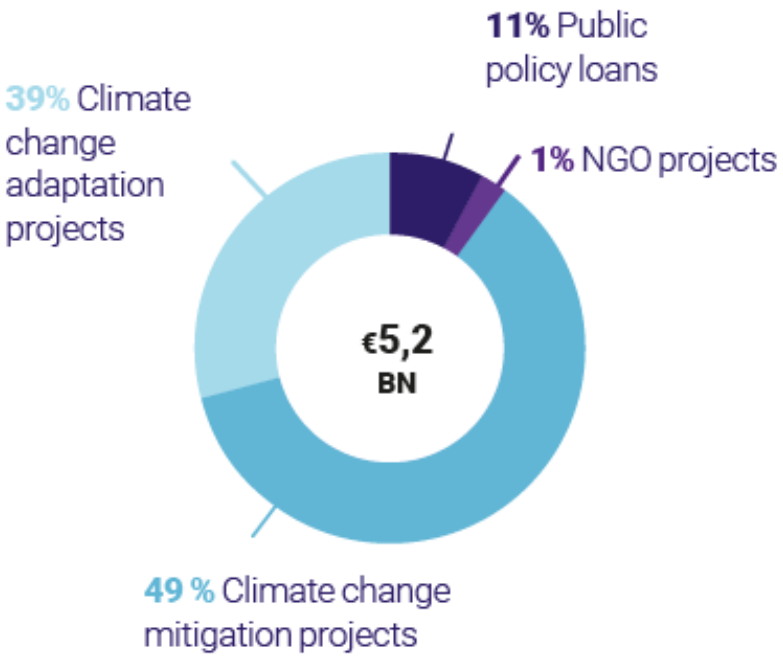
Climate Finance Tracking Methodologies

AsDB - AFD Workshop
9 July 2021

#MondeEnCommun
AGENCE FRANÇAISE DE DÉVELOPPEMENT

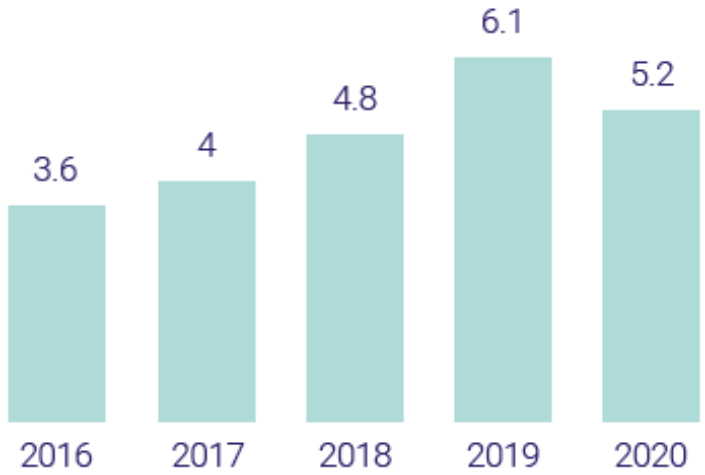
2020 Climate Finance

Breakdown by type of operation



