

Mobilizing climate investment: project preparation and financing

UNEP Risø Center
Low-Carbon Development Group

Singapore,
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The Big Picture

- Climate change is a "real" phenomenon, which cannot be tackled with public finance alone.
- Therefore:
 - *how should Parties negotiate rules for NAMAs?*
 - *how to successfully "crowd in" private capital?*
 - *what can be learned from the CDM experience?*

NAMAs: Political Framework

"developing country parties will take nationally appropriate mitigation actions (NAMAs) in the context of sustainable development, supported and enabled by technology, financing and capacity building, aimed at achieving a deviation in emissions relative to business as usual emissions in 2020"

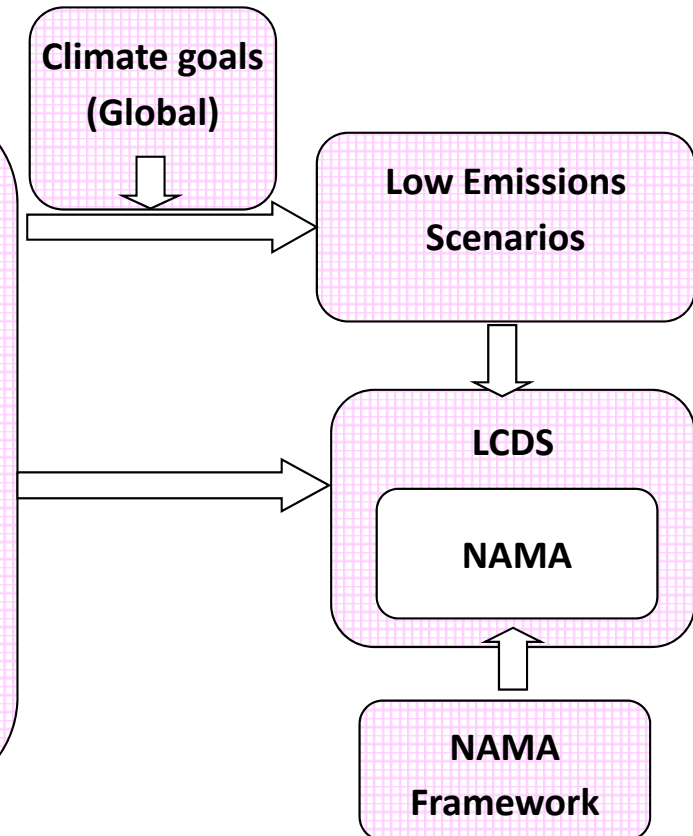
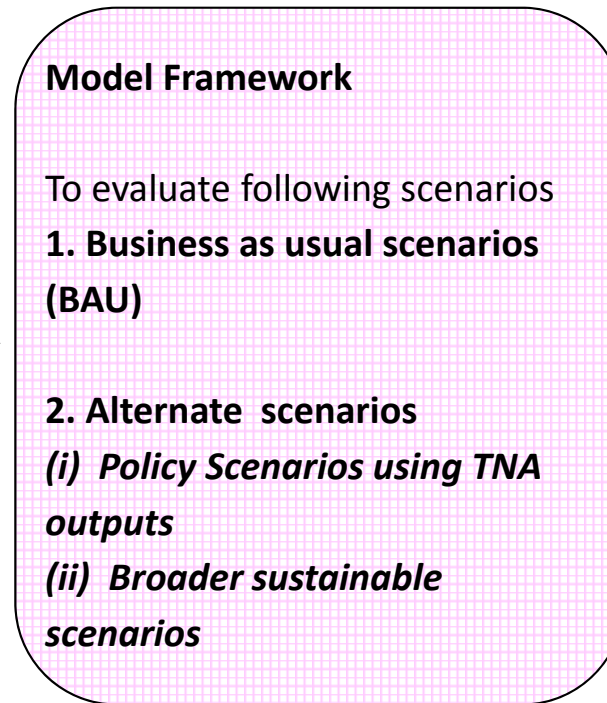
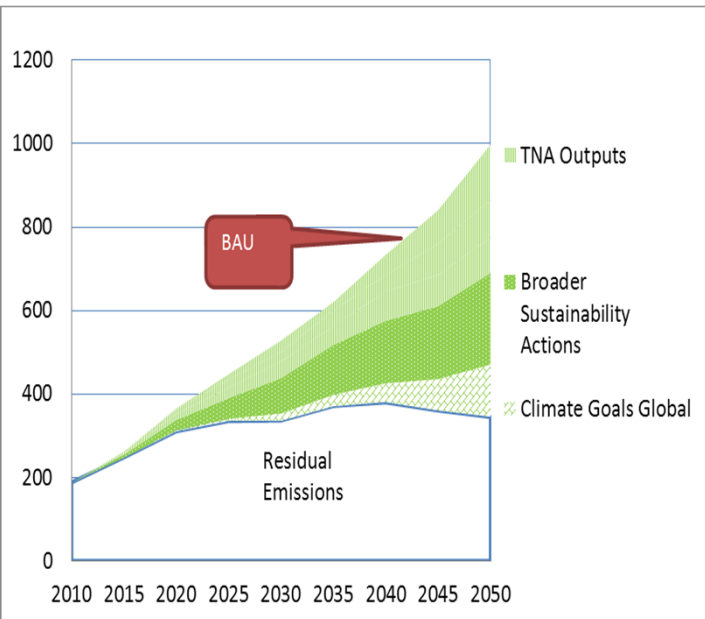
Cancun Agreements

MRV International Tier

1. National Communications (NC) every 4 years and Biennial reports (BER) every 2 years
 - Biennial reports Measurement (M) and Reporting (R) part of NAMA
2. International Consultations and Analysis (ICA) by technical experts
 - Analysis of information in BER

