

European Bank for Reconstruction and Development, Frameworks and Projects

18-19 June 2019

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European Bank
for Reconstruction and Development

Who we are

EBRD is an international financial institution supporting the development of sustainable well-functioning market economies



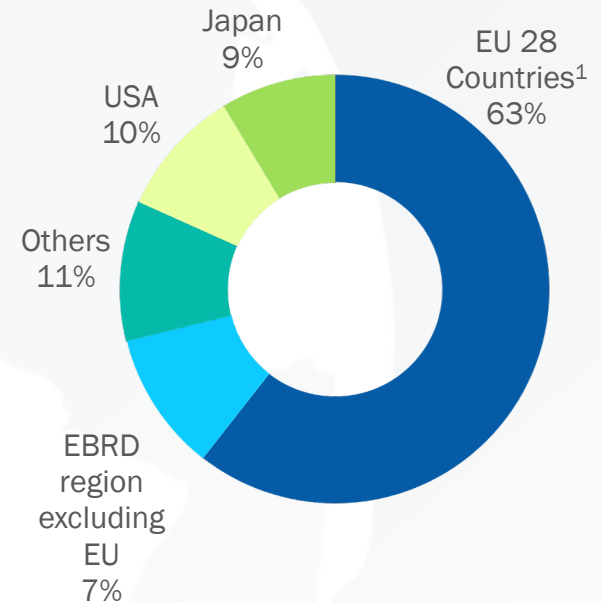
Highest credit rating (AAA/Aaa)

Owned by 66 countries and 2 inter-governmental institutions (the EU and EIB)

Capital base of €30 billion

- 1991** Established
- 1992** Russia and 11 other members of the former Soviet Union join
- 2007 /08** Czech Republic first country to “graduate”; Turkey becomes Country of Operations
- 2012** Starts investing in Egypt, Jordan, Morocco and Tunisia
- 2016** 25th anniversary; China becomes 67th member
- 2017** Starts investing in Lebanon and the West Bank and Gaza

Shareholding structure



1. Includes European Community and European Investment Bank (EIB) each at 3%. Among other EU countries: France, Germany, Italy, and the UK each holds 8.6%



Where we invest

Increasing footprint



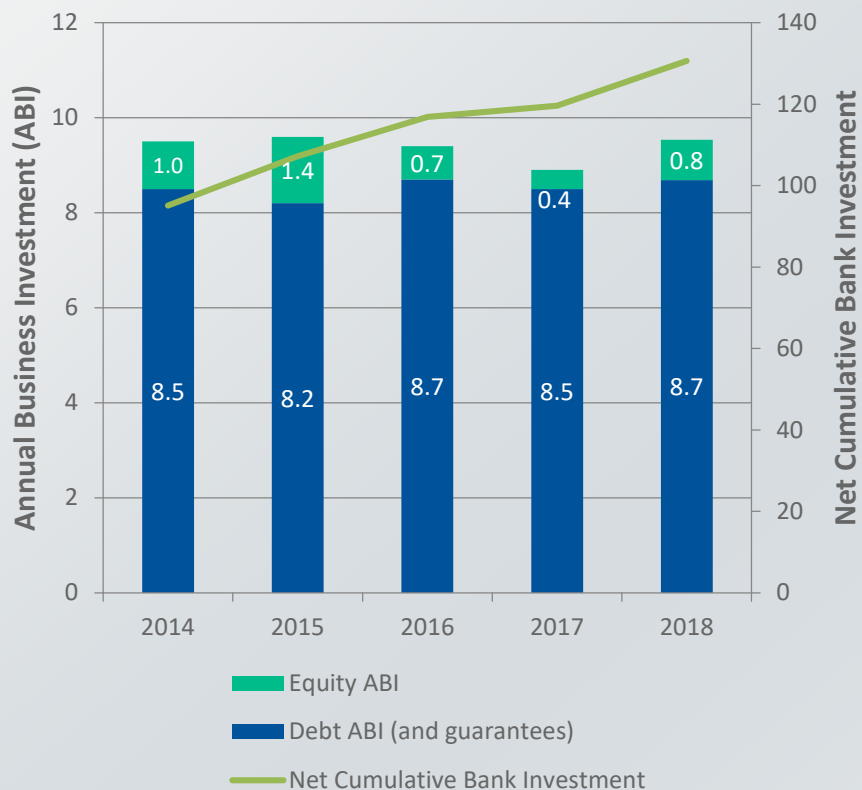
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EBRD

