

Private Sector Engagement in Financing Climate Change Adaptation

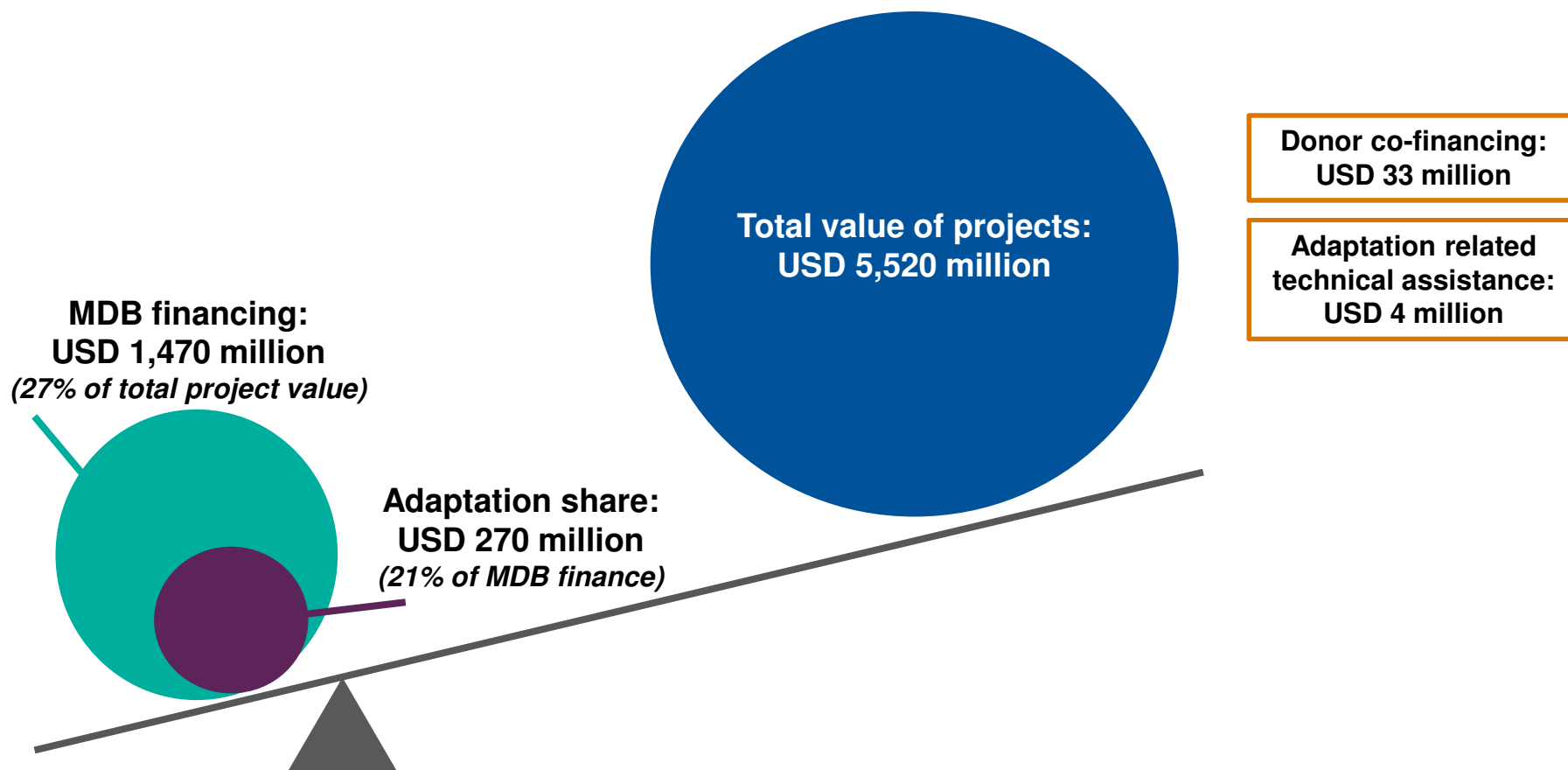
Marta Modelewska

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