

Financing adaptation in river basins

Adopting a common language and remembering the fundamentals

Monica Scatasta

Head of Environment, Climate and Social Policy

EUROPEAN INVESTMENT BANK

Questions

1. What are existing bottlenecks/challenges hindering water projects getting financed? What are lessons learned, and examples of mechanisms that work in the water sector or elsewhere.
2. How could the international institutions scale-up the financing of water projects, ensure financed projects are the ones which contribute most to minimizing water risks, balance mitigation and adaptation and improving access to finance of project owners? and
3. What could the water and climate community do to gain attractiveness by IFI's, private financiers and the private sector? Is there a role for project owners, IFIs, governments (central or local), etc.?
4. What is needed to improve the financing of measures in transboundary river basins?

EIB, the EU bank



- Shareholders of EIB are all EU memberstates
- 90% of activity in Europe, 10% outside EU in more than 150 countries
- Annual lending volume: 84 bn€ in 2016

What can the EIB do? Financing Instruments

The EIB has an **extensive range of instruments** to finance public and private sectors at investment and sub-investment grades of risk to its disposal.

EIB lending instrument
For Investment Grade operations



EIB special activities
For Low and Sub Investment Grade operations

Banks



Public Sector Financing

Project Finance Direct Loans

Intermediated Loans

Project Finance with direct project risk

Risk Sharing

Equity through Funds

Project

EIB in the Water sector: Large volumes & a variety of projects

The “water bank”

- 300 projects in last 10 years
- 4 b€ a year
- Avg. 30% of project cost (leverage)



St. Petersburg Flood Barrier



Delfland Waste Water Treatment Plant (NL)

Project: KMS 3 – APPROVISIONNEMENT EN EAU DE DAKAR – Senegal



20140043

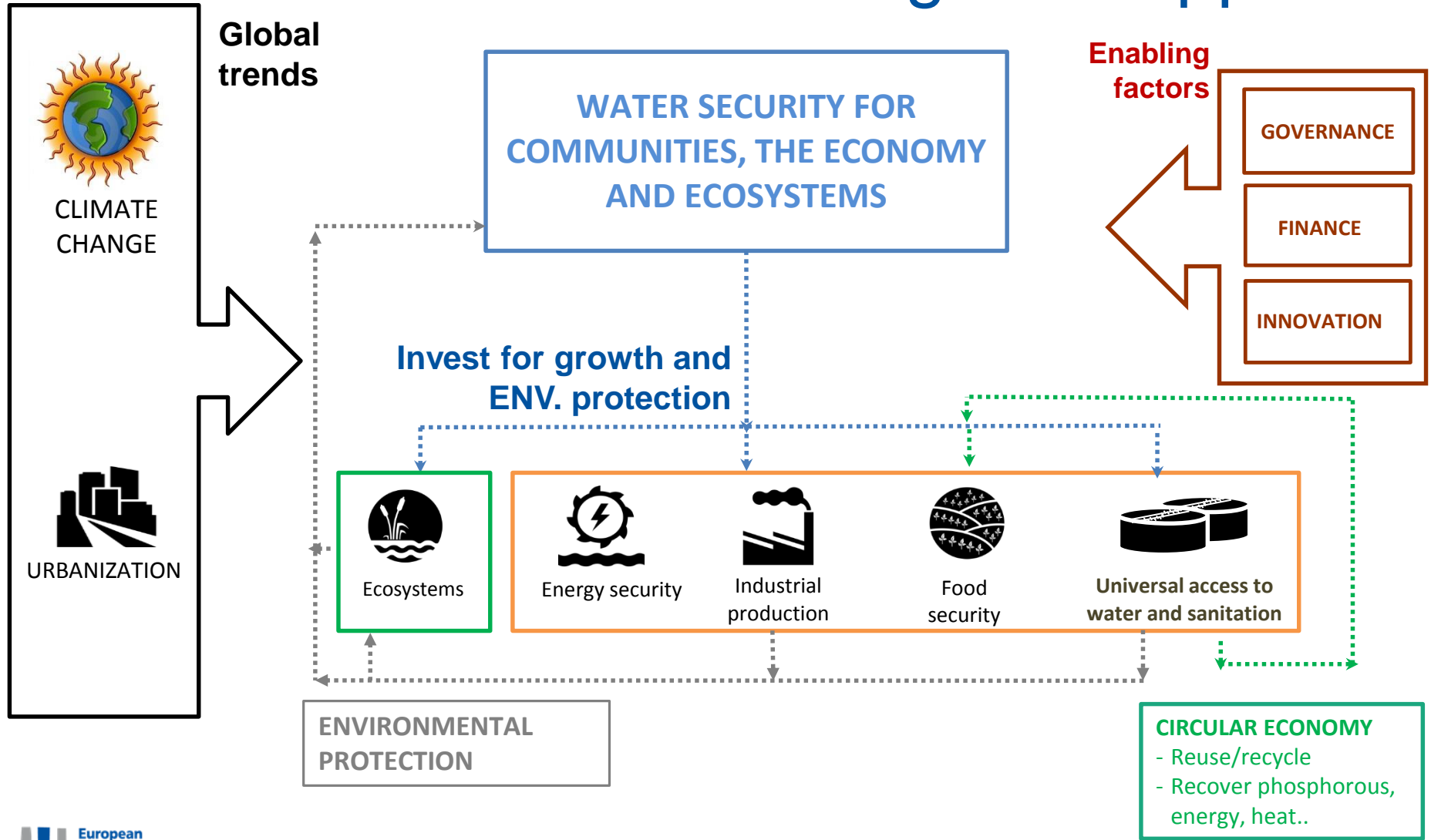
Dakar Water supply (KMS 3)

