

Renewable Energy Association Briefing on deep geothermal energy and trespass law reforms



Government is considering reforming trespass laws to facilitate directional drilling

- [These proposals](#) could make it simpler for developers to agree compensation terms with local communities for drilling under their land and properties.
- They could apply to both fossil fuels, such as oil and shale gas, and renewable geothermal energy projects.
- They could enable agreement on compensation terms to be made on a community scale, rather than on a case-by-case basis.

Geothermal energy is very different to shale gas fracking

- [Geothermal energy](#) is a renewable technology whereas shale gas is a fossil fuel.
- Geothermal projects do not take gas out of the ground. They pump water from deep underground to the surface, extract the heat, and then pump the water back down in a closed loop system.
- Geothermal power projects involve a limited amount of hydraulic fracturing to create heat reservoirs, but not the same ongoing fracking as shale gas extraction. These projects are not expected to be sited within communities. They only use minimal chemical additives compared with shale gas extraction.
- Geothermal heat projects, such as the [scheme in Southampton](#), are more likely to be sited within communities and do not use fracking at all.
- Geothermal projects involve the drilling of just two or three wells, compared to the many wells that could be drilled on a shale gas site. Geothermal wells are typically one to two kilometres deep and about eight inches wide. Their surface footprint is about the size of a double garage.
- Unlike shale gas, an operational geothermal well generates no additional heavy traffic flow, as there are no trucks moving to and fro to transport gas.

Geothermal energy can help make the UK energy and climate secure

- Geothermal energy can deliver continuous heat and power to homes and businesses for over 50 [or even 100 years](#).
- Geothermal energy is a home-grown UK energy resource that can reduce our dependence on imported fossil fuels.
- Geothermal energy has one of the lowest carbon footprints of any energy source. The environmental impacts of geothermal energy, below ground, above ground and globally, are minimal.
- Earlier this month [the European Geothermal Energy Council said](#) that geothermal energy could provide heating for 25% of the EU's population.
- The UK deep geothermal industry is very young, with approximately [25 companies employing 200 people](#) across the supply chain.
- Other countries have much more advanced geothermal industries. Paris is home to 38 geothermal district heating schemes, including [one at Orly Airport](#).