

REGIONAL ENERGY EFFICIENCY PROGRAMME (REEP) IN THE WESTERN BALKANS
CONCEPT PROPOSAL FOR NEXT EVOLUTION

SUMMARY

In order to build upon the successes of the EU-supported REEP programme and maintain the momentum from its unique business model, the EBRD (with the support of the Energy Community Secretariat) proposes the following evolution of REEP activities:

1. **Policy Dialogue:** Supporting further targeted policy dialogue to help create an enabling environment for the implementation of buildings energy efficiency measures.
2. **Financing:**
 - a. **Extend the Green Economy Financing Facility (GEFF Western Balkans)** in residential buildings EE, in order to build on the momentum from the strong demand and speedy take-up of initial financing by the market.
 - b. **Support and test market readiness for Public Buildings investments** through a new and innovative regional public buildings EE renovation programme, delivered through sovereign and intermediary structures and **bringing a sharp focus onto energy performance of public buildings.**

This proposed next evolution of REEP is expected to facilitate **EBRD investment of EUR 125 million** in public and residential buildings energy efficiency. **Donor funding of EUR 25 million** is requested to support the scope outlined.

<p>Introduction</p>	<p>REEP¹ has been very successful in transforming market conditions in the region and in particular in developing and implementing related investments. REEP’s integrated package of targeted policy dialogue, technical assistance, and financing² is proving to be a highly effective model, which leverages reforms whilst at the same time providing targeted finance to stimulate sustainable growth. It is a model that the EBRD is successfully rolling out in the Western Balkans as well as other countries and regions.</p> <p>As the programme continues to evolve, there is a need to both consolidate its most effective aspects and introduce new elements that can further develop and introduce innovations in the sector. Below therefore we describe concept proposals for follow-on activities and evolution of the various ‘Windows’ within the programme.</p>
<p>Background</p>	<p>EBRD’s financing through credit lines (WeBSEFF, WBGEFF) and direct lending (WeBSEDF) have introduced very successful financing models into the banking system and the general marketplace, and REEP investments have already helped to raise awareness, increase technical capacity and build energy efficiency supply chains – acting as ‘market-makers’. There is a need for ongoing efforts to build on the successes so far and to continue market development, so as to ensure that the full potential for energy efficiency is captured.</p>

¹ When we mention REEP in this document we mean REEP and its extension (REEP Plus).

² REEP benefits from donor funding from EU IPA, the European Western Balkans Joint Fund, SIDA and EBRD Shareholders Special Fund, and is implemented jointly by EBRD with the Energy Community Secretariat.

	<p>The energy intensity of the six Western Balkans' beneficiaries is around three times higher than the average for the European Union. This is largely a result of aged and inefficient energy infrastructure or equipment and outdated buildings, e.g. the majority of the public and residential buildings were built before 1980; and buildings account for almost half the energy use within the Western Balkans³.</p> <p>Significant energy consumption savings are possible from cost-effective measures – with deep retrofit, estimated at up to 35% in households, 40% in the public sector and 25% in the industrial & commercial sectors⁴. An EBRD-commissioned market study for the residential sector estimated total energy savings potential of 85TWh/year and GHG reductions of 21 MT/year from only basic energy efficiency measures. An Energy Community Secretariat-sponsored study from 2012 showed more than 515 GWh potential in annual energy savings in schools and hospitals alone.</p> <p>While the market size for both public and private sector energy efficiency is substantial, affordability and access to appropriate financing are barriers that remain. For example, it is estimated that in all of the countries at least 50% of the population spends more than 10% of their net income on energy, limiting the ability to invest even in basic measures, let alone in more capital intensive advanced technology.</p> <p>To achieve the intended savings of 9% of the total energy consumption specified in the NEEAPs by 2018 and beyond, continuous effort in all spheres is required. By addressing remaining regulatory and financial barriers specific for each country, energy efficiency investments can be unlocked while significant amounts of GHG emission and cost saving can be achieved. In 2016, the Energy Community estimated that in monetary terms public buildings and households could benefit from cumulative energy cost savings of €805 million by 2020.</p>
<p>Proposed Programme Evolution</p>	<p>The aim of the proposed REEP evolution is to both consolidate its most effective aspects, and introduce new elements that can enhance the programme. The programme will extend its support to energy efficiency in the buildings sector, which is on average the largest energy consuming sector in almost all six beneficiary countries. Below we note the main achievements of the various REEP Windows so far, and the enhancements proposed at this stage.</p> <p>WINDOW 1: POLICY DIALOGUE</p> <p><i>Main achievements so far</i></p> <p>Intensive Policy Dialogue has been provided relating to the EED, EPBD and ESCOs in all six countries under REEP. Under both phases, 33 Policy Dialogue deliverables have been received by governments, currently at different stages of adoption and implementation.</p> <p><i>Proposed enhancement</i></p>

