

Regional Investment Roundtable

Scaling Energy Efficiency Investments in Multifamily Buildings

Strategies for Structuring Energy Efficiency Fund in North Macedonia

The Needs for Residential Sector

Sofia 23rd November, 2022



Establishing Energy Efficiency Fund (EEF) in North Macedonia



- The EEF Context:
 - The Government has received financing in the amount of EUR 25 million from the IBRD toward the cost of the Public Sector EE Project, and it allocates part of the financing to support the Technical Assistance: *Developing an Energy Efficiency Fund (EEF) in North Macedonia*.
 - The main objectives of the Public Sector EE Project in North Macedonia are to:
 - a) Reduce energy consumption across all energy sectors, including the residential sector
 - b) Support the development and implementation of a sustainable financing mechanism for EE projects in North Macedonia via establishment of the North Macedonia Energy Efficiency Fund.
- The establishment process is work in progress:
 - Options for establishing EEF were assessed against a set of pre-determined criteria
 - The final option and Concept of the Fund will be designed by the end of the year
 - The EEF Strategy, 5-year business plan and operating manuals will be completed over the 2023 year



The EEF Mission

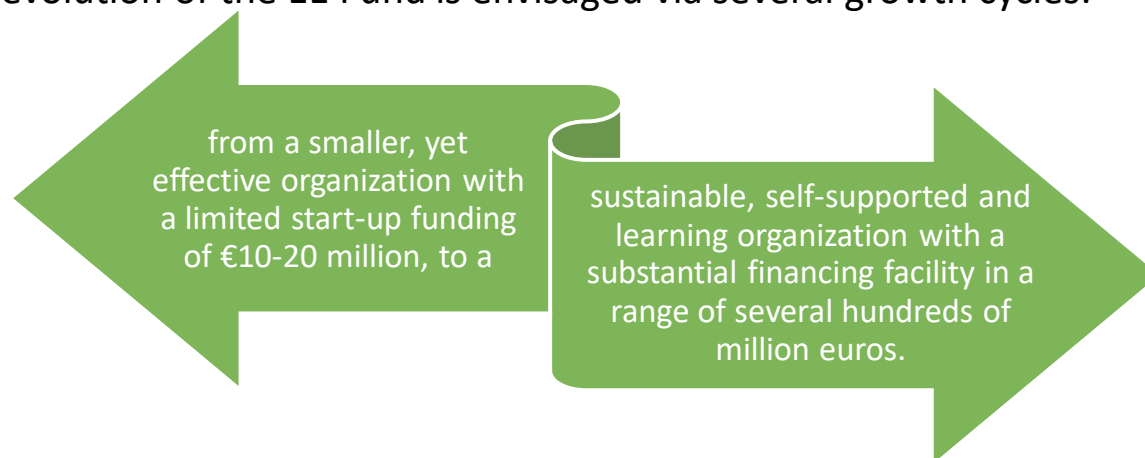
The mission of the Fund is to improve energy efficiency by reducing the levels of energy consumption and CO2 emissions via facilitating investments across all the sectors addressed in the Energy Development Strategy (EDS) of the Republic of North Macedonia.

- The scope of the EE Fund mission will comprise of the following activities:
 - a. Direct financing of energy efficiency investments via an array of financial instruments (loans, grants, guarantees) aimed for funding various beneficiaries and project categories (public and residential buildings, SMEs, municipal EE projects, and other project types per future EEF Strategy);
 - b. Financial support for technical assistance
 - c. Capacity building activities for public institutions, consulting engineers, and contractors;
 - d. Public awareness campaigns on energy efficiency topics;
 - e. Other activities according to the EEF's strategy;



Capitalization Strategy for EEF in North Macedonia

- The initial equity capital funding in the amount of EUR 5 million to be used for the first round of financing EE projects and to cover initial operating costs of the Fund;
- The long-term evolution of the EE Fund is envisaged via several growth cycles:



- Initial and viable equity funding sources will be identified early in the EE Fund lifecycle, such as: (i) central government finance, (ii) EU accession funding programs, and (iii) bilateral donors and IFIs.
- Financial leverage of EE Fund's balance sheet by optimal with long-term debt, tailored to the perceived risk of the EE Fund's financing instruments and target customers, as further to be developed in the EE Fund's Strategy and Business Plan.