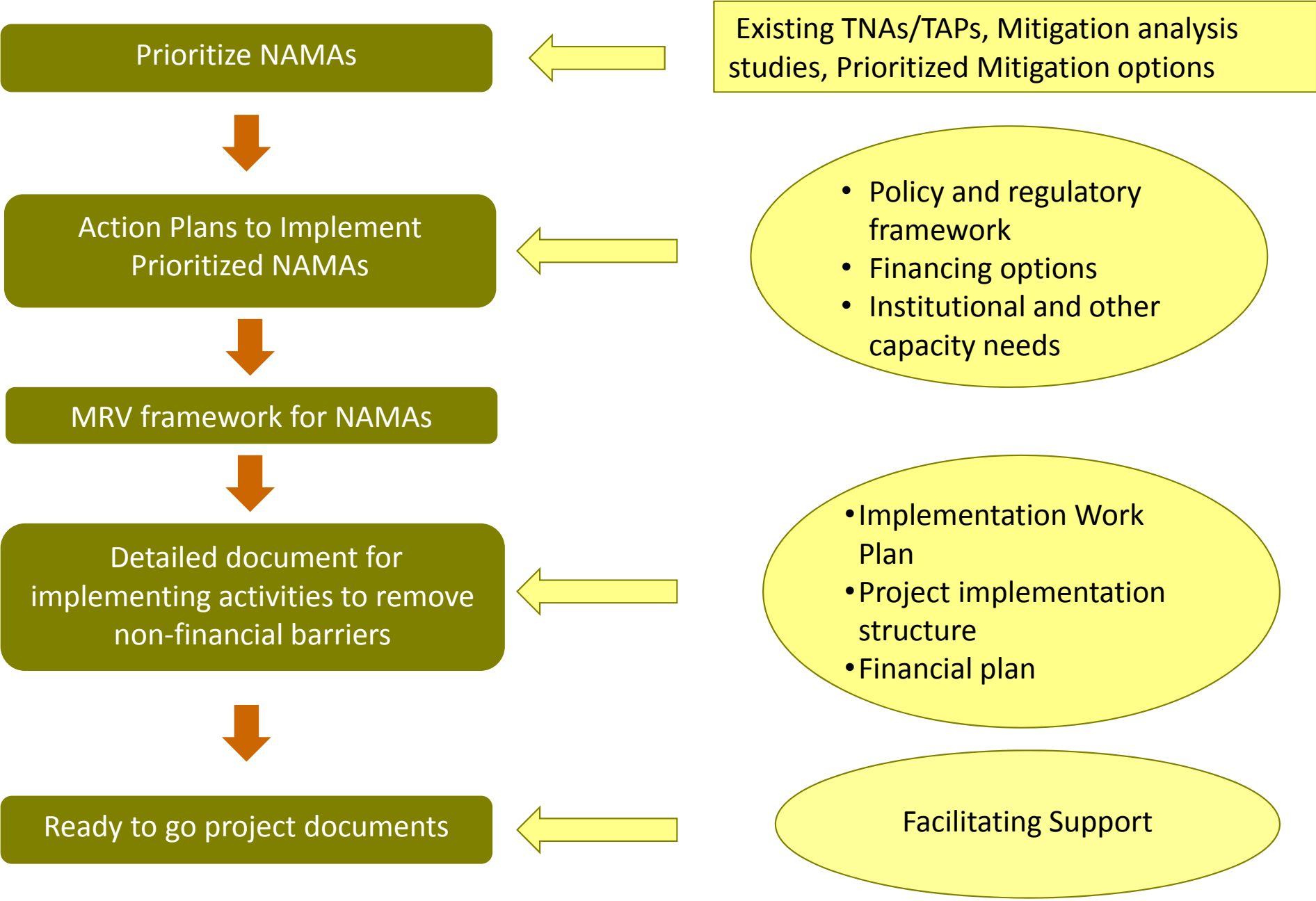
LCDS Framework

Technology Action Plans



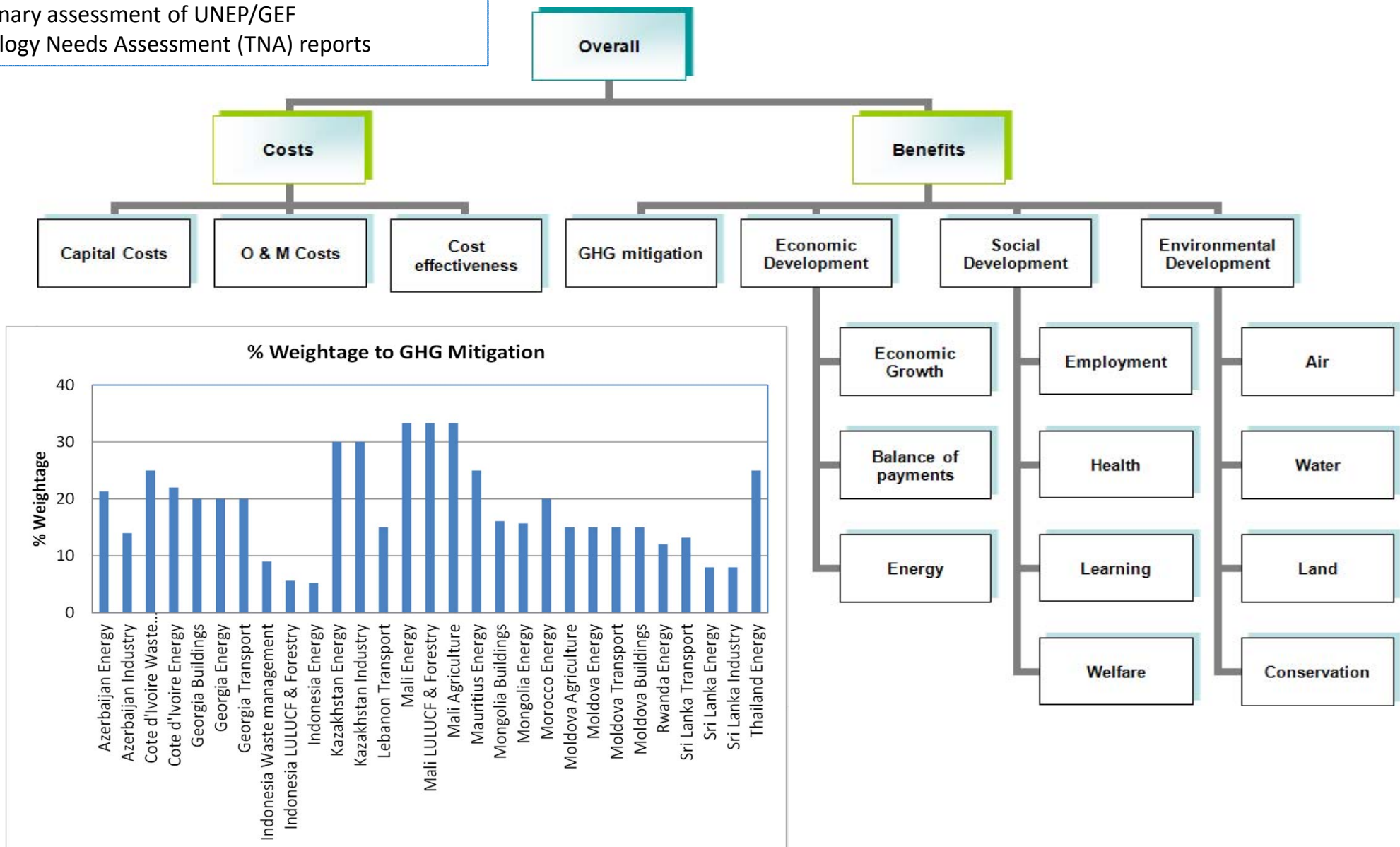
Source: Dhar, S, Painuly, J, & Zhu, X (2011) From TNAs to Low Carbon Development Strategies (LCDS) and Nationally Appropriate Mitigation Actions (NAMAs) http://tech-action.org/TNA_NewsNov2011.htm

Prioritizing NAMAs & Implementation



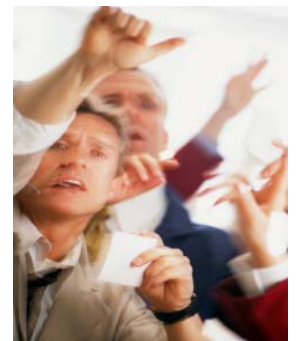
Multi Criteria & Mitigation

Preliminary assessment of UNEP/GEF Technology Needs Assessment (TNA) reports



The main challenge (1)

- **In a world with tightened liquidity, in order to make NAMAs more bankable, related assets or products need to be more clearly ring fenced by law. And definitive off-takers identified for those. Currently there are no buyers!**
- **As with the CDM, the legal and/or regulatory frameworks for the "asset" (whether tangible or not) has to be developed, otherwise there will be too much risk for private financiers!**



The main challenge (2)

- **If NAMAs are a sovereign prerogative, there's a risk that public actors and institutions or development banks will have a "monopoly" over their financing.**
- **Devising PPP structures, tenders and concessions incorporating GHG reductions into performance or payment criteria is fairly straight forward.**
- **BUT, this will likely fail to harness true sectoral "transformation" or create the necessary incentives to drive massive capital inflows into mitigation.**
- **"Reverse auction" structures similar to GetFIT make good sense, but there are practical challenges. These could be managed by designated national climate finance institutions.**

What can we learn from the CDM experience?



Building on CDM Strengths

The CDM was...

- both a *policy instrument and a marketplace* for mitigation operating under both international law and domestic political-legal frameworks. These are still relevant and shall continue until at least 2020.
- a bridge-builder on front lines of negotiations & investments between:
 - Private and State actors (explicit recognition of need to drive capital)
 - Developing and developed countries
 - Diverse interests: economic, environmental, social
- a catalyst for new institutions and governance frameworks to coordinate a large number of diverse stakeholders:
 - early identification of barriers and enablers
 - transparency in decision making
 - stakeholder buy-in
 - empowerment and ownership

NAMAs should build upon these strengths e.g., mobilizing private sector, creating partnerships and bridging stakeholder agendas, inspiring innovative approaches

Methodologies & Standards

- Importance of clear yet flexible approaches to:
 - eligibility criteria that define carbon "asset" quality
 - system boundaries for projects and sectoral activities;
 - baselines and emission factors
 - monitoring, reporting and verification
- *Standardization, benchmarks, and simplification tools are key building blocks for NAMA financing. They will front-load transaction costs, but enhance access and build scale by reducing time to market and investment uncertainties*

