

- GREEN ECONOMY TRANSITION (GET)
- DE-RISKING AND SCALING UP EE INVESTMENTS

Toivo Miller

Riga, 11 November 2016



European Bank
for Reconstruction and Development



PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11



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COP21/CMP11

Paris France



AMBITIOUS

Limit the increase in the average global temperature to 2 degrees C
“Pursue efforts” to limit to 1.5 degrees C

UNIVERSAL

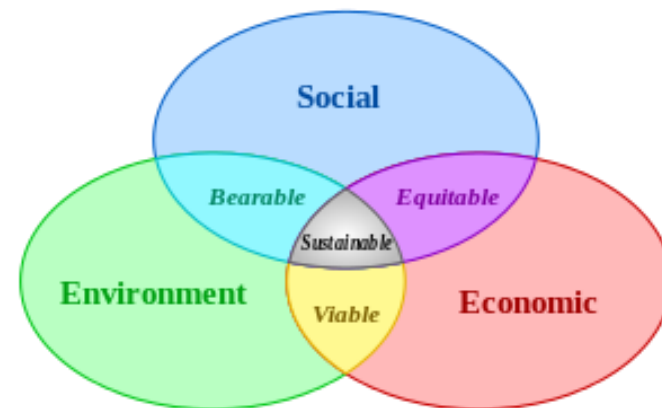
Agreement adopted by 195 countries

The Transition to a Green Economy



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- **OECD's definition of Green Economy:** “... to foster economic growth and development, while ensuring that the Earth's natural assets continue to provide the resources and environmental services on which well-being relies”
- Closely interlinked with the **21st Conference of Parties of the UNFCCC** aiming to achieve a universally-binding agreement on climate change mitigation and adaptation...
- ...and with the implementation of the **Sustainable Development Goals**
- **Translates into the investment scale-up in areas such as:**
 - Renewable energy and alternative fuels
 - Resource (energy, water & material) efficiency
 - Pollution prevention and control
 - Sustainable land use
 - Clean transportation
 - Sustainable water management
 - Bio-diversity conservation...



EBRD's Green Economy Transition Initiative: from energy efficiency to sustainability

- The GET aims to further scale up green business volume, and to expand to new areas of activity, such as environmental protection and technology transfer.
- It aims to **mainstream** and to **increase** financing for sustainable use of resources across the Bank's operations.
- A key guiding principle is that opportunities for resource efficiency financing exist across all economic sectors and project types - unlike until 2006, when energy efficiency was considered in isolation from other sector teams.

1994	2006	2013	2015
	Sustainable Energy Initiative (SEI)	Sustainable Resources Initiative (SRI)	Green Economy Transition (GET)
Energy Efficiency banking team	<ul style="list-style-type: none"> • Energy efficiency • Renewable energy 	<ul style="list-style-type: none"> • Water efficiency • Material efficiency • Adaptation to climate change 	<ul style="list-style-type: none"> • Environmental protection • Technology transfer

