

# Enhanced financing for adaptation and mitigation, including technology cooperation

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UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

# Part I

## Adaptation



# Estimates of financial needs

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- UNFCCC, 2007: Additional investment and financial flows in 2030 for adaptation amount to tens of billions of USD, estimates depend on underlying scenarios
- UNDP HDR 2007/2008: adaptation investment needs will be **USD 86 billion by 2015**
- However concerns regarding methodology (Agrawala and Fankhauser, 2008), including
  - Assumptions (e.g., 10-20% of investments for climate-proofing)
  - Limited sectors and adaptation
  - **'Nebulous nature' of adaptation**



# Categories of adaptation and types of action

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- Three broad categories of adaptation actions:
  - Actions that climate-proof socio-economic activities by integrating future climate risk
    - Climate-proofing a new bridge built in a coastal region given that sea level rise may threaten its longevity
  - Actions that expand the adaptive capacity of socio-economic activities to cope with current and future climate risks
    - Setting up crop-insurance
  - Actions aimed purely at adapting to the impacts of climate change
    - Lowering water levels of glacier lakes to prevent Glacier lake outburst floods as a result of melting glaciers

# Context for adaptation action

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- **National policies provide a strategic framework for adaptation and an enabling environment in which society, the public and the private sector engage in adaptation actions**
  - Developing countries are already integrating adaptation into their national and sectoral plans
  - Sectoral policies and national development plans are instrumental in creating such an enabling environment for adaptation
  - All privately owned assets (e.g. buildings and agriculture land) and business practices (e.g. insurance, water management and agriculture practices) that are sensitive to climate change will have to adapt
- **The Convention and the Bali Action Plan foresee developed countries assisting developing countries in meeting costs of adaptation by mobilizing financial resources. International public resources will be needed to meet adaptation costs.**

# Options for mobilizing financial resources

Public funding source	Voluntary contributions		Defined contributions	Contributions through levies on market instruments or commodities	
	Multilateral	Bilateral		International	National
<b>Current</b>	Convention funds operated by the GEF (GEF Trust Fund, SCCF and LDCF) PPCR GFDRR	Official development assistance		Adaptation Fund through CDM levy	European Union emissions trading scheme
<b>Proposed</b>			Fixed percentage of GNP or based on criteria such as GDP, greenhouse gas emissions and population	Expansion of CDM levy to 3–5 per cent Share of proceeds from JI and ET Levy on auctioning AAUs Levies bunker fuels	Share from global carbon tax

- Call for resources to be:
  - Adequate and sustainable to address identified adaptation needs
  - Predictable to enable proper planning or sequencing of adaptation actions
  - New and additional to not divert funds from ODA

# Key outcomes

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- International public resources, **new and additional**, would be needed for adaptation;
- Work would be needed to **categorize adaptation activities** to facilitate mobilization and allocation of resources;
- **Effective disbursement** of funding for adaptation would need considering the possibility of providing programmatic rather than project-based support in order to enhance action on adaptation.