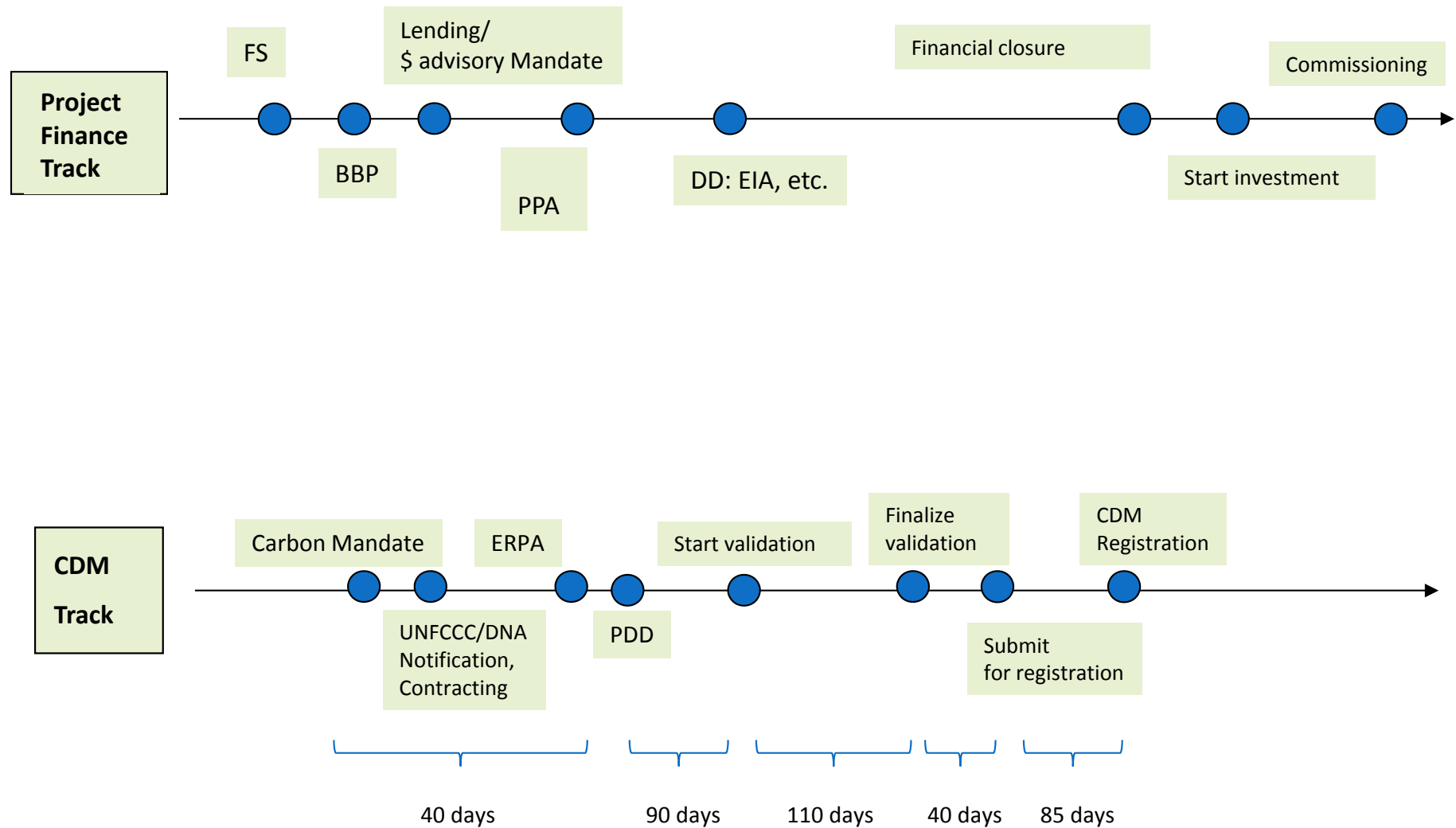
Carbon Finance as Late-Comer

- **Few CDM projects were developed by foreign developers** (less than 5%)
- **Very little foreign investment linked to CDM**
 - UNFCCC estimate: USD 21.5 to USD 43.0 billion CDM-specific investment over its lifetime
 - USD 495 billion recorded investments in the CDM pipeline (8,000 records out of a total of 12,000) – $21.5/495 = <5\%$
- **Limited cash flow from CERs**
 - Value of issued CERs: 1,27 B @ \$10 \approx USD\$ 12.7 billion \approx 2 billion /year)
 - CDM experience shows that only a marginal share of project financing can be clearly linked to emission reduction value drivers.

Don't expect FDI driven mitigation; rather, plan for its involvement.