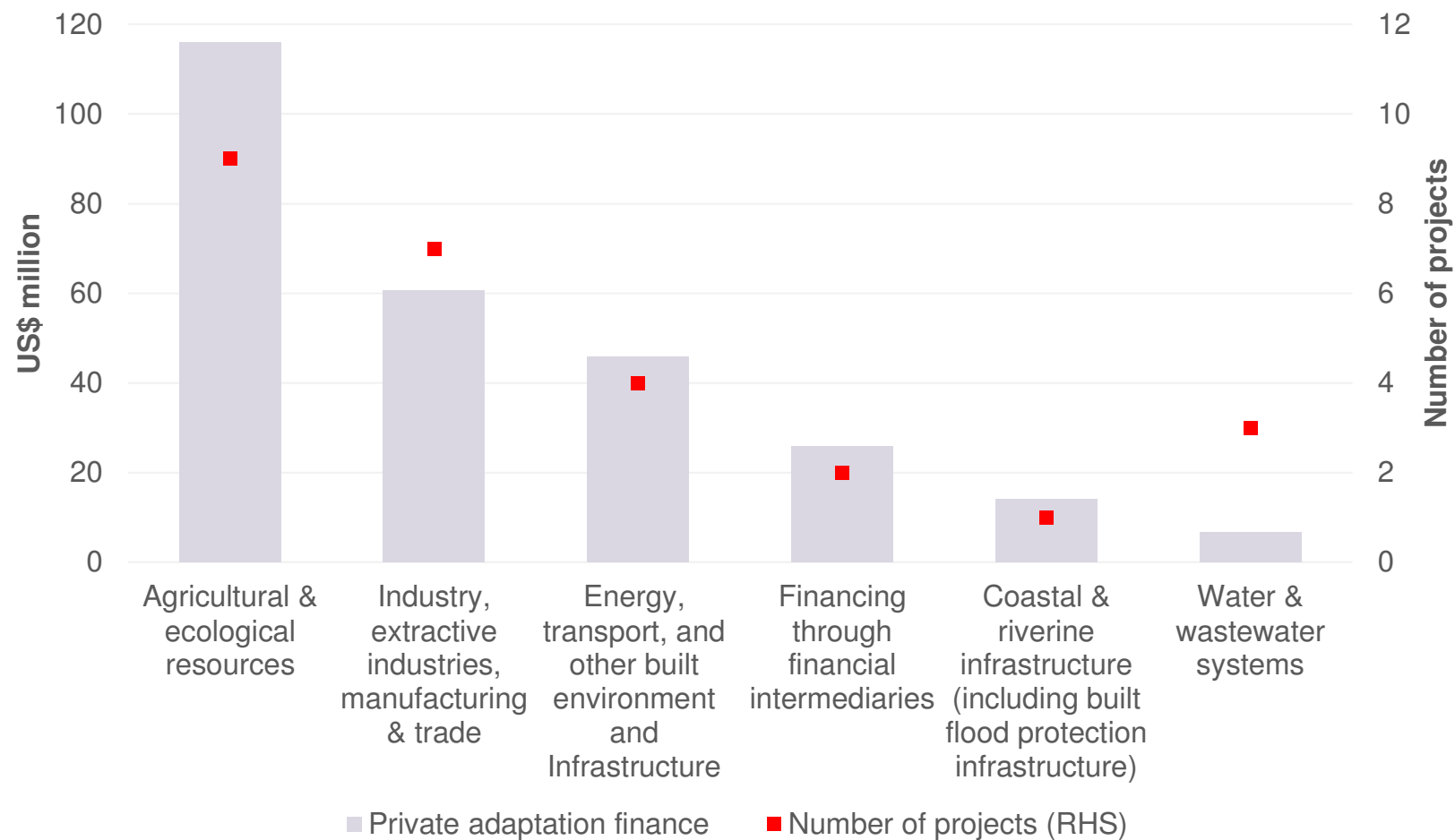
MDB interventions in 2013-2014 mobilised significant amount of additional private capital for adaptation projects



