

The global status of **Geothermal**



how to visualise the specifications of any Geothermal project

Ben Duncan answers all the questions you asked in our Geothermal webinar.



In the Enhanced and Advanced geothermal systems what are the distances, such as the closed loop?

For EGS, Soultz in France had wells 500m apart. United downs has a vertical separation of around 2km. For AGS I think it's pretty scalable but Eavor-Lite the horizontal well section is around 2.5km long.

In EGS, what well diameters are we talking about?



I have heard quoted for single coaxial well 36" top to 12" or 9" bottom so standard hole size. For AGS, the Eavor project's multilateral wells have a diameter of 61/4" so it is variable.



Not presently. There is increasing interest from major companies and in the public eye so we may see geothermal ramp up quickly in the next few years but at the current rate it lags behind other green energies.

Does TROVE contain any cost data, days to drill/complete hole?



Not tabulated yet but within the asset tabs for some individual projects yes. If subscribers show interest in this, it is an area we could look to do more development on.

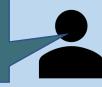


You mentioned high CAPEX cost of the plants. I have recently handled enquires for downhole equipment and see a trend that higher end materials are needed, but the budget is not allowing it. Is this a direct reflection on the high plant costs do you think and operators trying to save on what they put down hole as its in the ground and nothing to worry about?

Very interesting, yes quite possibly.

for e.g. district heating. Do you hold data for where there are suitable disused mines for this purpose or where it is being considered?

There is quite a lot of talk about using water from disused mines



A great new use of old coal mines! In the countries we have direct heat use coverage we capture data on these mine water projects e.g. UK - Glasgow. TROVE doesn't cover anything on potential mine water projects but might capture them if feasibility studies have been carried out or if captured at a country level.

What are the subscription charges for TROVE database?

For webinar attendees TROVE Geothermal costs £2k - £15k (GBP) depending on company size. This offer is valid until 30th June 2021. The subscription lasts for 1 year, after which there is a 30% maintenance fee to renew charged annually. Get in touch for specifics regarding company size and our standard pricing structure for after the offer period (info@troverenewables.com).

Do you believe there's a problem with know-how in countries that have geothermal capacity but isn't developed yet? Yes, that seems very likely to be an issue in many places, particularly for less developed



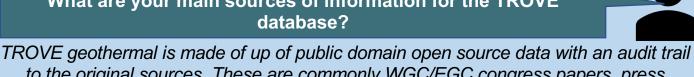
nations. I think countries with established hydrocarbon industries and knowledge of drilling also have an advantage over countries without. Saying that I think Chile is a country to watch for the next ten or so years in terms of developments and maybe that could be a springboard for South America.

being the leading country on these projects. We don't yet cover China for district heating so only the high level that is found

How much detail on Chinese projects does TROVE have? China

in the TROVE China asset tab. I expect we will all learn a lot more about China's geothermal use in the next few years given they will be hosting the World Geothermal Congress 2023!

What are your main sources of information for the TROVE database?



to the original sources. These are commonly WGC/EGC congress papers, press releases, company websites and presentations, public reports, online GIS systems e.g. NLOG etc. Some open source existing datasets have also been collated in the system.

Contact info@troverenewables.com if you have any other questions