Largest investor in the region

Since 1991, EBRD invested over €130.6 billion in 5,325 projects



In 2018

€9.6 billion

410 projects

Private sector accounted for share of 73%

Debt 83%

Equity 9%

Guarantee 8%

EBRD Top 10 investee countries in 2018 (€m)

1	Egypt	1,148
2	Turkey	1,001
3	Greece	846
4	Poland	556
5	Ukraine	543
6	Kazakhstan	472
7	Romania	443
8	Uzbekistan	397
9	Serbia	396
10	Belarus	360



Municipal & Environmental Infrastructure

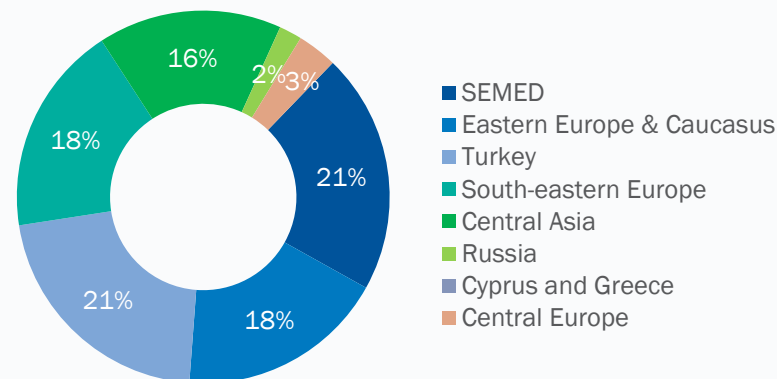
EBRD helps local authorities, including private sector operators, in the delivery of essential infrastructure services

- Total investments: € 8.093 billion / 456 projects
- In 2018: € 1,022 million / 36 projects
- Portfolio: € 4.792 million

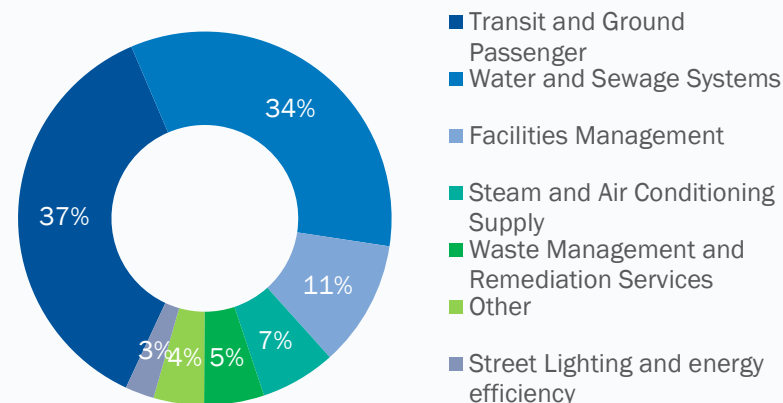
Strategic priorities/investment areas / opportunities

- Structuring the financing of municipal infrastructure, equipment and services to improve service levels
- Promoting the commercialisation and corporatisation of services
- Developing sound regulatory structures
- Promoting private sector involvement, where appropriate
- Supporting environmental, social, health and safety improvement
- Facilitating donor grant and commercial loan co-financing
- Providing comprehensive support for project preparation, using new Infrastructure Project Preparation Facility (IPPF) – a dedicated €40 million Facility to improve efficiency, focus and quality of project readiness for both public sector and PPPs

Portfolio by region



Portfolio by sub-sector





Municipal & Environmental Infrastructure



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Water & Wastewater

€2,968 million /
199 projects / 31
countries

- New and rehabilitated water and waste water treatment plants, network rehabilitation and extensions as well as pumps and metering to improve the quality of service and environmental compliance; investment in both maintenance and asset renewal.



