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User4GeoEnergy Project final conference

Press Release

September 2023

The implementation of the substantive program established in the User4GeoEnergy project has been completed, and the achieved effects and results were presented at the conference held on 21 September 2023 in Krakow. The final conference ending the project was attended by guests and people who wanted to get acquainted with the results and share their comments and experience. The conference was an open meeting, open to anyone who found the project's topic useful or simply interesting. Regardless of sending individual invitations to the conference, an open invitation was also published in a national industry magazine (District Heating, Heating, Ventilation No. 8/2023).

The meeting was attended by over 30 people, representing the target group of project recipients, i.e. the scientific community (researchers, Ph.D. students), the technical community (operators of heating systems, including geothermal systems), and the local government community (representatives of local governments and private). During the conference, the assumptions, methodology, and results of the project were presented in detail.



The original goal of increasing the efficiency of the use of geothermal energy and reducing the consumption of conventional fuels, without compromising comfort for users, has become even more relevant after Russia's aggression against Ukraine. Energy security, previously an important but rather theoretical problem, has become a very real problem. The use of geothermal energy resources is one of the elements of the increasing independence of some heating systems from the consumption of imported fuels.

The results achieved as part of the project confirm the possibility of significantly increasing the efficiency of geothermal systems, which is the result of changes in the requirements that

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the final user requires on the energy source. This mainly concerns the requirements for reducing the required supply temperature of heating installations. One of the goals was to quantitatively analyze the profitability of matching the recipient's requirements to the possibilities of a geothermal source. It was assumed that available and currently used technologies could be used for this purpose. The achieved results confirm the sense of this type of activity. However, achieving positive effects requires cooperation between the operators of the energy source, the energy system, and the final recipient.



The adopted strategy assumes covering the required investment outlays, bearing mainly by the energy recipient, through savings in the costs of energy production by the source and reducing losses on its transmission in the transmission and distribution system. It has been quantitatively demonstrated that this configuration of the energy system allows to achieve the intended effect. Rising prices for covering energy needs, especially in the case of heating networks, may motivate its operators to cooperate with consumers. An alternative may be a decline in interest in district heating, resulting from the gradual disconnection of some consumers from it. The IT tools developed as part of the User4GeoEnergy project, which were also discussed during the meeting, enable the inclusion of the most important factors enabling the assessment of the profitability of technical activities. One of the tools, easy to use, the so-called U4GEcalc calculator is available as an online tool to help you make preliminary estimates. The U4GEfm tool, covering a wider spectrum of parameters, was tested using the database developed as part of the project. Both tools were presented and their principles of operation were discussed during the conference.

The conference also shared the effects of cooperation in the exchange of knowledge and experience between project participants. This is also an intangible, but very important, effect of the implementation of the User4GeoEnergy project.

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According to the assumptions of the project, after its completion the so-called Geothermal District Heating Service Hub (GDHSH), the aim of which will be substantive assistance in the implementation of the project effects for interested entities. GDHSH will perform a consultative and advisory function. GDHSH consultation points will be opened in Kraków, Bratislava, and Szeged. The duration of their operation will depend on the interest of external entities. One of the tools used in the work of GDHSH points will be U4GEcalc.

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More about User4GeoEnergy project:

<http://user4geoenergy.net/>

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