³<http://documents.worldbank.org/curated/en/612291468303019094/Western-Balkans-Scaling-up-energy-efficiency-in-buildings-final-report>

⁴ World Bank estimates

- Continuation of existing work related to transposition of EED and EPBD
- Enhancing support under Article 4 of EED in relation to public sector buildings EE related policies and strategies, such as development of National Building Renovation Strategies which are a prerequisite to the development of large-scale building renovation programmes
- Expanding Policy Dialogue support to include:
 - the Eco-Design Directive, a key enabler of EE related products in the market
 - EE compliance and enforcement

WINDOW 1: ESCO SUPPORT

Main achievements so far

- Over 54 ESCO projects with an estimated investment volume of over EUR 69 million have been supported with project preparation - covering street lighting, buildings and district heating.
- Legislative and contractual support has been provided in three countries and will be provided to the remaining countries by Q3/2018.

Proposed enhancement

No enhancement is currently needed as the programme continues to deliver and the work programme for the next 2 years is funded.

WINDOW 2: INTERMEDIATED FINANCE

Main achievements so far

The EBRD with the support of the EU has been engaged with local financial institutions in the Western Balkans to support sustainable energy investments in various sectors including SMEs, public entities and, since 2017, borrowers investing in buildings refurbishment in the residential sector. This later intervention has already been launched in Bosnia and Herzegovina and is expected to be rolled out in all six WB countries by end-2018. Out of the allocated EUR 85 million EBRD financing EUR 34.5 million has already been signed in loan agreements and an additional EUR 41 million is in various stages of negotiations with prospective clients. There is very strong interest from financial institutions for the product and full allocation is anticipated already in 2018.

Proposed enhancement

In order to maintain momentum in lending to the residential segment and satisfy the appetite of potential late-comers to the programme additional funding of EUR 100 million could be allocated by EBRD in 2019/2020. Judging by current ongoing discussions with EBRD's existing client base, the allocated financing is expected to be oversubscribed by the end of 2018. The proposed additional funding would ensure continuous lending to the residential sector, build further awareness amongst beneficiaries and the general public on the benefits of implementing high performance building technologies as well as working on the supply side with

technology suppliers and local professionals in extending the supply of high performance technologies and quality installations. In addition to refurbishment, the focus would also be extended to improving standards in construction of newly built residential buildings and working with local service providers in this area.

WINDOW 3: DIRECT LENDING

Main achievements so far

This window has supported six renewable energy projects in the areas of small hydropower, biomass and biogas combined heat and power generation. In total, finance in the amount of EUR 25.9 million has been extended (with extra EUR 6 million approved) for the installation of 21.2 MW of renewable energy generation capacity, with expected annual electricity generation of 233.9 GWh and CO₂ emission reductions of 325,974 tonnes.

Proposed enhancement

No enhancement is required at this stage.

WINDOW 4: LENDING FOR PUBLIC BUILDINGS EE

Main achievements so far

The active marketing of this window commenced in 2017, currently resulting in the EBRD board approval of the Zenica Hospital EE refurbishment project. The total funding of €11 million includes €1 million grant. It is estimated that the energy efficiency building retrofit will result in 53% energy savings, corresponding to 9,600 MWh per year. It is expected that the active development of other proposals in 2018 will facilitate new projects achieving set targets for this window and utilise remaining grants.

