

ENERGY EFFICIENCY OPPORTUNITIES IN THE PUBLIC ENERGY PERFORMANCE CONTRACTING

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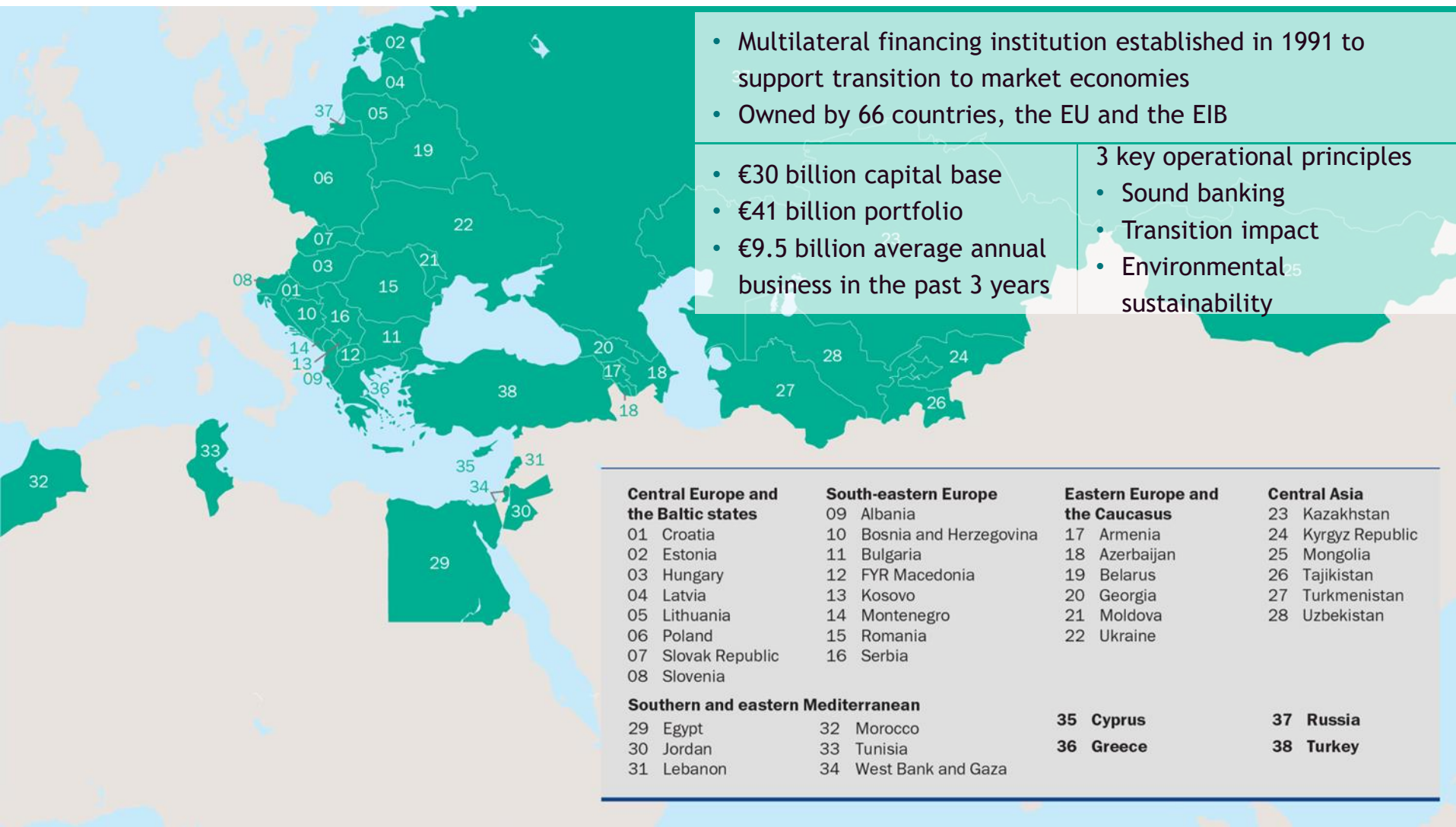
European Bank for Reconstruction and Development

