



# PARTNER

MIKROKREDITNA FONDACIJA



# Energy Efficiency in Partner – the beginning

- 2011 - USAID Solar Energy Project (domestic production of solar collectors).
- 2012 – Partner introduced a special Loan Product for Energy Efficiency with technical assistance from European Green for Growth Fund (GGF).
- 2012 – start using eSave software for evidencing EE individual projects and calculations for savings from implementation of EE measures on individual housing.

## EE funds in Partner

- **USAID** Solar Energy Project (domestic production of solar collectors).
- **EBRD** (European Bank for Reconstruction and Development) - Financing energy efficiency projects for households with grants ranging from 15% to 20% depending on the type and number of technologies used.
- **KfW** (Kreditanstalt für Wiederaufbau, a German government-owned development bank) – Financing energy efficiency projects for Businesses with 10% grant on the investment.
- **GGF** (The Green for Growth Fund) – Financing energy efficiency projects for households (75% of investment for EE measures, 25% for other costs).
- **CEB** (The Council of Europe Development Bank) – Financing EE projects for households

### Creation of a loan

#### Data entry / Selection

- ▶ Client ID
- ▶ Org. Unit
- ▶ Type of client
- ▶ (economic sector)

Loan saved

### Creation of measures

#### Selection

- ▶ Groups of measures
- ▶ Measures

#### Data entry / Selection

- ▶ Measurement costs
- ▶ Technic information

#### Calculation

savings in primary energy  
and in CO2 emission

Measure saved

Creation of additional  
measures

### Approval

Loan approval  
from the bank's loan  
committee

### Finalization

#### Adjustment

of loan or measured in  
according to approval  
from the committee

#### Finalization

of the loan, together  
with associate EE  
measures

### Reporting

#### Selection

- ▶ Group of measures
- ▶ Reporting period

Creation of report

Export  
through xlm/xls interface



# Market potential in BH housing sector

- 85% of individual houses in BH have unsatisfactory thermal protection in terms on prescribed regulations.
- Poor energy characteristics of individual houses with high energy consumption.
- Non-efficient outer shell of the typical housing object with high thermal efficiency values.
- Buildings bilt before 1970 have no insulation, and buildings built before 1980 has moderate or no thermal insulation.
- Great potential for energy savings, 80% of energy consumed in a household is used for heating and hot water.
- An average house in BH spends 180 kWh/m<sup>2</sup> of energy for heating while in West Europe an average house spends 55 kWh/m<sup>2</sup> for the same purpose.



# Energy efficiency data sheet

Since the beginning of the EE financing project (2012) the following results were achieved:

- 28 million EUR disbursed
- Active EE portfolio 13,92 milion KM (7,12 milion EUR)
- 3,227 active loans (average loan EUR 2,205)

## Savings:

- Primary energy savings – 2,8 million MWh
- Reduction of CO<sub>2</sub> emission - 877 thousand tons



# EE project results in BH context

- Savings from Partner's EE project represent **5%** of total savings in Bosnia and Herzegovina.
- Savings from Partner MCF represent **14%** of savings in BH housing sector.
- Partner's present share in national CO<sub>2</sub> emission reduction is **1,9%**.
- Savings planned for the equipment lifetime period (28,5 years) will result in **44%** primary energy savings in housing sector, and **6,2%** savings of CO<sub>2</sub> emission reduction in Bosnia and Herzegovina.