Trend since 2016

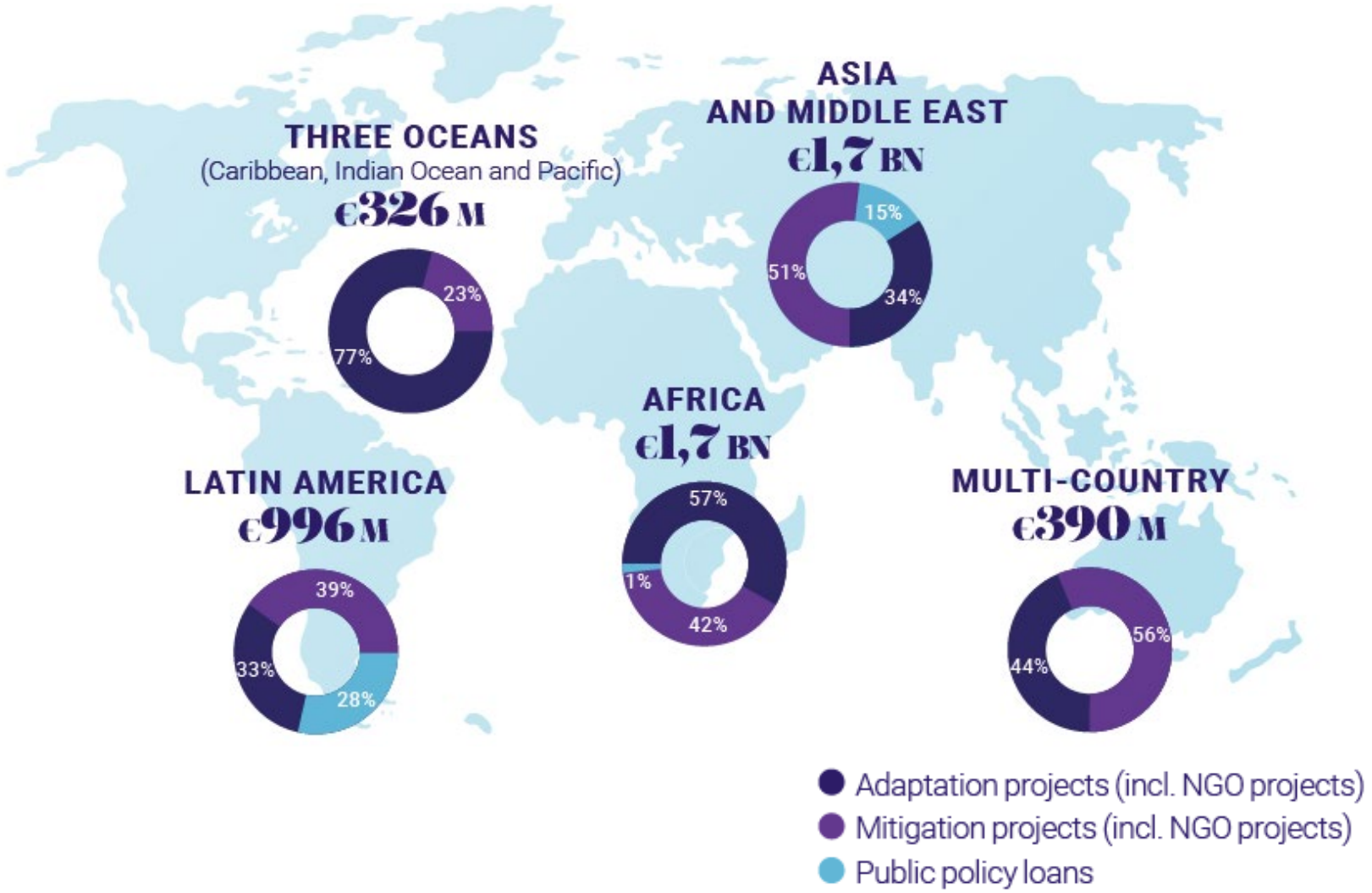
commitments in € BN



€23.7 BN

Total climate finance in developing countries since 2016

Geographic overview of climate activity in 2020
€ 5.2 bn of which € 1.5 Bn adaptation



