EuGeLi
European Geothermal brine Lithium

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Supply Europe with Lithium for battery sector

Adapt the Direct Lithium Extraction process developed by Eramet for Argentinian brines to the geothermal brines in EU
A strong consortium, supported by EU

Resource owner + Go to market study (BP, permitting, risk analysis)

Active material dev. and industrialization & Pilot scale trials

Resource mapping
Technical adaptations of the Eramet process

Argentinian salars

- Brine composition
  - 400 mg/l Li
  - High sulfate content
  - High boron content

- Design criteria
  - Atmospheric pressure
  - T = 20°C

Alsace

- Brine composition
  - 177 mg/l
  - Low sulfate content 😊
  - Low boron content 😊
  - Specific components

- Design criteria
  - P = 25 bar g
  - T = 80°C

Direct Extraction column process

Columns filled with a tailor-made material (12 patents)
Successful first pilot on site and under pressure

- Operated @ Rittershoffen for 3 months December 2020-February 2021
- Extraction pilot connected to the reinjection well under pressure with CO₂
- No modification of the natural brine prior to the DLE
- No impact of the geothermal reagent (antiscaling)
- Li is extractible with a yield up to 90 %
- To be followed! Industrially scalable extraction pilot campaign planned in September