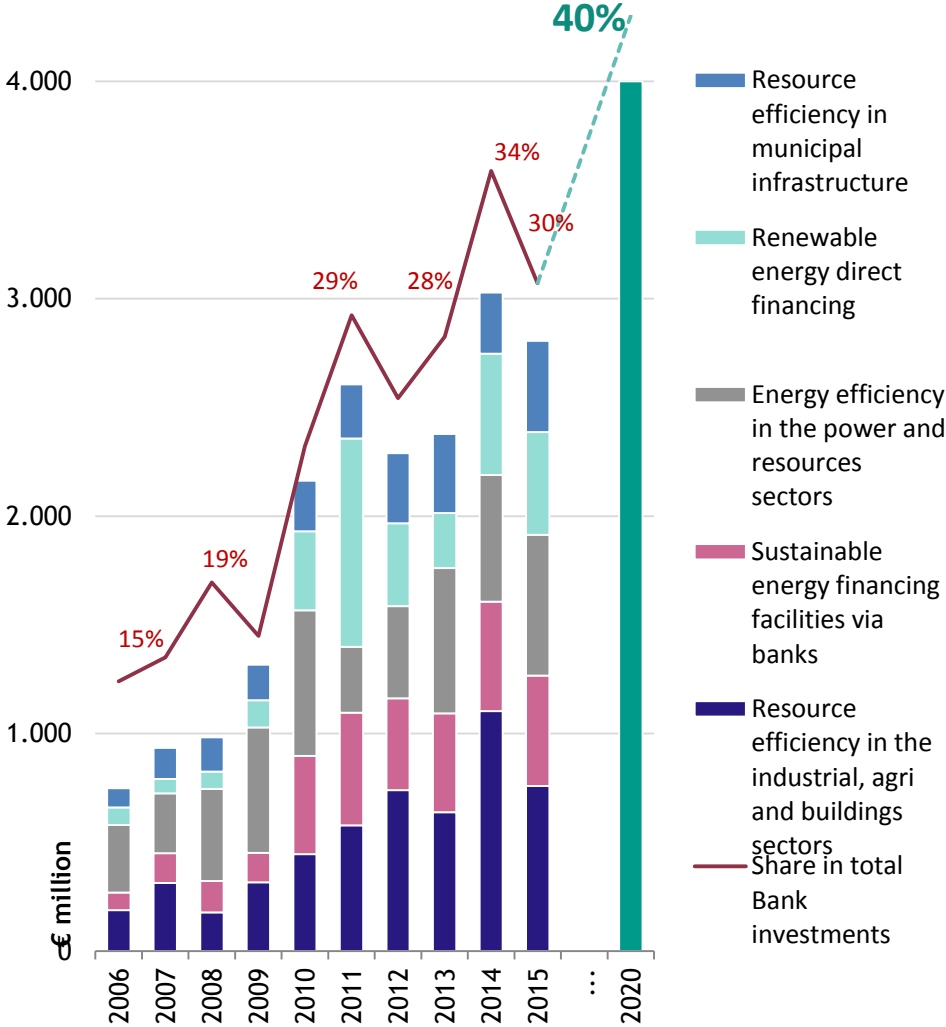
GET objectives and drivers



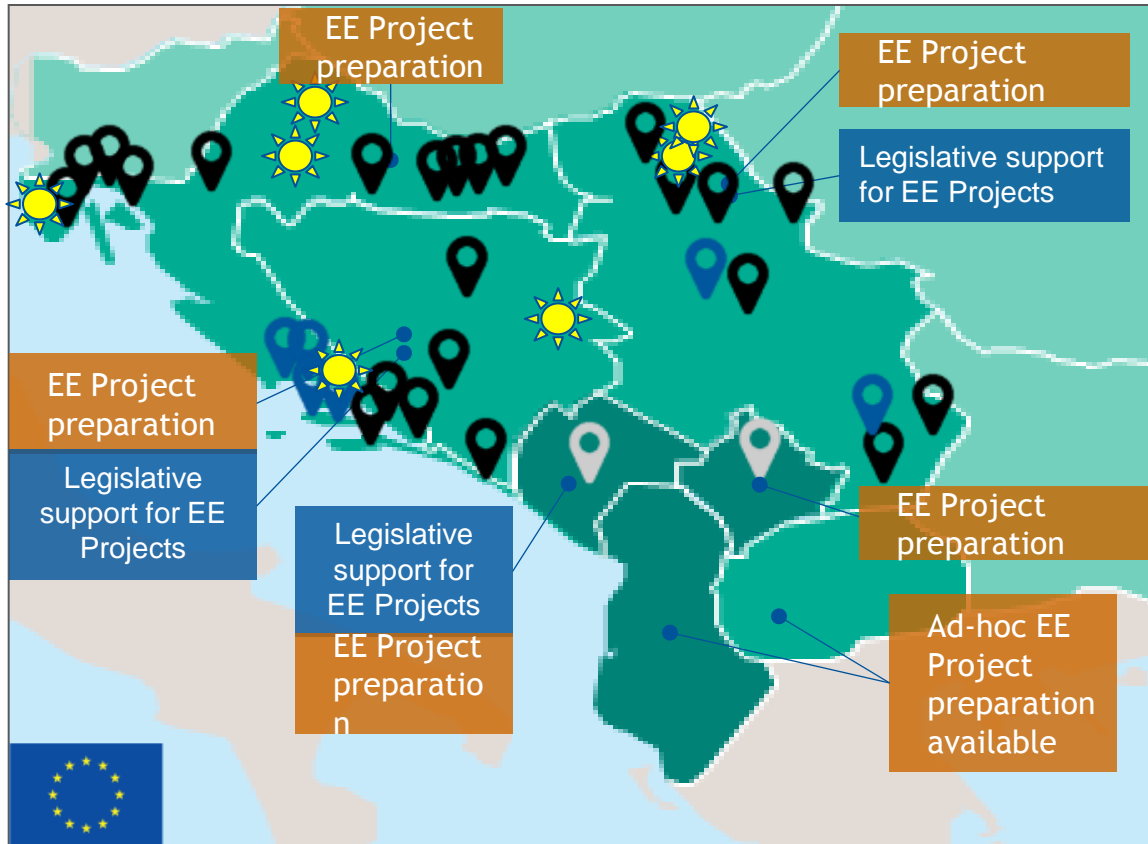
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GET objectives:

