INNOVATIVE FINANCING FOR GREEN BUILDING



GREEN BUILDING IN TRANSITION ECONOMIES: TURNING CHALLENGES INTO OPPORTUNITIES

Green buildings represent a major global investment opportunity, with buildings making up the largest segment of the US\$231 billion energy efficiency market. In EBRD countries of operations, however, they also represent a challenge. Currently, green-building renovation rates and practices in these countries are far below Paris Agreement targets. Furthermore, most of these efforts are not cost-optimal due to capacity and supply-chain limitations, as well as regulatory and policy constraints.

GET RESULTS

Since 2006, EBRD has financed 200+ larger-scale green-building projects in more than 62,000 building assets:

- key segments: Residential, public buildings and commercial buildings (hotels and lodging, office, retail and logistics)
- overall gross building area of EBRD-financed green buildings exceeds 25 million square metres
- GET enabled €15 billion of green-building investments, including €2 billion from EBRD
- GET investments in building assets vary from a few thousand euros to above €100 million in larger structured finance projects; EBRD can fund 30 to 100 per cent of investment costs
- GET investments yield aggregate lifetime (15-25 years) savings of 71,000 GWh of energy and 335 million tonnes CO₂

ALMOST €24 BILLION INVESTED UNDER GET APPROACH SINCE 2006

Investments under the GET approach aim to capitalize on the significant green-building opportunities in transition economies, while mitigating the effects of climate change and other forms of environmental degradation. Since 2006, the EBRD has invested almost €24 billion in green-building projects in countries of operations. With the goal of bringing investments with environmental and climate benefits to the heart of the Bank's mandate, EBRD intends to increase its volume of green financing from an average of 24 per cent over the previous 10 years to 40 per cent by 2020.

The GET approach offers direct, sustainable financing to large corporate clients in sectors such as agribusiness, industry, power and energy utilities, property, tourism and transport, as well as to municipalities. Indirect financing is extended through Green Economy Finance Facilities (GEFFs), which provide credit lines to local financial institutions for on-lending to small and medium-sized enterprises and homeowners.

€ 23.9 BILLION IN GET FINANCING SINCE 2006



Corporate energy efficiency
Green Economy Finance Facilities
Cleaner energy production
Renewable energy
Municipal energy efficiency
Trade Finance Programme

GET SNAPSHOT

€23.9 billion

since 2006

1,340

projects

85 million tonnes

expected annual $\rm CO_2$ reductions

GREEN FINANCING INSTRUMENTS

The GET approach enables both direct and indirect green-building investments through a range of innovative channels and financial instruments, including:

- direct finance, including debt, equity or quasiequity financing with a focus on green investments and use of advanced resource-efficiency techniques
- intermediated finance through local financial institutions or through nonfinancial intermediators, such as utilities and energy service companies
- large-scale public-private partnership (PPP) framework programs (greenfield and brownfield public buildings)
- sustainable property funds (commercial and private residential buildings)
- performance-based finance and other marketbased climate finance products that provide additional revenues for EBRD clients
- green-labelled property bonds (commercial/ public buildings)
- structured financing: EPC/ESCOs/Forfeiting (residential, public buildings)

If market barriers are very high, donor-funded concessional elements, grants and incentives are available to help early-movers implement selected measures. The EBRD's Finance and Technology Transfer Centre for Climate Change (FINTECC) supports implementation of advanced climate technologies with low market penetration rates.

TECHNICAL ASSISTANCE

The GET approach offers technical assistance to overcome market barriers, provide needed knowhow and ensure the successful planning and implementation of green-building projects.

POLICY SUPPORT

The GET approach facilitates country-level policy dialogue to remove institutional and market barriers to green-building investments. National governments benefit from a variety of EBRD policy and financial instruments designed to promote economic transition and positive environmental outcomes. With the EBRD's assistance, the governments of Ukraine, Moldova, Kyrgyz Republic, and all the Western Balkans have set up laws and regulations for energy performance in buildings using the guide from the EU Building Directive.

GREEN FINANCE HIGHLIGHTS UNDER THE GET APPROACH

GREEN CITIES FRAMEWORK

Cities in EBRD countries face common challenges to reduce their energy and carbon intensity, while managing the social and environmental impacts of climate change. Combining strategy, policy and technical support, capacity building and infrastructure investments, the Green Cities Framework offers a systematic and comprehensive approach to overcoming these challenges. Eligible cities must (a) have a population of at least 100,000, (b) undertake an initial project in urban infrastructure with meaningful climate or environmental benefits, and (c) commit to develop a Green City Action Plan, the Framework's key tool that helps municipal authorities and key urban stakeholders identify, benchmark, prioritise and guide green city actions.