Climate objectives => For each project
2 climate evaluations

100% Paris agreement

➔ Projects compatible with national low carbon and climate resilient pathways

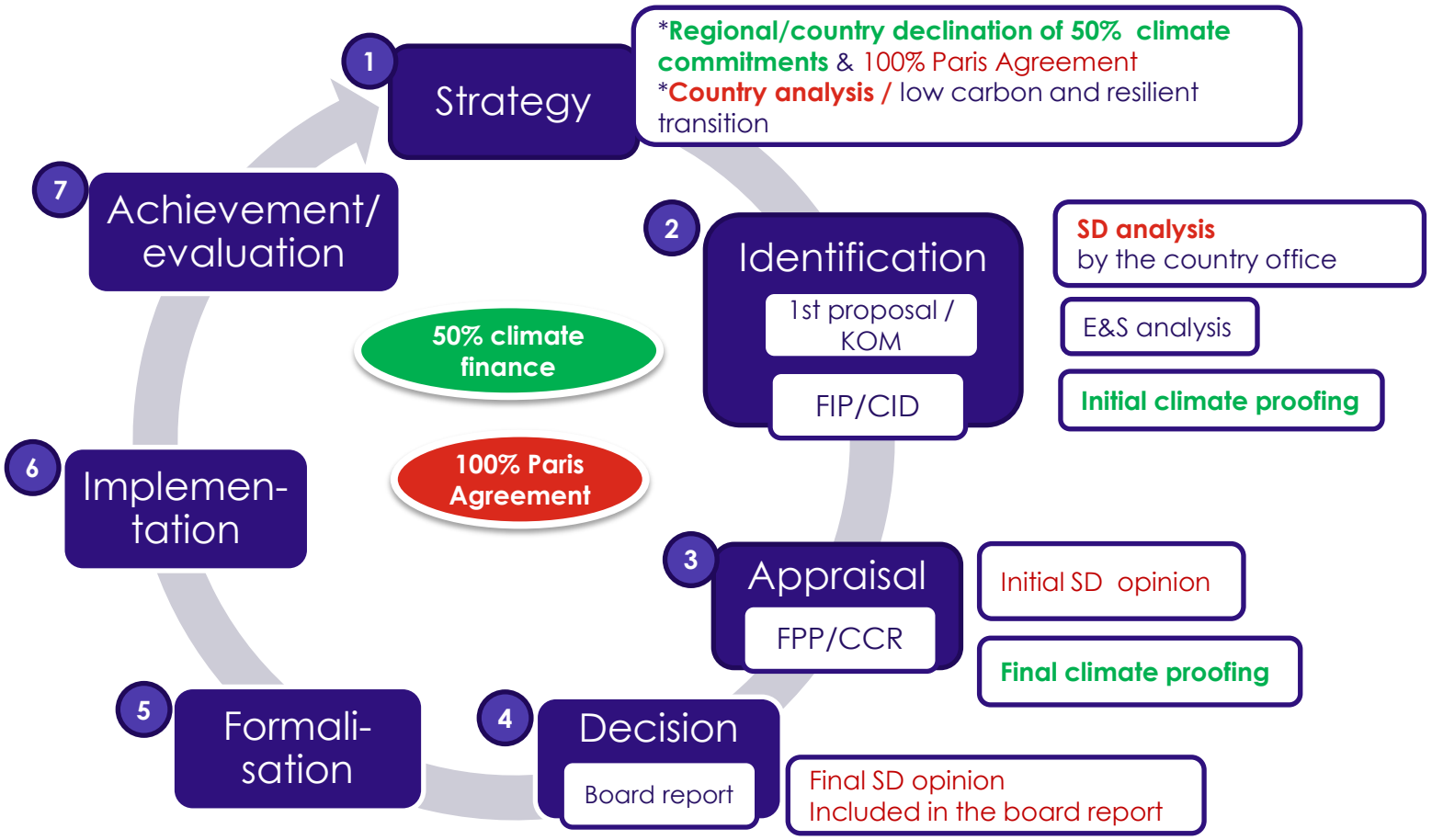
Tool : Sustainable development analysis

Based on a country analysis

50% climate co-benefits

- Reviewed by CLI(Mitigation/Adaptation)
- Carbon footprint tool- for mitigation/ Principles of selection for adaptation
- Selectivity for mitigation > 1 MT and > -10 Kt