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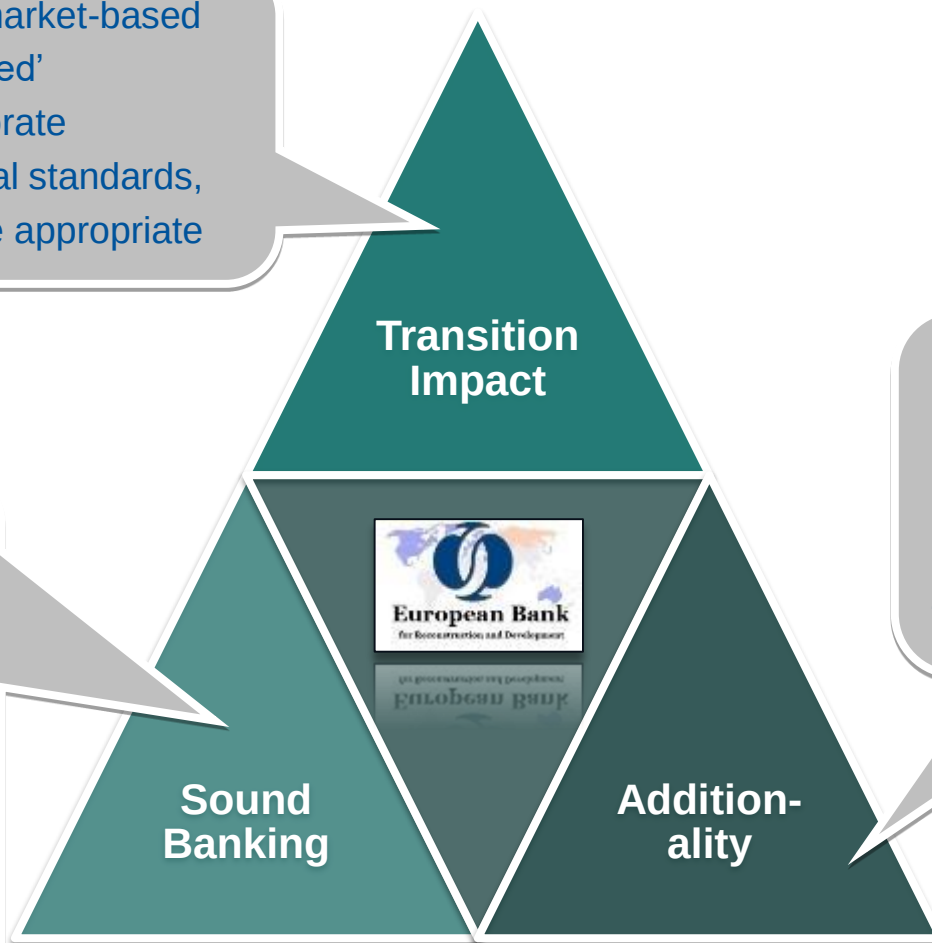
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What is the EBRD



Promotes transition to market-based solutions, 'commercialized' approaches, good corporate governance, international standards, private ownership where appropriate

Invests in financially viable projects, prefer revenue generating projects, co-financing with private sector (banks/sponsors)



Supports, but does not replace/underprice private investment and/or commercial finance



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 interests 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.