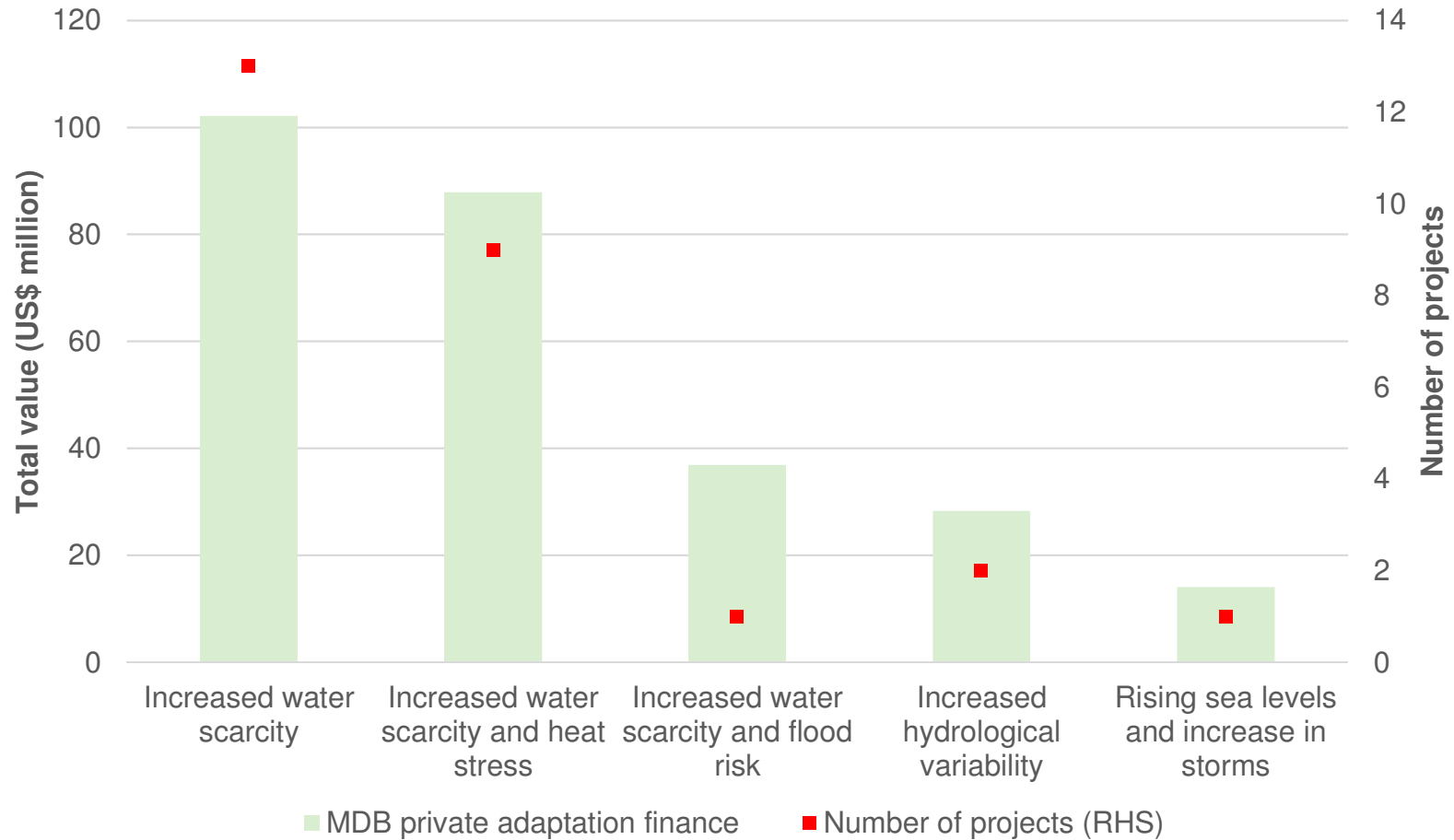
Source: Vivid Economics (2015). Building an Evidence Base on Private Sector Engagement in Financing Climate Change Adaptation.

Note: The Vivid Economics report documents and draws lessons only from multilateral development bank (MDBs) activity on private sector adaptation during 2013-2014 (EBRD, EIB, IDB and IFC). It provides a snapshot of private sector adaptation activities and aims to strengthen the evidence base in this area.

