Delegation from the City of Sveta Nedelja visited Iceland as part of the "Energy and Climate Change" Program

As part of the project " Development of documentation for the geothermal water exploration phase in the area of Sveta Nedelja" funded by Iceland, Liechtenstein and Norway through the EEA Financial Mechanism 2014. - 2021 and national funds of the Republic of Croatia within the programme "Energy and Climate Protection", a study visit to Iceland was organised, during which the delegation of the City of Sveta Nedelja, consisting of the Deputy Mayor Gabrijel Deak, Head of the competent administrative department Roberta Ciglar, the Director of the Trade Association SVENKOM Dalibor Jakopec, the Project Manager Martin Fabijan, the Technical Manager Ivan Abramović and the representative of the project partner EKOPLODOVI doo. from Sveta Nedelja, Mr Leon Popović, visited Iceland, the home of the project partner from one of the donor countries, the Icelandic company EFLA hf.

The City of Sveta Nedelja is currently implementing a project for the development of technical documentation for geothermal energy research in the amount of €372,006.43, of which €316,205.47 (83.99%) are grants, and considering that Iceland is the world leader in the use of geothermal energy, the Icelandic company EFLA was chosen as a partner, and they prepared very useful lectures and presentations.

As well as visiting geysers and other natural phenomena that are abundant in Iceland due to its location at the junction of two tectonic plates, Eurasian and North American, as well as earthquakes and volcanic eruptions, meetings were held at EFLE's headquarters to provide the project team with answers to the questions they face when preparing the documentation that precedes the actual drilling.

The delegation also visited the Hellisheidarvirkjun thermal power plant on the Hengill volcano. It supplies energy to Reykjavik and is the largest power plant of its kind in Iceland and with an installed capacity of 400 MW of thermal energy and 303 MW of electrical energy, it is one of the largest in the world. Near the thermal power plant there is also a facility for extracting carbon dioxide from the air, which is permanently stored underground and mineralised at the end of the heating process. The facility permanently stores up to 4,000 tonnes of carbon dioxide per year.

To get an insight into the use of geothermal energy in agriculture, a visit was organised to the Friðheimar tomato farm. The farm uses geothermal energy to heat the greenhouses and generate the electricity needed for the artificial lighting and climate control to grow tomatoes and cucumbers all year round. Inside the greenhouse itself is a restaurant where you can sit surrounded by tomatoes. The greenhouses cover an area of 120 hectares and are visited by

270,000 tourists a year. Similar or the same technology can be used for the greenhouses located or planned in the City of Sveta Nedelja.

The delegation also visited Sundhöllin, Reykjavík's oldest public swimming pool, which opened in 1937 and uses geothermal energy for heating and hot water. The pool complex covers 2700 m2 and consists of a swimming pool, children's pool, hot baths, sauna, diving board and fitness facilities.

Geothermal resources are the future of green energy and the future of economic development in Croatia, and the City of Sveta Nedelja is one of the cities that has recognised its enormous geothermal potential. The exchange of experience with engineers specialising in geothermal development will definitely contribute to the research of geothermal water in the area of the City of Sveta Nedelja.

More information on non-refundable grants can be found on the following websites:

https://eeagrants.hr/programi/energija-i-klimatske-promjene/

https://eeagrants.org/

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The project " Development of technical documentation for the use of geothermal energy" is funded by Iceland, Liechtenstein and Norway through the EEA Financial Mechanism 2014-2021 with national co-funding from the Republic of Croatia under the "Energy and Climate Change" Programme.

Sustainable development and protection of the environment are the goals of the project - once the projects following the drilling of the well and the acquisition of the exploitation field are completed, CO2 emissions will be reduced and energy will be used that is independent of weather conditions and the price of energy sources.