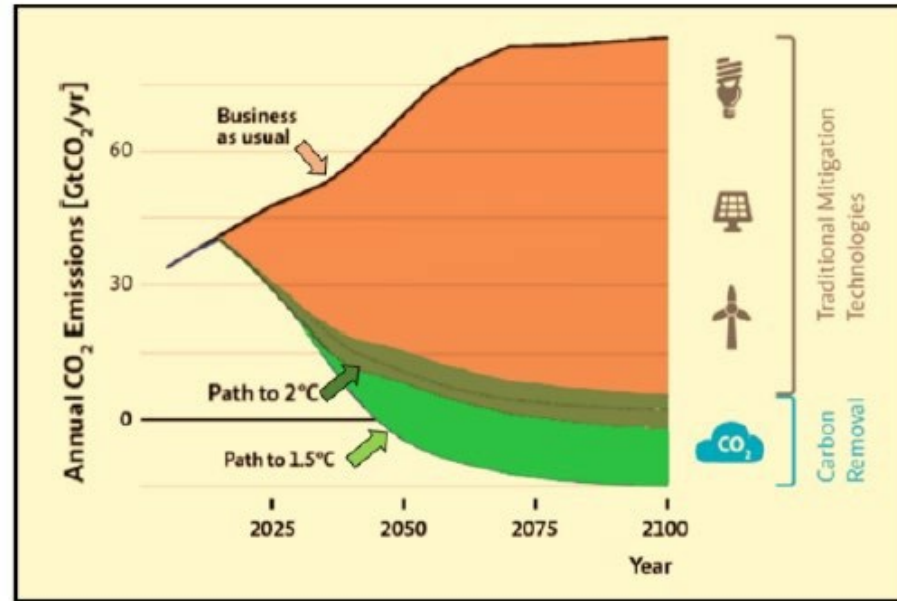


Problem

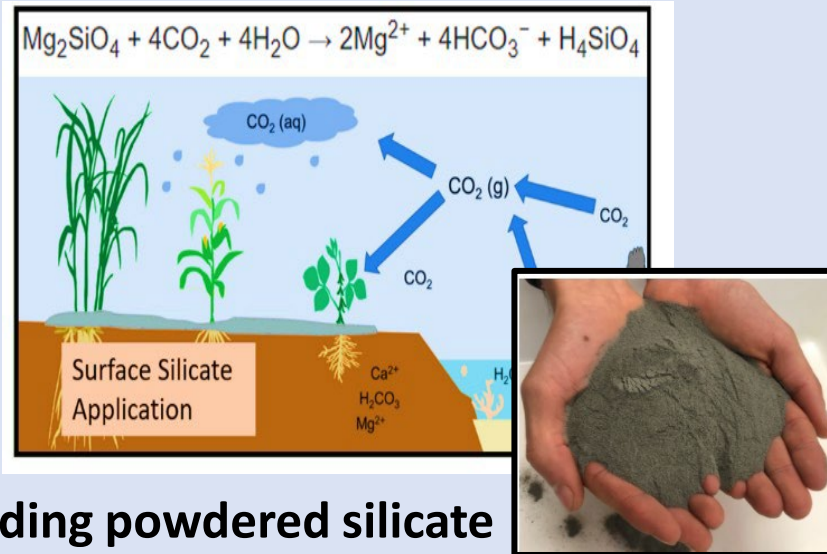
- global warming < 2°C
- 2 things will be needed:
 - 1) Reduce our emissions
 - 2) Remove CO₂ from the atmosphere



Master thesis topic: Co-deployment of Enhanced Weathering (EW) and biochar as carbon dioxide removal technologies in agricultural croplands

Carbon dioxide removal?

Enhanced weathering



Spreading powdered silicate rocks on land

Biochar

Thermochemical conversion of biomass under anoxic conditions → **highly stable carbon rich structure** → **no decomposition to CO₂**



+ Potential co-benefits in agriculture

? #CO₂ uptake/hectare

Thesis topic

- Mesocosm experiment combining natural and waste silicates (steel slag) with biochar
- Agricultural setting
- Field and lab work
- Location: ILVO, Merelbeke (near Ghent)

Goals of thesis:

- 1) Quantify carbon dioxide removal potential of EW, biochar and their co-deployment
- 2) Study potential interactions between EW and biochar

Last but not least:

- *Unique chance to contribute to delivering urgently needed data for carbon dioxide removal (ipcc) 😊
- *Applicability in agriculture 😊
- *Fun research group 😊



Interested/questions?

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