

# The EBRD's experience and solutions in buildings energy and resource efficiency

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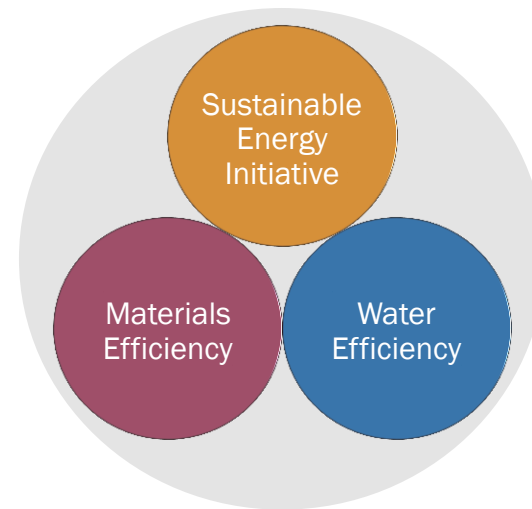


**European Bank**  
for Reconstruction and Development

- Introduction to the EBRD's Sustainable Resource Initiative
- The EBRD's actions in energy efficiency in buildings
- Barriers to buildings energy & resource efficiency investment
- The EBRD's response: integrated programme
  - Financial instrument (investment)
  - Technical assistance
  - Policy dialogue support
- Case studies
- Lessons from the building sector to the international climate negotiations and climate finance

# The EBRD's climate actions through its Sustainable Resource Initiative

- The EBRD addresses the issue of climate change mitigation and adaptation through its Sustainable Resource Initiative (SRI).
- The SRI promotes efficiency and innovation in energy (SEI), water and materials.
- Since launching the Sustainable Energy Initiative (SEI) in 2006, the EBRD has mainstreamed climate actions into the entire spectrum of its activities.
  - Climate mitigation through energy efficiency and renewable energy
  - Climate adaptation
- In addition to SEI, the SRI drives water and material efficiency, which are particularly relevant in the water-scarce Mediterranean region and Central Asia.
- Between 2006 and 2014, €16.4 billion of SRI finance was invested in 926 projects, with 69.6 m tonnes of CO<sub>2</sub> eq/y of emission reductions

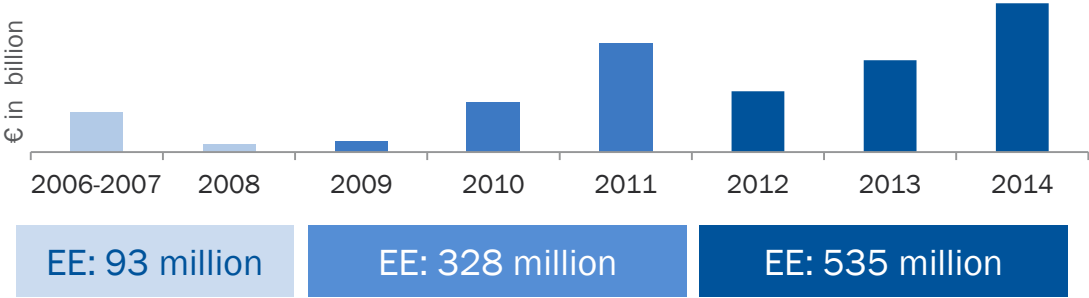


## Relevance of the building sector

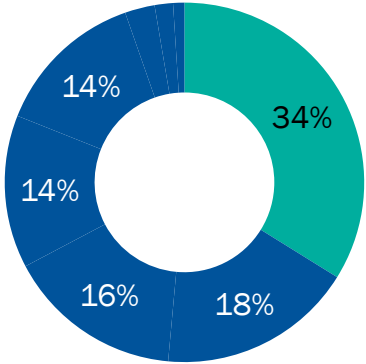
- Building sector is the largest energy consumer in the EBRD region (around 40% of the final energy consumption)
- Building sector has been one of the key priority areas for EBRD's climate actions since 2012

# The EBRD's investments in buildings energy efficiency

## SRI investment in buildings since 2006 (€ in million)



## By financing channel: intermediated or direct (€ in million)



|                              |     |
|------------------------------|-----|
| Intermediated finance (SEFF) | 294 |
| Direct EBRD financing        | 656 |
| Agribusiness                 | 177 |
| Transport                    | 159 |
| Municipal & Env Infra        | 138 |
| Property and Tourism         | 137 |
| Energy Service Companies     | 27  |
| Manufacturing and Services   | 17  |

- The EBRD invested over **€950 million** in buildings energy efficiency since 2006
- Intermediated financing: around 83,000 buildings EE projects were financed through 107 local financial institutions (PFIs) across 20 countries
- **Primary energy savings:** 4,318 GWh/year
- **Carbon reductions:** > 1.1 million tons of CO<sub>2</sub> per year