# Part II

## Mitigation

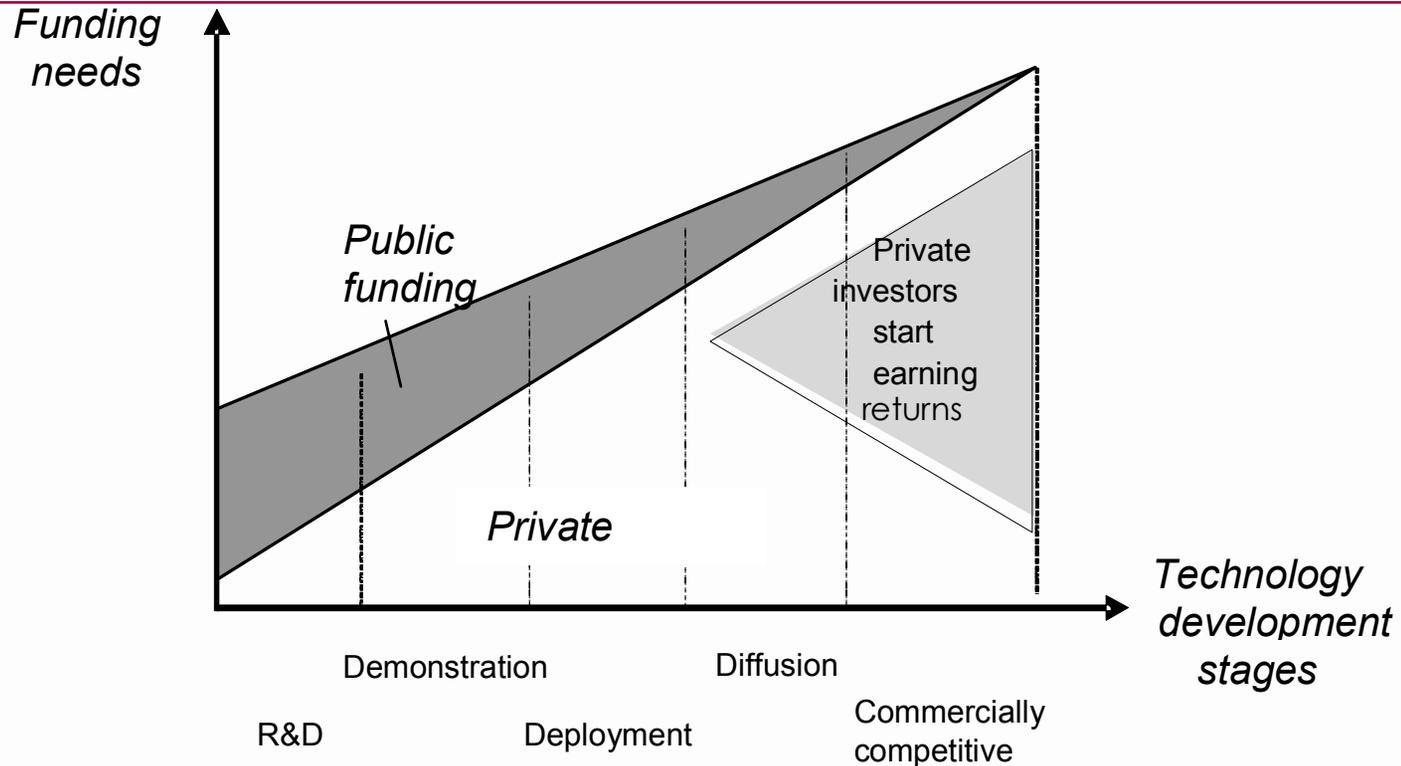


# New information relating to emissions scenarios and estimated investment needs

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- New emissions scenarios and estimates of emission reductions required in 2030, from the International Energy Agency (IEA) and others, are virtually the same as those presented in the 2007 report.
- New estimates of additional investment and financial flows needed are significantly higher, increasing the scale of the challenge to generate additional investment and financial flows.
- The strategies presented in the 2007 report to scale up, shift and optimize investment and financial flows to mitigate climate change assume even greater significance.
- Developed country Parties to take the lead in combating climate change and developing countries will need support in responding to this challenge.
- Mitigating climate change will require technological and behavioural change on several fronts.
- A variety of funding sources and delivery mechanisms are needed to address GHG emissions from all sectors in all countries, and also foster development and transfer of mitigation technology.

# Roles of the public and private sectors in financing technology development



Various options, tools and mechanisms could be considered - **private and public sectors, national policies and the Convention as a catalyst**

Any option/mechanism should take into **account the role of public and private finance** at different stages of technology development cycle.

# Public investment and financial flows for enhanced mitigation action

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- Public funding needs to shift towards providing more support for earlier stages of the technology development cycle
- Public funding is needed to mobilize and leverage the investment from private sector
- Design of public finance mechanisms need to
  - Identify and address clean energy market barriers and financial market conditions;
  - Build on existing capacities and engage partners at all levels in the chain of project development, marketing, delivery and financial intermediation;
  - Take a programmatic approach to project financing;
  - Undertake technical assistance programmes to build capacities and manage any gaps, roles or risks not addressed by the commercial parties.



# Private investment and financial flows for enhanced mitigation action

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- Carbon markets and private investment in clean energy have grown rapidly over the last few years.
- Crediting mechanisms have demonstrated their role in delivering additional financial resources to developing countries, a role that could be expanded by increasing the resource flows.
- International market in 2020
  - New estimates of the demand for emission reduction credits in 2020 are 0.5 to 1.7 GtCO<sub>2</sub>e.
  - Estimated mitigation potential in developing countries in 2020 is up to 7 GtCO<sub>2</sub>e ; with most of the potential available at less than USD 25/tCO<sub>2</sub>e
  - Parties have presented many proposals to expand market-based mechanisms for mitigation in developing countries.
  - Potential supply of emission reductions in 2020 is thus much larger than the estimated
  - Demand by developed countries for credits from developing countries, and crediting mechanisms are expected to play a supplemental role

# National policies to foster investment and financial flows

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- A diverse range of policies are available to enable countries to move to low GHG emitting development pathways.
- Each country needs to adapt or design policies to suit its own institutions and circumstances.
- Different policies for different mitigation measures and stages of the technology development, is likely to be most effective.
- Mitigation policies could play an important role in attracting private financing for technology development.
- Subsidy reform often can yield economic benefits and reduce GHG emissions.



# Key message

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- Financing enhanced mitigation action in developing countries will require options, tools and mechanisms to channel private and public finance enable through national policies and the Convention as the catalyst.
- Efforts may be explored in accordance with 1 b (ii) of the Bali Action Plan, which calls for “nationally appropriate mitigation actions by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner”.