Climate impacts probably won't be a primary driver for NAMA financing

Overlap of cycles should be clear



Unilateral Financing was the Norm

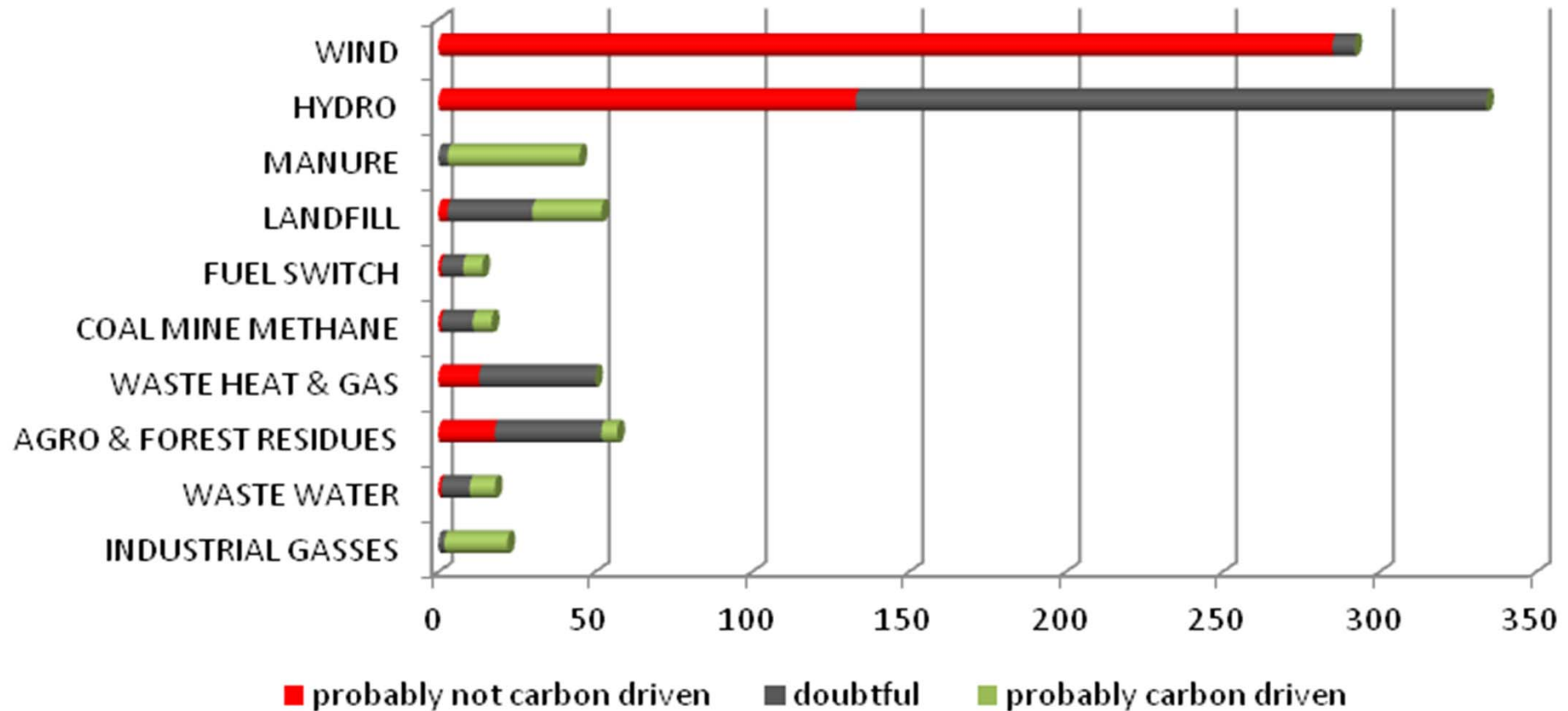
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- **Limited cash flow from CERs**
 - Value of issued CERs: 1,270,000,000 @ 10 USD \approx USD 12.7 billion \approx 2 billion /year)
 - CDM experience shows that only a very marginal share of project financing can be clearly linked to emission reduction value drivers.

**Don't expect FDI driven mitigation, rather plan for its involvement.
Climate impact probably won't be primary driver for NAMA financing**

Sustainable Development and NAMAs

- SD has been treated in divergent ways across regions, but generally aims to strike a balance between:
 - environmental integrity
 - economic efficiency
 - local development
- Is a one-sized-fits-all stakeholder consultation process appropriate?
- Need to estimate the "indirect" mitigation impact from positive "spillovers".
- Under the CDM, SD impacts were evaluated quite distinctly from financial or investment additionality considerations . *Greater harmonization of SD criteria and indicators as well as better integration of financial and non-financial tests would represent important progress for NAMAs.*

CDM Investment by Sector



Real structured trade/finance CDM example

Standard Bank financed a gas pipeline company that did a CDM project. A joint facility was established to refinance and re-gear the company

Carbon-backed finance and trade

- Project earns CERs through fuel switch
- Prepayment facility. to forward sell credits
- Combined package incorporating carbon and project finance

Benefits:

- Less admin, fewer parties involved
→ “one-stop shop”
- Better pricing due to familiarity with carbon market, improved risk assessment - combined facility
- Up-front finance