- **further scale-up** Bank operational and policy activity to accelerate COO transition to low carbon economy and climate resilience
- broaden green investment activity through **environmental dimension**
- develop **innovative technical and financing products** supporting private sector climate action complemented by public sector channels when needed
- in quant terms, increase EBRD environmental climate financing to **40% of total ABI by 2020**.



Example of public sector project pipeline: need for technical cooperation support



In Western Balkans:




- 4 street lighting projects implemented
- 2 street lighting projects to be implemented in 2016
- 7 tender under preparation for tendering in Q4/2016
- 14 tenders under preparation, including street lighting Belgrade and Novi Sad
- 8 municipalities indicated interest in projects

Policy dialogue

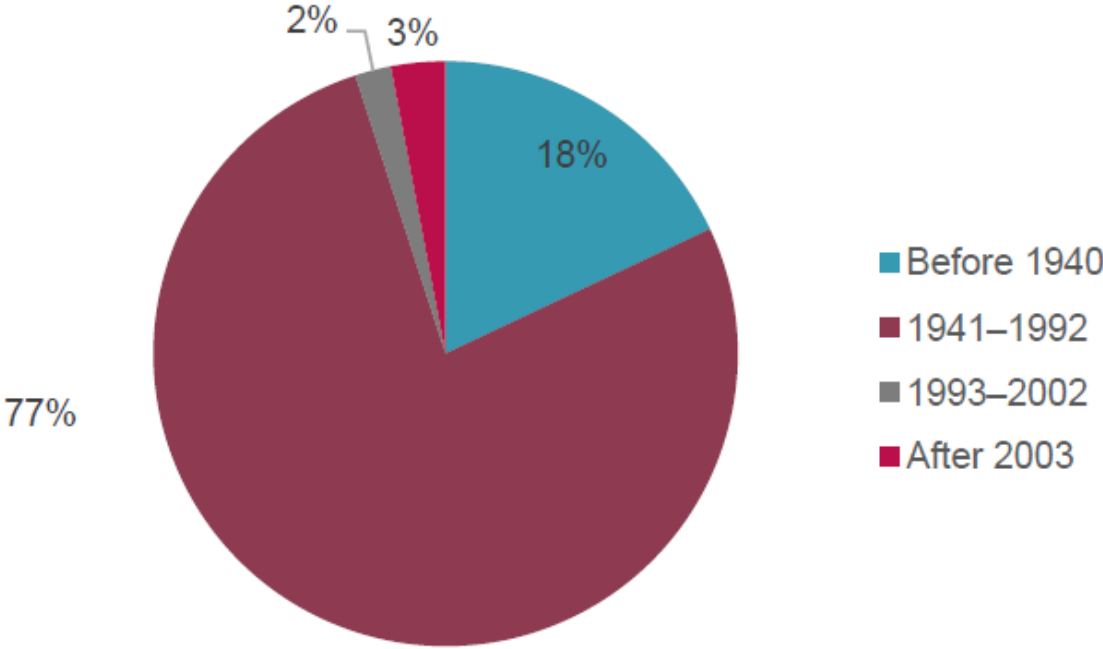
Legislative support for EE Projects

TC assignments

Energy efficiency (EE) Project preparation

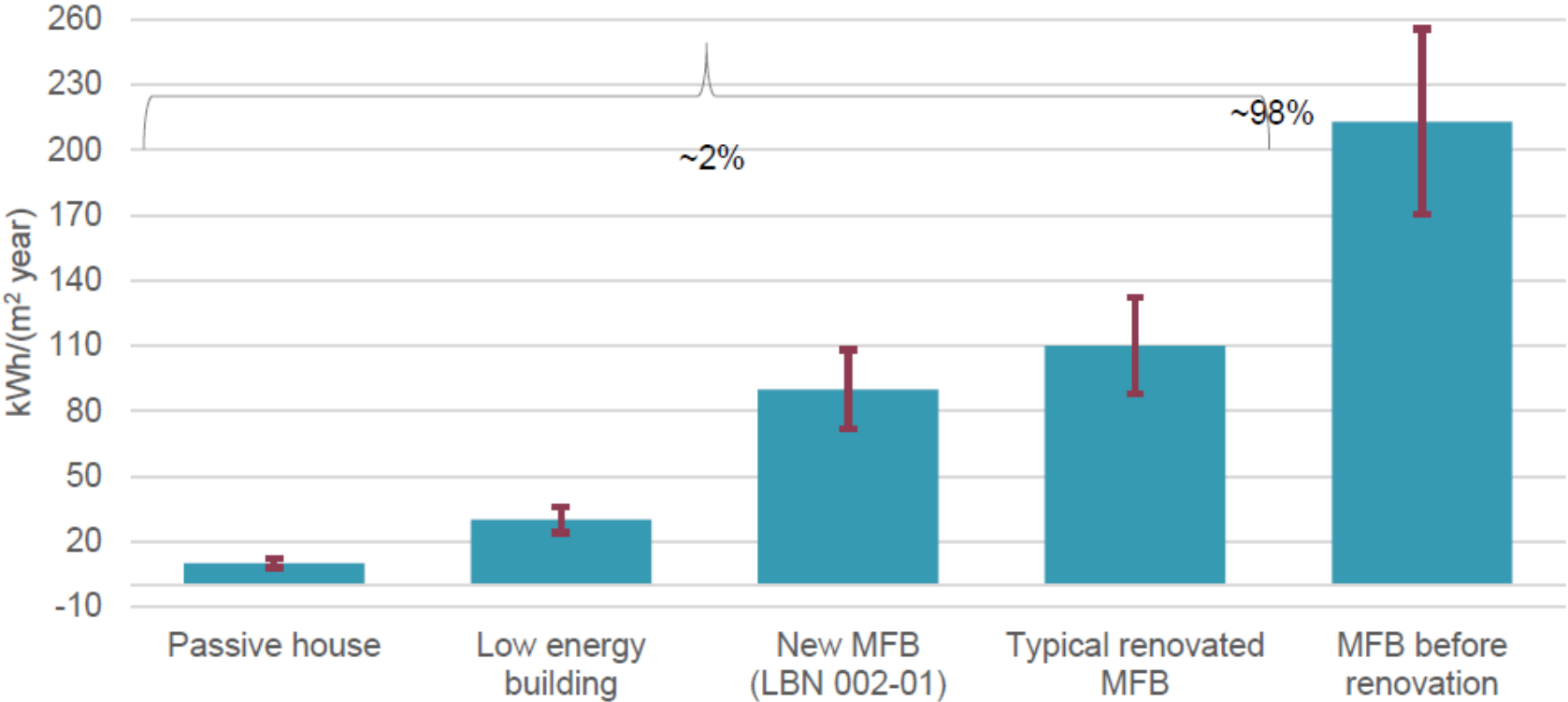
-  Tenders published, contracted or implemented: REEP policy or technical support ESCO tenders under preparation using REEP resources
-  Public authorities indicated interest in project
-  Feasibility/scoping studies prepared by REEP

Latvian residential building stock is aging: sustainable solution needed



Note: Structure of the housing stock in Latvia in % of m2 Source: Latvian Ministry of Economics

Significant energy saving potential allows cost savings in multi family buildings (MFB)