## Market actors in the supply chain

- High transaction costs due to small project size and wide range of stakeholders
- Lack of technical expertise for the EE assessment/appraisal in buildings
- Information asymmetries
- Misconceptions about technical risks and financial benefits and low awareness

## Financial sector

- Lack of specific and structured financing instruments
- High perceived risk (technical, financial) and low awareness

## Regulatory barriers

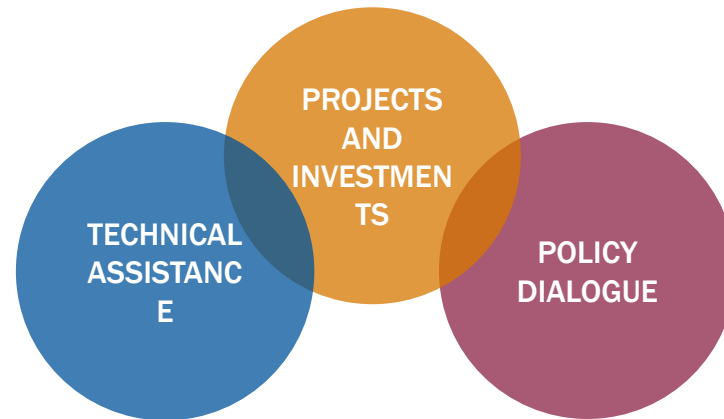
- Insufficient regulatory framework (technical standards, regulations, enforcement gaps)
- Mismatch between the government's support scheme and actual market conditions

# The EBRD's response to the barriers

## 1. The EBRD's integrated programme to address a range of barriers at the same time

Blend concessional finance from donors with the EBRD's finance through policy dialogue, capacity building and grant incentives

The EBRD's market rate finance + concessional finance (grants) + technical assistance + policy support



## 2. Well structured financing instruments for the effective delivery

# 1. The EBRD's integrated programme

## TECHNICAL ASSISTANCE

Technical assistance (TA) instruments include:

- Energy audits
- Feasibility studies
- Trainings and capacity building
- Energy and sustainability certification
- Energy management system
- Support with developing sustainability focused corporate policies

Support from in-house as well as procured experts

## PROJECTS AND INVESTMENTS

Well-structured financing instrument

- Eligibility criteria
- Eligible clients
- Energy performance criteria

Financing

- Directly to clients
- Through local financial institutions (PFIs)
- Through energy service companies (ESCOs)
- Through energy utilities

## POLICY DIALOGUE

Policy dialogue with

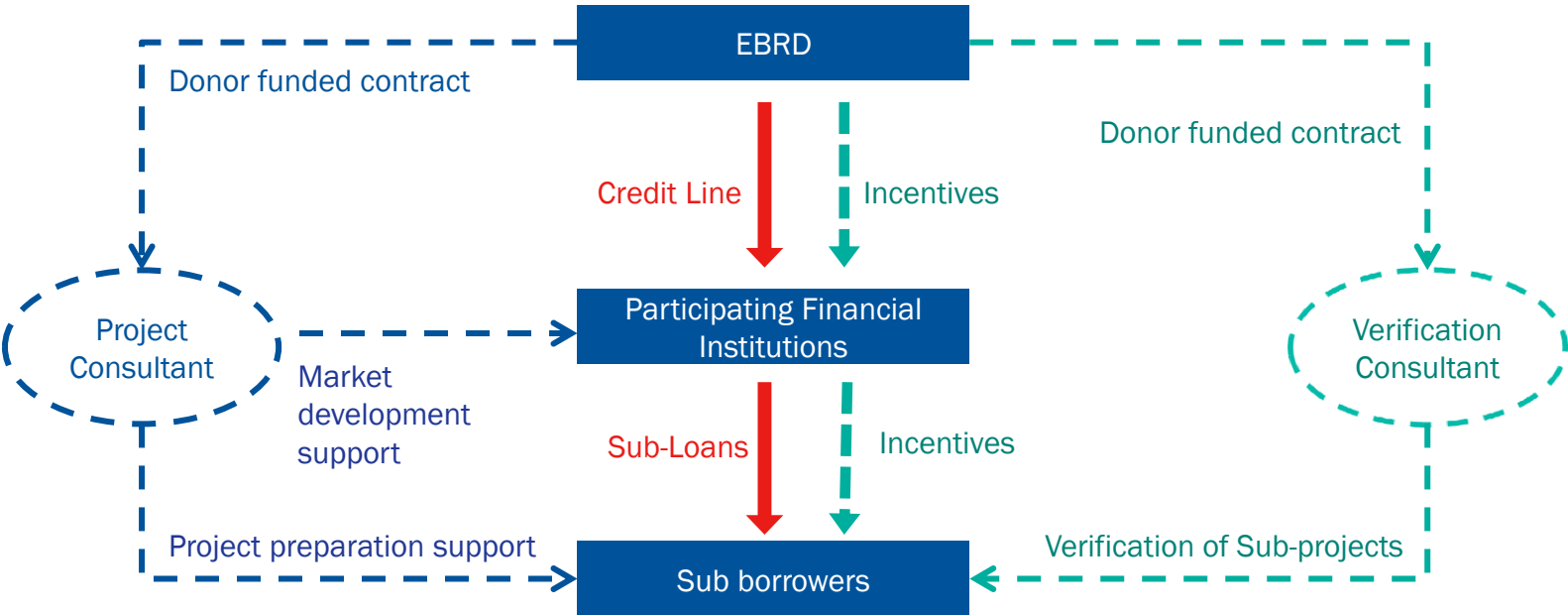
- national authorities
- business and professional associations e.g. Green Building Council

