





Geothermal workshop in Iceland for local governments – HU03-Bilat-A-2017

Report in English

Three members of municipality of Szarvas, Mr. Mihály Babák mayor, Mr. Pál Hodálik deputy mayor and Ms. Eszter Prievaráné Mácsár international financial manager have been in Iceland on 18th-22nd September 2017. We did attend a wonderful and special country of those of the world.

The bilateral activity entitled "Geothermal workshop in Iceland for local governments" under the Fund for bilateral relations at the Renewable energy (HU03) programme financed by the European Economic Area (EEA) Financial Mechanism (shortly EEA Grants) 2009-2014 was implemented on 18th-22nd September 2017 on which 27 decision makers, engineers and managers from 10 governments of Hungary had taken part. This short-term practice-oriented training in Iceland aimed to get a basic knowledge for utilization of geothermal energy, build relationships and make long-term cooperations. The present specific bilateral activity was specifically organized by the Hungarian Ministry of National Development as Programme Operator in cooperation with the National Energy Authority of Iceland as Donor Partner. The realization of this programme was financed up to 134.900 EUR subsidy, 100% grant rate by the Bilateral Fund on programme level of the EEA Grants Renewable energy programme. Applications to the Call for proposal HU03-Bilat-A-2017 for bilateral activity by the Ministry of National

Applications to the Call for proposal HU03-Bilat-A-2017 for bilateral activity by the Ministry of National Development of Hungary can be submitted on behalf of such hungarian municipalities which have still existing and operating geothermal district heating systems and geothermal energy possibilities and which are committed to use and utilize the geothermal resources as renewable ones.

Under the EEA FM 2009-2014 Renewable energy (HU03) programme, which aimed at promoting of the use of renewable energy resources, transfer of know-how and knowledge, also forming of our view connection with renewable energy, beyond strengthening the bilateral professional relationships, there were four projects implemented nearly in the amount of 1,5 billion HUF, with 610 million HUF grant.

Besides Szarvas, there were other 9 settlements from Hungary who have also taken part on this journey, namely Bonyhád, Budapest, Kaposvár, Kistelek, Nyíregyháza, Szeged, Veresegyház, Csongrád and Miskolc. In Iceland we got an overal view of this 'industry', we saw the good example, a pilot experience, so we got not only a theoretical training, but also a real-life training on the really spot of this energy sector.

Iceland has already have the knowledge, skills, expertise, everything what is needed to make this industry a success story and they kindly share their knowledge with us, and with as many countries in the world as they can. Moreover their defined objective is the spreading of their knowledge.

We have heard about renewable energy and geothermal energy in several lessons and in several aspects on the 2-day-long theoretical training, for example the effective renewable energy policy making, regulatory framework, financial support of geothermal, sustainable management, monitoring, modelling, cost structure of geothermal district heating projects, last but not least about their geothermal heating history. But they also threw light on how it was working in Hungary, they know and it was interesting to see in how extent they know the hungarian circumstances: geological,





geophysical, technical, economical aspects and also the regulatory framework of it. After the theoretical training we hade chance to experience the heard information within the frame of a field trip.

In Iceland oil crisis and world wars highlighted the need for <u>GeoDH</u> (geothermal district heating) <u>Policy</u>. Political, public, sectoral and financial recognition of the Geothermal Policy is necessary and this political and sectoral recognition was the base for the policy and implementations in Iceland. Public loans for exploration and drilling lowered the risk barriers and it could be important also for hungarian financial institutions and insurance companies to recognise the opportunities within GeoDH. What is more important is a favourable and neutral legal framework. It is an issue to be considered in Hungary. We also did like to hear and experience how the protection of environment is crucial for icelanders which approach is named sustainable energy policy. Because it's obvious that not every drilling is successful either in Iceland and it had occured that level of water in wells went back. So they realized the necessity of an effective policy and official monitoring of water level in order to maintain a renewable energy society for a long-term sustainable yield of the resources and long lifetime of investments.

What is also to highlight that their first priority is space heating. This was always the first objective for Iceland, and every field of geothermal usage can be after this objective, namely spas, swimming pools, industry, greenhouses etc.

We have got several questions on the lessons about hungarian situation. We have had to think it over how geothermal is going here in Hungary. We think if we find the appropriate answers to them, maybe we can see the future in a more skilled way even on a local level, level of municipality, or on level of the state. The most interesting question was the choosing of symphonie scenario or jazz scenario (both of them are the visions of the World Energy Council). Symphonie scenario is government controlled with strong policies and incentives. Jazz scenario is market controlled allowing flexibility and higher GDP growth (decentralised decisions and market driven). The answer on the lesson was unanimously is the symphonie scenario for Hungary.

Our opinion is that an effective combination of the private and the governmental sector is essential in the geothermal heating industry. If we can see the two approaches of the scenarios (symphony or jazz), in the case of Hungary it's obvious that the scenario of symphony is the better choice as we have heard it in Iceland too, where the history of geothermal heating has really excellent results, that results couldn't have been reached without the role of the state.

It's a very good comparison that the symphony scenario has a greater support for technology and environmental protection too. Environmental protection has a global convergence impact on earth in symphony scenario and as we know environmental protection is a global task now.

How would Hungary and municipality of Szarvas implement the scenario of symphony?

How could we here in Hungary start a kind of initiative to come nearest to examples on Iceland?

How could we join hands with the other settlements to force some improvements in regulation framework and how could we involve private capital in a better way to geothermal heating sector?







There are many questions that have to be answered. But they have to be answered as soon as possible because time is going and the sooner we have a useable answer to problems and to our questions the sooner we can enjoy the advantages of geothermal in several aspects that is economically, in our living standard or if we think of the protected environment.