Distribution of MFB energy consumption; Source: Ministry of Economics

Creating opportunities from energy savings: performance based deep retrofits

THE PROBLEM

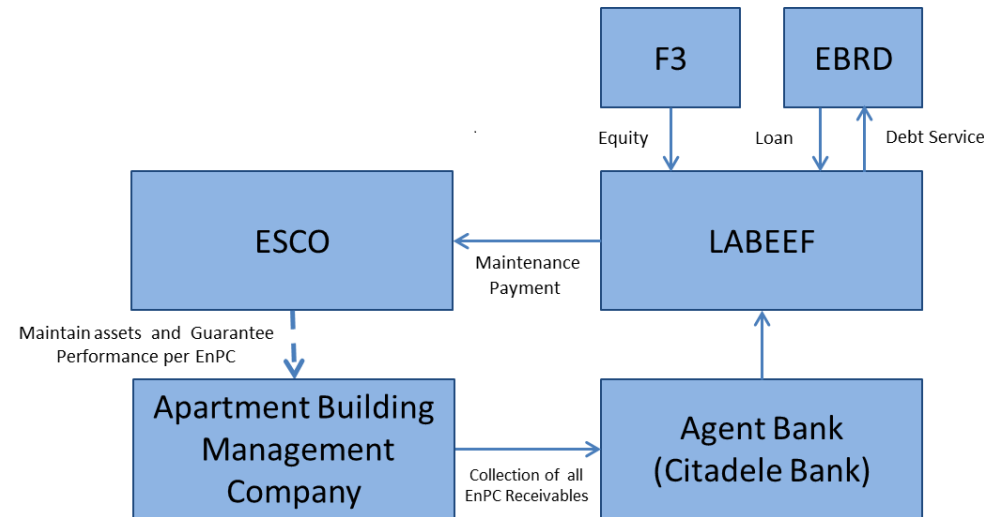
- Multi family buildings (MFB) struggle to initiate, implement and finance deep retrofits.

THE INNOVATIVE SOLUTION

- ESCOs are contracted for the technical design, implementation, financing and energy savings.
- ESCOs are only paid based on performance (=no additional costs for building owners).
- LABEEF purchases implemented and performing ESCO projects.
- This helps ESCOs to have cash for implementing additional projects.

THE EBRD'S ROLE

- Helped develop the financing structure.
- Intention to provide debt-financing to LABEEF for purchasing the receivables of implemented projects.
- Intention to support state to extend concept to public sector buildings and street lighting.



Verified during EBRD due diligence



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- There are 39,000 multi family buildings
- 95% of residential buildings built pre-1992
- 98% consume >200 kWh/sqm*year
- Reconstruction requires approx. EUR 40 billion – ESCO projects only EUR 8 billion = business opportunity

- Performance based retrofits in 15 buildings with 359 apartments implemented
- No defaults since implementation in 2009.
- Buildings will last >30 years.
- No increased cost for residents means no increase of affordability risk.
- 54% energy savings on average.

Thank you!



