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Statement of participation

Guest user

has completed the free course including any mandatory tests for:

Understanding deep geothermal energy

This 4-hour free course investigated the potential of the Earth's geothermal energy to replace, or reduce, the global dominance of fossil fuels.

Issue date: 14 March 2022



www.open.edu/openlearn

This statement does not imply the award of credit points nor the conferment of a University Qualification.
This statement confirms that this free course and all mandatory tests were passed by the learner.

Please go to the course on OpenLearn for full details:
https://www.open.edu/openlearn/nature-environment/environmental-studies/understanding-deep-geothermal-energy/content-section-0

COURSE CODE: **S278_5**

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Understanding deep geothermal energy

https://www.open.edu/openlearn/nature-environment/environmental-studies/understanding-deep-geothermal-energy/content-section-0

Course summary

Energy from sources other than fossil and nuclear fuels is, to a large extent, free of the concerns about environmental effects and renewability that characterise those two sources. Each alternative source supplies energy continually, whether or not we use it. This free course, Understanding deep geothermal energy, considers one of these alternative sources, geothermal energy, derived from the interior heat of the Earth, and the potential for this alternative to supplant fossil and nuclear fuel to power social needs fast enough to avoid the likelihood of future global warming and other kinds of pollution.

Learning outcomes

By completing this course, the learner should be able to:

- explain the principles that underlie the ability of geothermal energy to deliver useable energy
- outline the technologies that are used to harness the power of geothermal energy
- discuss the positive and negative aspects of geothermal energy in relation to natural and human aspects of the environment.

Completed study

The learner has completed the following:

Section 1

Geothermal energy

Section 2

High- to medium-enthalpy steam fields

Section 3

Hot dry rock (HDR) fields

Section 4

Locating high-enthalpy geothermal fields

Section 5

Geothermal power plants

Section 6

Direct heating using geothermal energy

Section 7

The pros and cons, and future of geothermal energy