

BUILDING A SUSTAINABLE TOMORROW: DECARBONISATION IN THE CEMENT INDUSTRY

Baltic Carbon Forum 2024

Eglė Jankauskienė



SCHWENK BUILDING MATERIALS GROUP

SCHWENK GLOBAL

SCHWENK was founded in Ulm in 1847 making it one of the oldest family companies in the German building materials industry.

SCHWENK is represented on the market internationally with a large number of investments and subsidiaries. They form a wide-ranging portfolio – from suppliers of building materials to research companies.

SCHWENK DIVISIONS



Cement



Sand & Gravel



Concrete



Pumps



Recycling



SCHWENK UNDERSTANDING

VISION

Sustainable building material solutions for future generations

MISSION

Development of CO₂ neutral products and processes with the help of outstanding employees and innovative technologies

VALUES



FOR FUTURE GENERATIONS



TWO STEPS AHEAD



MORE THAN THE SUM OF PARTS

AKMENĖS CEMENTAS – PART OF THE SCHWENK

AKMENĖS CEMENTAS

Akmenės cementas operating since 1952 is the only one cement plant in Lithuania and biggest in the Baltics. Part of SCHWENK since 2021.



610 employees



~1,2 MTPA

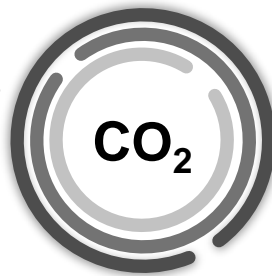


35,7 MEUR EBITDA

AKMENĖS CEMENTAS CO₂ TARGETS

TARGET 1

Reduction of the average CO₂ emission factor of the clinker production till 2033 by saving approximately **78 000 t CO₂** per year



TARGET 2

Reduction of the average clinker factor (% clinker in cement) till 2033 to a level enabling clinker savings of **257 000 t**

TARGET 3

CO₂ neutral cement plant by 2033 which will utilise the currently developed technologies for CO₂ capture, storage and utilisation



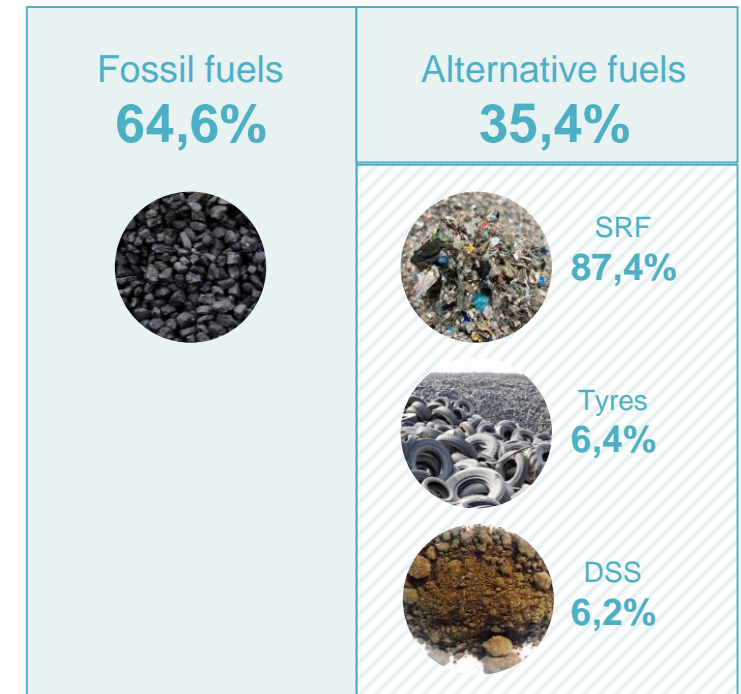
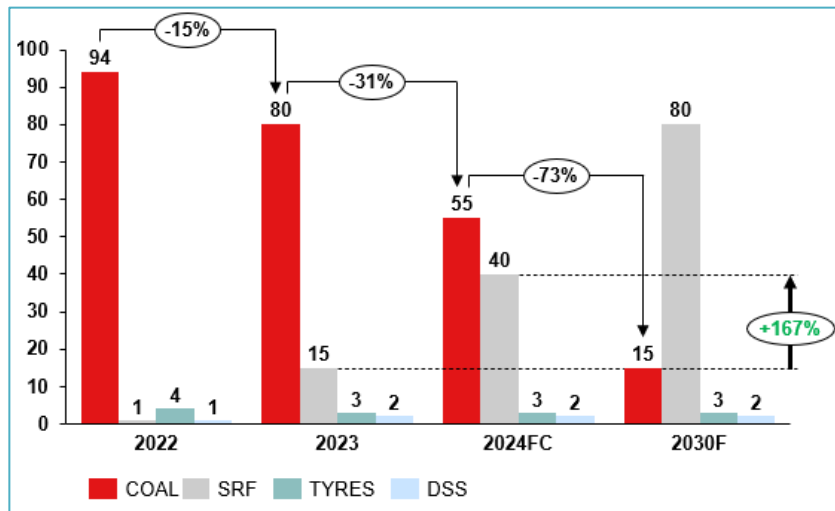
CO2 REDUCTION ROADMAP