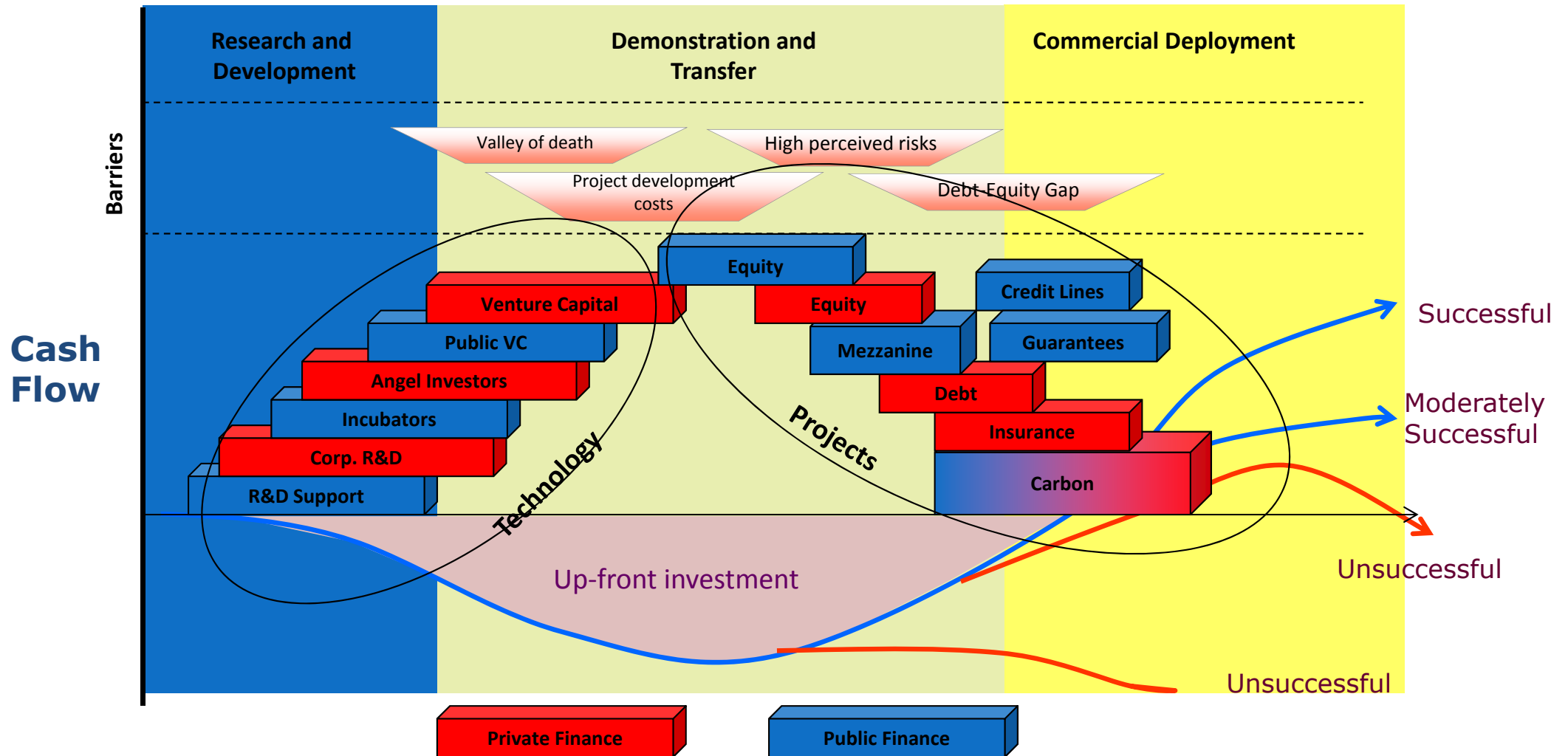


Making NAMAs more bankable

- **NAMAs can be scoped out and prepared just like any other major infrastructure investment project**
- **NAMAs should be aligned with primary non-carbon investment (or core business) drivers**
 - profitability
 - regulation (actual or anticipated)
 - technology development and innovation linked to industrial policy
 - rising fossil fuel prices
 - security of supply
 - energy access
- **Stakeholders, mainly government, can create incentives to promote secondary NAMA investment drivers**
 - prestige
 - brand value/reputational impact as well as CSR
 - local environmental considerations

UNEP Model for Deploying Clean Technology

Filling Gaps in the Finance Continuum



Financial Structuring of NAMAs (1)

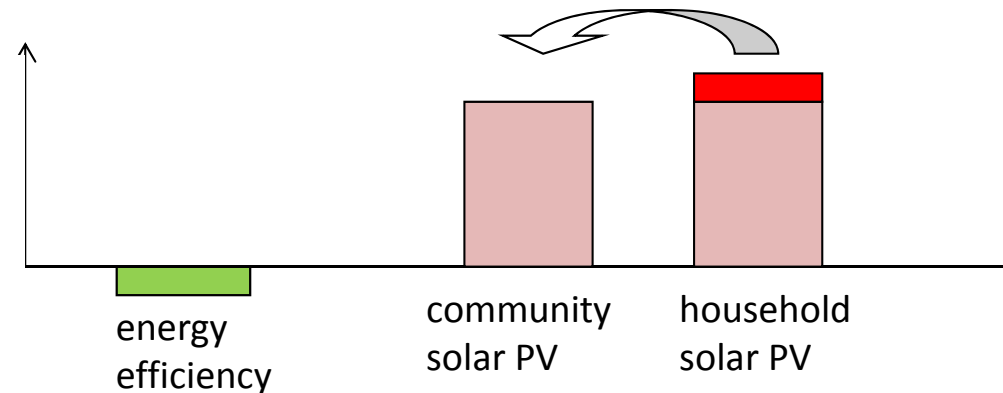
- Financial structuring doesn't exist in a vacuum. It is not a separate "activity component" that requires a separate source of financing
- It *is* fundamentally an exercise in splitting the bill
- There is no magic formula that will eliminate any additional cost
- The need for "innovative financial instruments" for NAMAs is questionable. Rather, find innovative ways of splitting the bill using existing structures.
- More a question of context than tools.

	Public	Private
Domestic	1	3
Foreign	2	4

Financial Structuring of NAMAs (2)

- Cost *inefficiency* is not always *inappropriate*
- Successful financial engineering around a NAMA is not (necessarily) influenced by high marginal abatement costs because other drivers are more important.
 - e.g., wind and solar energy investment often thrive in places where energy efficiency does not

A shift from high to lower cost of abatement indicated by the arrow reduces costs, but remains far above the (negative) cost of energy efficiency initiatives



Financial Structuring of NAMAs (3)

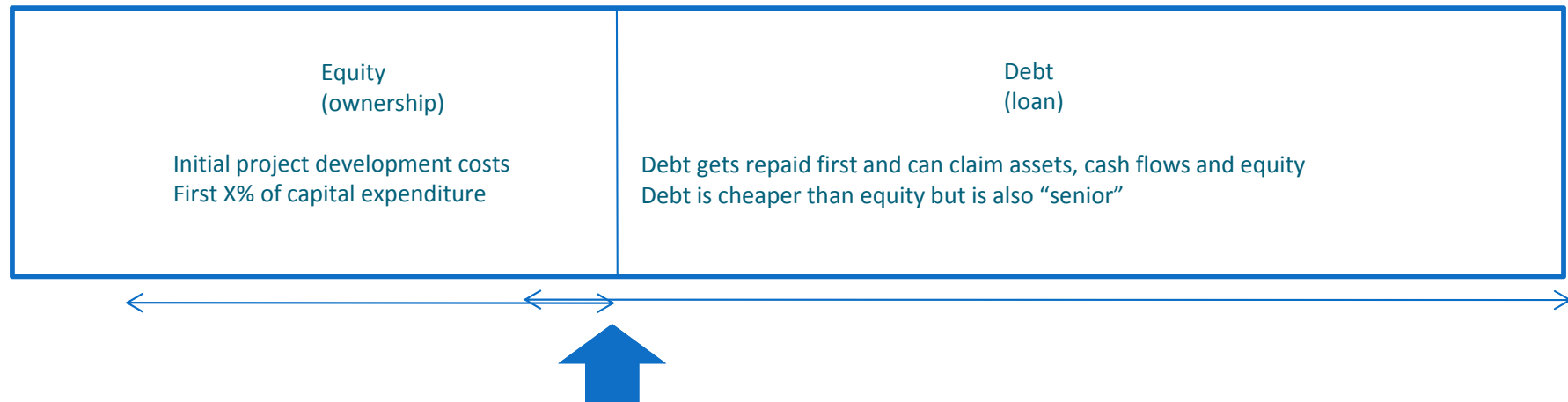
- Expectations are diminishing that the Green Climate Fund will become primary vehicle for deploying private capital in climate investment objects
- Leveraging is all about "who goes first"

