

Video 3: Where To Use the Deep Underground Concept

So, what do we have underground? Heat.

Heat is available everywhere below the Earth's surface, including areas with favorable geotechnical conditions. The geothermal gradient for most of Earth is approximately 25 degrees Celsius per kilometer of depth. Therefore, rock temperatures at depths from -500 to -700 meters start at 20-25 degrees Celsius; at a depth of -3000 meters, they rise from 60-85 degrees Celsius; and at a depth of more than -4000 meters, they reach above 100 degrees Celsius.

Geothermal energy is a potentially powerful source of clean energy with practically no impact on the environment. Enhanced Geothermal Systems, commonly called geothermal power plants, can provide an inexpensive and powerful energy source to replace coal and nuclear power plants. However, this option is rarely mentioned. Do we have any?

Yes, we do. The first one was constructed almost 100 years ago in Italy. The strongest is in the United States. Iceland has been exploiting geothermal energy for a long time as well. One of the upcoming videos will explain how to use the Deep Underground concept to exploit heat.

The next consideration is transport.

We need to get rid of cars sooner or later, or they will get rid of us. It's just that simple. There are nearly one billion cars in the world, and close to 100 million are manufactured each year. That's a waste of limited resources that can be used more wisely.

The Deep Underground concept doesn't aim to provide solutions for cars, trains, or anything that requires long, straight lines, except in one case, which will be discussed in a separate video. But because of the technology it is based on, it can be ideal for several short-distance methods of transport, such as walking, cycling, moving walkways, or even the metro.

The deep underground concept can also provide a solution that offers everything a car does, in collaboration with another modern technology, as presented in a separate video.

Additionally, we can farm underground.

Indoor farming technologies create an environment where heat, humidity, water, and light can be controlled, so food production can be multiplied by a factor of five or even more. Underground structures are ideal for this process.

We can also use the underground as a basement to store unattractive structures that occupy a lot of space on the surface. What those are may be a matter of personal opinion, but at any rate, moving factories and shopping centers underground would clear up the surface.

And of course, underground construction can offer shelter against inclement weather and other hazards, as was done in the ancient past.

So, the underground can offer a lot. The next video shows how to get there according to the Deep Underground concept.