

Deliverable:

Report from the survey of the current state of the residential buildings in the Municipality Bratislava- Karlova Ves

Activity

C4

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*Projekt DELIVER - DEveloping resilient, low-carbon and more LIVable urban Residential area
DELIVER: Sídlišká ako živé miesta odolné voči zmene klímy, kód LIFE17 CCA/SK/000126 - LIFE DELIVER.
Projekt je financovaný zo zdrojov Európskej komisie, z finančného nástroja pre životné prostredie:
program LIFE, z podprogramu „Ochrana klímy“.*

Residential buildings proposal for refurbishment and quantification of energy potential savings for the residential housing stock in Bratislava Karlova Ves Municipality

January 2019



Správa je realizovaná v rámci projektu „Sídľiská ako živé miesta odolné voči zmene klímy“, DELIVER - DEveloping resilient, low-carbon and more LIVable urban Residential area, kód LIFE17 CCA/SK/000126 - LIFE DELIVER. Projekt je financovaný zo zdrojov Európskej komisie, z finančného nástroja pre životné prostredie: program LIFE, z podprogramu „Ochrana klímy“.

SUMMARY

Even, the most of the residential buildings are already partially renovated in Karlova Ves Municipality, there is still a great potential of energy savings, because those renovations covered only inevitable repairs of buildings - such as roof leakages, facade defects together with insulations (but with insufficient thickness of insulation, although within requirements valid at the period of renovation works), old windows replacements, etc. The analytical works deals with residential prefabricated buildings from building period after 1991, a subject are not buildings built after, as well as family houses, offices, schools and student dormitories, social, medical and shipping centres, etc.

Almost the whole housing stock in Municipality Karlova Ves is already refurbished (approx. 80% is refurbished). The refurbishment process has been realised approx. 20 years. The renovation level of single prefabricated residential building has been realised depending on legislation requirements currently valid, and the requirements of energy efficiency, as well as on the technical competence on the side of a customer and a supplier of building works.

The first part of C4 activity consists of relevant data collection about the existing building stock, such as number of buildings, living area, the state of the art - refurbished, non-refurbished.

The data collection and possibility of another data processing is coming out of available data of buildings in Karlova Ves. We have collected data from Statistical Office of the Slovak Republic, Building Office of Municipality Karlova Ves, from a relevant literature, but mostly from visual inspection and photo documentation in situ. The work consists of buildings list and localisation, based on digitalised maps offered by Municipality of Karlova Ves.

Actually, there is only less information regarding energy consumption for building's operations, which might be in a very different range from non-refurbished to refurbished. The next work will cover also a cooperation with buildings managers, to receive more information about a current state of the art, that will serve as a base for evaluation of potential of energy savings for building operation (heating, cooling, hot water preparation) and thus a base for calculation of CO2 emissions savings.

The aim of another part of C4 activity will be searching for innovative solutions for prefabricated residential building's refurbishments, which will connect mitigation and adaptation solutions.

