

Media Release

Bern, 18. November 2024

Neustark and Feess open the first site for permanent storage of CO₂ in demolition concrete in the greater Stuttgart area

- The Swiss climate tech pioneer neustark and German recycling specialist Feess (winner of the German Environmental Award 2026) have launched the first commercial CO₂ storage site in the Stuttgart area.
- The plant in Kirchheim unter Teck can permanently store 1,000 tonnes of biogenic CO₂ per year in demolition concrete, thus generating crucial negative emissions.
- Neustark's carbon removal solution is already being used at various locations in Europe, where CO₂ is captured at point source such as biogas plants and permanently stored in mineral waste such as demolished concrete.

Swiss carbon removal scale-up neustark and family-owned reusable materials specialist Heinrich Feess GmbH & Co. KG have launched the first site in the greater Stuttgart area, in which biogenic CO₂ is stored in demolition concrete and thus permanently removed from the atmosphere. The new site has an annual storage capacity of 1,000 tonnes of CO₂.

Demolition concrete is the world's largest waste stream, with more than one billion tonnes generated globally each year. In Germany alone, this figure reaches 70 million tonnes annually.

Neustark's technology transforms this mineral waste stream into a carbon sink. CO₂, which is produced as a waste product during biomethane production, is captured, and transported to the nearby production facility of the Stuttgarter construction waste recycler. On-site, the CO₂ is injected into the demolition material in an airtight silo consisting of four chambers, where it is bonded permanently in the aggregate in the form of limestone. Neustark's technology accelerates the mineralization process that stores the CO₂ in the mineral aggregate from several decades to a few hours. The permanent storage of the captured biogenic CO₂ creates negative emissions – next to emissions reductions, a crucial pillar in the path towards net zero.

The potential of this solution is sizable: each ton of concrete can permanently store on average 10 kilograms of CO₂. That means that in Germany, via this mineralization technology, up to 700,000 tonnes of CO₂ can be stored and removed permanently from the atmosphere per year! This local carbon capture and storage (CCS) approach provides an alternative to both local underground CO₂ storage and the transportation of excess CO₂ to North Sea geological storage sites, which have been central to recent discussions in Germany.

“Neustark and Feess share a vision of creating positive environmental impact. Feess has done some impressive pioneering work in circular building materials in Germany, and our partnership builds on that: After Feess first tested our mobile technology for CO₂ storage, we

are now proud launch neustark's second site in Germany—and the first in the Stuttgart area—with Feess. This is a milestone for onshore CO₂ storage and removal in Germany. Now, public and private sector demand for carbonated building materials, along with supportive legal regulations, is urgently needed to advance our efforts," says Valentin Gutknecht, founder and co-CEO of neustark.

"We chose to partner with neustark to launch this innovative technology because it integrates perfectly with our on-site concrete recycling and production process and makes it even more sustainable. We're excited to be the first to store the hundreds of tonnes of CO₂ permanently in demolition concrete in the Stuttgart region. At Feess, circularity is deeply rooted in our corporate DNA. With neustark's technology, we're taking an important step towards a truly circular economy and greater sustainability in the resource-intensive construction industry," says Walter Feess, former managing director of Feess.

Another milestone on the way to removing 1 million tonnes of CO₂ in 2030

Next to the site in Germany, neustark has recently launched two more storage sites with Swiss construction company [Montebello AG](#) in Pontresina (Graubünden, Switzerland) and [Ch. Gerster AG](#) in Liechtenstein, as well as one capture site with [SIG](#) in Geneva. In addition, neustark has opened its first CO₂ storage site in the United Kingdom together with [Aggregate Industries](#) (part of the Holcim Group). A total of 22 carbon capture and storage facilities are already in operation, with 40 more in the planning and construction stages.

All of these recently opened plants are further important steps for neustark's goal of permanently removing one million tonnes of CO₂ in 2030.

Media contact: Desiree Goldstein, media@neustark.com, +49 151 68538298

About neustark

Limiting global warming to 1.5°C implies reaching net zero CO₂ emissions in 2050, according to the IPCC. Next to substantially reducing emissions, this target will only be possible by globally deploying carbon removal (CDR) solutions at the scale of billions of tons of CO₂. Neustark is a leading provider in this rapidly growing field, having developed a solution to durably remove CO₂ via mineralization in recycled mineral waste such as demolished concrete and slags.

Our first solutions have been deployed in Europe and are already capturing and storing tons of CO₂ every day. We are currently scaling up our operations and carbon removal impact globally – on the road to permanently removing one million tons of CO₂ in 2030, and beyond that.

Founded in 2019, neustark AG is based in Bern, Switzerland, comprising a team of around 85 people (as per Q3 2024). Together, we enable permanent CO₂ removal for a bright future of all generations on our planet.

www.neustark.com | [neustark](#) | [LinkedIn](#)

About Feess

Founded in 1951 as a transport company for gravel and sand, founder's son Walter Feess became Managing Director in 1995 and invests heavily to build up the company. In 2010, Feess launched the

3.5-hectare Rabailen recycling center directly on the A8 motorway with the first wet classification plant in Germany, which washes mineral construction waste with rainwater collected in cisterns on the site. In 2016, Feess is awarded the German 'Umweltpreis' (Environmental Prize), and a year later, opens its Academy K³, where staff are trained, and knowledge is passed on to students and politicians. In 2023, Feess invests in a state-of-the-art, e-capable truck and machinery workshop at its headquarters that is powered by photovoltaics and geothermal energy. In 2024, Walter Feess hands over the management of the company to his sons Alexander and Benjamin, who are both civil engineers. The Feess Group, which has digitalized many areas and acquired stakes in various companies, currently employs 300 people and operates six recycling centers in the Stuttgart region, generating a turnover of over EUR 70 million in eleven business areas such as recycling management, earthworks, demolition, recycling and training.

www.feess.de

Images:



Image 1 - Overview of the CO₂ storage site



Image 2 - Co-CEOs and founders of neustark Valentin Gutknecht (left) and Johannes Tiefenthaler (right)



Image 3 - Senior Partner Heinrich Feess GmbH & Co: Walter Feess



Picture 4 - from left to right: The management team at Feess: Alexander Feess (Managing Director), Benjamin Feess (Managing Director), Walter Feess (Senior Partner), Jochen Röhrer (Managing Director), Nadine Winter (Managing Director)