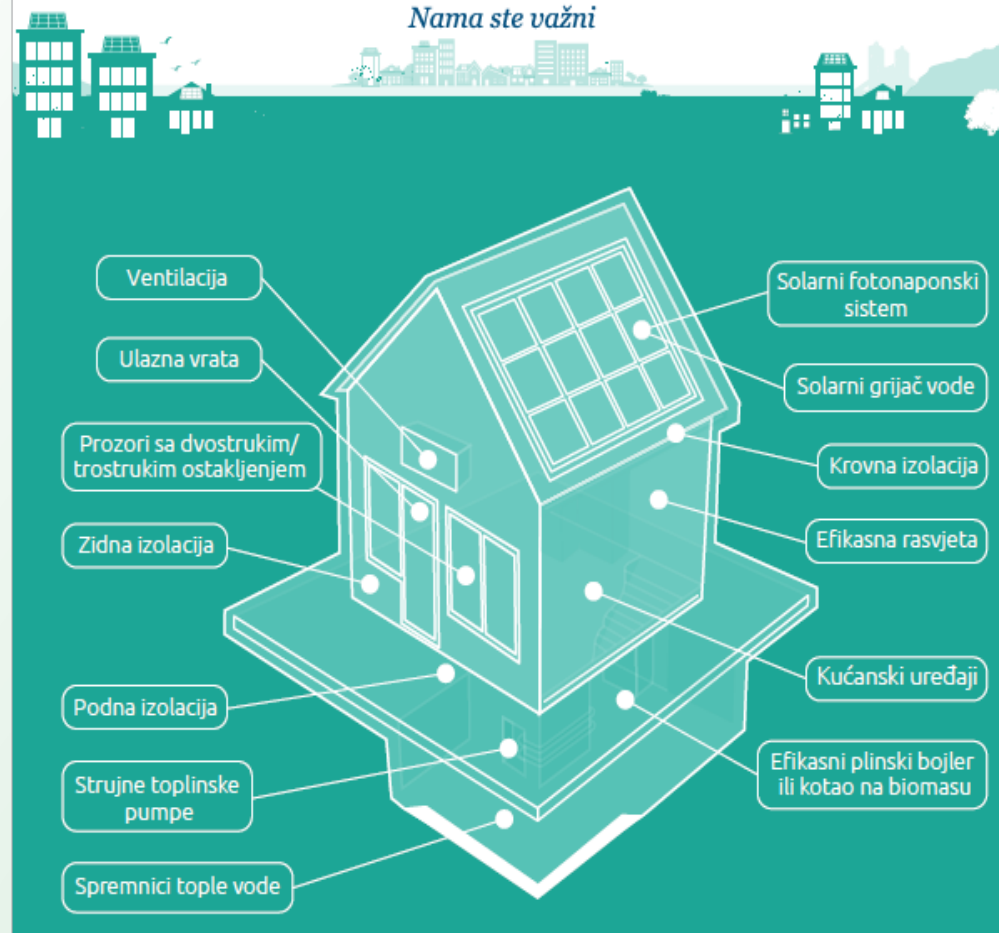


# EE measures implemented

The most commonly used energy efficiency measures on individual households funded by the EE loans are:

- Thermal building insulation - 46,78%
- Replacement of windows/doors - 43,99%
- Heating systems (biomass) - 9,06%
- Other - 0,18%
  - EU labeled home appliances
  - HAVAC
  - Solar collectors

*Nama ste važni*





# Key benefits for clients

- Inevitable increase of energy prices (electrical energy, water and energents)
- Energy savings
- Saving on energy and water heating cost
- Appordable financing options with fund return (from 10% to 20%)
- Loan cost are being paid off through return and achieved savings
- Better life quality / more comfort in housing unit/apartment
- Increase in realestate value on the market



## Client testimonials



- „Last winter the only warm room was our living room since the coal stove was there, and now, with new boiler, the rest of the rooms are warm enough throughout the day. Most importantly, our little sons, Antonio and Andrej, can now stay in their rooms in the winter, spend time there in learn and play“ - says Ana Vidović, Partner MCF's client.



- „In addition to the economic, energy and ecological reasons that are constantly being mentioned, I would also add aesthetic reasons, since house with a facade looks much better, the durability of the walls are prolonged, and thermal insulation, apart from winter, also has its effects in the summer, as well“ - says Mario Tadijić, a client Partner MKF.

# Client Salih Gurić from Bugojno (EBRD loan)



# Key challenges

- Insufficient knowledge of general population on energy efficiency and benefits of investing in EE measures and technologies
- Low prices of electric energy and thermal energy
- Perception of people what is comfortable (21° C) or overheating (25 ° – 27 ° C).
- Not enough subventions on EE investments on individual housing
- Defining a market value of a house still does not include EE valuation





# Future perspectives

- In the forthcoming period, the focus of Partner MCF will be on energy efficiency projects for households and business facilities. Partner wants to be recognized as the leader in this area.
- Further communication with the target population primarily women and young couples on benefits from the use of EE measures, educating raising awareness through PR activities.
- Developing more partnership with local suppliers and sellers of EE equipment (study visits, promotional campaigns)
- Development of own software for calculation of actual individual savings.
- Expanding understanding and knowledge of Loan Officers who, we will keep providing our clients with first-hand counseling and advises.
- Partner will keep providing technical assistance on savings calculations for beneficiaries of Energy Efficiency Project (larger grants for each following EE measure for individual facility).

# Thank you!