Urban Transport

€2,588 million / 108
projects / 21 countries

- Fleet and rolling stock renewal, metro, LRT, buses and trams, public transport infrastructure, including track, power supply and signalling, depot refurbishment, e- ticketing and automated fare collection; traffic management and vehicle information systems, and rehabilitation of municipal streets.



Solid Waste

€318 million / 35
projects / 15 countries

- Investment in new landfills, recycling and collection equipment to improve both the efficiency and frequency of collection and well as to prevention of groundwater contamination.



District Heating & Other Muni Services

€1,676 million / 106
projects / 25 countries

- District heating/cooling, parking, ESCOs and facilities management to promote efficiency gains and new ways of service delivery.



Facilities Management

€541 million /
8 projects

- Investment in social infrastructure (e.g., hospitals and schools) using long-term facilities management PPP models.

- In **2018**, over **18 Million people** benefitted from **improved water / sewage / waste and heating services** financed by EBRD, and over **3 Million people per day** are using improved **urban transport measures**.
- **MEI projects in 2018** produced **250 Million m³ of potable water**, treated **300 Million m³ of wastewater** and saved more than **876 Thousand tonnes of CO₂ equivalent**.



Urban Transport

Supporting improved and low-carbon urban transport

CORE BUSINESS IN URBAN TRANSPORT

- **Fleet and rolling-stock renewal**;
- Metro, light rail transit, buses and trams, public transport **infrastructure** (including track, power supply and signalling);
- **Depot refurbishment**;
- **E-ticketing** and automated fare collection;
- **Traffic management and vehicle information systems**;
- **Rehabilitation of municipal street**.

DEVELOPING AND NEW BUSINESS

- **Fleet electrification**: integrated vehicle and charging infrastructure, integrated energy supply using local renewables;
- **Urban streetscape**: urban enhancement through improved streetscape, soft modes of transport (cycling, walking)
- **'Smart' solutions**: street lighting, traffic and safety control systems
- **Fleet leasing**: supply of single operator markets through fleet lease companies driven by mobility application technology and electric-vehicle adoption.

EBRD VALUE ADDED

- Promotion of fleet **electrification** and usage of renewable energy sources, taking into consideration affordability and accessibility;
- Support to projects in public transport that promote and enhance **sharing economy principles** resulting from an increasing adoption of mobility solutions
- In line with the **UN SDG11**, aiming at by 2030, providing access to safe, affordable, accessible and sustainable transport system for all, improving road safety notably by expanding public transports

Our Transition Qualities



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Competitive

Building dynamic and open markets that stimulate competition, entrepreneurship and productivity growth

Well-governed

Promoting the rule of law, transparency, and accountability, and stimulating firms to adequately safeguard and balance the interest of their stakeholders

Inclusive

Building inclusive market economies which ensure equal economic opportunity for all and leave no group behind

Integrated

Building geographically integrated domestic and international markets for goods, services, capital and labour

Resilient

Building resilient market economies that can withstand turbulence and shocks

Green

Building green, sustainable market economies which preserve the environment and protect the interests of future generations

EBRD Green Economy Transition (GET) financing Objectives



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40%

Green business as % of
total EBRD Business by
2020

€4 billion

Targeted Annual EBRD
Green Business by 2020

€ 18 billion

Target cumulative EBRD
Green Business 2016-2020

EBRD Green Economy financing Results from 2006-2018



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FINANCED

1,600+

green projects

1200+ directly financed projects with green components, and 440 credit lines to local financial institutions for on-lending to smaller projects

SIGNED

€ 30 billion

of green financing

For projects with a total value of €170+ billion

Since 2016 green financing has represented 36% of EBRD's total business.