EIB's 2008 Water Sector Lending Policy

- **River basin approach (IWRM)**
 - Promote IWRM + water services provision in a project
 - Support transboundary cooperation
- Sector development
- **Adaptation to climate change**
- Water efficiency
- Development of new water supply
- Wastewater and sanitation services
- Research and Innovation



EIB and Water Security: An integrated approach



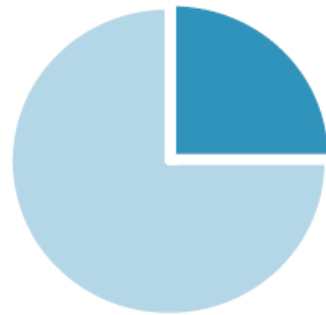
The largest multilateral provider of climate finance

> **19** bn
EUR
for Climate
Action in
2016

100 bn
USD
in 2016-2020

Climate Action: Clear commitment, ambitious targets

In the lead up to COP-21, the EIB committed to increase its climate finance for **developing countries** to 35% by 2020.



>25% worldwide

2015 → 2020

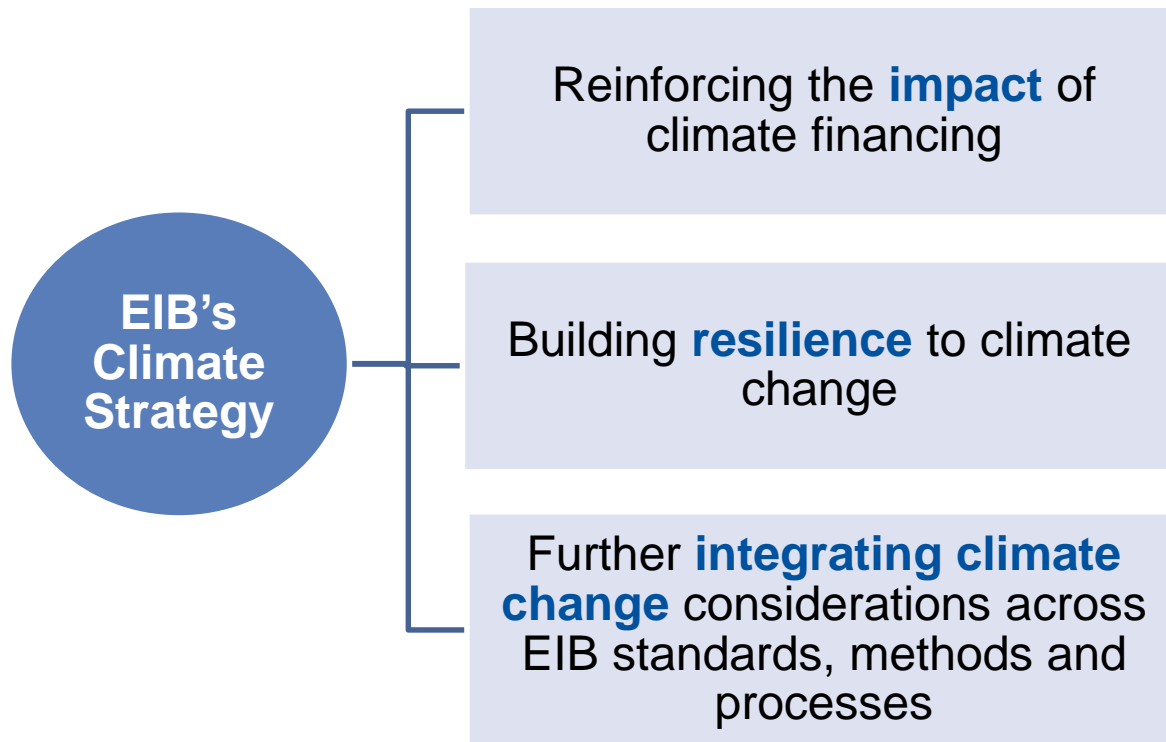


35% in world's
developing regions

We are increasing our climate commitment:

EIB Climate Strategy

An integrated vision beyond lending volumes:



European Financing Institutions Working Group on Adaptation to Climate Change (EUFIWACC)

We consider climate change in everything we do

And yet..

- Adaptation representing only 5-6% of CA total
- Difficulties identifying climate action in water projects
- Limited direct financing of RBOs

WHY?

Lost in translation?

1. Adaptation

- What is adaptation?
 - agreed MDB climate action definitions at the basis of climate finance reporting
 - not ALL good water management is adaptation..
- Credible analysis to identify adaptation components
 - Climate risk and vulnerability assessment
 - Appropriate assessment/comparison of hard vs. soft, green-blue vs. grey solutions

EIB Climate Action Eligibilities

Mitigation – addressing a malicious global problem

- **Renewable Energy** – wind, sun, geothermal, hydro etc
- **Energy Efficiency** – in buildings, industry, transport, etc. (with thresholds)
- Modal shift in transport to lower carbon modes
- Research & development in EE&RE technologies
- Biological GHG sequestration – afforestation and reforestation
- Other GHG reduction (e.g. methane from solid waste, wastewater treatment)

Adaptation – coping with a wicked local problem