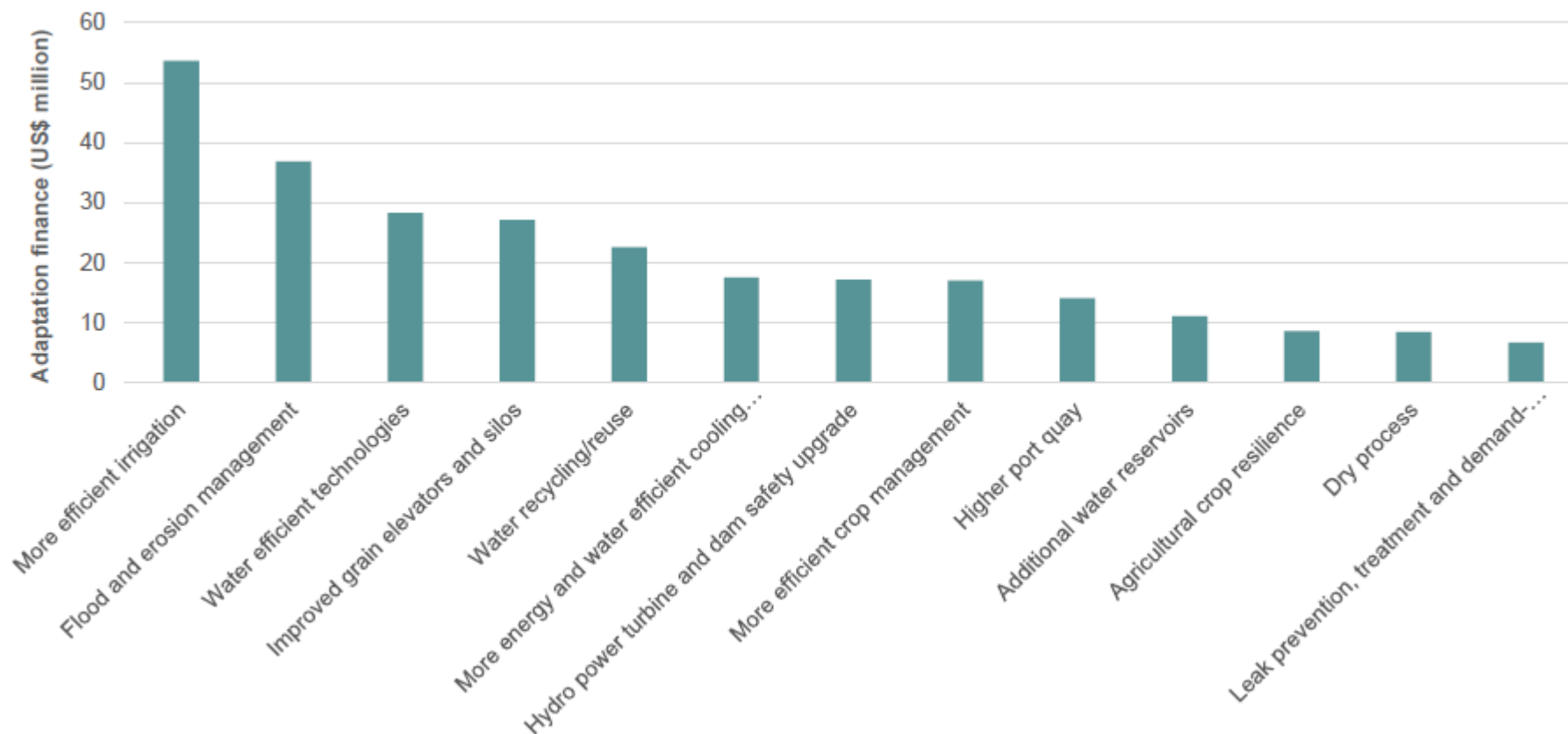
The agricultural and ecological resources sector is the main beneficiary of MDB private sector adaptation finance



Increased water scarcity is the main climate risk addressed with private sector adaptation finance



Most private sector adaptation finance is invested in technologies that improve resilience to droughts and enhance water use efficiency

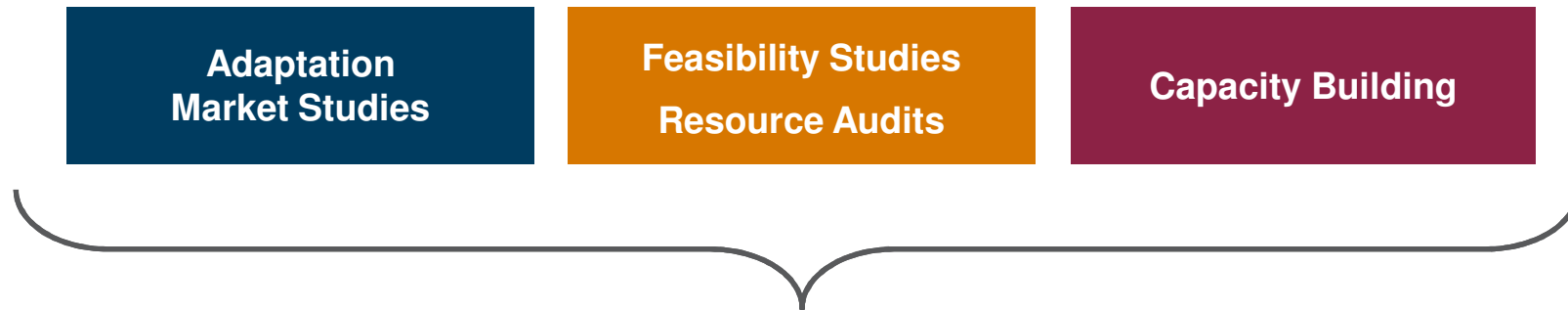


How to promote and scale up private sector adaptation projects?

To increase private investment in climate resilience, MDBs have developed tools that can:

- help to fill knowledge gaps to stimulate climate resilience investment;
- help to identify viable investment opportunities and suitable financing strategies; and
- help to create the evidence base needed to encourage private sector interest in climate resilience by piloting replicable and scalable approaches and business models.

