

CBR to build one-of-a-kind hybrid carbon capture unit at its Antoining cement plant

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- **The hybrid unit will combine the Oxyfuel and Amine capture technologies in a second-generation set-up**
- **Once operational, it will capture around 800,000 tons of CO₂ from the cement production process annually**
- **To support this capture project called “Anthemis”, CBR will seek national, regional and EU funding**

CBR, Belgian subsidiary of the Heidelberg Materials Group, intends to equip its Antoining plant with an innovative hybrid carbon capture unit. Antoining is a state-of-the-art cement plant with one of the world’s best-performing kilns in terms of specific CO₂ emissions, which was recently modernized and is ready to be used for the project with no further need for modification. The innovative second-generation OxyCal concept combines the established Oxyfuel and Amine technologies in a hybrid unit that no longer requires an additional preheater tower. This means a significant reduction in the need for structural steel and concrete, which considerably improves the resource efficiency of the system. Once operational, the project will reduce CO₂ emissions from Antoining by more than 97%, equaling around 800,000 tons of captured CO₂ annually.

“We are excited to add yet another pioneering technology to our CCUS project portfolio, and to build on what we have already achieved in terms of research and innovation”, says Dr Dominik von Achten, Chairman of the Managing Board. “From the Antoining plant alone, we will be able to offer more than 15 million tonnes of carbon-free cement to the construction market in the first ten years of operation. This is a key contribution to Belgium’s transition to net zero greenhouse gas emissions.” With its geographical location more than 100 km from the coast, Antoining would be the first inland cement plant in Western Europe to supply carbon-free cement.

While the project will be focusing on the carbon capture process, collaborations will be established with various partners to transport and store the captured carbon, with the aim of creating a complete CO₂ value chain. To support the construction of the capture unit, the company will seek grants from national, regional and EU funds.



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Press release



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