	Public	Private
Domestic	1	3
Foreign	2	4

- Donors can assist in implementation, but mainly in project preparation, technical assistance, capacity building, sector strategies and other activities that are not related to physical assets
- instruments like sector-specific reallocation of national budget, cross-subsidization (like health and environment) – and regulation

Leveraging

Total capital requirement of a project



Equity is typically spent on:

- Design & feasibility
- Permits & approvals, EIA
- PIN, PDD, registration
- Legal & financing costs
- Initial project construction

Gearing or leverage:

If project is 70% debt funded, it has “70% leverage”

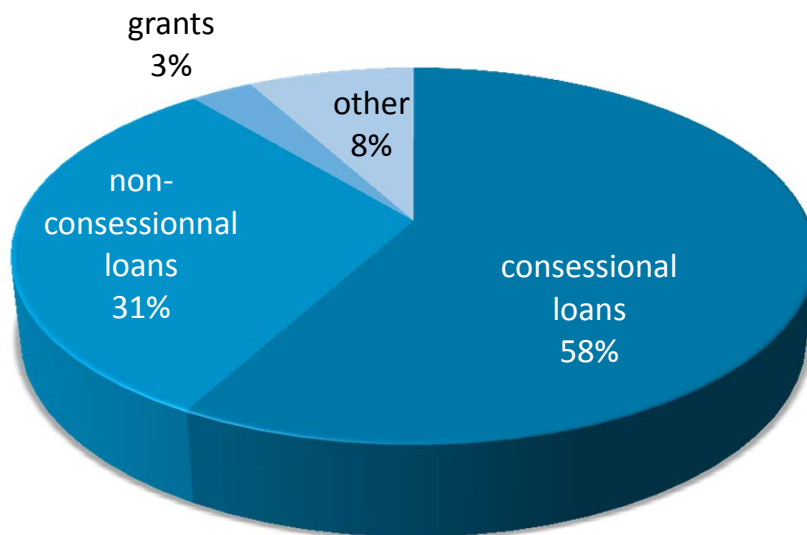
Debt is typically spent on:

- Construction costs
- Re-financing equity once the project is at a less risky stage

- The riskier a project, the more equity is required compared to debt
- The earlier stage or riskier a project, the more expensive the debt

International Financial Sources

Distribution on types of financing from major donors

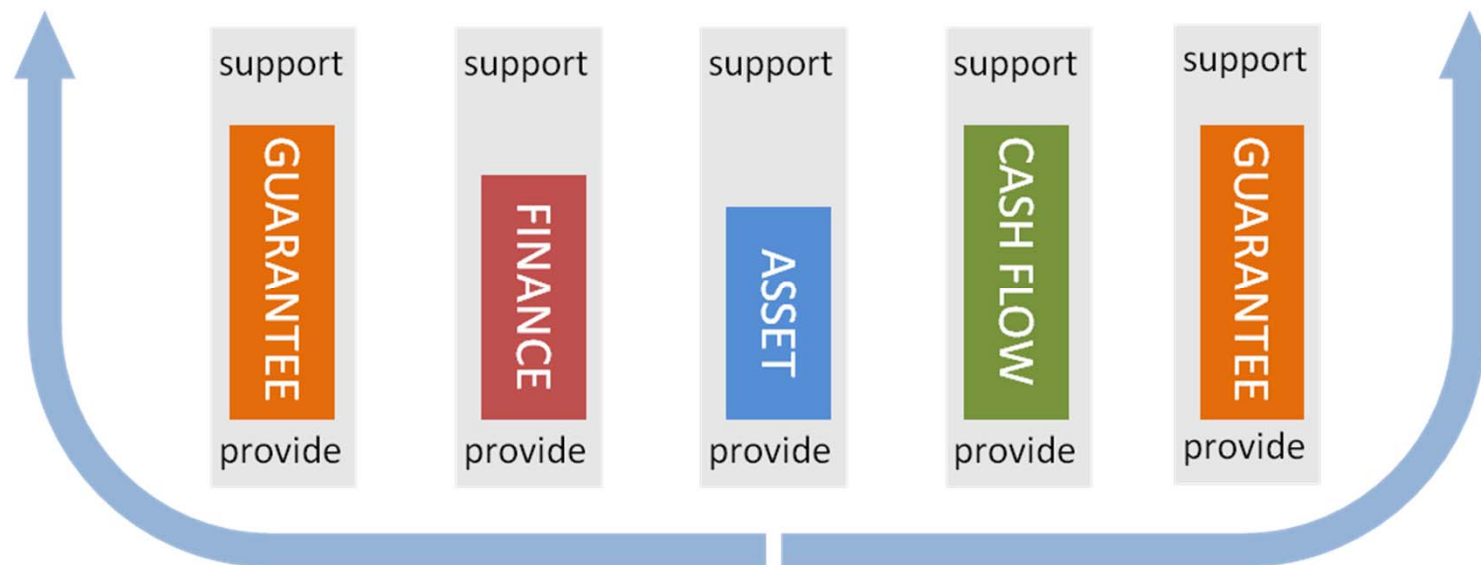


Main types of international financial instruments:

- concessional loans,
- non-concessional loans
- guarantees
- grants
- hybrid financing and bridge financing (revolving funds)

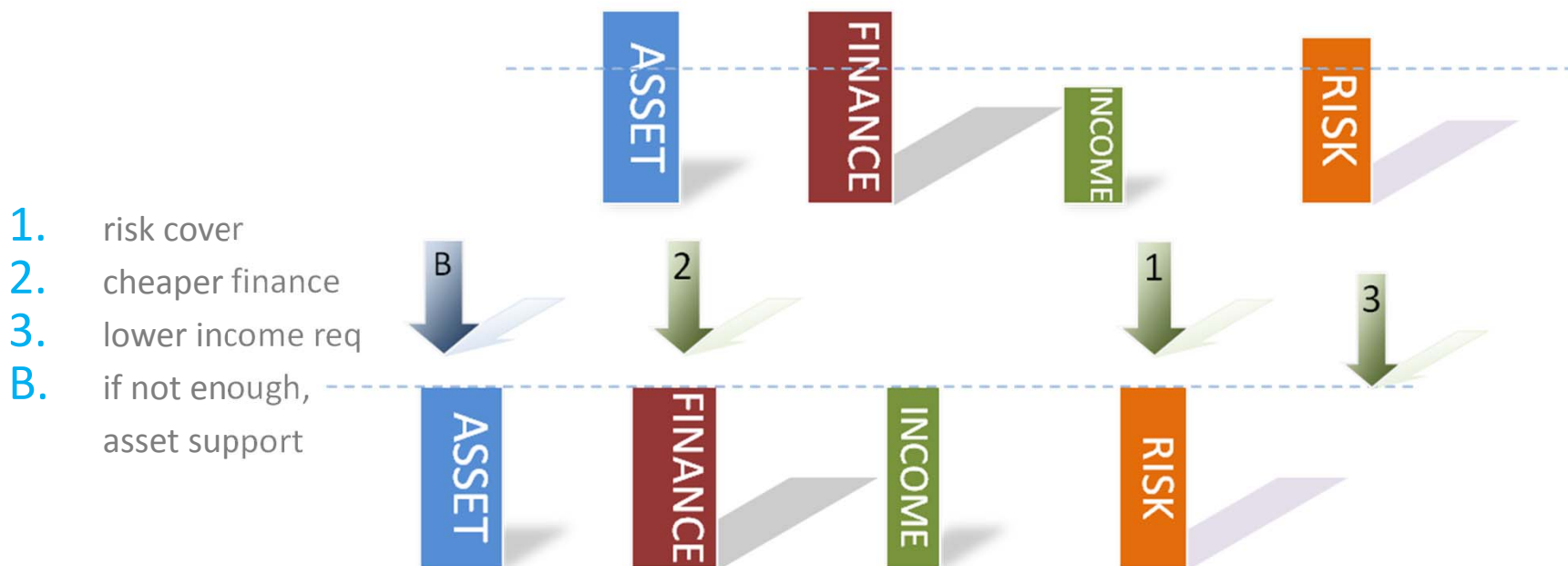
Financial Structuring of NAMAs (4)

- The support falls in four streams: Support for the asset (blue), support for the service (green), support for the finance (red) and support for the guarantee
- Support or provide



Financial Structuring of NAMAs (5)

- Another way of viewing it is a balancing exercise that looks at four financing elements: the cost of the asset, the cost of the finance, the size of the income and the composition of the risk

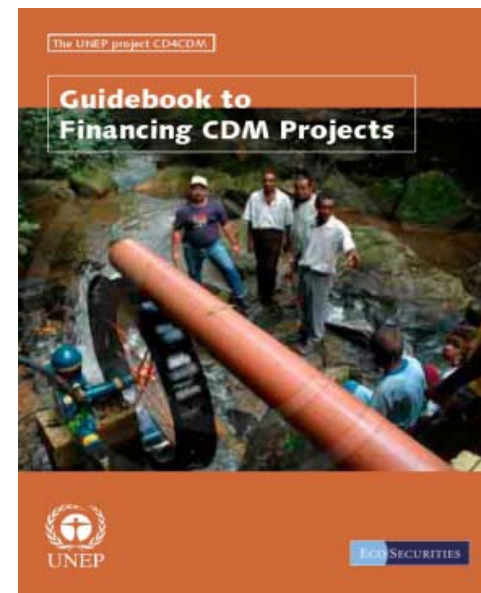
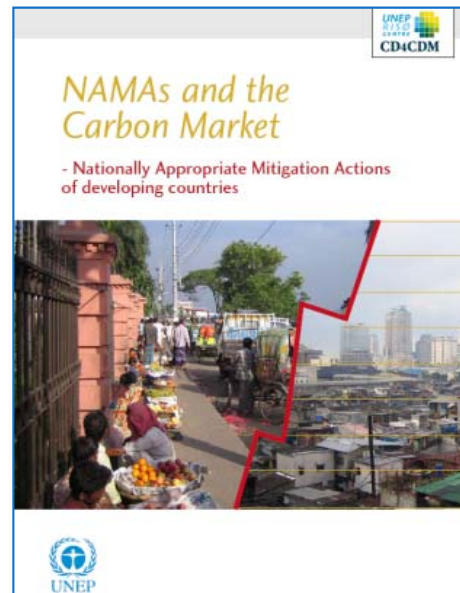


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- ✓ **Target group: Developing country officials**
Group size: 10
- ✓ **Course length: 2 weeks**
- ✓ **Course dates: 19th August 2013, February 2014**
Individual coaching possible

- ✓ **Price: 3800 USD**
Scholarships available
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Thank you!!



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