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Toivo Miller

Principal, Climate Finance and
Policy

Energy Efficiency & Climate
Change

Email: millert@ebrd.com



Risks of performance based deep retrofits



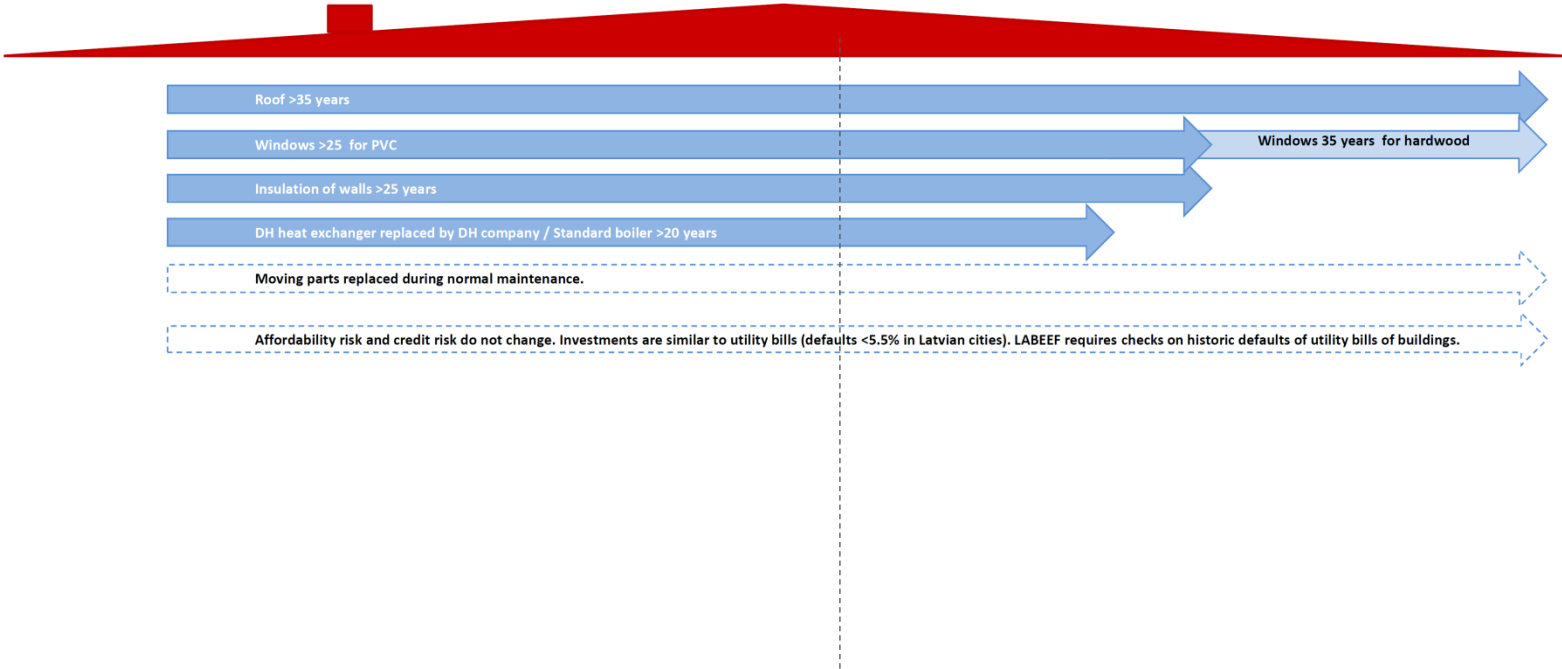
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Key risks and their allocation:

Lifetime of energy efficiency investments:

Default risk of building owner:

Status of implemented EnPCs

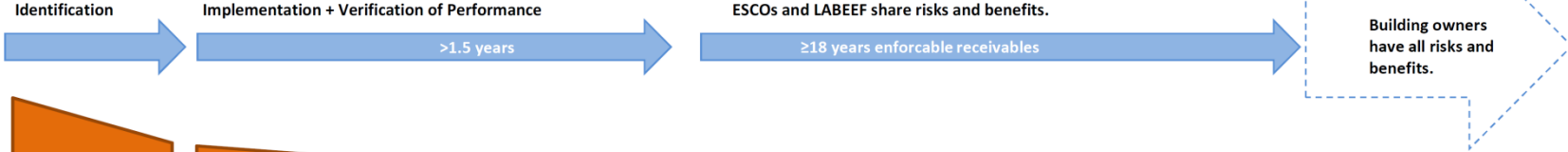


De-risking investments and scaling up

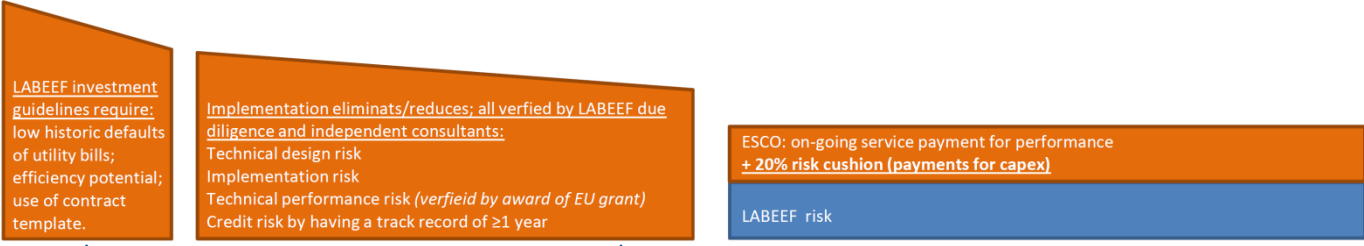


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EnPC project cycle:



Steps for de-risking over time:



Investment guidelines:

- Required technical standards
- Analyse historic credit risk
- Contract templates

LABEEF and independent verification consultants:

- Due diligence
- Review prior to disbursement approval

ESCOs paid for on-going performance and maintenance services.