Climate and Sustainable development (SD) tracking in the project cycle



Mitigation finance tracking

History of the Carbon footprint at AFD

2007

- Development of the first Carbon Footprint calculator based on the ADEME methodology

2008-2010

- Improvement of the tool at AFD to better meet the needs of users
- Sharing the tool with the IFC, who adapted it to its own needs

2011

- Development of a new tool at AFD in collaboration with Carbone 4
- Ergonomic, technical and methodological improvements
- Integration of new types of projects
- Agriculture and forestry projects assessed with Ex-ACT (FAO)

2020

- Update of emission factors
- Possibility to share the AFD tool outside the AFD Group
- https://www.afd.fr/en/form/carbon-footprint-tool

2021

- Monitoring of absolute emissions of projects funded by the group.
- The proposed scope of reporting covers sectors with a significant carbon footprint: food and forestry, industry, transport, energy, water and sanitation, buildings and waste.

Principles

"A transparent and simple tool to assess ex-ante the order of magnitude of direct and indirect GHG emissions due to a project over its lifetime."

- Estimation of volume of GHG emitted and/or saved annually by a project
- One common unit: tCO_2e
- Level of accuracy: Order of magnitude (~10-20% accuracy) → only main emission sources taken into account ; between -10,000 and +10,000 tCO_2e a project is considered "neutral"
- Take into account emissions induced by a project, by comparison to a reference scenario.
- Reference scenario = what would have most likely occurred without the project
- Results presented as average annual emissions or emission savings over lifetime of the project
- Take into account all project emissions (not pro rata AFD financing)

Indicative selectivity rules

Project avoiding more than 10 000 t CO_2eq / year	Contributes to mitigation	100% climate co-benefits
Project whose carbon footprint lies between -10 000 t and +10 000 t CO_2eq / year	« neutral »	No climate co-benefits (besides exceptions)
Project emitting over 10 000 t CO_2eq / year	Emissive	Acceptable in some cases
Project emitting over 1 Mt CO_2eq / year	Very emissive	In principle not eligible to AFD financing

But also :
If the climate related risks have not been taken into account (« maladaptation »),
=> projet not aligned with the Paris Agreement

Specific cases / methodologies

Buildings :

- If the project avoids GHG emissions / energy consumption / water consumption
- Or certification (HQE/LEED/BREEAM)

→ Application of a flat rate

Small scale urban projects / components

- EE street lighting
- Low-carbon mobility infrastructure
- Planting / restoring green areas

→ 100% mitigation co-benefits

Energy :

- RE / low carbon energy distribution and storage

→ Co-benefits according to the share of RE in the grid

Mitigation project examples

Supporting the development of renewable energies

VIETNAM

AFD finances capacity expansion (+360 MW) of the Ialy hydroelectric plant to reach installed capacity of 1080 MW. This component includes TA on hygiene matters, Safety, Environment on EU funds. The objective is to improve standards and practices in Hydroelectric construction.
AFD also supports the development of the Se San photovoltaic power plant with a capacity of 49 MWp.

Impacts

- New solar and hydroelectric capacities and reduction of GHG emissions by **97,600 $tCO_2eq/year$**
- Împroved security of electrical systems

Climate finance : 100% mitigation

Clean Energy Access (cancelled)

Co-financed with ADB

PAKISTAN

Investment program to develop renewable energy in the provinces of Khyber Pakhtunkhwa and Pendjab. The objectives of the program are to increase renewable production capacity, improve the inclusion of women, strengthen the capacity of provinces to conduct investment programs, and increase energy efficiency in the public sector.

