

# Climeworks takes another major step on its road to building gigaton DAC capacity

**Groundbreaking on Mammoth, Climeworks' newest direct air capture and storage facility, has started.**



The groundbreaking of Climeworks' newest and largest direct air capture and storage plant represents a demonstrable step in the company's ambitious scale-up plan: multi-megaton capacity by 2030, on track to deliver gigaton capacity by 2050. In September 2021, [Climeworks began operations of Orca](#), its first-of-a-kind plant, kick-starting the supply availability of high-quality carbon removal. Following a recent equity raise of USD 650m, Climeworks is focused on rapidly scaling-up capacity on the market. It will concentrate on implementing large modular direct air capture and storage facilities, investing in technological development, and growing its organization globally.

Mammoth is Climeworks' 18th project and its second commercial direct air capture and storage plant. It is designed with a nominal CO<sub>2</sub> capture capacity of 36'000 tons per year when fully operational – an order of magnitude larger than its Orca. Located in Iceland, construction is expected to last 18-24 months before operations start. Carbfix, Climeworks' CO<sub>2</sub> storage partner, will provide the permanent underground storage of carbon dioxide. The Hellsheiði electricity power plant operated by ON Power will supply Climeworks' Mammoth plant and the Carbfix CO<sub>2</sub> injection sites with renewable energy to run the entire direct air capture and storage process.

Mammoth is designed to further expand supply and provide engineering experience for Climeworks' 10x scale-up steps. It capitalizes on a very dynamic market demand – with several 10-year offtake agreements signed over the last months – and technology learnings from operating Orca.

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Today is a very important day for Climeworks and for the industry as construction begins on our newest, large-scale direct air capture and storage plant. With Mammoth, we can leverage our ability to quickly multiply our modular technology and significantly scale our operations. We are building the foundation for a climate relevant gigaton-scale capacity, and we are starting deployment now to remain on track for this.

**Jan Wurzbacher, co-founder and co-CEO of Climeworks**

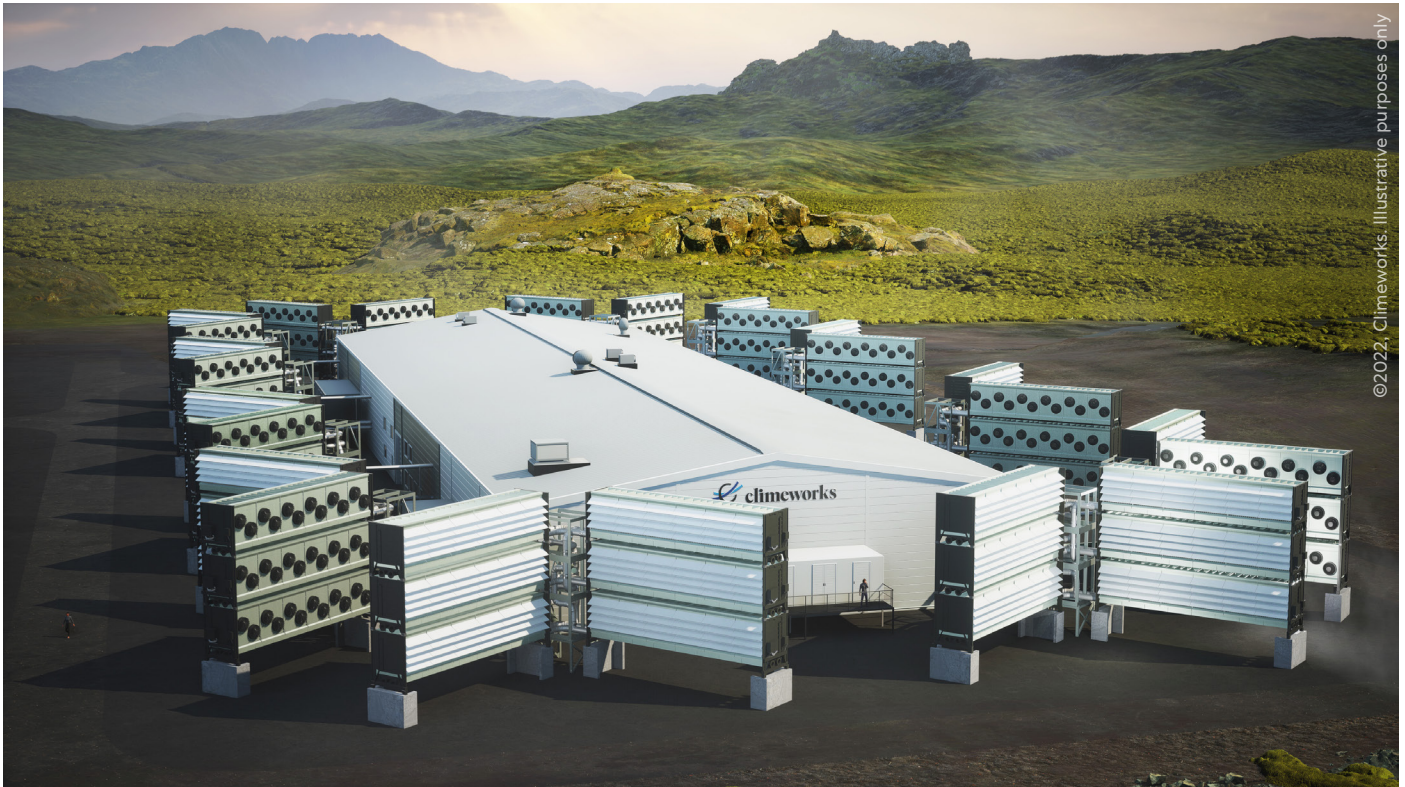
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Based on most successful scale-up curves, reaching gigaton by 2050 means delivering at multi-megaton scale by 2030. Nobody has ever built what we are building in DAC, and we are both humble and realistic that the most certain way to be successful is to run the technology in the real world as fast as possible. Our fast deployment cycles will enable us to have the most robust operations at multi-megaton scale.