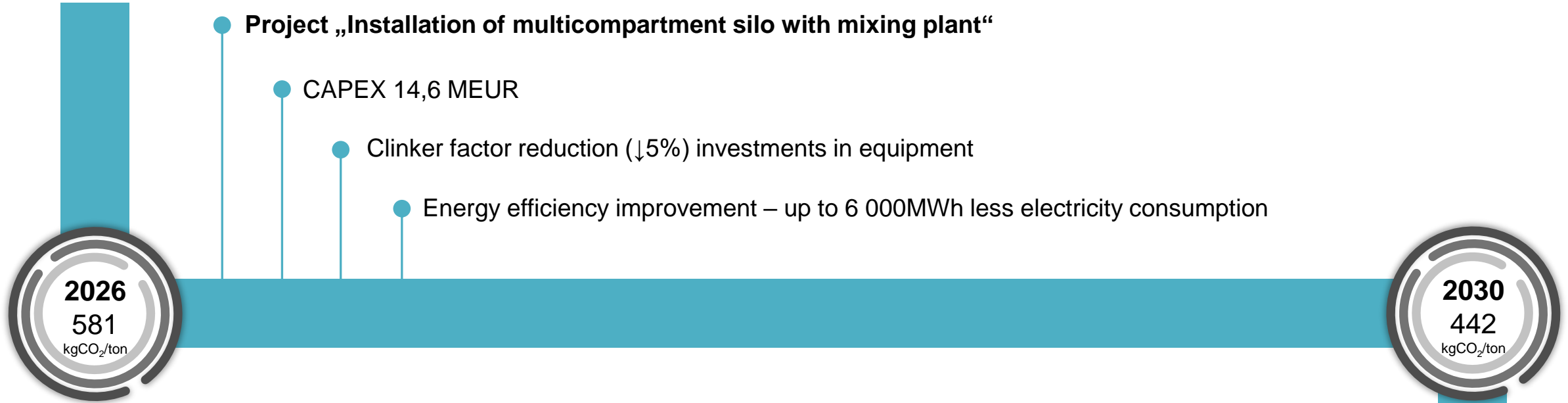
- Project „Reducing CO₂ emissions by replacing fossil fuels with alternatives“
- CAPEX 30 MEUR
- Industrial operation since 2024 07 06
- ZERO amount of any kind of waste enters environment
- Fuel consumption per ton of clinker %:

SRF supply: 50% LOCAL, 50% IMPORT

Types of fuel (2024):