- Intended actions that help cope with specific climate vulnerabilities: answers differ across and within countries → local problem, context-specific solution
- Often changes/modification to projects/systems, i.e. incremental actions or activities → **Climate action components** , rarely the whole project
- Sometimes not large amounts BUT crucial for resilience of project or its contribution to resilience of area/community/economy
- Climate Strategy: addressing resilience of everything we finance

What counts as Climate Action?

Mitigation – Project investment costs directly related to GHG emissions reduction

Adaptation - 3 steps are required to count adaptations as climate Action

1. Setting out the climate vulnerability context of the project.
2. Making an explicit statement of intent to address climate vulnerability as part of the project.
3. Articulating a clear and direct link between the climate vulnerability context and the specific project activities.

- *We only count the incremental cost needed to become resilient to future climate change*

What?

Why?

How?

Good practice TA & funding for CDB



ACHIEVEMENTS TO DATE

THE CARIBBEAN REGION is one of the world's most disaster-prone areas and is particularly vulnerable to climate change risks. Some of the key issues for Caribbean countries include rising sea levels, changes in precipitation patterns and the increasing intensity and frequency of hurricanes and other extreme weather events. These have potentially serious adverse environmental, social and economic consequences for the Region.

The Caribbean Development Bank (CDB), with support from the European Investment Bank (EIB), has provided credit lines supporting projects which explicitly address climate actions for mitigation and adaptation.

The CDB-EIB partnership is unique. It includes:

- Making available concessional funding for Climate Action projects at a subsidised rate;
- Providing technical assistance for capacity building of CDB and CDB's borrowing member countries (BMCs) as regards Climate Action;
- Delivering technical support for projects addressing climate change adaptation issues for CDB teams, and for project preparation for BMCs.
- Providing grants for upstream planning and feasibility studies.