REDUCED

100 million

tonnes of CO₂/year

Emission reductions equal to the annual energy use related emissions of Greece

+annual water savings of 330million m³ since 2013 equal to more than a third of Londoners' water use



Under the Green Economy Transition (GET) approach, we cover the following areas:

- Energy & resource efficiency:
- Circular Economy
- Renewable energy.
- Climate resilience



Under the GET approach, we have implemented a wide-range of programmes in our regions:

- EBRD Green Cities
- Finance and Technology Transfer Centre for Climate Change (FINTECC)
- Green Economy Financing Facilities (GEFFs)
- Near Zero Waste



MEI – Green Cities Framework

Green Cities Framework advances EBRD Green agenda

GREEN CITIES KEY PRINCIPLES

- **5-year duration Project**
- **Headroom: EUR 950Mn**
- A systematic approach to address urban environmental performance and barriers through **three components**



Delivery of strategy and policy support (GCAP – Green City Action Plan)



Facilitating and stimulating green City infrastructure investments



Building capacity of city and key stakeholders

RESULTS

16 projects signed amounting to **EUR 344 Mn**

- Chisinau Buildings – EUR 10 mn
- Sarajevo Water – EUR 25 mn
- Belgrade Green Bld – EUR 20 mn
- Batumi Bus – EUR 5.5 mn
- Banja Luka DH – EUR 8.3 mn
- UKT Tirana Water – EUR 15 mn
- Varna Resilience – EUR 10 mn
- Ulaanbaatar Waste – EUR 8.4 mn
- Lviv Solid Waste – EUR 20 mn
- Izmir Metro – EUR 80 mn
- Zenica Hospital- EUR 10 mn
- Sofia Electric buses – EUR 7.4 mn
- Minsk WWTP – EUR 84 mn
- Tbilisi Solid Waste – EUR 15 mn
- Craiova Urban Rehabilitation – 15 mn
- Skopje Buses – 10 mn

14 ongoing GCAPs

- Yerevan, Tbilisi, Tirana, Minsk, Sofia, Chisinau, Belgrade, Banja Luka, Zenica, Batumi, Gyumri, Ulaanbaatar, Sarajevo, Amman, Lviv, Skopje

REQUIREMENTS INFRASTRUCTURE INVESTMENTS

Framework focus on sectors:

- Solid Waste
- Water & Wastewater
- Urban Transport
- District Heating
- Public Building Energy Efficiency
- Renewable Energy

CITIES OF ≥ 100,000

Across EBRD’s COOs Cities with smaller population sizes can be considered on a case-by-case basis considering the needs of the cities

MUST CONDUCT GCAP

To initiate the Framework, in conjunction with a ‘trigger’ project in one of the Framework’s sectors

A **Green City Project** identifies & prioritises a city’s **environmental challenges** through an assessment of **35 core indicators** and articulates the city’s **vision, strategic objectives, priority actions & investments** to address these issues.

Smart city concept

- An **integrated concept** to enhance **competitiveness** and **quality of life** by applying **real-time urban data analytics** using the Internet of Things (IoT) and other data driven solutions to improve the efficiency, reliability and quality of urban infrastructure and associated public services for users.

Smart City Strategy Principles

- **Public sector disclosure** of intent;
- **Open-data platforms** for innovation by 3rd parties;
- **Anonymization of data** ; and
- **'Public benefit test'** for all SC projects

EBRD role

- Support in defining **SC strategy** (priority SC investment areas, data mgmt policies, etc) in a bottom-up approach in order to raise public involvement;
- Support in **creating a SC open data platform** based on real-time data using IoT;
- Support in **designing and financing SC elements**

Potential sectors of operation

- **Smart Street Concept** – creating a better street environment combining technology & design (ex: LED street lighting investment, automated parking information, etc.)
- **Smart & Green Buildings** through Intelligent Building Management Systems (reduced power usage through power management based on consumption information on a real-time basis)Big Data analytics in Transport to reduce congestion