Proposed enhancement

EBRD proposes a new public buildings renovation programme, aimed at testing the market readiness for deep energy efficiency refurbishments through an innovative and flexible model embedding energy performance at the core of the structure. The programme will complement existing programmes operating in the region by enabling multiple countries to benefit at the same time from support in this sector. The proposed programme is expected to be piloted in up to two WB countries (likely BiH and Kosovo) where the EBRD is increasingly engaging in this sector. The proposed programme will combine technical assistance (funded from other sources), financing and incentives to accelerate EE investments in public buildings.

As illustrated in the figure below, the proposed programme aims at providing individual sovereign loans and grants to finance a nation-wide EE renovation scheme. Funding will be passed to the relevant public entity owning and operating the targeted buildings, and monetary savings generated by improved efficiency will be used to partly repay the investment.

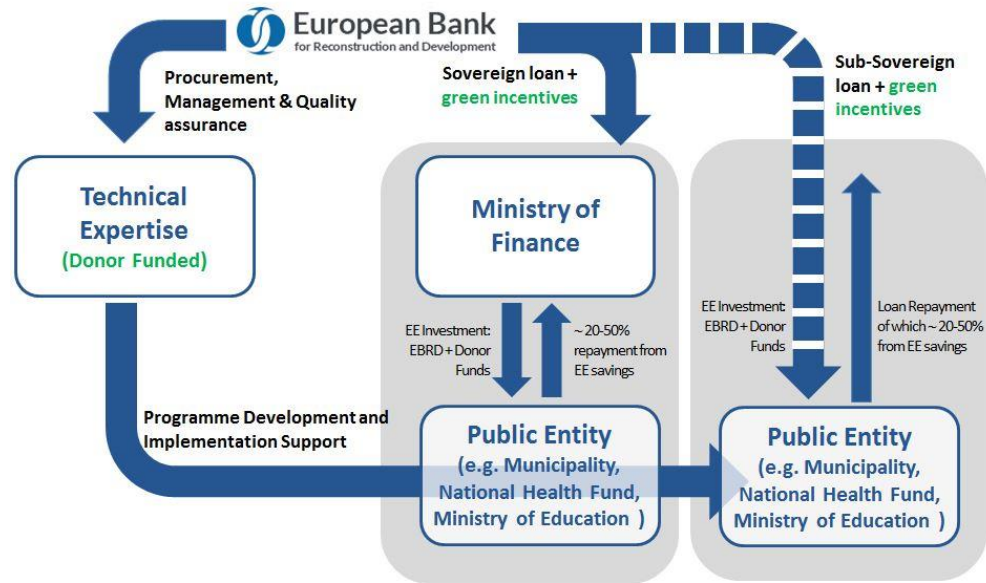


Figure 1 – Illustrative Country Level Programme Implementation Structure

In case sovereign lending limitations exist the programme will finance eligible *sub-sovereign* entities interested to participate in the renovation scheme.

The final selection of buildings, which offer the most cost-effective energy efficiency measures will be harmonised with ongoing national refurbishment initiatives. This will increase the leverage of the funds dedicated for energy efficiency investments.

At a project level, the financial assessment of energy efficiency renovation measures will determine the level of grants necessary to achieve acceptable paybacks. This will ensure that grants mitigate country specific barriers such as low energy tariffs or higher capital costs for advanced technology and material. Based on similar project experience it is expected that on average a 20% grant will be needed to reach desired paybacks, encouraging municipalities and central government to prioritise energy efficiency investments.

Mechanisms will be introduced to ensure that energy cost savings are accounted for, and that the benefit of the savings are allocated to the repayment of the loan (or are re-invested in public buildings EE), thus bringing a sharp focus from all stakeholders to the value of energy savings and to the actual building energy performance after completion of the investments. Depending on individual financial arrangements the repayment could be either regular repayments in the form of direct transfers by the public entity operating the building, or a reduced central budget allocation for building operational costs (e.g. utility bills). This will also encourage energy management practices in the facilities, sustaining results. The renovation will lead not only to reduced energy consumption but increase building comfort level which may result in higher quality of service.