ESCO motivated to select suitable buildings:

- Higher energy saving potential
- Lower credit risk

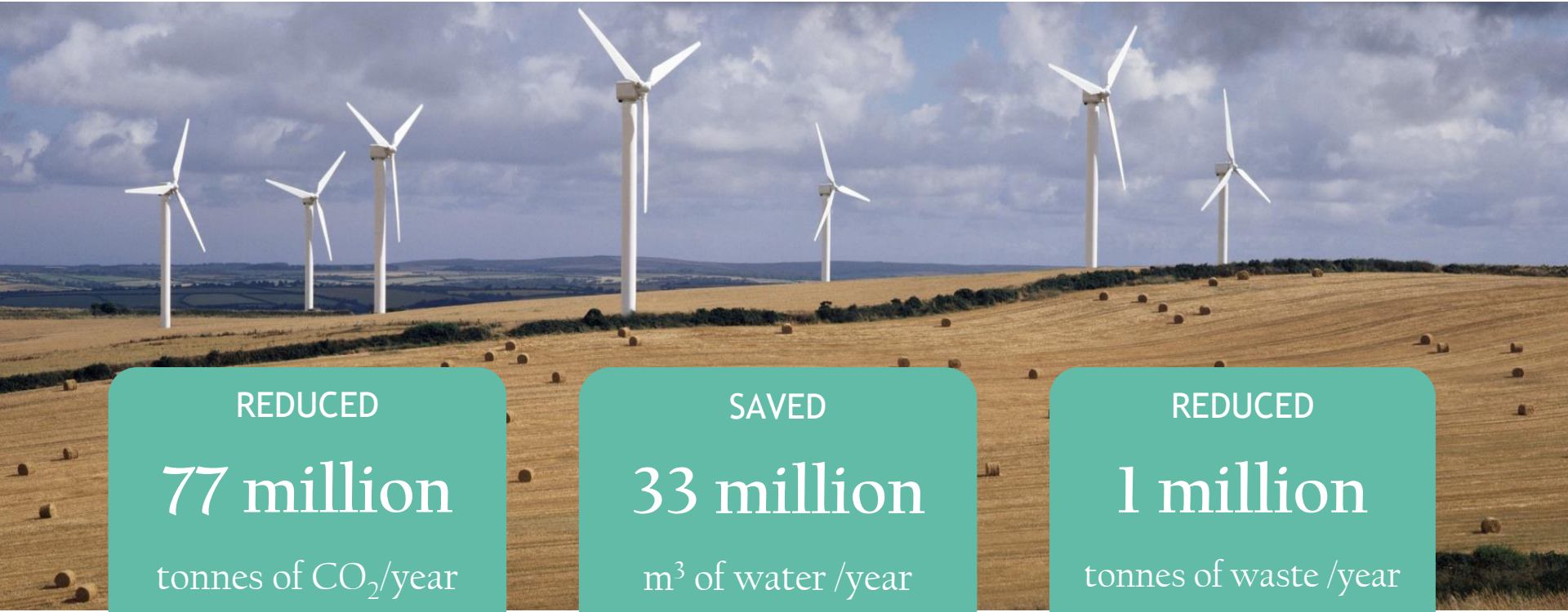
ESCO motivated to implement at highest standards:

- Technical design
- Quality material
- Execution of works

ESCO motivated to ensure performance:

- Maintenance
- Operations

Physical impacts of EBRD green financing



REDUCED
77 million
tonnes of CO₂/year

In 2006-2015
More than the annual energy use related CO₂ emissions of Romania or twice those of Sweden

SAVED
33 million
m³ of water /year

In 2013-2015 from 70 water efficiency projects
Equivalent to a third of the annual water consumption of the population of Prague

REDUCED
1 million
tonnes of waste /year

In 2013-2015 from 40 waste efficiency projects
Various streams of waste: metals, minerals, agricultural waste