Differentiating Green Cities and Smart City Solutions

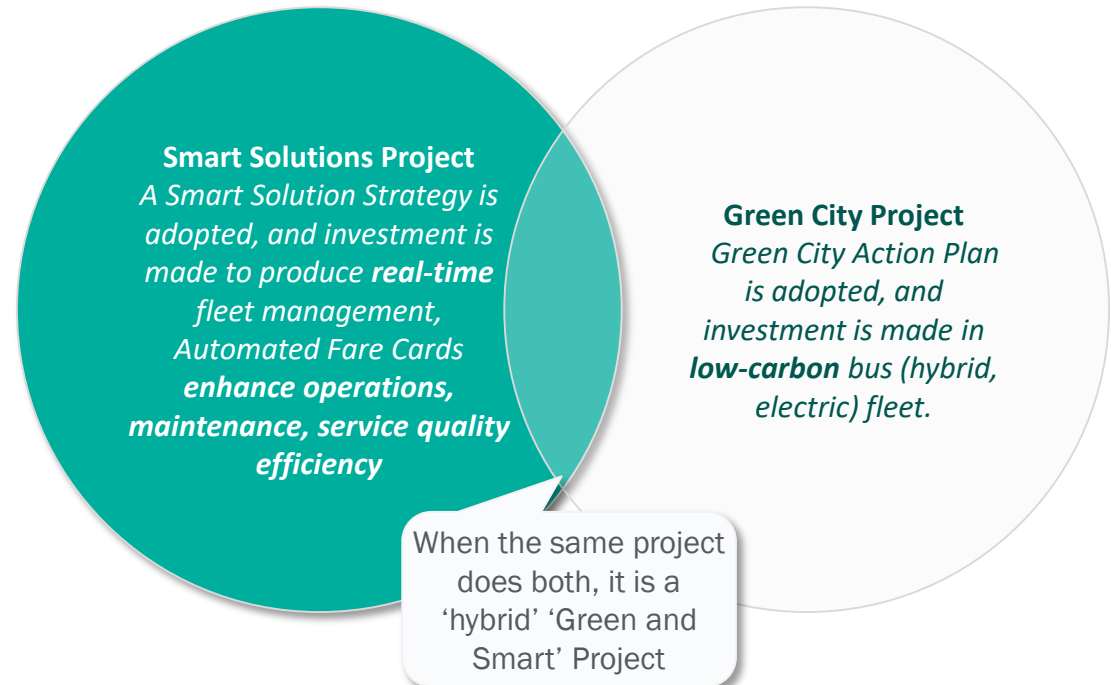


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Smart & Green Cities concepts

- “**Smart**” solutions can be used as a means to achieve “**green**” outcomes. There are numerous projects that can be both “**smart and green**”.
- A **Green City Project** can incorporate smart solutions and vice versa. In more advanced cities, a pure focus on smart solutions could be preferred.
- Smart cities and Green Cities are two separate concepts that can have **overlapping features** when smart solutions are targeted to purely achieve green results.

Example: Urban Bus Project



Smart Solutions focus on applying real-time urban data analytics using the Internet of Things (IoT) and other data driven solutions to improve the efficiency, reliability and quality of urban infrastructure and public services for users.

A **Green City Project** identifies and prioritises a city’s environmental challenges through an assessment of 35 core indicators and articulates the city’s vision, strategic objectives, priority actions and investments to address these issues.

Public Street lighting Framework for the Baltics, Central and South-Eastern Europe



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DESCRIPTION

- Financing **energy efficient public lighting projects** through public authorities and private companies
- Projects include **street lighting** and **traffic lights**.
- A **EUR 140 million** window

SCOPE

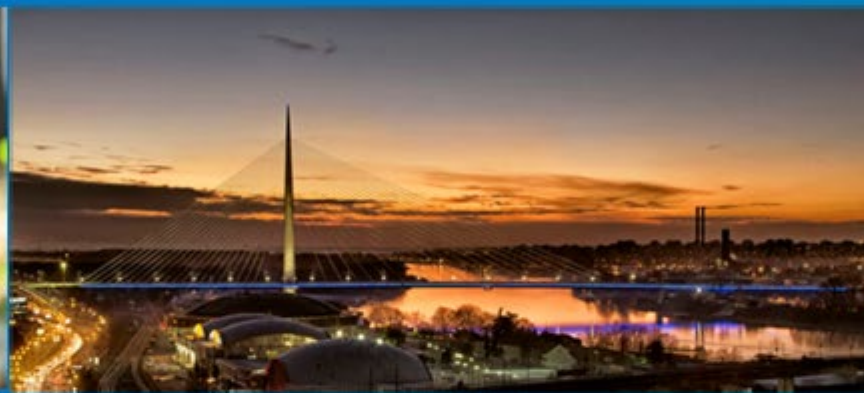
- The **Baltics, Central and South-Eastern Europe**
- **Private** and **public** clients

