## Gravitricity looking into old coalmines

An Edinburgh-based energy storage company is exploring the possibility of establishing their first full scale 4-8 MW project in The Czech Republic in a former coalmine there.

Their form of energy storage could use former coal mines as a way of decarbonising future energy supplies. The company hopes that the disused Czech coalmine could be the first of many other projects in Europe.

Engineers from the company have just returned from the Staříč mine in the Moravian Silesian Region of Czechia where six deep mining sites were formally moved into a post mining phase earlier this year.

On site, they investigated the mine shaft, traveling to a depth of over 1km underground and met state-run mine owners DIAMO, along with the regional government and other local businesses as well as VSB Technical University of Ostrava.

Gravitricity specialises in gravity energy storage, which stores and discharges energy by lifting and lowering massive weights in a shaft.

The storage specialists <u>have already demonstrated a scale</u> <u>version of their technology in Edinburgh</u> — built in partnership with Dutch winch specialists Huisman — and now plan to commence a full-scale 4-8MW prototype scheme in a

disused mine next year.

This single weight system could deliver up to two megawatt hours (MWh) of energy storage — enough to power more than 16,000 homes for 15 minutes. Future multi-weight systems could have capacity of 25MWh or more.



## Chris Yendell

Chris Yendell of Gravitricity said: "As the world moves to net zero, we are shifting from coal generation to intermittent renewables — and with this comes a need for energy storage. By utilising former coal mines as massive energy stores, we can find new uses for existing infrastructure and help mitigate the social impact on mining communities.

"We received a very warm welcome in Czechia and have received a formal letter of support from the region's governor."

The Staric mine lies within a large coal field which extends across the border into Poland and is one of a number of mainland European sites shortlisted by the storage specialists. They plan to make a final site decision early next year.

Ludvík Kašpar, CEO of DIAMO said: "We are ready to cooperate in this preparation of this project and have provided Gravitricity with all the information to allow them to make a fully qualified decision on the Staříč mine. We are convinced that closed mines have the potential for further use and an energy storage project could be attractive and useful for the region."

Worldwide, Gravitricity estimates there are around 14,000 mines which could be suitable for gravity energy storage.



Exkurze v dole Paskov (Staříč II)