GREEN ECONOMY FINANCING FACILITIES (GEFFS)

GEFFs aim to develop local financing markets for sustainable energy and resource efficiency projects. Through GEFFs, the EBRD offers credit lines to local partner financial institutions (PFIs) for on-lending to small and mid-sized green projects with loans or leasing. Credit lines are complemented with technical assistance for PFI capacity-raising and project assessments, and occasionally with lowintensity grants to reward end-beneficiaries who opt for advanced technologies. To date, GEFFs have facilitated the refurbishment of 60,832 building assets.

GEFF SNAPSHOT

€1,148,243,000

Total budget

€463,854,000 GET investment in buildings

325,535

CO₂ emission reductions (tonnes/year)

€724,321,000 EBRD loan

GGEFF

EBRD Ioan

926,309 Primary energy savings (MWh/year)

CASE STUDY RESIDENTIAL ENERGY EFFICIENCY CREDIT LINE, BULGARIA

The first residential GEFF was the Residential Energy Efficiency Credit Line (REECL) in Bulgaria. REECL provides loans to Bulgarian banks to on-lend to individuals, homeowners' associations, utility companies and energy-service companies for energy-efficiency and renewable-energy improvements in residential buildings. The credit line of over €100 million is the result of cooperation between the EBRD, the Bulgarian government and the KIDS. Launched in 2005, REECL has achieved significant outcomes in Bulgaria's carbon-intensive and fragmented residential sector, including annual cost savings of €19 million, energy savings of 240,132 MWh and reductions of 249,680 tonnes of CO_{2} equivalents.

PUBLIC-PRIVATE PARTNERSHIP PROGRAMMES

Specific products have been developed to finance public buildings under public-private partnership (PPP) arrangements between public authorities and private concessionaires. EBRD has introduced a PPP framework for development, construction and operation of public hospitals upon long-term, concessional agreements with private operators in Turkey. In 2014, Turkey's Health Ministry PPP programme launched with total investments of €12 billion to deliver 60+ new hospitals with more than 50,000 beds. EBRD offered financing on commercial terms under A/B financing structure to interested concessionaires upon conclusion of specific hospital PPP tenders. EBRD also provided the Turkish Ministry with technical support for valuefor-money analysis on PPP structures, as well as contract support to train a dedicated PPP unit inside the Ministry for monitoring. As part of the EBRD engagement, the Bank has assisted the Ministry with establishing advanced technical requirements at levels of best industry practice. Following the success of several hospital projects under the PPP framework, EBRD is currently working with national authorities to replicate this project in other countries of operation, including Croatia, Kazakhstan and Romania, and will also consider extending the approach to other types of public buildings.

SUSTAINABLE (GREEN) PROPERTY FUNDS

This EBRD product is based on a set of criteria encompassing all aspects of sustainability and resource efficiency applicable to a portfolio of building assets. After an initial sustainability assessment, a plan for sustainability-focused upgrades is established, along with measurable objectives that align with and exceed national targets. Sustainability performance assessment is conducted by an independent and accredited third party.

CASE STUDY HINES POLAND SUSTAINABLE INCOME FUND

In 2014, EBRD assisted Hines Poland — a privately owned, Polish real estate investment firm with a presence in 19 countries — in the development of the first green property fund in the Bank's Central and Eastern European (CEE) region. With a capital commitment of €50 million, EBRD is one of the largest partners of the Hines Poland Sustainable Income Fund, which was valued at €155 million at final closing. The fund aims to raise standards of business conduct through sustainability improvements to its acquired assets. Requirements include: a) making sustainability improvements to existing buildings, taking into account best international practice; b) introducing sustainability-focused facility management at asset and fund level; c) targeting opportunities for more efficient and less resource-intensive use of buildings by their occupants; and d) documenting fund achievements with internationally recognised certification, following LEED or BREEAM schemes. Fund activities are expected to result in the emergence of new policies (e.g. green leases, sustainable facility management) and standards in the Polish market. The concept is also expected to be replicated throughout the Central and Eastern European region.

SUSTAINABLE RETAIL

EBRD was the first international financial institution to develop a dedicated approach to promoting energy efficiency in retail buildings. As of mid 2017, EBRD had provided €550 million and technical support for green retail investments in around 15 corporate projects in countries of operation. To facilitate green investments in retail, the Bank introduced the Sustainable Enterprise and Environmental Diagnostic (SEED) toolkit in 2015, which provides guick screening and benchmarking of retailers in EBRD regions. The Bank offers further assistance by conducting feasibility/ pre-feasibility studies of specific technologies (e.g. efficient mechanical and electrical services, energy management systems, logistic management tools, water and waste management techniques) and establishing key performance indicators for resource efficiency. The Bank has assessed dozens of retailers, including large, multinational chains with hypermarket, supermarket or convenience store formats, as well as smaller local chains with convenience or discount stores.

