

CASE WATCH 02: CO₂ MINERALISATION

Capture and purify CO₂ emissions for reuse as raw material in process industry.

Mine CO₂ emissions by converting carbon costs into revenues (credits, resources).



MINING OUR EMISSIONS

KEY INSIGHTS

- value CO₂ streams
- keep license to operate
- reduce CO₂ emissions
- improve sustainability profile

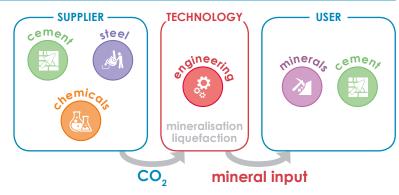


Figure 1: Synergy scheme ¹

CROSS-SECTOR COLLABORATION

Carbon-intensive process industries have a high potential to capture part of their CO₂ emissions.

Minerals and cement sectors have a demand for CO₂ as feedstock.

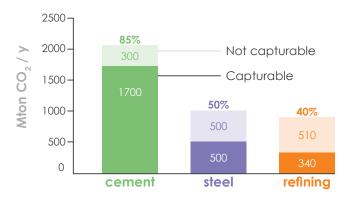


Figure 2: CO_2 potential per sector 3,4,5,6,7

SUSTAINABILITY IMPACT

Wins for industry

> for suppliers: 15-35 €/ton CO₂ emissions reduction¹0

> for minerals: 60-200 €/ton of mineral^{7,8}

Environmental gains

> CO₂ emissions reduction: 20-70% CO₂ mitigation potential^{7,9}

Wins for society

> public health benefits due to emissions reduction1

> improved business relations in regional clusters

) job creation and new skills development



Figure 3: Sustainability 1





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