**Press Release**

* **Groundworks complete and drilling soon to start at Eden’s deep geothermal heat and power project**
* **Working with the Government as part of UK National Infrastructure Strategy to deliver clean green energy**
* **Technology being installed at home of world-famous Biomes could one day supply one-fifth of UK electricity**

After a year of intense activity, deep drilling is soon to commence at the pioneering Eden Geothermal Project near St Austell in Cornwall.

Next week, the first lorries carrying a 450-tonne, 55 metre-high drilling rig will arrive on the outer edge of the Eden Project site, the home of the world-famous Rainforest and Mediterranean Biomes.

Once fully assembled into position on a newly-laid concrete platform, the rig will be ready to drill 4.5 kilometres (nearly three miles) down into the Earth’s granite crust.

The first phase of drilling is expected to take five months and when complete will then allow water to be injected down the borehole to be superheated by the hot rocks beneath.

The hot water will then be pumped back to the top up a pipe suspended in the same borehole, generating heat initially to warm Eden’s Rainforest and Mediterranean Biomes, offices, kitchens and greenhouses. The same water will then be re-circulated to be superheated and used again.

Following the successful completion of this first phase the next phase is to drill a second well close to the first to a similar depth of around 4.5 kilometres.

This closed circulatory system of two wells will bring even more heated water to the surface for heating in the local area and also allow the generation of electricity from the hot water.

Successfully completing the second phase will mean that the project will generate enough renewable energy for Eden to become carbon negative during 2023.

Research has shown that when geothermal energy is developed, it will be capable of providing around 20 per cent of the UK's current electricity demand plus a vast amount of heating. In Germany the industry has created more than 22,000 skilled jobs, and added €13.3 billion to the German economy since 2000. The use of geothermal energy reduced the country's emissions by more than 1.7 Mt CO2 equivalent in 2017.

Eden Project Co-Founder Sir Tim Smit said today: “Forget the official po-faced language about sustainability and our energy future…this is every romantic’s dream. Jules Verne would be smiling, as would Brunel, as will every Briton worried that we had lost our island mojo.

“It is a privilege for Eden to be involved in a team embracing the future with the skills of the engineer and the power of the imagination, laying down a marker for a future that is ours to make.”

This past year has been a period of intense activity in preparing the site close to Eden’s main visitor gate and arranging contracts with a host of service providers.

The diggers rolled in autumn last year and despite some of the wettest weather seen in Cornwall in recent years the drilling apron, guide pipe, service roads, and water storage lagoon are ready to take delivery of the drilling rig.

A special viewing area has been erected to enable visitors to come and observe the ongoing project safely from a nearby path.

The project is being delivered by Eden Geothermal Limited (EGL), a three-way partnership between Eden Project Limited, EGS Energy Limited, a leading geothermal development and consultancy group with experience in Cornwall and worldwide, and BESTEC (UK) Limited, which is affiliated with BESTEC GmbH, the specialist geothermal developer and drilling advisor.

EGL Chairman Richard Day said: “This a momentous day for EGL and all our stakeholders, with drilling starting on our site. We have received significant funding from central and the local Cornwall government as well as from our commercial investors to help us reach this stage.

“We are also working closely with the local business community to provide clean, renewable baseload heat and power 24/7, from a small discrete footprint on the land.

“We are keen to be an active part of the clean energy revolution under the Government’s UK National Infrastructure Strategy.”

The first deep well will be drilled into the granite to a vertical depth of 4.5 kilometres When the well reaches two kilometres, it will be steered to intersect with a naturally fractured zone in the granite.

Once the well is completed down to the anticipated terminal depth of 4.5 kilometres, an insulated pipe will then be inserted into the well down to the three-kilometre point. Cold water will be injected down the outside of the pipe where it meets the hot rock and the rock will act as a heat exchanger. The hot water then travels back up the inside of the pipe in a method known as a co-axial system.

The use of the heat will demonstrate the benefits of greenhouse gas (GHG) savings achievable from this specific project, while also indicating the long-term level of heat and power that may be achieved from the subsequent two-well system.

EGL is working with other experts and interested parties in the geothermal field to create a wider renewable and industry sector for Cornwall and for the UK.

To drill the first well, EGL secured £17 million funding from a combination of European Regional Development Fund, Cornwall Council and commercial funding from GCP Infrastructure Investments Limited, an investment trust advised by Gravis Capital Management Ltd.

Gus Grand, Executive Director at EGL said: ‘’We are really excited to be taking an important step toward making a contribution to the UK’s net-zero goal in this year of G7 and COP 26. As a drilling technology, we believe geothermal is well placed to take advantage of the UK’s expertise developed in the North Sea, as energy companies pivot away from fossil fuels and toward a greener, better, future.’’

**ENDS**

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Caption: The drilling rig due soon at the Eden Project, pictured at a previous site.

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There is more information about the geothermal project and frequent updates on the Eden Geothermal Limited website [www.edengeothermal.com](http://www.edengeothermal.com/)