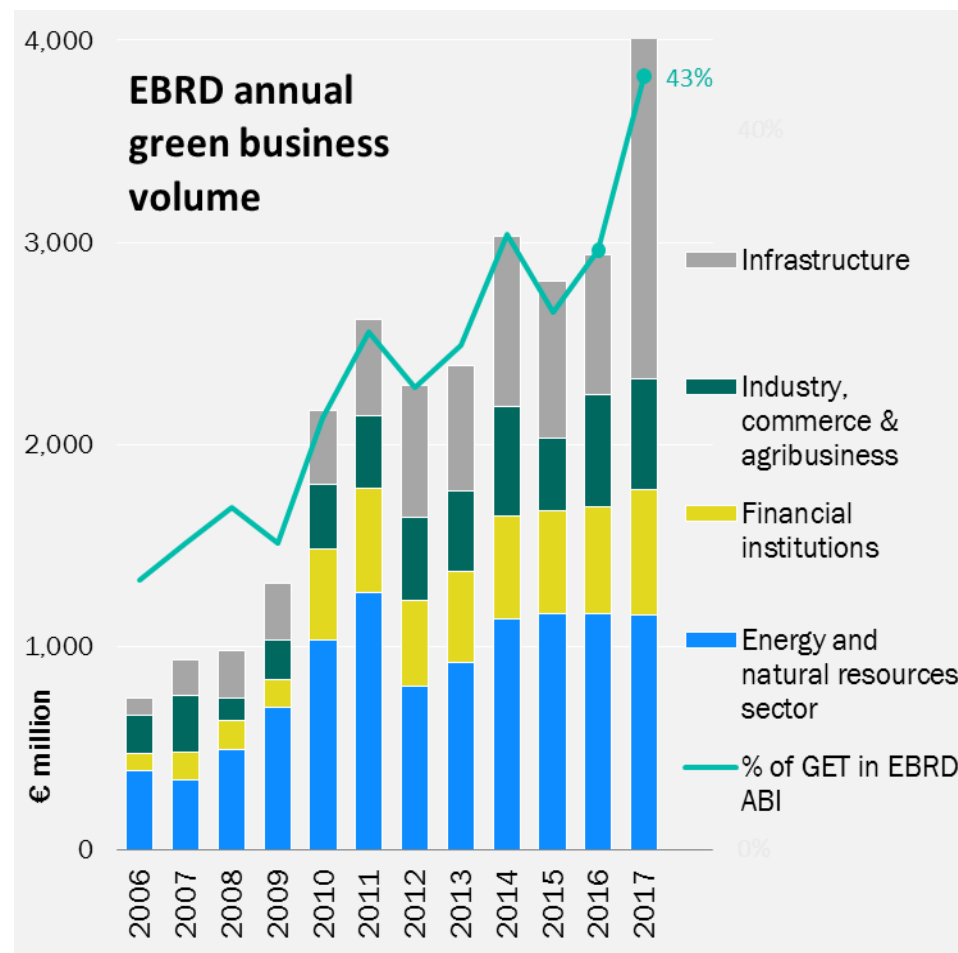
Green

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

Mainstreaming green financing the Green Economy Transition strategy

The Green Economy Transition aims to address market opportunities, as well as market failures, related to resource use and environmental degradation. GET aims to:

- **further scale-up** the Bank's operational and policy activities to accelerate transition to low-carbon and climate resilient economies
- **broaden the environmental dimension** of investments supported by the Bank - this includes elements of environmental compliance and remediation
- **innovate and engage in new areas**: promote green technology transfer and innovation and engage in new areas like green logistics, irrigation, bioeconomy, etc.
- **use more flexible financing channels**: engage private and public financing channels to accelerate low-carbon transition (e.g.: energy efficiency in public buildings, green infrastructure).
- **align the transition impact rating** of the Bank with the objectives of promoting a green economy, including recognising scale of impact or related elements of policy change and innovation.



