Promoting renewable heating in South Eastern Europe – **Best of BiH**

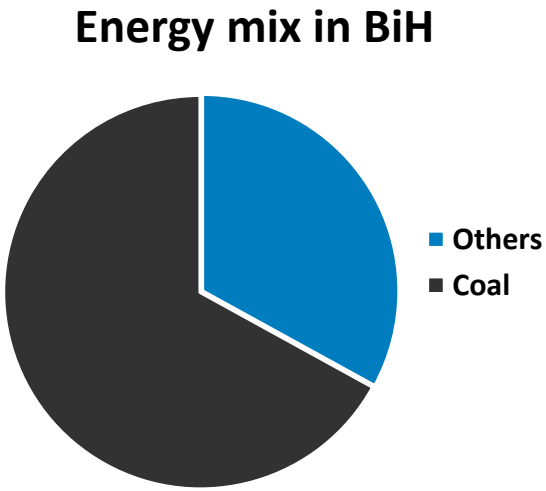
Sadžida Hafizović
ENOVA d.o.o.
21.03.2023., Brussels
Keeping the heat on in times of crisis – How to REPLACE inefficient fossil heating systems

Making heating and cooling for European consumers efficient, economically resilient, clean and climate-friendly

This project has received funding from the European Union's Horizon 2020 Research and innovation programme under grant agreement No 847087.

INTRODUCTION

- Bosnia and Herzegovina's heating sector faces a number of **challenges**, including outdated infrastructure, inefficient technologies, high energy consumption, and reliance on fossil fuels
- **Coal** as a primary source for district and household heating
- Coal is often burned in stoves or furnaces, which can result in high levels of indoor **air pollution** and pose **health risks** to residents



SARAJEVO CANTON

Due to the increased demand for the production of thermal energy for heating, and the large number of individual solid fuel heating systems, the air quality in Canton Sarajevo significantly worsens every winter

Out of around 132,000 households in Sarajevo:

41,000 households are connected to the district heating network of the public company Toplane

49,000 use natural gas for heating

40,000 households use solid fuels for heating, mostly coal burned in poorly efficient stoves with high emissions of pollutants

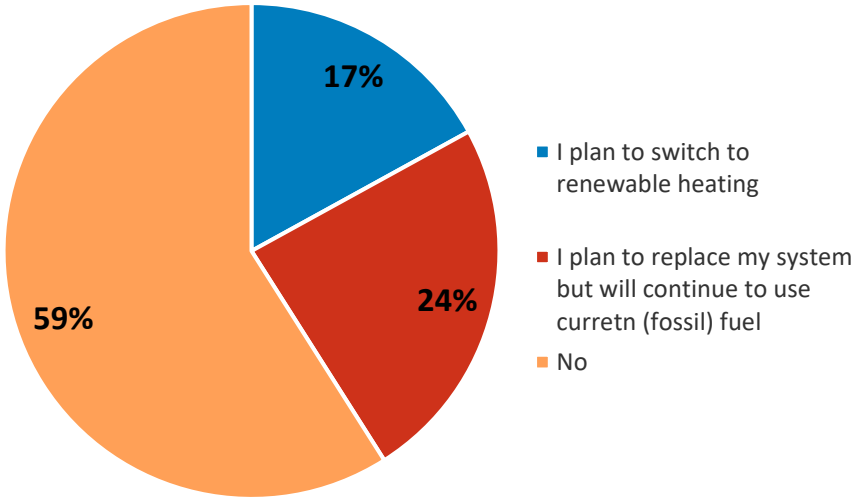
Source: Eko akcija, 2020.

REPLACE in the action

BASELINE STUDY

- Insights from end users revealed the primary barrier to adopting renewable heating systems, overcoming conventional system preferences, include:
  - **Lack of information** about possibilities and available alternatives
  - **Distrust** of innovative solutions
  - **Financial factor** – no subsidies available

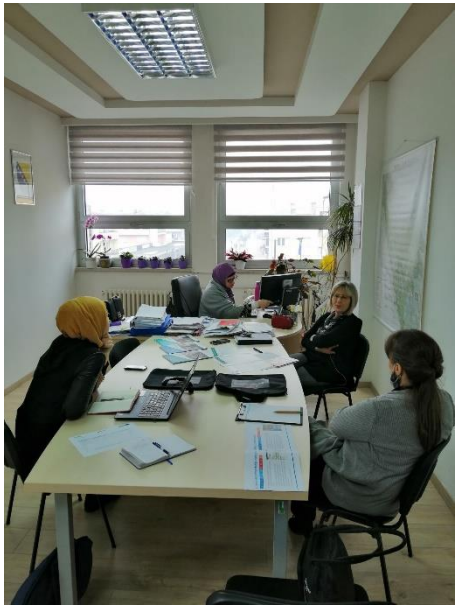
Consideration of heating system replacement



