programme Packaging & Integration
- Funding receipt, disbursement
- M&E and reporting
Thank you!