Mainstreaming green financing

Results in 2006 – 2017



FINANCED

1,460

projects and credit
lines

1,000+ directly financed
projects with green
components, and
250 credit lines to local
financial institutions for on-
lending to smaller projects

SIGNED

€26 billion

of green financing

For projects with a total
value of €148 billion signed
in 2006-2017

In 2017 green financing
represented 43% of EBRD's
total business, up from only
15% in 2006

REDUCED

90 million

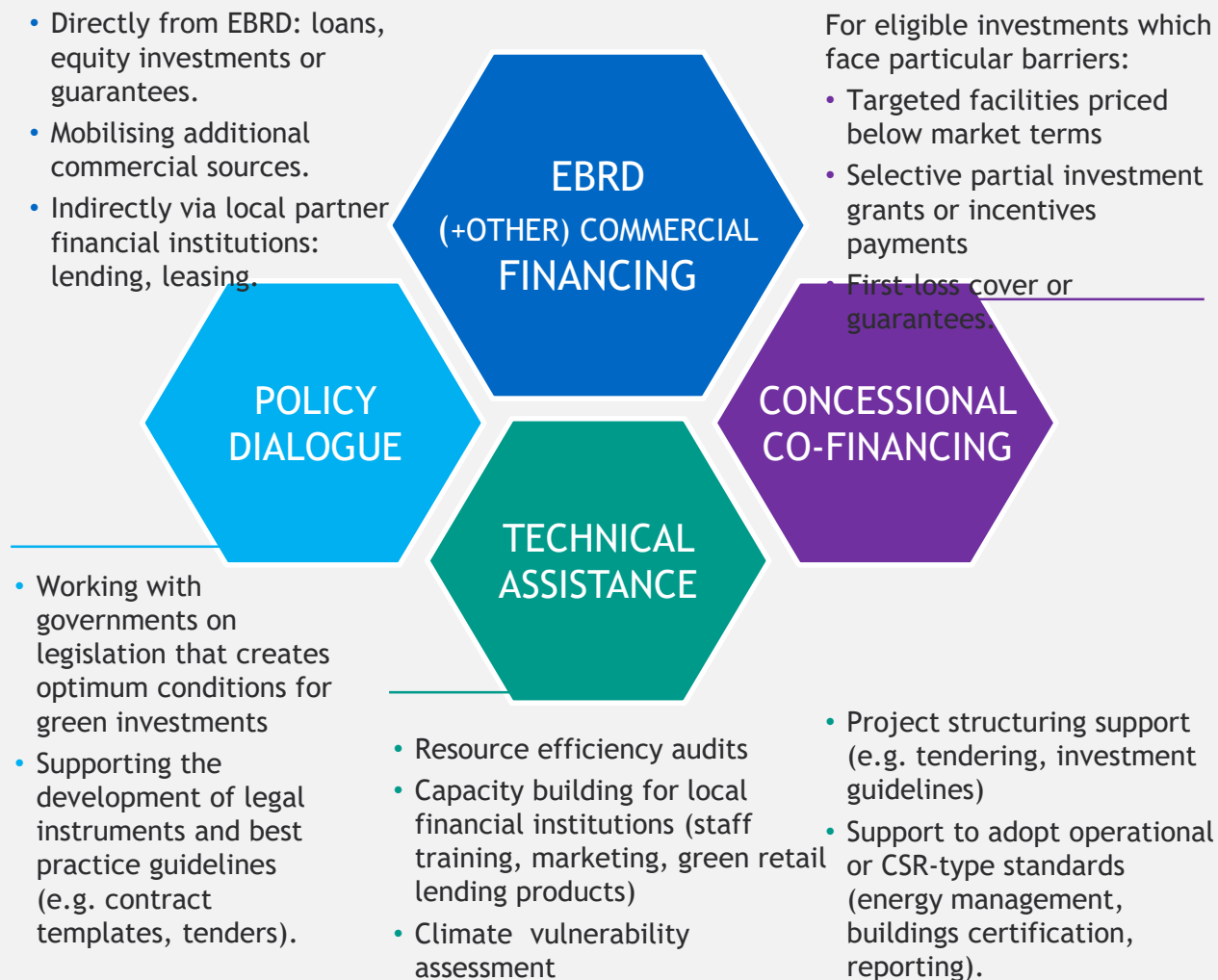
tonnes of CO₂/year

Emission reductions more
than annual energy
emissions of Romania

+annual water savings of
200 million m³ since 2013
equal to more than a third
of annual water use in
London