URBAN REGENERATION

EBRD provides financing and technical support to municipalities and private companies undertaking urban regeneration projects. Many cities in EBRD countries have been left with dilapidated brownfields of former industrial or residential estates — sometimes close to, or directly in. their downtown areas. Some of these brownfield sites are contaminated, so environmental remediation is needed before any further development work can begin. Urban regeneration can be turned into a commercially attractive opportunity with significant social and environmental benefit, but only with cooperation among public and municipal landlords, commercial entities and local communities. In addition to providing debt and equity financing, EBRD helps foster alignment among interested parties by providing donor-funded technical support for master planning, environmental risk assessment, policy dialogue, inclusion and resource efficiency. Recent EBRD urban regeneration projects have taken place in Jordan, Egypt and Ukraine.

STRUCTURED FINANCE PRODUCTS TARGETING GREEN-BUILDING AGGREGATORS

EBRD endorses a wide range of structured finance products through non-financial aggregators to unlock the considerable potential of energy efficiency in the fragmented building sector. In 2016, the Bank extended a loan of up to \in 50 million to the Lithuanian Public Investment Development Agency to finance demand-side energy efficiency investments in residential apartment buildings. This project aims to reduce wasted energy and CO₂ emissions by about 40 per cent.

Other important aggregators for financing energyefficiency investments in the building sector include private energy service companies (ESCOs). EBRD recruits private ESCOs to design, fund, maintain and operate energy-efficiency improvements for public beneficiaries. These investments are repaid from the resulting savings, often through a performance-based contract. Since savings are realized over a long period of time, the ESCO can on-sell expected receivables (a stream of future energy savings) and refinance itself for future investments.

EBRD also seeks to promote demand-side energyefficiency financing through utilities. Launched in 2015 and expected to run until 2018, the DESIREE GAS project aims to support the transition from carbon-intensive electricity to natural gas in Bulgarian households. With the goal of achieving energy savings of 142,000 MWh per year, this project provides funding, grants and technical assistance to support gas installations, high-efficiency gas water heaters and space heating in single-family and multifamily homes. Furthermore, the project is expected to achieve additional yearly energy savings of 70,000 MWh by switching from coal, biomass and oil to natural gas, resulting in higher combustion efficiency.

CASE STUDY LATVIAN BALTIC ENERGY EFFICIENCY FACILITY

The Latvian Baltic Energy Efficiency Facility (LABEEF) is a fund supported by EBRD that was established to purchase receivables (a stream of future revenues) from completed and certified ESCO projects. This model allows resident associations and managers of public buildings to engage with ESCOs to carry out energy-efficiency upgrades, for which ESCOs can access financing. The fund's approach enables sustainable financing for energy-efficiency projects without relying on grant funding, and does not place a financial burden on homeowners and/or occupants. It is worth noting that 70 per cent of Latvians reside in Soviet-era buildings with heat losses of over 50 per cent. Under LABEEF's model, residents do not have to make extra payments for refurbishment and insulation works, as these costs are covered from the reduction in their energy bills. In most cases, these energy-efficiency upgrades are combined with structural repairs designed to extend the life of buildings, hence improving their value.

GREEN-LABELLED PROPERTY BONDS (COMMERCIAL/PUBLIC BUILDINGS)

EBRD has been a leading issuer of Green Bonds since 2010. The proceeds of Green Bonds are earmarked to support projects in energy efficiency, renewable energy, water management, waste management and environmental services and sustainable public transport. In 2017, EBRD's Green Project Portfolio included 388+ projects worth €3.8 billion. The EBRD's largest green issue of US\$650 million 3-year bonds came in July 2016.

The Bank also supports capital market transactions by purchasing green-labelled and climate bonds issued by clients. In late 2016, EBRD backed a €288 million bond issued by Rönesans Holding to finance a state-of-the-art, Elazig PPP hospital in Turkey, making it the country's first-ever greenfield infrastructure project bond. To enhance credit for a corporate client, the Bank pledged to provide €89 million as interim liquidity to mitigate the risks associated with construction and operation. Drawing from these experiences, EBRD is actively supporting green capital market development in countries of operation by offering corporate clients valuable assistance, knowledge and guidance to turn their normal bonds into green and/or climate bonds.

The Bank is also working with the Climate Bond Initiative, participating actively in technical working groups, including one specifically for buildings, and discussing standards and requirements for greenlabelled bonds in different sectors.