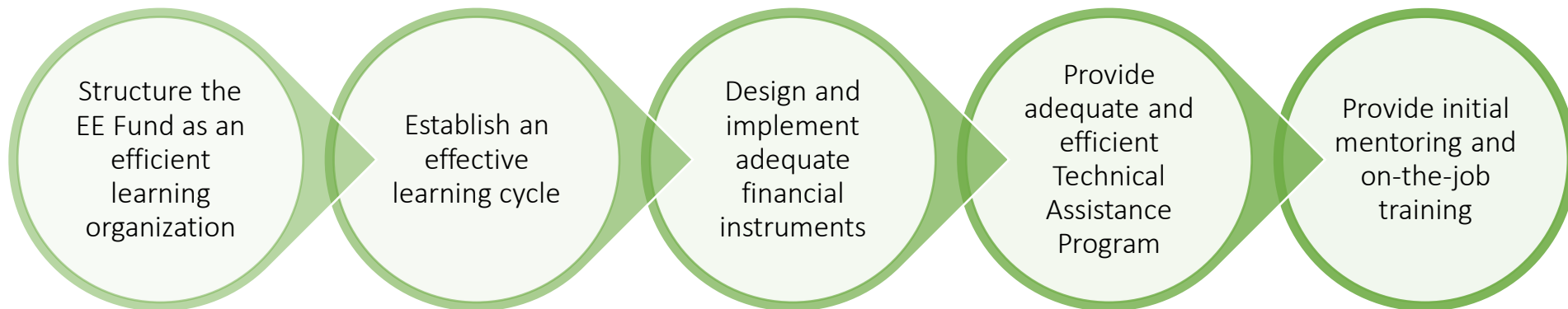
Barriers in Structuring EE Fund in North Macedonia

- Institutional and Legal Constraints
- Identification and recruitment of people with adequate skills
- Lack of systemic annual funding from national budget via dedicated energy efficiency or a combined EE & Pollution Charge levy (tax)
- Awareness and education about key energy efficiency issues:
 - EE Technologies
 - CapEx, Benefits and ROI
 - Financing options and issues

Success Factors for Structuring EE Fund in North Macedonia



- To structure the EE Fund as an efficient, learning organization based on targeting and recruitment of skilled professional people.
- Establish an effective learning cycle, based on some of the international and EU EE Fund practices and over a staged growth and financing cycle.
- Design and implement adequate financial instruments tailored to the specific EE project technologies and sectors (like residential EE sector financing needs in Macedonia).
- Provide adequate and efficient Technical Assistance Program for proper project identification, preparation and application for finance.
- Provide initial mentoring and on-the-job training by experienced professionals with prior track record in managing EE Fund in the region.



NM Residential Sector Energy Efficiency - Context & Needs



- The national policies and measures that are currently in place with regard to the **decarbonisation and energy efficiency dimension** do include **Implementation of EE measures in final energy consumption for household and commercial sector.**
- The North Macedonia residential building market has significant need for investment in energy efficiency enhancement measures due to:
 - Dominant heating source is wood fuel, wooden pellets, electricity and to some extent light fuel oil (LFO);
 - Wood heating stoves in solid portion are aged and inefficient;
 - Predominant use of electricity for domestic hot water heating, instead of thermal collectors;
 - The older building stock needs thermal insulation retrofit;
 - Energy management and automation systems are almost not in place;

NM Residential Sector Energy Efficiency - Current Financing



- GEF (Green Energy Financing Facility) funded and implemented by EBRD in North Macedonia over the last 5-year period. Major GEF facts are:
 - Nearly €30 million of loan portfolio has been disbursed from several on-lending commercial banks, in single and multi-family housing energy efficiency and RES improvement technologies;
 - There is a financial incentive, i.e. grant subsidy component into the program (in the range of 15 to 20% based on the customer and project profile), that proved to be the key success factor of the facility;
 - There is a dedicated Technical Assistance and Project Implementation Team coordinating with the commercial banks involved in the loan approval and disbursement, program promotional and awareness building activities and communication with equipment vendors and contractors involved in the program;
- Habitat for Humanity (HfH) residential financing program for energy poverty vulnerable residents in North Macedonia. The web tool: <https://buildingmanagementweb.azurewebsites.net/>
- Commercial bank financing
- Key issues: Multi-family houses loan collateral and joint contracts