2012-2016

CDB Climate
Action Line of
Credit

€50
million

2017-2021

CDB Climate
Action Framework
Loan

€100
million

The new €100 million Climate Action Framework Loan will continue to build capacity for climate risk management, fully mainstreaming climate change and strengthening climate resilience in CDB's BMCs.

It will be used to support more mitigation and climate resilience projects such as:

Climate Action Mitigation

- Energy efficiency
- Renewable energy
- Lower carbon transport
- Forestry and lower carbon land use

Climate Change Resilience

- Transport
- Water
- Coastal protection
- Public buildings
- Urban and rural development
- Other sectors that could have an adaptation to climate change component (to be agreed on a case-by-case)

Climate Resilience Identification Mechanisms

- Climate risk and vulnerability assessment
- National adaptation programmes of action
- Nationally determined contributions
- Other national, regional, local or sector resilience assessments



TRANSPORT

PHILIP S.W. GOLDSON HIGHWAY UPGRADING

Total	CALC
\$29.7 MILLION	\$12.5 MILLION



- Protection of highway from increased flooding to reduce congestion, improve climate resilience and improve road safety.
- Enhanced capacity of Ministry of Works and Transport (MWT) to plan and sustainably fund road maintenance.
- Enhanced capacity of MWT and Belizean road contractors to address gender equality and social inclusion in current and future construction projects.

BELIZE SOCIAL INVESTMENT FUND

Total	CALC
\$10.0 MILLION	\$2.5 MILLION

- Increased gender-equitable and inclusive access to climate resilient infrastructure and basic social services for poor and vulnerable communities.

Good practice TA & funding for CDB



WATER

WATER SUPPLY IMPROVEMENT

Total	CALC
\$41.8	\$12.38
MILLION	MILLION

- Climate-resilient water supply systems and operations on New Providence, Andros, Cat Island, Crooked Island, Eleuthera, Long Island, and San Salvador.

- Enhanced institutional capacity of the Water and Sewerage Corporation to

mainstream climate change considerations into planning and operations.

THE BAHAMAS

VIEUX FORT WATER SUPPLY REDEVELOPMENT

Total	CALC
\$19.7	\$12.0
MILLION	MILLION

SAINT LUCIA

- An efficient, reliable, climate-resilient and sustainable supply of potable water to all of the residents and businesses of Vieux Fort and its environs by December 31, 2018.

JOHN COMPTON DAM REHABILITATION

Total	CALC
\$18.3	\$8.93
MILLION	MILLION

- Improved climate resilience of potable water supply to residents and businesses in the north of Saint Lucia.
- Enhanced management and operational capacity of the Water and Sewerage Company in climate resilience planning, financial management and gender inclusion.

ACHIEVEMENTS TO DATE

WATER SUPPLY NETWORK UPGRADE

Total	CALC
\$44.3	\$2.21
MILLION	MILLION

BARBADOS

- Enhanced safety and efficiency of the potable water supply system in Barbados.
- Enhanced water sector planning capacity in the areas of gender inclusion, non-revenue water management and climate resilience mainstreaming.



RENEWABLE ENERGY/ ENERGY EFFICIENCY

1 MW SOLAR PHOTOVOLTAIC PLANT

Total	CALC
\$2.3	\$1.66
MILLION	MILLION

- Utilisation of renewable energy by Anguilla Electricity Company for electricity production.

ANGUILLA

STREET LIGHT RETROFITTING

Total	CALC
\$7.9	\$3.90
MILLION	MILLION

ANTIGUA AND BARBUDA

- Reduced fossil fuel consumption for street lights and reduced greenhouse gas emissions.
- Enhancement of the Antigua Public Utilities Authority's capacity in climate change adaptation planning.

STREET AND FLOOD LIGHT RETROFITTING PROJECT

Total	CALC
\$5.8	\$3.57
MILLION	MILLION

ST. KITTS AND NEVIS

- Reduced fossil fuel consumption for street lights and greenhouse gas emissions.
- Enhanced capacity of St. Kitts Electricity Company Limited and Nevis Electricity Company Limited in climate resilience planning.

Lost in translation?