OBJECTIVE

- Support to the introduction of best available energy efficient technology (primarily LED)
- Support of best practice in procuring performance based design, financing, installation, operation and maintenance of energy efficient solutions
- Support, where possible, of private sector provision of low carbon public services (lighting).

PROJECTS

- **Javna Razsveljjava Street Lighting** - EBRD financing will be used to buy the receivables due under public-private street lighting contracts. (EUR 5.5 million signed in 2017)
- **East Kazakhstan Municipal Street Lighting Modernisation** - Upgrade and modernisation of the street lighting system in the cities of Oskemen (Ust-Kamenogorsk) and Semey, East Kazakhstan Oblast



Municipal and Environmental Infrastructure Sector Strategy

April 2019



European Bank
for Reconstruction and Development

2. Sector context and transition challenges

2.1. Key drivers and implications

Environmental challenges and practices

- Climate change
- Land-use constraints
- Air / water / soil pollution
- Poor resource efficiency practices
- Unsustainable waste management practices

Cities face multiple environmental challenges. Coupled with scarce resources and limited land availability, this puts an increasing strain on their ability to provide services in a sustainable manner. Cities need to develop cross-sectoral and regional responses to these challenges.

Demographic and social pressures

- Uneven urbanisation
- Growing regional disparities in access to services
- Affordability constraints
- Migration
- Youth unemployment
- Public health
- Gender and income inequality
- Working conditions, health and safety
- Participative society and social media

Internal and international migration changes the demand for public services across the region. Consistency in quality and access to municipal services is needed to alleviate social pressures and promote growth. Moreover, cities need to seek additional revenue sources to cope with the demands of urbanisation.

Governance and asset management

- Ageing infrastructure and systems
- Capacity constraints
- Lack of commercialisation
- Politicised management
- Funding and affordability constraints
- Fiscal space limitations
- Regulatory reforms needs
- Need for green planning
- Poor ongoing asset maintenance
- Underuse of land resources
- Low adoption of regeneration and development potential
- Demand for new approaches and technologies
- Technology transformation
- Need for integrated stakeholder engagement
- Integrity risks

A city's ability to maintain its infrastructure is essential for the provision of quality municipal services. However, weak governance and the lack of funding drives down the quality of services and a city's ability to attract new business. Lack of commercialisation and inadequate tariff setting contribute to the growing funding gap in the municipal sector.

