thyssenkrupp Polysius is set to provide the kiln system for SMA Mineral’s trailblazing quicklime plant in Norway – designed to operate entirely without CO2 emissions.

News | 04.08.2025

thyssenkrupp Polysius to supply innovative electric kiln based on SaltX’s decarbonization technology for the world’s first zero-emission lime plant

thyssenkrupp Polysius is set to provide the kiln system for SMA Mineral’s trailblazing quicklime plant in Norway – designed to operate entirely

without CO2 emissions.

Based on SaltX electric calcination technology, the project represents a global first in the decarbonization of lime production and marks a significant milestone in the transition to climate-neutral industrial processes.

The facility will be based on the ZEQL (Zero Emission Quicklime) concept, developed by Swedish innovation company SaltX Technology. The process electrifies the traditionally fossil-fueled lime calcination process, enabling the production of quicklime without any carbon dioxide emissions. thyssenkrupp Polysius will play a central role in scaling this technology to industrial level by delivering the kiln system and contributing its extensive engineering expertise.

> “This project is a testament to our commitment to engineering solutions that drive decarbonization.”
>
> **Christian Myland, CEO at thyssenkrupp Polysius**

“We are proud to contribute to this landmark project that sets a new standard for sustainable lime production”, says Christian Myland, CEO of thyssenkrupp Polysius. “Our collaboration with SMA Mineral and SaltX Technology demonstrates how industrial partnerships can accelerate the transition to net-zero emissions."

SMA Mineral, one of the largest lime producers in the Nordic region, operates across Sweden, Norway, Finland, and Estonia. With over 90 years of experience, the company supplies high-quality lime products to key industries such as steel, construction, pulp and paper, water treatment, and agriculture. By investing in the ZEQL pilot plant, SMA Mineral positions itself as a pioneer in the transition to sustainable lime production without the use of fossil fuels, taking a bold step toward reducing the carbon footprint of an essential raw material.

The partnership between SaltX Technology and thyssenkrupp Polysius forms the foundation of the ZEQL project. Following the signing of a Letter of Intent in February 2025, both companies are working closely together to scale up electrified industrial processes. This collaboration reflects a shared commitment to innovation and sustainability and marks a major step forward in decarbonizing the cement and lime industries.

The bottom line: The pilot plant is scheduled for completion in 2027 and will have an annual production capacity of 40,000 tons of ZEQL quicklime. The project has received EUR 24 million (NOK 287 million) in funding from the Norwegian state enterprise Enova.