REPLACE CAMPAING - STRATEGY

Focus -> end consumers

- Identifying the most effective ways to communicate with and engage the target audience
- Establishing partnerships and collaborations with local governments, industry stakeholders, and other relevant organizations to utilize their resources and expertise, and to guarantee a cohesive and synchronized approach to the campaign.
- Assisting and education end-consumers about the advantages of using renewable heating systems, such as financial benefits, enhanced air quality, and decreased carbon emissions, while also offering alternatives to promote replacement.



INFORMATION HUBS

- Organized 3 info-hubs points for end-users
- Over 1000 visitors
- The possibility of direct consultation on replacement with the project team
- REPLACE calculator
- Available handbooks and fact sheets on best practices and tehcnical solutions
- Engagement in further activities


Poziv građanima da se od 21. do 25. marta na štandu projekta "Replace" informišu o mogućnostima zamjene sistema grijanja

Poziv građanima da se od 21. do 25. marta na štandu projekta "Replace" informišu o mogućnostima zamjene sistema grijanja

TECHNO-ECONOMIC FEASIBILITY STUDIES

- Feasibility studies for heating system replacement introduced through REPLACE project for the **first time**
- 7 studies completed
- Data collected from end-users during info hubs and through direct contacts
- Studies focused **on single-family houses** mainly heated with **coal** or **wood-coal combo**
- Analysis found oversized boilers and higher energy consumption than expected

CONSULTANTS AND ENGINEERS

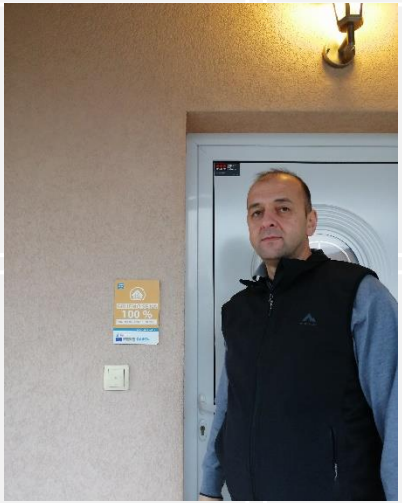
TECHNO-ECONOMIC FEASIBILITY STUDIES

- Recommendation to improve energy efficiency before replacement
- **Pellet boilers** preferred over air-to-air heat pumps due to cost
- Continuation of activity planned in collaboration with Cantonal Ministry of Environmental Protection and municipalities in KS
- Aim to establish feasibility studies **as standard practice** for heating system replacement

Recommendation: Thermal insulation of the outer envelope of the house

SUPPORTING PIONEERS

- Visited and labelled 30households heated by renewable energy sources
- Open house events organized for end-users to hear first-hand experiences
- 8 open house events in total
- Citizens showed great interest in the activities



STRATEGY DEVELOPMENT

Strategy for Restricting the Use of Coal and Other Solid Fuels in Sarajevo Canton 2021-2031

- Calculation of total emissions and impact on air quality of all individual solid fuel heating systems using a dispersion model;
- Analysis and suggestions for improving emissions control, improving the chimney sweep sector, and controlling and certifying stoves and fuels used in Canton Sarajevo;
- Energy efficiency measures in individual buildings;
- Improvement and amendments to regulations aimed at improving air quality in Canton Sarajevo.

COCNLUSION

- ✓ REPLACE - medium to showcase sustainable heat supply strategies, good practices, and innovative technologies.
- ✓ Initiated a constructive dialogue regarding the potentials and key challenges encountered by Bosnia and Herzegovina in the heating sector, with a special emphasis on exploiting renewable energy sources.
- ✓ Implementation and results of the project activities shows the commitment to sustainable development and improving the quality of life in the region.

Contact

Sadžida Hafizović

Enova d.o.o.

sadzida.hafizovic@enova.ba

T. +387 62 424 833

Podgaj 14 | 71000 Sarajevo | Bosnia and Herzegovina

Further info:

www.replace-project.eu

linkedin.com/Enova

twitter.com/EnovaSarajevo

facebook.com/Enova

This project receives funding from the European Union's Horizon2020 research and innovation programme under grant agreement No. 847087.

ENOVA CONSULTANTS AND ENGINEERS