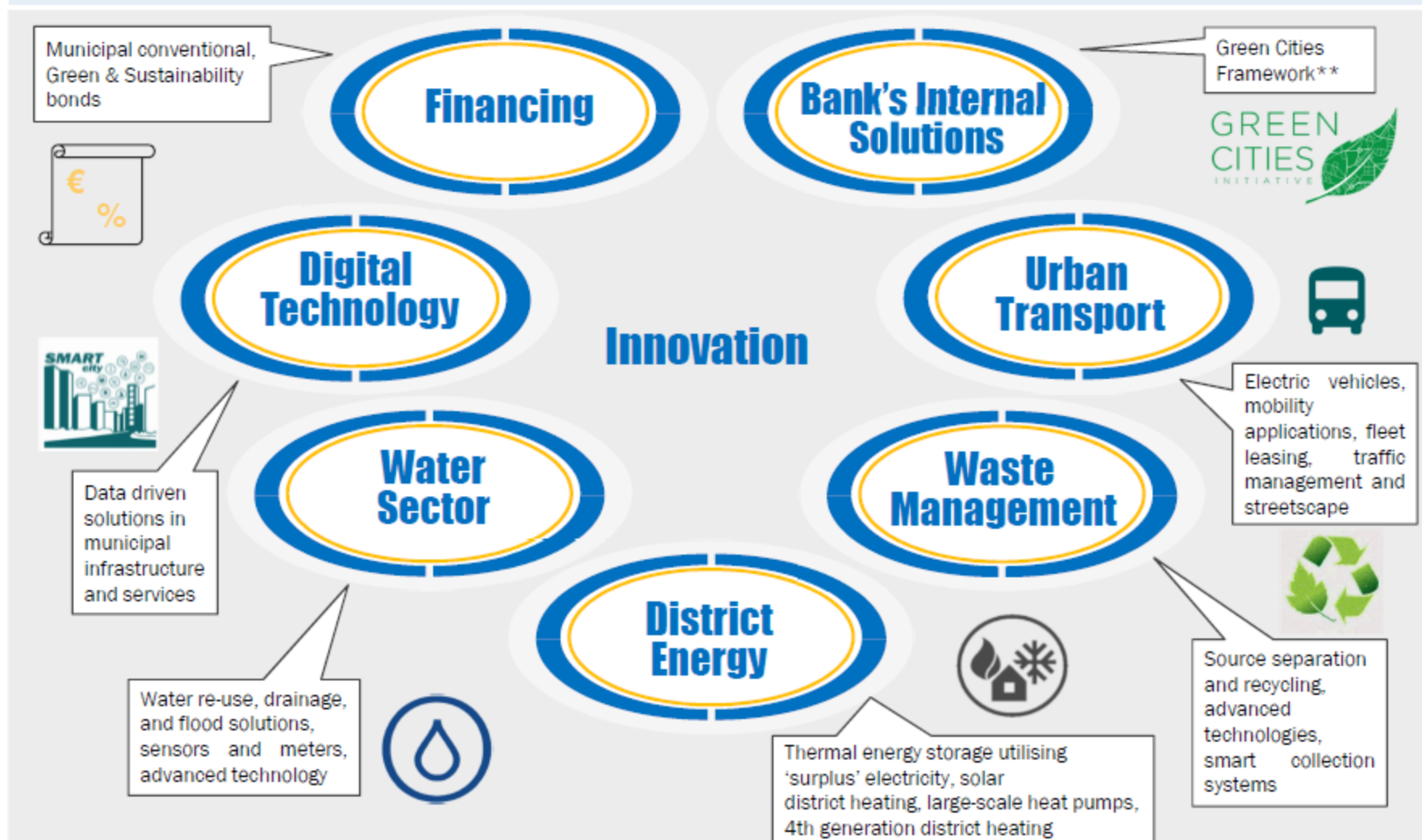
2. Sector context and transition challenges

2.3. Innovation opportunities in MEI sector



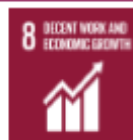
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The Bank recognises the **importance of introducing innovative technologies and novel project-structuring solutions** into the sector where this enhances value and service quality. Implementation of new technologies will depend on the counterparty's readiness and the economic value of the innovative solution*.



Examples of SDG targets that could be addressed by MEI strategic directions

Green and Sustainable Investments



Target 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil **pollution and contamination**.

Target 6.1: By 2030, achieve universal and equitable access to safe and affordable **drinking water** for all.

Target 6.2: By 2030, achieve access to adequate and equitable **sanitation and hygiene** for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.

Target 8.6: By 2020, substantially reduce the proportion of **youth not in employment**, education or training.

Target 8.9: By 2030, devise and implement policies to promote sustainable **tourism** that creates jobs and promotes local culture and products.

Target 9.1: Develop quality, reliable, sustainable and resilient **infrastructure**, including regional and trans-border infrastructure, to support economic development and human well-being, with a

focus on affordable and equitable access for all.

Target 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased **resource-use efficiency** and greater adoption of **clean and environmentally sound technologies** and industrial processes, with all countries taking action in accordance with their respective capabilities.

Target 11.1: By 2030, ensure access for all to adequate, safe and **affordable housing** and basic services and upgrade slums.

Target 11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding **public transport**, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

Target 11.3: By 2030, enhance inclusive and sustainable **urbanization** and capacity for participatory, integrated and sustainable human settlement **planning and management** in all countries.