Mainstreaming green financing

The EBRD business model



GET IMPLEMENTATION ENERGY EFFICIENCY INVESTMENTS



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Assist clients upgrade municipal infrastructure such as:

- District heating
- Public transport networks
- Water supply systems
- Public buildings EE
- Street lighting

20% OF GET ENERGY EFFICIENCY
INVESTMENTS

Infrastructure



Assist businesses to assess energy and resource efficiency potential by:

- Conducting resource efficiency audits to identify priority investments
- Introducing advanced energy and resource management practices
- Providing financial solutions tailored to businesses and their projects

36% OF GET ENERGY EFFICIENCY
INVESTMENTS

Corporates



Credit lines to local PFIs for on-lending to small and mid-sized green projects. Technical assistance teams, who identify and assess investment opportunities, train banks' staff, and develop marketing activities. If needed, complemented with incentive payments to end-borrowers.

16% OF GET ENERGY EFFICIENCY
INVESTMENTS

**Financial
Institutions**



Preparing Green Cities Action Plans to promote low-carbon urban development via integrated assessments of environmental gaps and priorities for upgrading services and infrastructure. Investments are supported with technical assistance, financing and concessional co-financing.

Green Cities

GCAP

Finance and Technology Transfer Centre for Climate Change helps clients to invest in climate technologies with partial investment grants along EBRD finance to overcome affordability and first-mover barriers. Newly launched innovation vouchers scheme (Ukraine, Serbia) supports R&D service providers.

FINTECC

**EBRD
FINTECC**

Ukraine Residential Energy Efficiency Facility is a €40 million facility for high performing technologies in the residential sector, implemented via 4 PFIs. Combined with 4 policy engagement activities to implement the legal and regulatory framework.

UREEF

G GEEF

Problem – Public and private sector assets (e.g. buildings) are often characterised by underinvestment. This causes energy inefficiencies.

Opportunity – inefficiencies give rise to energy (cost) saving potentials

Constraint to opportunity – asset owners often lack

- knowledge needed for designing energy efficiency (EE) investments and
- funds for financing EE investments