Impacts

- 310,000 tCO_2 eq/yr avoided

Climate finance : 100% mitigation

Adaptation finance tracking

Adaptation finance tracking is based on the 3 steps (Joint MDB IDFC principles)

1. Setting out the **context** of risks, vulnerabilities and impacts related to climate variability and climate change
2. Stating the **intent to address** the identified risks, vulnerabilities and impacts in project documentation;
3. Demonstrating a direct **link between the identified risks, vulnerabilities and impacts, and the financed activities**

- Once adaptation activities have been identified, their share of the investment covered by AFD financing is computed as co-benefit
- If the costs cannot be segregated from non-adaptation activities, a conservative approach is adopted (undercount, internal practice 15% or pro rata)
- This work is **subject to audits** (Green bonds, RSO, DAS)< and compared with peers (co-financing)

Example : urban project in Pakistan. 30 M€

Component 1 : road construction, no specific climate risk identied – 8 M.

Missed opportunity ?

Component 2 : increase sustainable water access and efficiency to cope with increasing drought frequency linked to CC
- 20 M.

CLIMATE
(3 steps to be informed)

20 Millions / 30 millio**ns**
= tentatively 66% climate adaptation only if the 3 steps approach is confirmed within project documentation

Component 3 : Improvement of water company management of costs (no specfic activities related to climate) -2 M.

Not climate

Missed opportunity ?

The (lost) opportunities

- **Construction of a road**

Adaptation co-benefits identifiable if:

- Presence of flood risks that could be exacerbated by CC
- Will to fix it
- The road is draining (side drains, permeable materials)

⇨ **If additional costs are identified: they are accounted for** as climate co-benefits

⇨ If additional costs cannot be isolated: **co-benefits may be estimated at 15%** of road construction costs

- **Capacity building programme**

⇨ If the program includes several themes or objectives, including adaptation to CC: adaptation co-benefits **pro-rata the number of themes** taken into account

⇨ If the program includes CC training, without any precision: we can compute **up to 15% climate co-benefits**

Consequence: the 3 steps require action at early stage

- **Context is key**: a dam for irrigation is not necessarily an adaptation project depending on the context (is the water sufficient to cover the needs even in the near future?)
- The intent of doing adaptation can be materialized within the **logical framework** (as one of the objective of the project for instance) or in the project documentation
- The detailed/estimate **costs of activities** responding to adaptation needs have to be spelt out in the project documentation. Otherwise we cannot count
- Capturing adaptation issues and clarification **within the feasibility study is good practice**
- Use climate horizons consistent with the type of project:
  - projections at 2100 are usually useless for an agriculture project, 2035 is more relevant
  - For urban planning or long-standing infrastructure 2050 and 2080 make sense.
  - **RCP 8.5, multi models CMIP5**

Tools and resources to inform adaptation challenge for project design and climate finance accounting

- **Thinkhazard**

  Early climate risk identification by country and sub-national scales. Rankings for different types of climate related hazards.

  This helps for identifying basic risks known in the target zone. High level of risk would call for specific attention during project design.

- **GERICS factsheets**
  - Mains trends captured in a pdf documentation
  - Summarized and detailed averview, country scale only
- **Climateknowledgeportal (2018 World Bank)**
  - By country or watershed, 100km*100km, dataset downloadable
  - Free access, many sector relevant indicators (e.g. CDD)
- **WRI/Aqueduct portal for climate related water stress:**
  - Shows clearly the demographic and climate water stress driver
  - Use mainly the « Projected supply » filter for climate risks purposes

Adaptation Project Examples

Sponge city- IWRM in Mianyang, (Sichuan)

- 35 M€ CCN1081

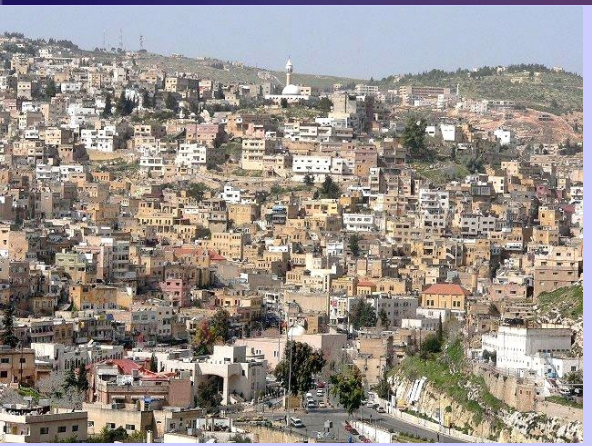
CHINA

A project with adaptation cobenefits

Two components

- Restore green areas and wetlands to increase water infiltration during heavy rain events and build a sponge road i.e. draining road to store temporarily water, reuse it and ease it later infiltration to buffer heavy rains events
- Improve water management and access in a context of increasing water stress in the dry season

