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Energy efficiency in Montenegro

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Institutional framework

Ministry of Capital Investments, through the Directorate for energy, is responsible for creating and implementing the energy efficiency policy. The Directorate for energy efficiency existed from November 2009. until the end of 2018. (then within the Ministry of Economy). Currently, there is only a Department for energy efficiency as a part of Directorate for energy. The Department has 4 employees and 5 external consultants working on international projects through which the improvement of energy efficiency in public buildings is financed.

- This primarily refers to the World Bank's MEEP project, and
- The project called PEEPB (Promotion of energy efficiency in public buildings), which is financed by a loan from the German development bank Kfw.

A little more about both projects in the continuation of the presentation

Legal framework

- The first law regulating the field of energy efficiency in Montenegro was the "Law on energy efficiency" from 2010.;
- The law that succeeded the aforementioned is "Law on efficient use of Energy" from 2014, which is still in force today, with minor amendments from 2019. and 2022. years;
- The Ministry of Capital Investments of Montenegro, in agreement with the Energy Community, fulfilled its obligations in a timely manner, so the law today is fully in accordance with the recommendations of the Energy Community;
- Very soon, next month (may 2023.), another amendment to the Law on efficient use of energy awaits us.

By-lows (eco-design and labelling)

- The regulations on the technical requirements of eco design and labeling of the energy efficiency of products that use energy derive from the Low on efficient use of energy. These regulations represent one of the key obligations of the Department for energy efficiency, and we can boast that we have updated all regulations in accordance with the *Eco-design* (*Directive2009/125/EC*) and *Energy labeling drective* (2010/30/EU).
- Since 2015., we have adopted around **70** regulations on the technical requirements of eco-design and labeling of energy efficiency of products that use energy.

Energetski efikasan dom (Energy efficient home)

Also, a very important project for our department is the Energy Efficient Home project. This is not one of those international projects I mentioned earlier, this is a "home project".

• Brief description of the project

Ministry of Capital Investments announced a public call for the ENERGY EFFICIENT HOME PROJECT. Interested banks apply first, followed by construction companies and finally interested citizens, who choose the bank from which they will take a loan and the company that will perform the works.

Citizens choose one of 5 measures of energy efficiency:

- installation of heating systems based on modern forms of biomass (pellets, briquettes);
- installation of highly efficient heat pumps,
- installation of split and multisplit systems for heating/cooling,
- installation of thermal insulation on the facade of the residential building,
- installation of energy-efficient facade joinery,



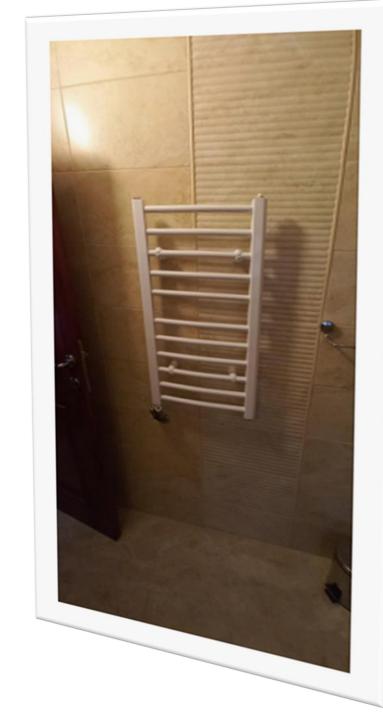
Energetski efikasan dom (Energy efficient home) (2)

- After a positive report that the works were completed with quality and on time, MKI covers the interest to the selected bank for each citizen who qualified for the project.
- The project has been successfully implemented under different names for more than 10 years.











International projects in energy efficiency – Ministry of Capital investments

- MEEP (Montenegrin energy efficiency project)
- The MEEP project is a project supported by the World Bank, and it refers to the reconstruction of health facilities,
- Since 2009, 30 buildings (hospitals) have been reconstructed;
- The total energy saving is 2,691,298.75;
- Saved money 299,160.33 euros and CO2 savings amount 1,032,652.11;



Opšta bolnica Bar: fotografije sa lijeve strane su prije adaptacije, dok su fotografije sa desne strane nakon adaptacije.

Bar - city hospital before and after reconstruction

PEEPB (Promotion of energy efficiency in public building – supported by Kfw)

- This project refers to the reconstruction of public buildings (administrative buildings and schools),
- About 60 million euros have been allocated for the III phase of the project alone, mainly from loans,
- As part of this project, a new national software for building certification MEEC Montenegrin energy efficiency certification is also being prepared,
- Software is developed by Fraunhofer Institute:

EPC Software

- Fraunhofer IBP has developed a software (Fraunhofer EPC Software) for calculating the energy efficiency of buildings and for creating energy performance certificates. This software is designed to be adapted to the needs of specific countries and their regulations on energy efficiency in buildings. Fraunhofer EPC Software has been adapted to Montenegro (MEEC – Montenegrin Energy Efficiency Certification).
- MEEC software is applicable for residential and non-residential buildings, as well as for new and existing buildings. Certain modifications and adaptation of the DIN V 18599 calculation methodology have been made in order to comply with applicable regulation that determines the method for calculation of the energy performance of buildings in Montenegro. It is planned that MEEC software is used as national tool for energy performance certification of buildings.

MEEC SOFTWARE

Montenegrin Energy	
Efficiency Certification	l I
Powered by Fraunhofer EPC Soft Starting	Version
Fraunhofer	0.8.93.9

THANK YOU FOR ATTENTION