## Capturing CO2 to Create Beneficiary Byproducts





ENVIRONMENTAL

According to Cuycha Innovation Oy, the technology is capable of reducing CO2 emissions by 40% to 90% while reusing waste minerals.



ECONOMIC

Apart from the lowering of CO2 emissions, this solution provides valuable and commercially usable byproducts.



Deployed in



→ This carbon capture and neutralization solution lowers CO2 emissions, reuses waste material and water, and creates aluminium and water as byproducts.

Cuycha Innovation's solution captures CO2 emissions from flue gas and **neutralizes** and permanently binds them in carbonate form. According to the company, this method enables a **40% to 90% reduction of CO2 emissions**. The flue gas is washed with water or mine drainage to form carbonic acid. The resulting mildly acidic water is passed through a series of reaction silos filled with crushed feldspar. This material is readily available as it forms over 60% of the Earth's crust.

The byproducts of this process are typically valuable, easily marketable compounds like aluminium oxides, various carbonates, and bicarbonat water. Joint ventures have been set up in Africa, Australia, and the UK, with one plant under construction and three industrial projects in the implementation phase.

## Why a Sustainia100 solution?

Carbon capture solutions often stall due to high energy consumption. It is unverified whether this solution will be able to overcome this barrier and scale globally, but if the potential is realized across multiple industries, carbon capture and neutralization could represent an important building block for the sustainable society.