The technical assistance will support prioritisation of investments, pipeline development and the development of an inventory of public buildings. Sub-project preparation will be supported through energy audits, procurement and implementation assistance and verification of energy saving results. The programme will also provide, to the extent possible, capacity building to interested

	<p>service providers to use energy performance contract practices during procurement.</p> <p>It is estimated that a total funding envelope of €30 million will enable the upgrade of up to 216,000 m² over a 4-year period. It is expected that, using the EBRD's experience and stream-lined processes, technical assistance funding needs for programme implementation support will be in the region of €1 million (funded from other sources).</p>																												
Indicative Budget for Enhancements	<p>Indicative numbers are provided below for proposed additional EBRD financing, and associated donor funding requirements.</p> <table border="1"> <thead> <tr> <th>WINDOW</th> <th>DONOR FUNDING NEED (EUR million)</th> <th>RELATED EBRD INVESTMENT (EUR million)</th> <th>TIMING OF DONOR FUNDING</th> </tr> </thead> <tbody> <tr> <td>WINDOW 1: POLICY DIALOGUE (EBRD)</td> <td>0.5-1⁵</td> <td>N/A</td> <td>From 2020</td> </tr> <tr> <td>WINDOW 1: ESCO SUPPORT (EBRD)</td> <td>-</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>WINDOW 2: INTERMEDIATED FINANCE (EBRD)</td> <td>20 of incentives⁶</td> <td>100</td> <td>From 2019. Can be tranchés as follows: <ul style="list-style-type: none"> • 2019: 10 • 2020: 10 </td> </tr> <tr> <td>WINDOW 3: DIRECT LENDING (EBRD)</td> <td>-</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>WINDOW 4: LENDING FOR PUBLIC BUILDINGS EE (EBRD)</td> <td>5 for incentives</td> <td>25</td> <td>From 2019</td> </tr> <tr> <td>TOTALS</td> <td>25</td> <td>125</td> <td></td> </tr> </tbody> </table>	WINDOW	DONOR FUNDING NEED (EUR million)	RELATED EBRD INVESTMENT (EUR million)	TIMING OF DONOR FUNDING	WINDOW 1: POLICY DIALOGUE (EBRD)	0.5-1 ⁵	N/A	From 2020	WINDOW 1: ESCO SUPPORT (EBRD)	-	N/A	N/A	WINDOW 2: INTERMEDIATED FINANCE (EBRD)	20 of incentives ⁶	100	From 2019. Can be tranchés as follows: <ul style="list-style-type: none"> • 2019: 10 • 2020: 10 	WINDOW 3: DIRECT LENDING (EBRD)	-	N/A	N/A	WINDOW 4: LENDING FOR PUBLIC BUILDINGS EE (EBRD)	5 for incentives	25	From 2019	TOTALS	25	125	
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Expected Benefits	<p>With buildings responsible for over 40 per cent of energy consumption in the region, their improved energy performance will have tremendous economic and social benefits for the populations and the countries. Expected results include:</p> <ul style="list-style-type: none"> • Improved regulatory framework that requires high EE performance in new and renovated buildings; • Improved compliance with Energy Community Treaty obligations; 																												

⁵ Funding for window 1 will be sought in the next REEP funding programming phase;

⁶ Part of the incentive (up to EUR 5 m) may be used as TC; the exact share will be clarified at the funding proposal stage;

- Increased demand for EE services and materials;
- Improved government leadership in the area of EE;
- Increased awareness about EE benefits;
- Reduced energy consumption in targeted buildings, typically between 20% and 40%, with significant CO₂ emissions reductions;
- Improved financial sustainability of the central Government and Municipalities, through lower energy costs;
- Improved living conditions and lower energy bills for residents
- Increased competitiveness of construction-sector businesses who will gain knowledge and skills of measures and technologies related to buildings EE; and
- Reduced dependence on energy imports and increased energy security.