2. Financing

- From plans to investment programmes to actual bankable projects → the fundamentals have not changed!
- We say financing, some hear “grants”
 - We actually need a borrower.. → Limited RBO borrowing capacity (legal impediments, creditworthiness)
 - New philosophy in grant use: mobilization of private finance

The fundamentals

A transboundary climate adaptation project is first a project

.... for this reason it will require:

- **An alignment with some of the bank objectives**
- **A promoter:** the entity that will implement the project and borrow the money => need operational and financial capacity
- **A revenue stream:** EIB is a bank, when lending money to a promoter it needs to verify that the investment will generate revenues or other sources of funding that make it sustainable
- **A sound technical approach:** the project design must be based on solid and reliable analysis
- **An environmental and social sustainable approach**

Example: Investment at Basin level in Spain

- Objective: water cycle / Dam safety / Flood protection / water quality monitoring / Compliance with EU regulation
- Project cost: 1,400 M€
- EIB (700) / Gov. (700)
- Borrower: Gov. of Spain
- Promoter: Ministry of agriculture and environment and interregional Basin organizations.

Challenge: not possible to lend directly to Basin Organization

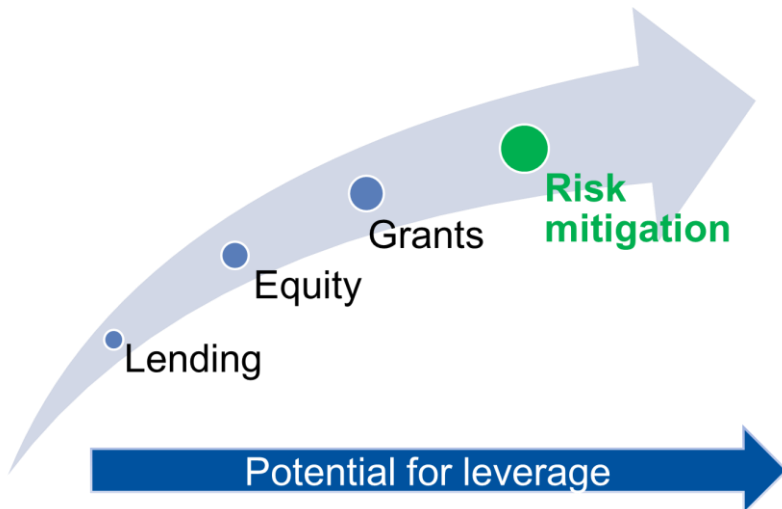
Gov. of Spain through its ministry is the borrower



How “climate people” think about finance

















- The bulk of the investment needed to address climate change will have to come from the **private sector**
- The EIB identifies operations with a **high financial impact** focusing on:
 - **Financial innovation** to mobilise private resources.
 - Blending with **public funds** for de-risking
 - **Capital markets investors**



Make investing in climate action commercially more attractive and leverage private finance

How EIB can pave the way for private finance

Product	EIB Examples	Overview	Leverage Potential for Private Sector
Improve bankability of small projects	 (ICF supported)	<p><u>Access to risk protection</u> and financing products for small RE project in Sub-Saharan Africa</p>	
Equity Funds	 	<p><u>Catalyse and leverage</u> additional private investment (“halo effect”) and enable investment into new asset classes.</p>	
Layered funds	 	<p><u>First loss protection</u> for funds focused on specific policy outcome to allow public and private co-financing</p>	
Fund of funds with first loss protection		<p><u>Innovative risk water fall</u> for fund of funds focused on RE and EE in emerging markets and economies in transition to attract private co-investment</p>	
Engage Institutional Investors	 <div data-bbox="672 986 852 1098" style="border: 1px solid green; padding: 5px; display: inline-block;"> <p>10 year 2007-17</p> </div>	<p><u>Credit exposure to EIB credit not projects</u>: CABs pari passu with other EIB bonds (AAA rated)</p>	
Innovative Use of Bond Proceeds	 Madagascar Climate/ Conservation Bond (under development)	<p>Innovative use of bonds proceeds for equity fund investments</p>	

NCFE: An instrument for nature based adaptation solutions

- A **financial instrument** blending EIB finance with EC funding under the LIFE programme (*EU programme for the environment and climate action*)
- **Loans plus a grant-based technical assistance** component
- Overall size: EUR 100-125 million
- Target: 9 -12 or more operations in total
- Technical assistance: EUR 10 million in total
- Pilot phase: 2015 – 2019

What is the NCFF?