Help prepare primary and/or secondary legislation, or help build relevant capacity, namely:

- Energy Performance in Buildings Directive (EPBD)
- National Calculation Methodology for energy consumption on heating, cooling, etc.

# 2. Well structured financing instruments: Sustainable Energy Financing Facilities

- Sustainable Energy Financing Facility (SEFF) is a one-stop shop financing instrument providing dedicated credit lines through local financial institutions; technical assistance; calibrated financial support (grants, incentive fees)
- SEFFs have simple and straightforward procedures, ensure high technical requirements (e.g. List of Eligible Measures and Equipment, or LEME) and utilise existing local technical capacities (e.g. List of Eligible Suppliers and Installers, or LESI)





# Direct financing in retail: Energy efficiency in Abdali mall in Jordan

TECHNICAL ASSISTANCE



PROJECTS AND INVESTMENTS

## CLIENT

A private shareholding company incorporated under the laws of Jordan and majority owned by United Real Estate Company

## PROJECT

Support of the completion of a retail and entertainment centre anchoring the Abdali Urban Regeneration Project (AURP) in Amman, with a special emphasis on resource efficiency improvements and sustainability

## TECHNICAL ASSISTANCE

- the identification and assessment of energy and resource efficiency technologies
- The Bank provides pre-certification assessment and a training on LEED sustainability certification.



## FINANCIAL STRUCTURE

|                        |                |
|------------------------|----------------|
| EBRD loan              | USD 80 million |
| – of which SEI and SRI | USD 41 million |

## EXPECTED IMPACT

- Energy savings > 19,200 MWh/year
- Emission reductions: 22,800 tCO<sub>2</sub>/year
  - Of which district heat and cooling energy: 6,000 t CO<sub>2</sub>e/year
- Water savings: 2,400 m<sup>3</sup>/year

# KYRSEFF – intermediated financing for the residential energy efficiency



## CLIENT



## PROJECT

Up to USD 20 million for credit lines to local banks and microfinance institutions for on-lending to private borrowers and energy service companies.

Two lending windows:

- Residential (2/3 of the facility volume)
- Business (1/3 of the facility volume)

## FINANCIAL STRUCTURE

EBRD credit lines                    USD 20 million  
Technical assistance (EU)    EUR 3 million  
Incentive payments (EU)    EUR 3.8 million  
(to sub-borrowers and participating banks)

## EXPECTED IMPACT

| For every USD invested | Residential project         |
|------------------------|-----------------------------|
| Energy savings         | 1 kWh/year                  |
| Emission reductions    | 0.3 kgCO <sub>2</sub> /year |

## POLICY DIALOGUE

Assistance to the Kyrgyz government for the successful transposition of the EU Directive on Energy Performance of Buildings into primary and secondary Kyrgyz legislation.

## Solutions to the high fragmentation and diversity of the building sector

- Well structured financing instruments to address a range of barriers at the same time  
e.g. EBRD's SEFF - a straightforward banking product with simple procedures and technical assistance
- Need to identify market aggregators to scale-up buildings EE
- Need to improve the regulatory environment (public intervention): due to a number of sector-specific barriers in the building sector, carbon pricing alone is unlikely to be a sufficient incentive for climate change mitigation & adaptation projects in buildings

## The EBRD's suggestions

- Development of the supply chain and facilitating technology transfer  
e.g. SRI focused Trade Facilitation Programme
- Support for larger high-visibility demonstration projects focused on building sustainability and resource efficiency

# Thank you



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