

Video 2 Short interview of Project PI to Public Television of Armenia about Geothermal Energy.

<https://www.youtube.com/watch?v=-Z9EZwqo280>

Subsurface of the Earth – a source of electricity production

Khachatur Meliksetian: This is Vayots Sar volcano in the region of Vayots Dzor, it erupted over 30,000 years ago.

Journalist: Dormant volcanoes are not a rarity in Armenia. There are over 500 similar volcanoes, from Syunik mountains to Javakhk mountain range.

Khachatur Meliksetian: The white dots are the volcanos of our Republic of Armenia.

Journalist: The geologists mapped it all and proved with research that dormant volcanoes have a huge potential of electricity production. The first such potential source was discovered by drilling about 4 years ago.

Khachatur Meliksetian: One step forward in terms of research is Karkar site in Syunik region, where exploration drilling has already been carried out. This geothermal site is available on the website of the Government of Armenia as an investment project.

Journalist: If investors are interested in this site, it will already be possible to start electricity production in Syunik from the vapor and heat generated in the subsurface. Only one very important fact must be taken into account:

Ruben Muradyan: To generate electricity, these underground waters and vapor must be at least 110°C.

Journalist: The Institute of Geological Sciences has recently received a grant from the US PEER Science Program and began a new round of joint research with the American partners.

Khachatur Meliksetian: Our goal is to single out similar promising sites in Vardenis volcanic plateau, in Gegham volcanic plateau, and in the north-western part of Armenia – the southern part of the Javakhk volcanic mountain range.

Journalist: The hot waters of Armenia are also promising in terms of geothermal energy production. This is Iceland – already famous for its volcanoes and hot waters. This country is a world leader in terms of receiving electricity from the subsurface: 27% of the energy is obtained by this method. Subsurface potential is also used for heating.

Khachatur Meliksetian: About 90% of Iceland's heating is generated by geothermal energy, by its direct use, not by the use of electricity. The buildings and cities of that country are heated this way, even the streets and highways – so as not to freeze at wintertime – have an underground heating system.

Journalist: During the next 3 years of research, the geologists will try to discover all the possibilities of our country's subsurface and deep geothermal sources. Until then, the experts assure that the use of geothermal energy will contribute to solving the issue of energy security to some extent.