Goal – Natural capital conservation

Address barriers for revenue-generating/cost-saving projects for the conservation of natural capital

- Establish a pipeline of replicable, bankable operations
- Demonstrate to private investors the attractiveness of natural capital projects
- Leverage funding from private investors through the use of EU Funds

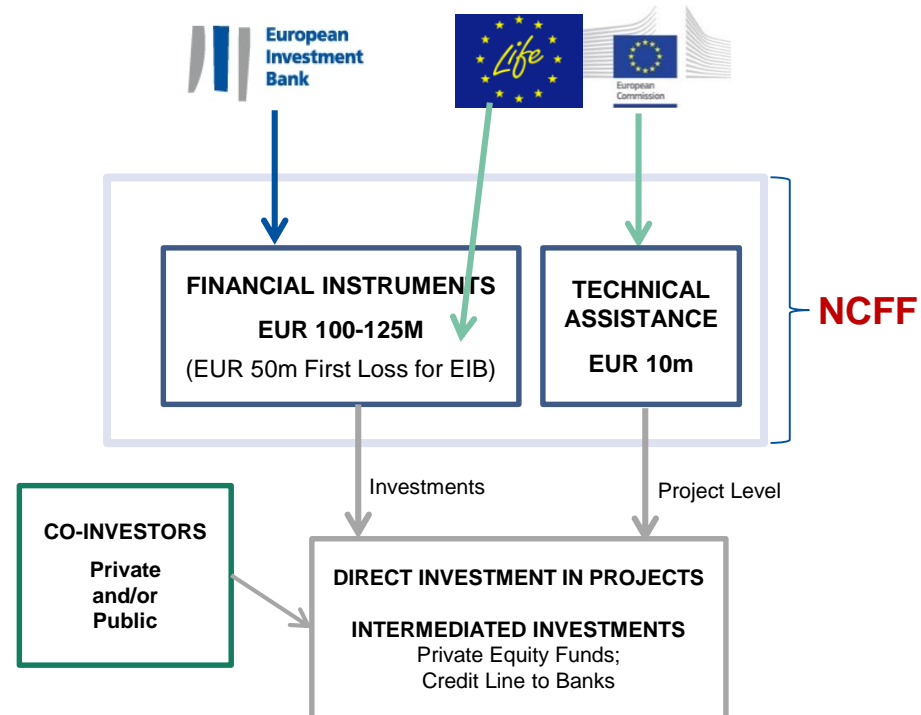
Innovative Aspects – Beyond public grants

- Beyond traditional financing for natural capital projects (i.e. public grants) by promoting market-based instruments
- Maximising the impact of “scarce” public funds (EU LIFE budget) by testing new instruments to mobilise private finance
- Technical assistance for project preparation, implementation, monitoring and evaluation

Projects - Use of market-based instruments

- Payments for ecosystem services
- Green infrastructure projects
- Pro-biodiversity and pro-adaptation businesses
- Projects involving biodiversity offsets

Structure



Financing: Everyone (still) has a role/responsibility

➤ Policy-makers: Clear rules, realistic goals, appropriate tools

- Set up adequate framework; Realistic investment programmes; Clear funding strategy:

Political decisions can't be "outsourced"; Fin. sustainability is a political choice

➤ Project promoters: Improved planning, project preparation, efficiency, implementation capacity

- Avoid defining investment in isolation; Improve implementing capacity; Strengthen creditworthiness; Strengthen dialogue with policy-makers and clients

Design bankable projects, efficient implementation and management

➤ FI Role: Honest broker, targeted grants, effective support

- Blend grants/loans for affordable financing package,
- Generate appropriate risk/return profile to MAX leveraging; Promote viable innovation (incl. financial), scale it up, reduce its transaction costs;

Be a reliable, effective and innovative (as relevant) partner.

**What about the responsibility of the customer, the citizen?
New opportunities may arise in this space...**

THANK YOU FOR YOUR ATTENTION!



For more information please contact :
Monica Scatasta (m.scatasta@eib.org)
EUROPEAN INVESTMENT BANK
<http://www.eib.org/>