

PRESS RELEASE



Geothermal energy heats the Eden Project in UK first since 1986

- Beyond the Biomes: how new geothermally-heated plant nursery and education facility are pioneering the Eden Project's regenerative mission

[HIGH RES IMAGES](#)

The Eden Project's world-famous Biomes, offices and new state-of-the-art plant nursery were heated by deep geothermal energy this winter in a first for the UK since 1986.

The 5km well, which is located on the Eden Project site and operated by Eden Geothermal Ltd, began generating heat in June 2023 and began supplying heat for the first time once the colder weather set in this winter, heating the Eden Project's Biomes, new state-of-the-art plant nursery and education hub, and offices. It is the UK's first operational deep geothermal well since 1986.

It's expected the pioneering geothermal technology will save up to 500 tonnes of CO₂ per year and take the Eden Project almost entirely off gas – the equivalent of 227 UK homes heated with gas^[1] - a major step in the organisation's pathway to achieving net zero and realising its goal of becoming climate positive by 2030.

Besides heating the Eden Project's enormous Biomes and offices, geothermal energy is an integral part of the brand-new plant and education facility constructed beyond the Biomes. Growing Point nursery

is a demonstrator of regenerative sustainability and circular systems in its construction, operation and purpose.

Regenerative sustainability is the practice of making things better than they were, rather than simply doing less harm. This can be applied to environmental, social and economic initiatives. Circular systems, or circular economy, is a model of minimising or eliminating wastage and making the most of resources by reusing, recycling and regenerating materials.

Built from light, recyclable materials, Growing Point harvests rainwater from the sky and utilises heat from the earth to grow plants for the Eden Project's gardens, restaurants and shop.

Included within the build is rubble collected from the landslips that affected Eden Project during heavy rainfall and floods in 2020 and granite and limestone excavated from the site's rainwater collection pond.

When compared with a glasshouse alternative, the design and construction of Growing Point had an 89% lower impact in terms of embodied carbon emissions.

The Eden Project's Chief Transformation Officer, Si Bellamy OBE said: "We are working with and for nature to develop new ways to grow and new ways to encourage people to think differently about plants, the planet and themselves.

"We have built a landmark sustainable nursery and education facility - a pillar of our wider ambitions for the future impact and expansion of the Eden Project, and it will help us accelerate massively our mission towards a climate-positive future."

At 6,500 square metres, Growing Point represents the biggest physical development at the Eden Project since the opening of the Core building in 2006. With a footprint bigger than the Mediterranean Biome, the nursery enables Eden Project's Horticulture team the capability to propagate and take care of one million plants per year, supporting the organisation's valuable living collections for its Rainforest and Mediterranean Biomes, Outdoor Gardens and Outer Estate.

The team are able to grow and supply food for the menus that feed thousands of visitors each year, operating within food metres rather than food miles. Dishes already incorporating geothermally-grown produce have included Thai green curry, orange and fennel salad and poke bowls.

Using deep geothermal heat allows the Eden Project's horticulture team to grow produce, such as fresh herbs, fruits and vegetables over a longer

seasonal period, and experiment with exotic produce that would ordinarily need to be imported, including bananas, papayas, ginger and lemongrass.

The facility opens up a world of creative possibilities for Eden Project's chefs, demonstrating a sustainable, circular food system while connecting visitors to the produce and their stories told throughout the destination's botanical and cultural exhibits.

Around 90% of the house plants sold in the Eden Project shops and 100% of plants sold online are produced at Growing Point, in peat-free compost, using natural solutions to control pests and diseases. These include Arabica coffee plants that have been grown from 'beans' harvested from the Rainforest Biome.

Beyond its vast plant production capabilities, Growing Point includes world-class facilities for Eden Project Learning students, apprentices and other learners. These include a state-of-the-art soil science and teaching laboratory created in partnership with Cornwall College and funded by the Shared Prosperity Fund.

Growing Point is also the home of the Eden Project's National Wildflower Centre, and the CHAOS group, a community interest social group that provides a space for those with physical and emotional needs to develop work and social skills in a safe and welcoming space.

Find out more about Eden Project's climate-positive journey at www.edenproject.com.

ENDS

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Notes to editor

Eden Geothermal Ltd

The process of drilling deep in the granite at the home of the Eden Project was completed in 2021. The well has a vertical depth of 4,871 metres (just over 3 miles) and an actual length of 5,277 metres (nearly 3.3 miles), making it the longest well under UK soil. Hot water is pumped from deep beneath the ground before being replaced by cooled water. The geothermal heat is delivered via a 3,800-metre heat main to supply Growing Point and the Eden Project's Biomes and offices.

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

Eden Project Learning

Eden Project Learning provides further and higher education for over 200 students and apprentices on a range of horticulture, sustainability and ecology courses, from Foundation Degrees through to Masters and their equivalents.

The portfolio of courses at Eden Project Cornwall are facilitated in partnership with the Cornwall College Group and the University of Plymouth, Falmouth University and Anglia Ruskin University.

The new Growing Point facilities will allow students to develop their practice in a modern growing and teaching complex alongside professional horticulturists, with valuable laboratory space and a venue for lectures, films and courses.

National Wildflower Centre

Part of the Eden Project, the National Wildflower Centre (NWC) transforms areas of land with wildflower planting around the UK. From hedges, fields and woodlands to roundabouts, housing estates and urban developments, the NWC projects bring biodiversity, delight and colour to the lives of communities. Its new home at Growing Point provides the team with more space and advanced seed processing, storage and wildflower growing facilities

CHAOS Group

The CHAOS Group is a long-standing organisation and Community Interest Company (CIC) providing supportive horticulture and work projects for adults with physical and emotional needs.

Formerly known as People & Gardens, the group were previously based at Watering Lane Nursery, producing a wide variety of fresh produce for their Veg Bag scheme.

The group's new home at Growing Point provides them with their own green space, including a sensory garden and quiet area, allowing them to diversify their projects and experiences. Among the produce being grown are tomatoes for the Eden Project's restaurants.

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