HEIDELBERGCEMENT

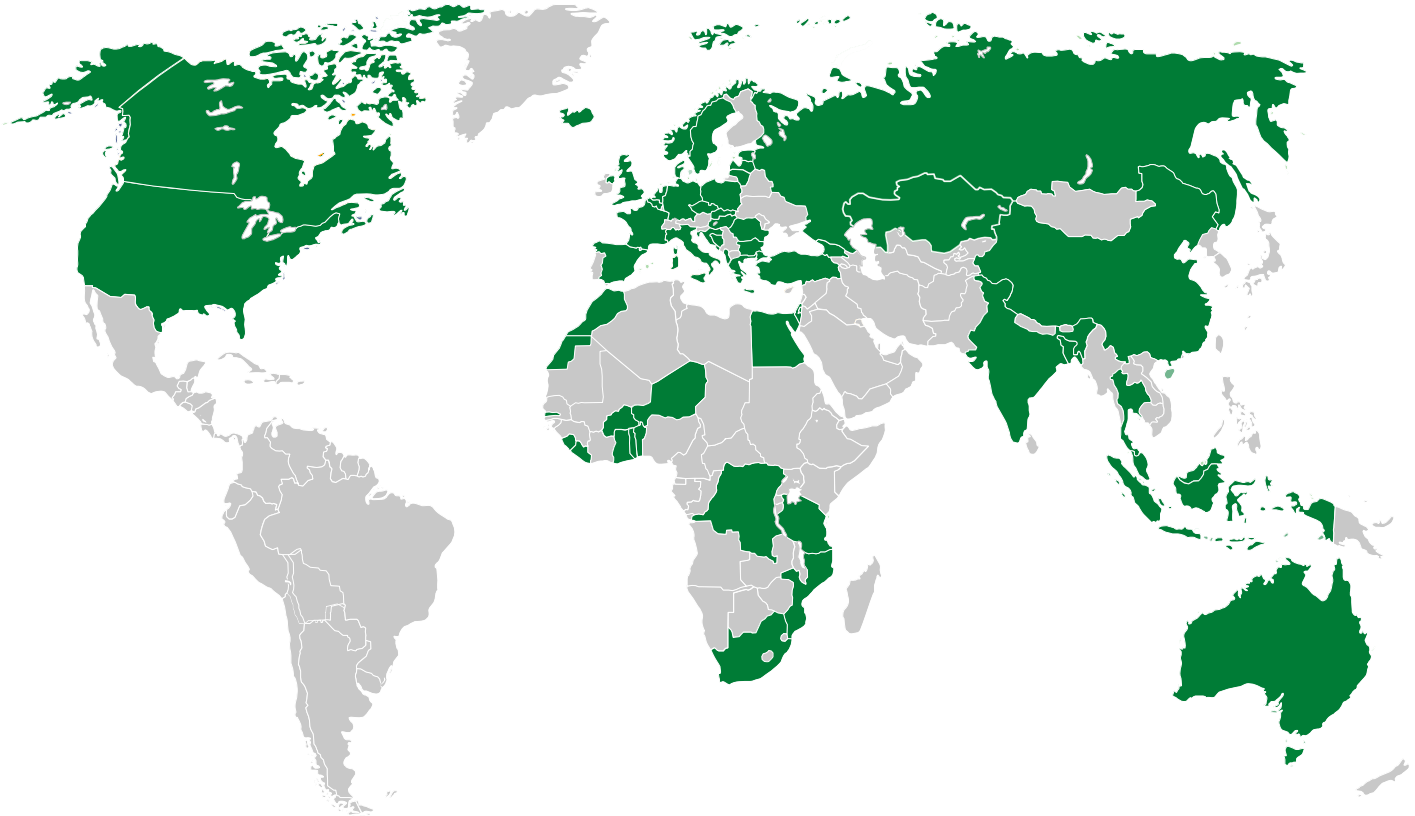
CCS in Baltic region from Cement Perspective

Jan Theulen

Director Alternative Resources, ESG

CO2 CARBON NEUTRAL

We are the largest vertically integrated building materials producer in the world



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Our goal is to realise carbon neutral concrete by 2050 at the latest.

