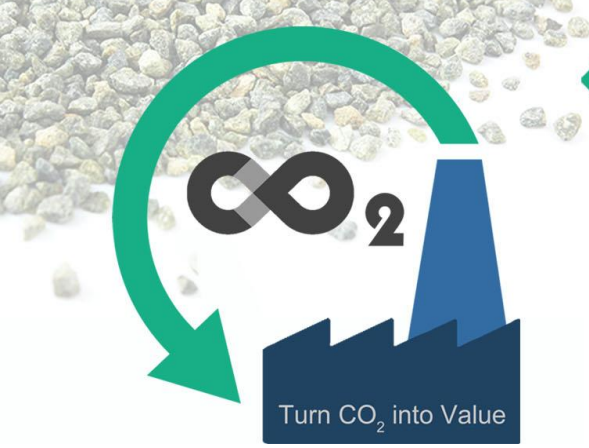
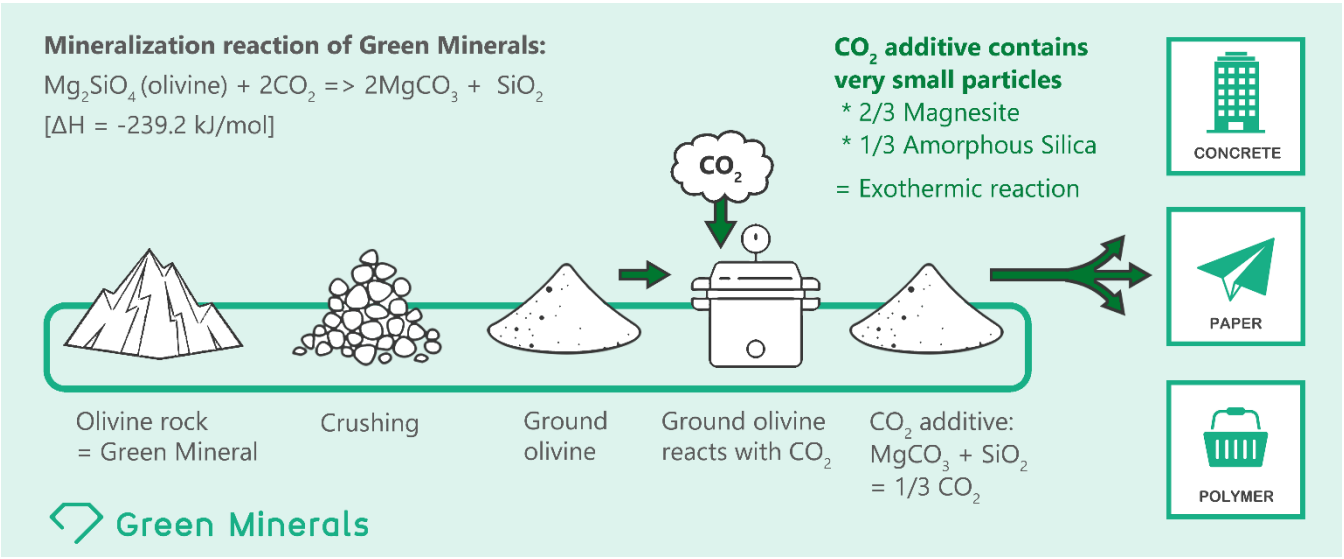


Green Minerals

CO_2 as feedstock

Reduced CO_2 emission & CO_2-based materials

Concrete, plastics, and paper are three examples of Green Minerals applications, in which CO_2 is captured and stored in materials through mineralisation. In this process, CO_2 is used as a feedstock that reacts with **olivine**: a rock-forming mineral that binds CO_2.



Green Minerals is a process which a factory can integrate within its current production process: capturing CO_2 and add it to its resources, materials and products. A circular manufacturing process producing CO_2-based materials. Research was conducted with **KU Leuven** and **Brightlands Innovation Factory** facilitates to start-up.

CONCRETE

During the three-year research project **CO2MIN**, **HeidelbergCement** and **RWTH Aachen University** will explore the reaction of CO_2 by the minerals olivine and basalt.

DELTA Concrete Consult will give support in short-term applications and new concrete technology.

PAPER

Replacement of Precipitated Calcium Carbonate (PCC) with CO_2 negative paper as result.

In cooperation with **KCPK**

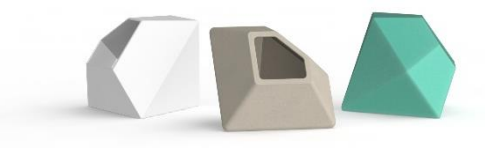
POLYMER

Replacement ground lime as functional fillers

- 1st prototype by 3D printing
- Biobased polymers + CO_2 based fillers
- Recycling industry based on chemicals

MORE OPTIONS

Process exchange with cooperation partner **SCW Systems**.
SCW = Super Critical Water: a clean energy technology process. Wet biomass is converted into green gas and reusable raw materials, where the CO_2 is used by Green Minerals



www.green-minerals.nl

Leaflet: Regeneration Design
www.regenerationdesign.nl
Regeneration