s

REPORT ON THE PROJECT OF COOPERATION IN EEA GRANTS

Name:	Stanislav Barták
Project:	Comparison of energy potencial of Iceland and the Czech Republic
Date:	1/ 8/ 2021 – 31/ 8/ 2022
Schools:	Technical College Reykjavík a Technical College Jihlava
Place:	Iceland and the Czech Republic

When I was given the opportunity to participate in the project entitled "*Comparison of the energy potential of Iceland and the Czech Republic*", I did not hesitate for a moment and I immediately agreed. It was a huge opportunity and challenge for me, both linguistic and professional. Because I love to travel, there was an opportunity to visit a remote island country for us. I was very much looking forward to the whole project and with the help of teachers and family I tried to prepare especially for the language barrier.

Autumn part in the Czech Republic:

In the autumn of 2021, the first part of the project came into being - a visit of students from Iceland to our country. Even before the visit, we contacted many of them via social networks, so then we were already waiting for that particular student. The student I provided facilities for during his stay with us was named Axel. He is a very nice and polite man, we talked most about our common interests, which are programming and computer technology. We had a lot of fun together and with other students. The train ride was interesting, for example, when Icelandic students did not know this at all, and it was the first train ride for them. An excursion to the Dukovany and Ledvice power plants was prepared for students. We visited with them the castle of Lipnice nad Sázavou and, last but not least, our capital city of Prague, especially its historical center. It is also worth mentioning the Lower Vítkovice area, where our main goal was the unique exhibition "Small World of Technology". We also had professional lectures at school, among others we were visited by nuclear physicist Dana Drábová. Another activity together with Icelandic students was individual projects on given topics about energy. Unfortunately, the epidemiological situation did not suit us, so our autumn part of the project had to be shortened.

Spring part in Iceland:

In the spring, we were all looking forward to the much-anticipated date of our visit to Iceland, especially the fact that after half a year we will finally visit our Icelandic friends, with whom we have been in contact through social networks. Finally, the departure date was set for Sunday, April 24. We flew to Iceland by the traditional Icelandic airline Icelandair, from Munich Airport. After a long journey, we were all looking forward to a new country, new discoveries and experiences. Upon arrival we went to stay in our host families, where we spent the whole stay.

We attended our partner school in Reykjavík Tækniskólans. We had professional lectures at school, a debate with the Minister of the Environment, we created a project and we had a lot of other activities. We also made themed t-shirts at school, which we then took home as a souvenir.

In Iceland, we visited a geothermal power plant, where we had the opportunity to see the process of obtaining electricity from geothermal sources. The principle is quite simple, deep below the surface of the earth, where high temperatures are changing water into steam (250-300 ° C), which drives a generator that generates electricity. The water that desublims from the steam is further used for the CARBFIX method. Which is a method that reduces emissions in the Icelandic geothermal sector. Carbfix technology uses water that is generated back from steam that produced electricity, CO2 is added to this water. The water is then injected into the basalt subsoil, where it forms solid carbonate and sulphide minerals.

We took the ferry to the island of Vestmannaeyjar, where in 1973 the active volcano Eldfel was active, which forced the inhabitants to leave the island and flee to Iceland. We visited the volcano eruption museum, where we saw the remains of local houses after the

eruption. V Reykjavíku jsme navštívili genetickou firmu deCODE, kde jsme měli exkurzi. Tato společnost je globálním lídrem v analýze a pochopení lidského genomu. Firma deCODE objevila genetické rizikové faktory pro desítky běžných onemocnění.

We swam in the famous Icelandic pools, which are fed directly from the thermal springs. The pools had temperatures up to 45 ° C. We also had the opportunity to look and bathe in the geothermal spa Blue Laguna, where the water is colored a milky blue color, which is caused by the high amount of silica.

We went on trips to natural attractions. We visited the Lithosphere Plate Bridge between North America and Europe. We also went to see the largest geyser named Geysir, which is unfortunately no longer functional, but we did not lose sight of the active geyser because there is another fully functional geyser around Geysir, which has an eruption about every 5 minutes.

We were scheduled to return home on Sunday, May 8th. The two weeks spent in Iceland, where there are no forests and the climate is quite different from ours, were GREAT in one word. I got to know a new culture, new friends and I expanded my knowledge about energy, both in the Czech Republic and in Iceland. I brought a lot of experiences and new knowledge. Language skills were also very important. I am very glad that I was able to take part in such a project, I think it was very successful. I would like to take this opportunity to thank all those who participated in the creation and organization of this project.

Tento projekt byl realizován za finanční podpory Fondů EHP.