R-ACES
Energy Cooperation Platform

Utilization of deep geothermal energy

Germany

2015

Type : **Project**
Size : **Regional**
Area : **Industrial, Residential**

District heating, Geothermal

Environmental benefit

Saving 21.5 million kilogram of CO2

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In the municipality of Kirchweidach in Germany, since 2013 vegetables are being produced sustainably and residents are supplied with renewable heat and electricity based on deep geothermal energy. The biggest customer of the geothermal heat is a vegetable growing company using a 12 hectare large green house, cultivating regional peppers and tomatoes. This project is a unique flagship in terms of sustainability and environmental heat utilization strengthening the regional economy and location of the municipality in many ways.

The vegetable production is completely CO2 free. Compared to “conventionally produced” tomatoes from Spain or the Netherlands, the company saves approximately 6.5 million liters of fuel oil and 21.5 million kilogram of CO2. The establishment of the greenhouse enabled the creation of 150 jobs. In addition, a power generation plant is still under construction. The complete project will enable the connection of further 300 households to the local district heating network. The positive response of the citizens and the high acceptance of the district heating network, comprising very low connecting and operating costs, give benefit to each household in the community. If there is a default, the supply is ensured by two fuel oil fired hot water boilers and a reserve heat storage with more than 3,400 m3. The thermal water passes the process twice, what results in an efficient and inexpensive system. In addition, a neighboring biogas plant is connected.

Source: Information on this page is retrieved from district heating award

https://www.districtenergyaward.org/deep-geothermal-energy-kirchweidach/

More info

More information: https://second.wiki/wiki/tiefengeothermie_kirchweidach

R-ACES has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 892429