

Using geothermal in an innovative way: a community greenhouse

Húsavík Community Greenhouse



 Húsavík, Iceland



COUNTRY BACKGROUND

Iceland is a pioneer in the use of geothermal energy. With a total installed geothermal power generation capacity of 755 MW, the country is among the top 10 countries for geothermal electricity generation. In terms of direct use, Iceland is a role model for district heating (90% of households are heated by geothermal energy) and other direct applications such as bathing and swimming, greenhouses and farming

STATUS OF THE CASE

Ongoing: planning phase

EXPLOITATION TECHNOLOGY

Shallow geothermal system (<500m)

USES

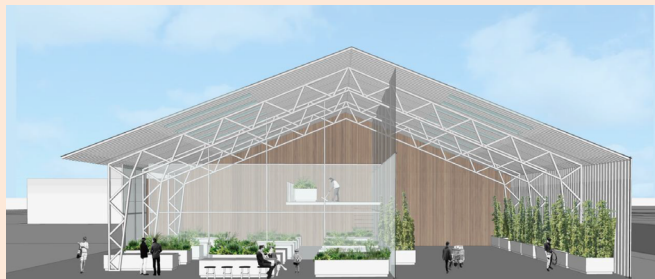
Food production and processing

FUNDING

Public and private (crowdfunding)

HÚSAVÍK COMMUNITY GREENHOUSE

It is planned to develop a community greenhouses in Húsavík, in the north-east of Iceland. In this region, 71% of the geothermal primary energy is unused. The idea behind the project is to emphasize innovation in the usage of geothermal energy and ease such development through crowdfunding, thereby encourage sustainable value creation. Several factors influenced the decision to site the project in Húsavík. There are five active volcanoes in the area so there is plenty of geothermal energy available. The area also offers a considerable amount of freshwater.



The plan is to establish a communal vegetable garden, consisting of a few small greenhouses, heated by geothermal and artificially lighted. Here, individuals and businesses can rent slots to grow vegetables, fruits and herbs or perform small scale experiments for agricultural innovation. The garden could also be used by schools for educational purposes. One option would be for the members of the community to sell the harvest in local a pop-up market established in the area. A small community would arise around the greenhouses where growers support one another and teach newcomers how to grow their own vegetables.