CO2 REDUCTION ROADMAP



Project „MECACLAY: Sustainable Cement Production through Mechano-Activation of Clay“

green chemistry 

any clay 

simple process 

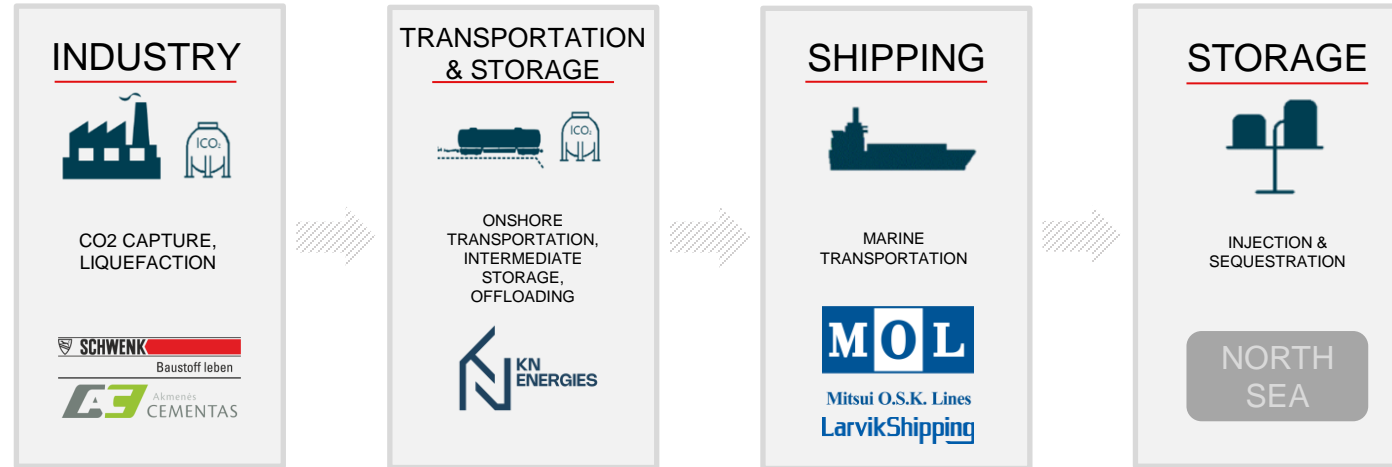
- CAPEX 100 MEUR
- Clinker replacement with MECACLAY up to 200KTPA
- Application to Innovation Fund in April, 2024
- Pilot small scale plant in SCHWENK Zement in Allmendingen
- Key features of MECACLAY

CO2 REDUCTION ROADMAP

- Project „CCS Baltic Consortium“

- CC CAPEX 400-500 MEUR

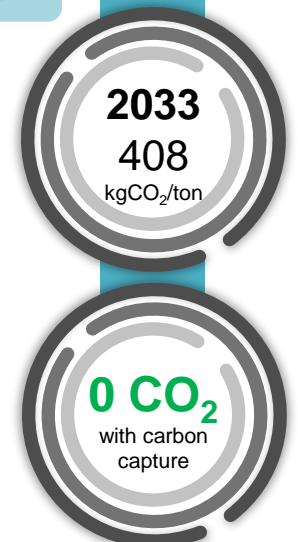
- Project partners and value chain:



- Project timeline:



- SCHWENK contribution to carbon capture research and development:



WHAT REMAINS TO BE DONE TO ESTABLISH CC IN INDUSTRIAL SECTOR?



REGULATORY
FRAMEWORK
AND POLICIES

PUBLIC
AWARENESS
AND
ACCEPTANCE



COST
ADEQUACY
AND
FINANCING

- Advocate for EU strategy for CCS, outlining the targets, policies and business models.
- Work with policymakers to create an environment for CCS investment.
- Educate the public about CCS benefits, safety measures and environmental impact.
- Address any misconceptions or concerns related to CO₂ storing.
- Assess the economic viability of CCS projects.
- Secure funding and financing mechanisms for infrastructure development.



Baustoff leben

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