Target 11.4: Strengthen efforts to protect and safeguard the world's **cultural and natural heritage**.

Target 11.a: Support positive economic, social and environmental **links between urban, peri-urban and rural areas** by strengthening national and regional development planning.

Target 11.b: By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards **inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters**, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels.

Target 12.5: By 2030, substantially reduce **waste generation** through prevention, reduction, recycling and reuse.

Target 13.1: Strengthen resilience and adaptive **capacity to climate-related hazards** and natural disasters in all countries.

Corporate Governance



Target 6.a: By 2030, expand **international cooperation and capacity-building** support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies.

Target 10.4: Adopt **policies**, especially fiscal, wage and social protection policies, and progressively achieve greater **equality**.

Target 12.7: Promote **public procurement** practices that are sustainable, in accordance with national policies and priorities.

Target 16.5: Substantially reduce **corruption and bribery** in all their forms.

Target 16.6: Develop effective, accountable and transparent **institutions** at all levels.

Target 17.9: Enhance international support for implementing effective and targeted **capacity-building** in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation.

Innovative Financing



Target 10.b: Encourage official development assistance and **financial flows**, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes.

Target 17.3: Mobilize **additional financial resources** for developing countries from multiple sources.

Main challenges on Road Safety

for Reconstruction and Development

Technical

Very outdated infrastructure
Underfinancing
Designs, role of engineers, police,
road operators
Delay in the projects
Re-approval of the projects

Legal

Responsibility, Duty of care,
Enforcement

Financial implications

Costs for RS measures vs Real costs
of the road accidents

Institutional

Decision makers and priorities

Different Stakeholders. Who is the decision maker?

Political parties
Ministry of Finance
Ministry of Infrastructure
Ministry of Internal affairs
Financial Institutions
Road operator
Designer
Road Police
Contractors
Drivers
Other Road users
Local authorities
Local residents
Mass-Media
Business



Potential ROAD SAFETY framework

for Reconstruction and Development

Urban Road Safety Framework (Ukraine) loan EUR 150 million for the financing of infrastructure investments related to urban road safety in five+ Ukrainian municipalities (Kiev, Odessa, Lviv, Dnipro and Kharkiv).

EUR 75 million co-financed by the EIB approved and signed in July 2018.

The proposed Urban Road Safety FW (Ukraine) will:

- Support to achieve European levels of road safety.
 1. Improvement of the most dangerous accident blackspots;
 2. Intersection improvements;
 3. Create safer facilities and infrastructure for pedestrians and cyclists;
 4. Provide safer and more effective traffic management.
- Reduce fatalities and injuries
- Bring Social and economical benefits
- Complement other ongoing road safety initiatives at national level,
- Improve accessibility and facilities for pedestrians and cyclists.

Environmental and Social policy, EBRD Performance Requirements (PRs)



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PR 1: Assessment and Management of Environmental and Social Impacts and Issues

PR 2: Labour and Working Conditions

PR 3: Resource Efficiency and Pollution Prevention and Control

PR 4: Health and Safety

PR 5: Land Acquisition, Involuntary Resettlement and Economic Displacement

PR 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

PR 7: Indigenous Peoples

PR 8: Cultural Heritage

PR 9: Financial Intermediaries

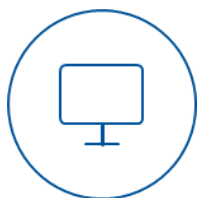
PR 10: Information Disclosure and Stakeholder Engagement

May 2014

Environmental and Social Policy



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EBRD website:

www.ebrd.com

Information about the countries of operations & Sectors of EBRD:

www.ebrd.com/news/publications/factsheets.html

The Green Economy Transition (GET) approach:

<https://www.ebrd.com/what-we-do/get.html>

Municipal and Environmental Infrastructure Strategy:

<https://www.ebrd.com/what-we-do/strategies-and-policies.html>

EBRD Green Cities:

<https://ebrdgreencities.com/>

Environmental and Social Policy:

<https://www.ebrd.com/environmental-and-social-policy.html>

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