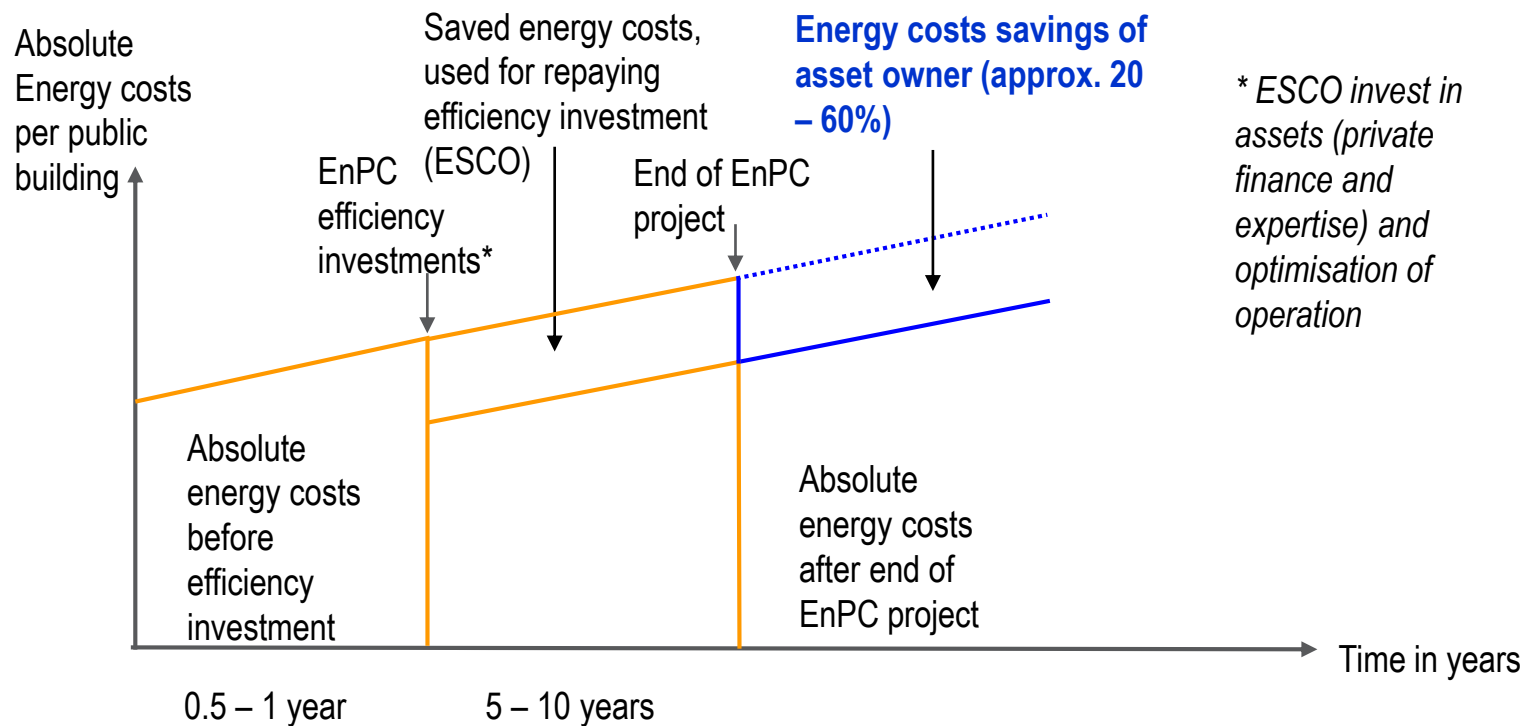
Solution – ESCO projects solve this constraint by offering:

- **private sector expertise** for project design, implementation and operation and accept the related performance risk
- selection of the **most economic energy efficiency solution**
- **commercial financing** (=off-balance sheet finance, which means no new public debt)

Financing source of ESCO projects: Energy Performance Contracting (EnPC)



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End-users will benefit from

- improved comfort levels in hospitals, schools, public administration, street lighting etc.

Public sectors benefit from

- private sector expertise available for efficiency project design, implementation and operation
- the most economic efficiency solution being procured on basis of life cycle costing
- contractually guaranteed energy cost savings
- off-balance sheet investments and savings result in state budget relief
- available budget or grants can be leveraged = more investments in energy efficiency than through traditional procurement and more efficient use of grants

Private sector benefits from

- new economic activities and employment in private sector (ESCOs)
- ESCO services and its benefits can extend to residential, commercial and industrial sectors

Banking sector

- new financing products for financing energy efficiency; cash flow based financing; forfeiting; new, secure long term product

Case study of street lighting project in Novigrad, Croatia: EBRD supported tender preparation



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- **Project:** Replacing more than half of the approx. 1,700 lights in the town of Novigrad, Croatia (population 2,600) in Istria with LED lights
- **Model:** Energy performance contract, with payments linked to savings
- **Costs:** total capex of €411,000 with a 8 years payback based on energy and maintenance savings
- **Financing sources:** 35% grant-funded by Croatia's Environmental Protection and Energy Efficiency Fund and 65% financed by the ESCO company selected following competitive tender
- **Savings:** 54% of energy consumption and 45% of maintenance costs, annually



This project is funded by
the European Union

- **Environmental impact:** 112 tonnes of CO₂ estimated annual greenhouse gas emission reductions from electricity savings
- **Tender preparation supported by EBRD under EU funded Regional Energy Efficiency Programme (REEP).**

Thank you!



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PUBLIC