CLIMATE RESILIENCE INVESTMENT TOOLS:



**The origination mechanisms complement each other
and work in conjunction rather than isolation!**

Market Studies inform about opportunities and potential future compliance costs

Tajikistan Climate Resilience Financing Facility “TajCReFF” (2015)

AGRICULTURE



Affected by insecure water and power supplies, and land degradation (esp. soil erosion)

BUSINESS/ MANUFACTURING SMEs



Economy loses over USD 200m p.a. (3% of GDP) due to severe power shortages

RESIDENTIAL



Over 60% of population (mainly rural) suffer from extensive winter power shortages

MARKET BARRIERS

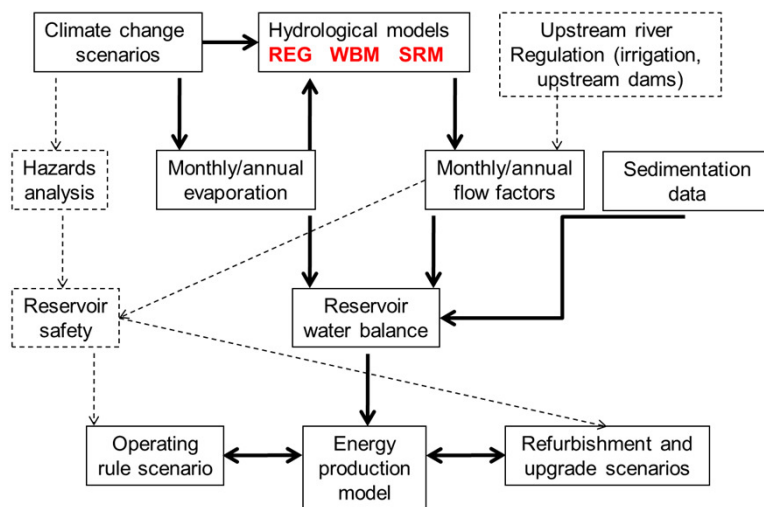
- Generally average-to-low penetration of climate resilience technologies
- Knowledge gaps and lack of awareness among stakeholders, local banks, end-users, suppliers/ installers
- High cost and low availability of medium term finance
- Low energy and water tariffs create dis-incentives

Feasibility Studies comprise assessment of the potential of a project and the proposed investment components for the short and long term



Energy sector: rehabilitation of Qairokkum hydropower plant in Tajikistan (2014)

- Hydropower is a major source of clean energy in Tajikistan (98%)
- Projected climate change impacts pose risks on the hydropower plant's ability to generate electricity - specifically shifting temperatures and precipitation affecting glaciers and rivers
- Investment design phase included two steps:
 - i. Modelling Qairokkum's capacity to generate electricity under different climate change scenarios
 - ii. Technical options for the rehabilitation of Qairokkum hydropower plant
- A simple min-max analysis technique was used to identify the upgrade option that gives the best economic performance across the entire range of scenarios



Resource Audits help assess the technical and economic feasibility of resource-efficiency measures and to prioritise them according to their economic potential



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Manufacturing: refit of a paper and pulp mill in Bosnia & Herzegovina (2010)

- A highly water-intensive industry
- Company located in a region where summer surface runoff is projected to decrease by 12.5% by 2050 and by 19% by 2100
- EBRD financed the EUR 11 million rehabilitation of the mill (hard loan)
- Feasibility work included an extensive energy & water use audit financed by EBRD
- Water availability stress test using climate scenarios up to 2050
- Water savings of 6.3 million m³ per year identified and incorporated into the refit (water recycling and leak reduction)

Impeding regulation and policy constraints have been marked drivers of private sector adaptation projects.



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- Governments can adjust regulatory frameworks to create stronger incentives for private investment in climate resilience. Well-designed frameworks can trigger private engagement.
- Non-existent or deficient frameworks can inhibit the incentives for investment by failing to put an adequate price on the risk of inaction and lowering the rate of return of possible climate-resilient investment opportunities.

Behavioural barriers were the main observed barriers to private sector adaptation projects, but can be addressed through capacity building activities



Harbour expansion project in Poland (2014)

- Sector highly vulnerable to rising sea levels
- Feasibility work included an assessment of the risks of sea level rise and increases in storms, which indicated that a higher quay was needed
- The investment recommendations were only partially implemented, possibly due to unfamiliarity with (i) the climate resilient measures proposed, and (ii) risks and opportunities of climate change
- EBRD provided EUR 31 million to co-finance the construction of a second deep-water berth at the container
- The long time horizons in climate-proofing infrastructure investments appear to be a particularly challenging barrier to further adaptation finance in this sector

Thank you



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