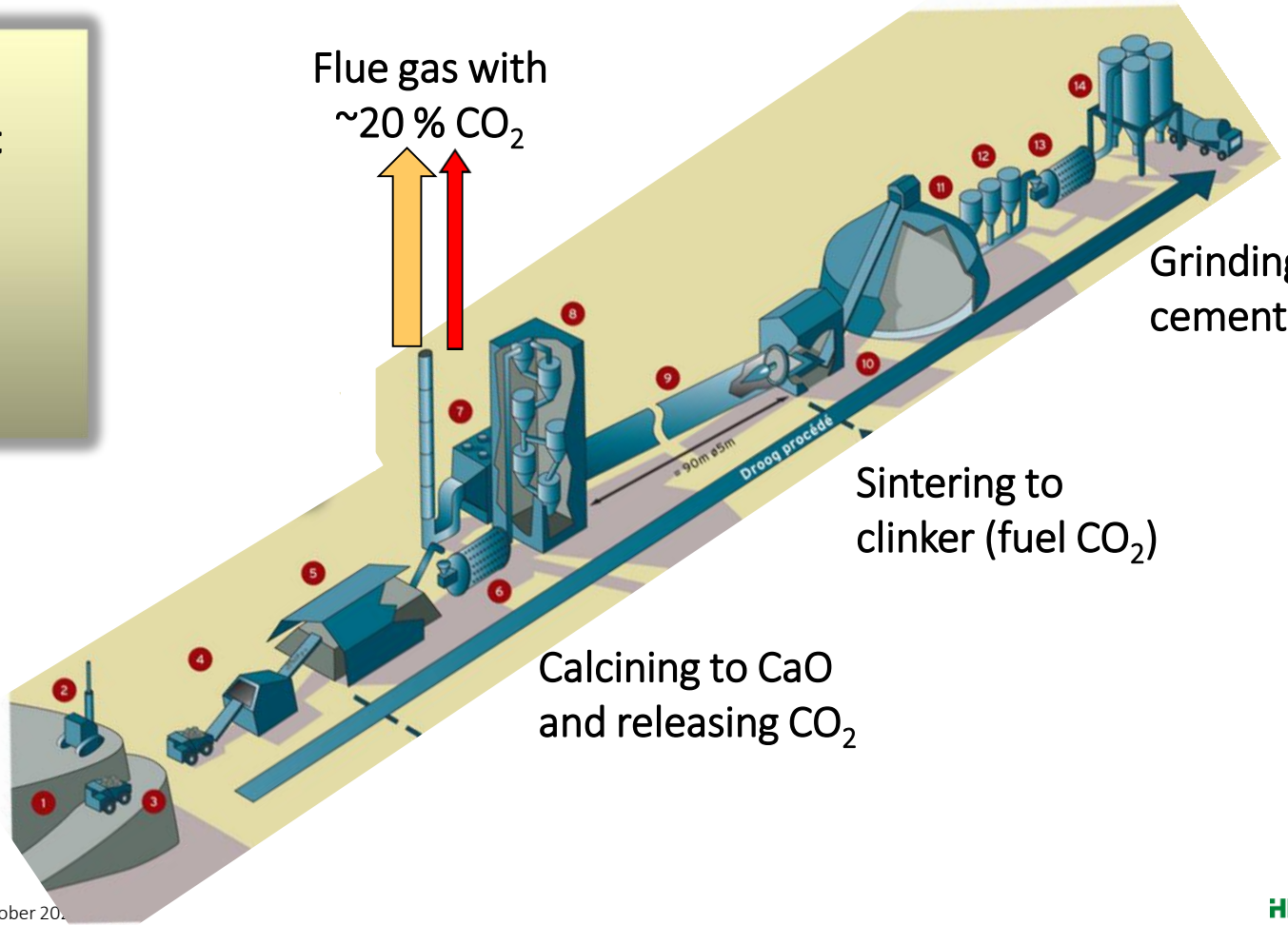
CO_2

CARBON NEUTRAL

Cement production and CO_2 emission

1 ton cement

+ 590 kg CO_2



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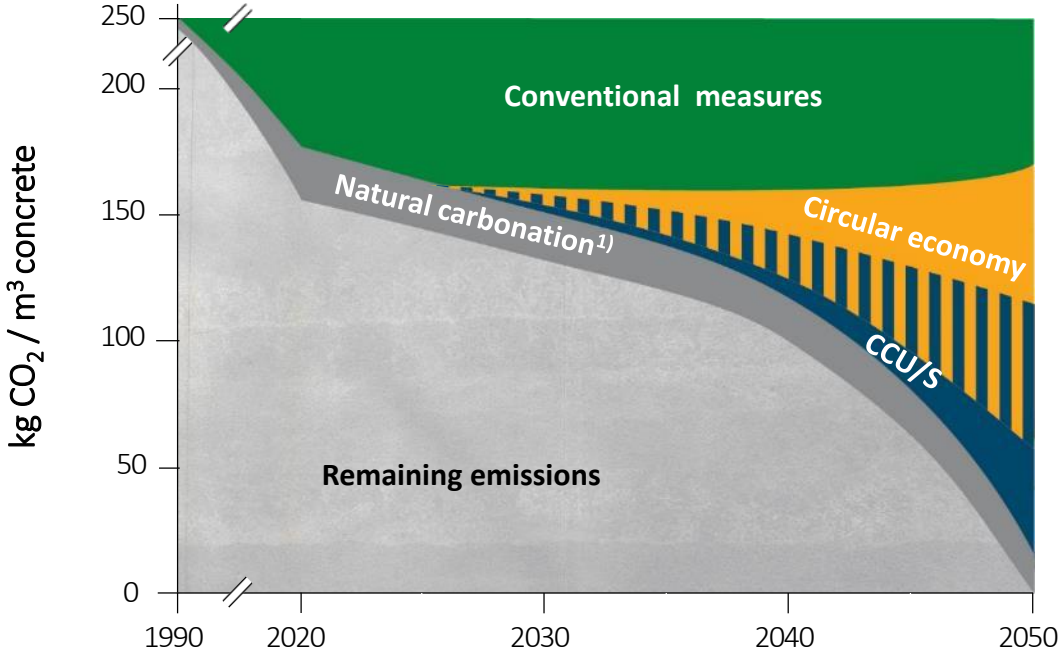
Carbon neutrality by 2050 build on 4 main tracks



1) Natural carbonation is the absorption of CO_2 from the atmosphere during the lifetime of a concrete construction

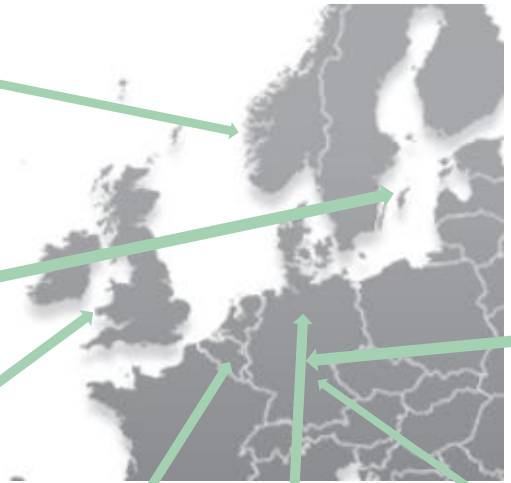
Portfolio HC in Europe on CC, CCU and CCS

CCS

Longship: full scale CCS in 2024

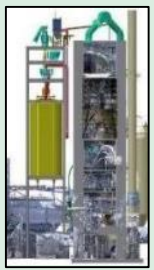
HC-Cementa CCS in 2030

HC-Hanson UK part of HyNet 2026

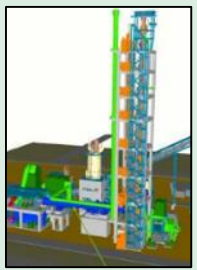


CC

LEILAC Capture
Demo 2019



LEILAC-2
Demo 2020-2024



Oxyfuel
Demo 2019-2024

CCU

CO2MIN
Mineralization olivine
2017-2020

C^2inCO2
Recycle concrete carbonation
2020-2024

K4
CO_2 carbonation
2021-2025

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CCUS at HeidelbergCement is real and ongoing !