- Improvement of water management during heavy rain and dry spell will increase adaptation to the local climate context – **66% adaptation cobenefits**
- Carbon balance slightly emissive (+14.000 tCO2e/yr)
- Project fully aligned with national and local policies on climate DRM



Waste water collection and treatment in Balqa

JORDAN

Context

- Arid zone, with alarming projection on futur rainfalls
- High prevelence of diarrheal diseases in target zones

The project - 75 MEUR

WW collection instead of infiltration/septic systems
Treatment and energy valorization of the WW
Tertiary treatment to allow for water reuse for agriculture

Climate finance : 50% adaptation

- Reduction of diarrheal diseases prevalence
- Additionnal 13Mm3 available for irrigation

Strengthening the marine meteorological system

INDONESIA

AFD supports the development of an integrated marine meteorological system in Indonesia. A observation network, covering the entire Indonesian maritime space, will be implemented, together with reliable and integrated modelling, forecasting and alert services, accessible to the users of marine and coastal areas.

Impacts

- Better monitoring and knowledge of the ocean and climate change
- Improved planning and adaptation capacities of the population and economic actors to the effects of climate change
- Reduced economic damages linked to natural disasters and recurring weather events
- Improved quality of life of the coastal population and of the blue economy

Climate finance : 100% adaptation

3. Buildings

Main principles

- Designed for all construction, extension or renovation projects (hospitals, schools, both in rural or urban areas, social housing, offices etc.)

  ⇒ The explicit objective is to improve the energy and environmental performance of the project as compared with the reference situation

- Deals with both **mitigation** and **adaptation** aspects

New construction : mitigation

- At least 20% reduction in energy consumption, GHG emissions or water consumption (2 of the 3) => 40% mitigation co-benefits
- Low carbon materials or certification (HQE très bon, Leed Silver, Breeam Good) => 10% additional co-benefits
- GHG savings over 40% => 30% additional co-benefits

New construction : adaptation

- Certification (HQE très bon, Leed Silver, Breeam Good) => 40% adaptation co-benefits
- Approach by relevant risk treated : +15% for each relevant climate risk treated (the 3 steps apply)
- Low-energy buildings : 40% adaptation flat rate if all relevant risks are addressed

Fondo Mi Vivienda
Financing green social housing

PERU

The Peruvian government has developed, with AFD support, an offer for certified sustainable social housing, integrating water and electricity efficient equipment, Verde"), accessible to Peruvian households at no additional cost and at preferential interest rates. This project is a credit line to the Peruvian state, cofinanced with KfW and supported by an EU grant.

Impacts

- Fosters the transition of the Peruvian building sector through the introduction of more sustainable and binding standards
- Improves access of more than 10,000 Peruvian families to secure and decent housing through loans at reduced interest rates

Climate finance :
40% mitigation
30% adaptation

4. Policy Based Loans

A process in 2 steps

1

Eligibility for climate finance

2

Quantification of climate finance

1- Eligibility for climate finance

The sector policy supported by the PBL contributes to the low-carbon and/or resilient pathways of the country

=> The sector policy states explicitly its contribution to the « climate » trajectory of the country

OR:

The PBL will enable a substantial improvement of the climate pathway and is the basis for a dialogue with the borrower on its pathways and its climate policies

⇒ Sector policy / NDC / country objectives
⇒ Leverage effect of the PBL on LT pathways
⇒ Dialogue started