**Christoph Gebald, co-founder and co-CEO of Climeworks**

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Digital rendering of Climeworks' future direct air capture plant, Mammoth. For illustrative purposes only.

## About Climeworks

Climeworks empowers people to reverse climate change by permanently removing carbon dioxide from the air. One of two things happens to the Climeworks air-captured carbon dioxide: either it is returned to earth, stored safely and permanently away for millions of years, or it is upcycled into climate-friendly products such as carbon-neutral fuels and materials. The Climeworks direct air capture technology runs exclusively on clean energy, and the modular CO<sub>2</sub> collectors can be stacked to build machines of any size. Founded by engineers Christoph Gebald and Jan Wurzbacher, Climeworks strives to inspire 1 billion people to act now and remove carbon dioxide from the air. Together we can build a climate-positive world. Join us!

**Web:** <https://www.climeworks.com>

**Twitter:** <https://twitter.com/Climeworks>

For media enquiries including images enquiries, please contact [media@climeworks.com](mailto:media@climeworks.com)

## About Carbfix

Carbfix, Climeworks' CO<sub>2</sub> storage partner at Orca, will also provide the permanent underground storage of carbon dioxide for Mammoth via underground mineralization. Carbfix is the world's first CO<sub>2</sub> mineral storage operator, having mineralized 80 thousand tons of CO<sub>2</sub> underground in Iceland since 2012 using its proprietary technology. Carbfix injects CO<sub>2</sub> dissolved in water into basaltic rocks, where it turns into stone in under two years through accelerated natural processes. This proven, safe, permanent, and cost-effective carbon storage solution is ripe for significant upscaling both in Iceland and worldwide.

**Web:** [www.carbfix.com](http://www.carbfix.com)

**Twitter:** <https://twitter.com/CarbFix>

## About ON's Geothermal Park

ON Power's Geothermal Park provides a platform for environmentally conscious companies who want to use clean renewable resources from the plant for their vision. Innovative companies like Climeworks have grown within the Geothermal Park to support the circular economy. ON Power produces and sells electricity to the entire population and hot water to the capital area. The objective is to protect the interests of the country's natural resources and the company's customers, guided by the principle of sustainability. In so doing, the company supports innovation and the responsible utilisation of natural resources and promotes energy switching to a lower ecological footprint for the benefit of society as a whole.

**Web:** [www.geothermalpark.is](http://www.geothermalpark.is)