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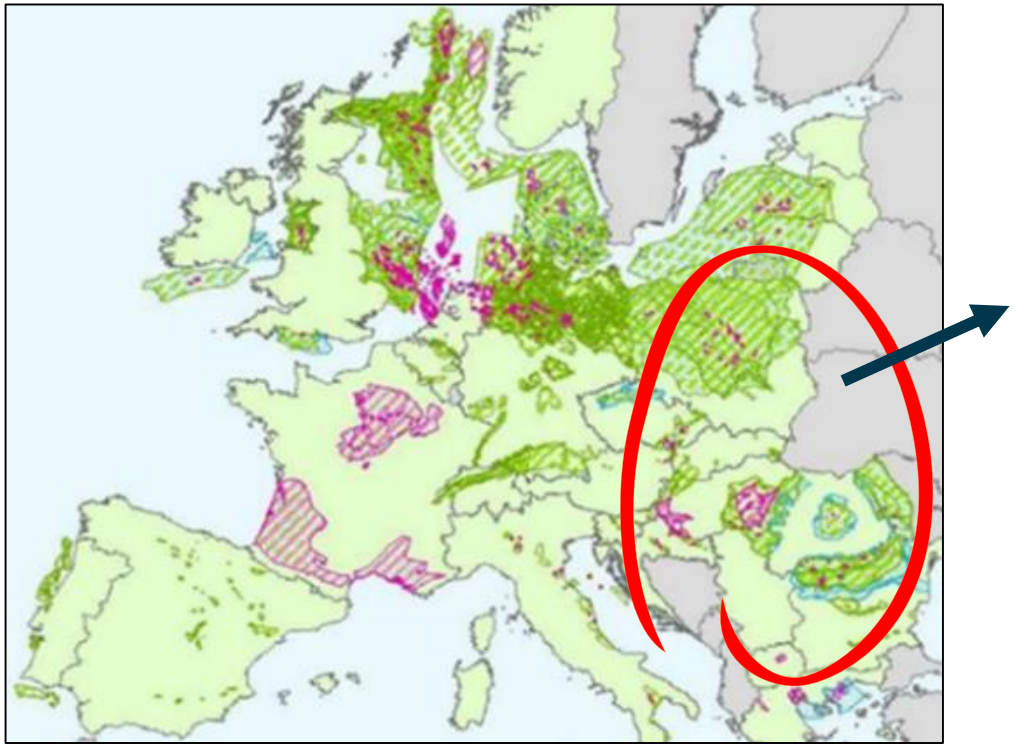
CCS beyond the North Sea → onshore in Eastern Europe



Onshore location + acceptance to be developed by HC and its partners

Trace suitable storage locations with Geological Institutes

Co-development with Storage Solution Provider (oil/gas)

Deep understanding of national laws and policy on CCS

Societal Acceptance is a pre-requisite

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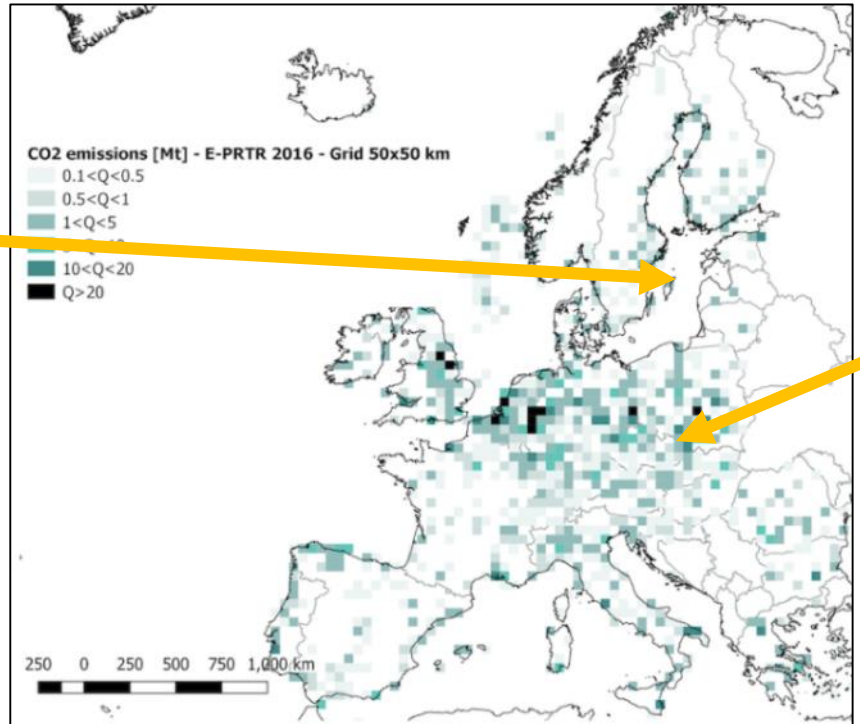
HeidelbergCement around the Baltic Sea

Slite
1.8 mton CO_2/year



CO2 emission clusters and CO2 storage capacity in Europe
Source (left) Carbon limits, adapted from Endrava (2018) Potential for CCS in Europe
Source (right)
https://ec.europa.eu/energy/sites/ener/files/documents/2010_10_co2_infrastructures.pdf

Górażdże
2.5 mton CO_2/year

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CCUS key pillar for Carbon Neutrality 2050….