Eligibility is justified by a set of crosscutting « climate » activities that may be on-going or elaborated within the public policy dialogue

Examples of crosscutting « climate » activities

- ✓ **Institutional change for the development and implementation of a climate policy**
- ✓ **Transportation planning with low-emission mode objective**
- ✓ **Planning for energy efficiency development**
- ✓ **Fiscal and budgetary policy to reduce emissions**
- ✓ **etc.**

2- Climate finance accounting

Counting on the basis of standardised elements

Pro rata the climate-related indicators of the public policy matrix

=> If possible, on the basis of triggers

OR:

Pro rata the volumes of investments in the actions defined by the sector policy supported by the PBL

⇒ Investments must be identifiables and measurable

⇒ Relevant link with the indicators/targets of the matrix

Examples

Pro rata the climate-related indicators of the public policy matrix

PBL of €100M€ for energy policy with 20 indicators of which 5 « climate »

=> 5/20 = 25% climate co-benefits

Pro rata the volumes of investments in the actions defined by the sector policy supported by the PBL

If the annual investment programme of the energy policy is €700 M and « climate » activities amount to €300 M

=> 300/700 = 43% climate co-benefits

2- Climate Finance Accounting

40% Flat Accounting

If the standard elements do not reflect the impact of the operation on the climate trajectories of the country and if the operation:

Deserves a score of +2 or +3 on the criteria « low carbon » or « resilience » of the Sustainable Development evaluation grid

AND

results in the formalization of a follow-up table or logical framework that highlights the climate goals to be achieved through the PBL

Example of an Energy PBL

Uzbekistan – 80% Climate

Energy-Climate PBL in Uzbekistan

- **Context**
  - **The most populous country in Central Asia, the second largest economy in the region.**
  - **An electric mix dominated by gas at 80%,** with RE accounting for 0% of the electric mix (13 GW) in 2018!
  - **A change of regime in 2016 that le**
  - **d to the opening of the country,** including the signing/ratification of the Paris Agreement.
  - **A NDC with low ambition:** -10% energy intensity by 2030 compared to 2010.
  - **The weight of the Soviet heritage:** Very high energy intensity (3x Germany!), infrastructure in poor condition, high networks losses.
  - **Strong political will to reform the electricity sector:** liberalization of the sector (unbundling, IPP), decarbonization taking advantage of the RE potential, energy efficiency... but also gas development

Energy-Climate PBL in Uzbekistan

- **Purpose:**
  - **Support the implementation of energy reforms to ensure a low-carbon development trajectory, and support the Government of Uzbekistan's (GoU) reform agenda towards a low-carbon economy.**
- **Contents:**
  - **A budget loan** of €150m
  - **A public-policy matrix** shared with the Asian Development Bank
  - **A Technical Assistance program** to support the implementation of the public policy.

Energy-Climate PBL in Uzbekistan

- **The matrix: 4 pillars, 10 reforms, 21 actions**
  - *Pillar 1 : Strengthening the legal and institutional framework of the electricity sector (3 reforms, 3 actions)*
  - *Pillar 2: Improving financial sustainability and attracting private investment (3 reforms, 3 actions)*
  - *Pillar 3: Decarbonation of the electricity sector in accordance with the Paris Agreement (4 reforms, 10 actions)*
  - *Pillar 4: Reducing energy demand(5 actions)*

Climate: 80% of the actions in the matrix are climate oriented => Climate finance is 80% of the loan

PBL to finance a program of reforms in water and waste water management

Co-financed with ADB

GEORGIA

Preparation of several laws on water resource management, regulation of public water and sanitation services, development of programation tools, improvement of the performance of the public operator.

Impacts

- Through the generalization of integrated water resource management and mainstreaming of climate change, the programme will provide cross-cutting support to Georgia's climate resilience in the area of drinking water and sanitation

Climate finance : 40% adaptation

Thank you
for your attention !