

March 2025



# Litherm – fully electric kiln for carbon-neutral cement & lime production

CEO Felix Nelles

# Cement & lime production contribute 8% of global CO<sub>2</sub> emissions

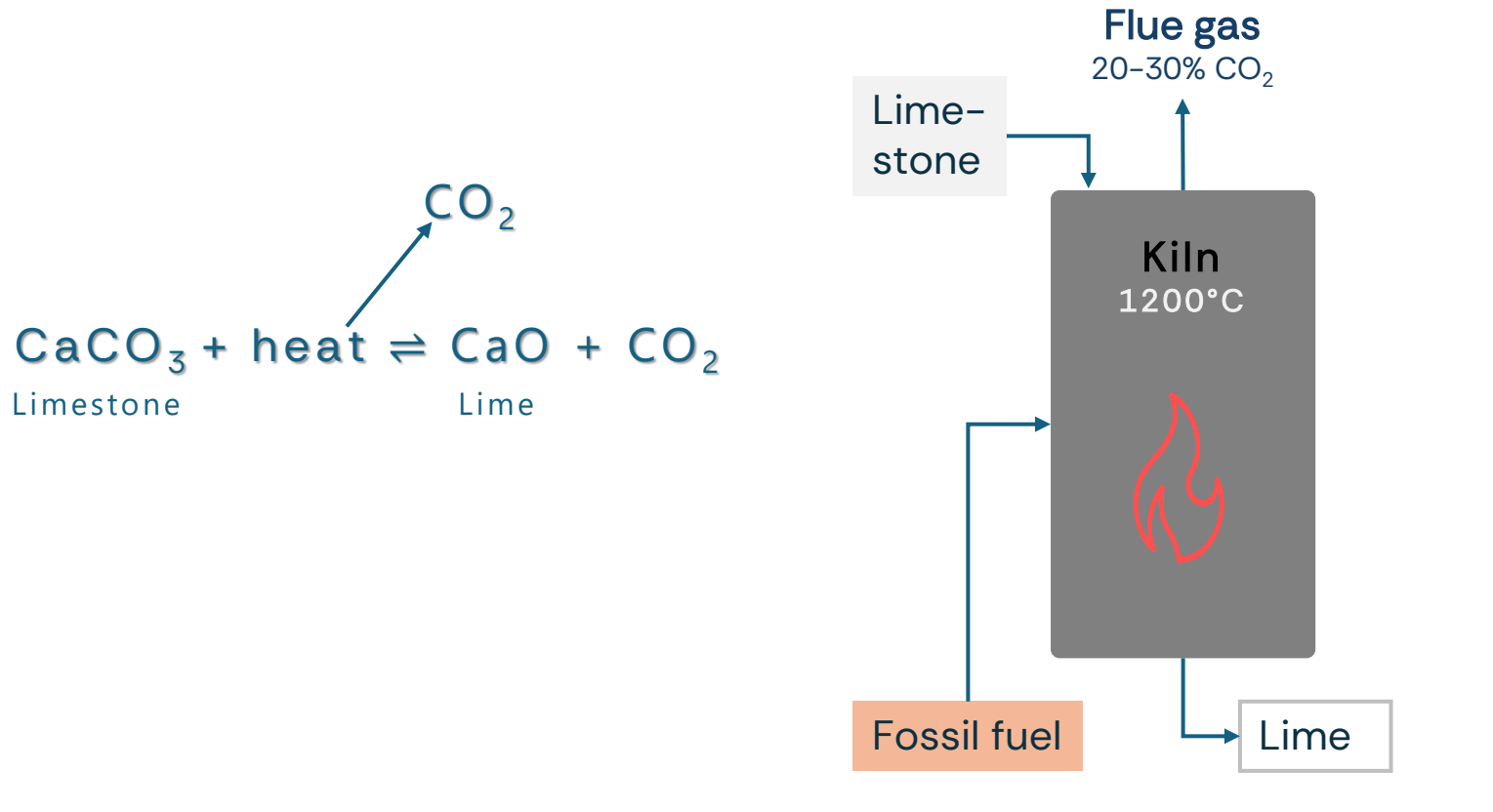
Cement & lime are essential—with no carbon-neutral alternatives for many applications.

EU cement producers must purchase CO<sub>2</sub> certificates for all emissions from 2034.

~50 B€ investment is required to decarbonize this industry in Europe & North America.

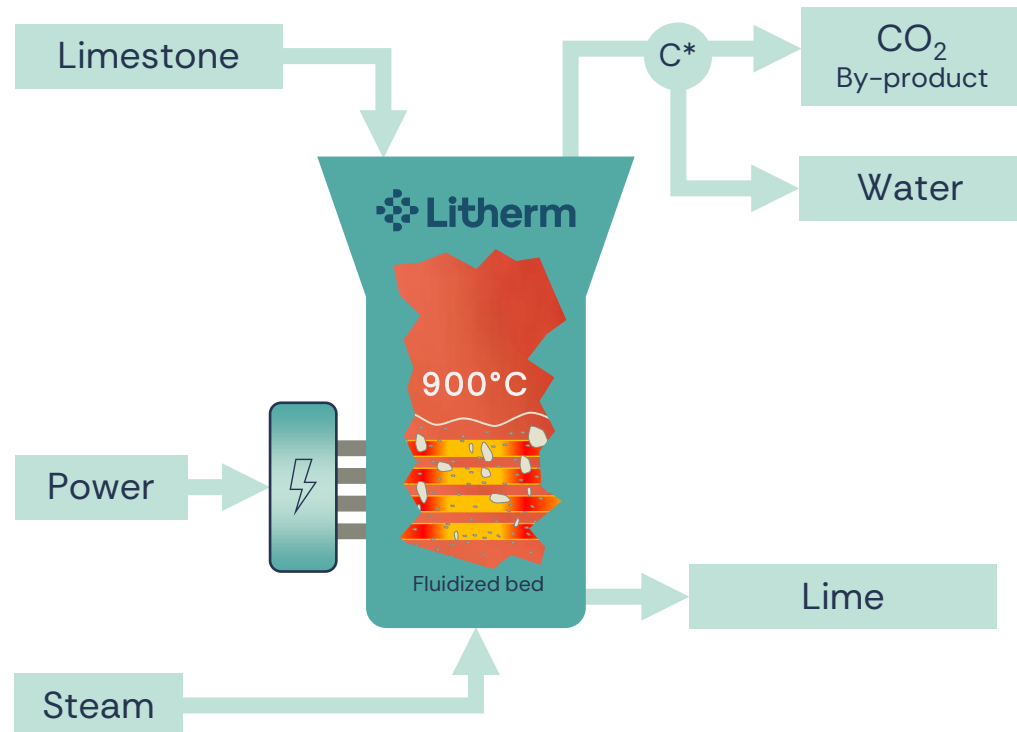


## Conventional lime kiln



- Highly efficient
- CO<sub>2</sub> from two sources
- ~1,1 t CO<sub>2</sub> per t lime
- Low CO<sub>2</sub> conc. in flue gas

## Fluidized bed with integrated CO<sub>2</sub> capture



Fully electric



Zero fuel emissions



Integrated CO<sub>2</sub> capture

η

Highly efficient



Extremely compact



Suitable for cement clinker



# Step-by-step upscaling as the basis for a pilot and demo system

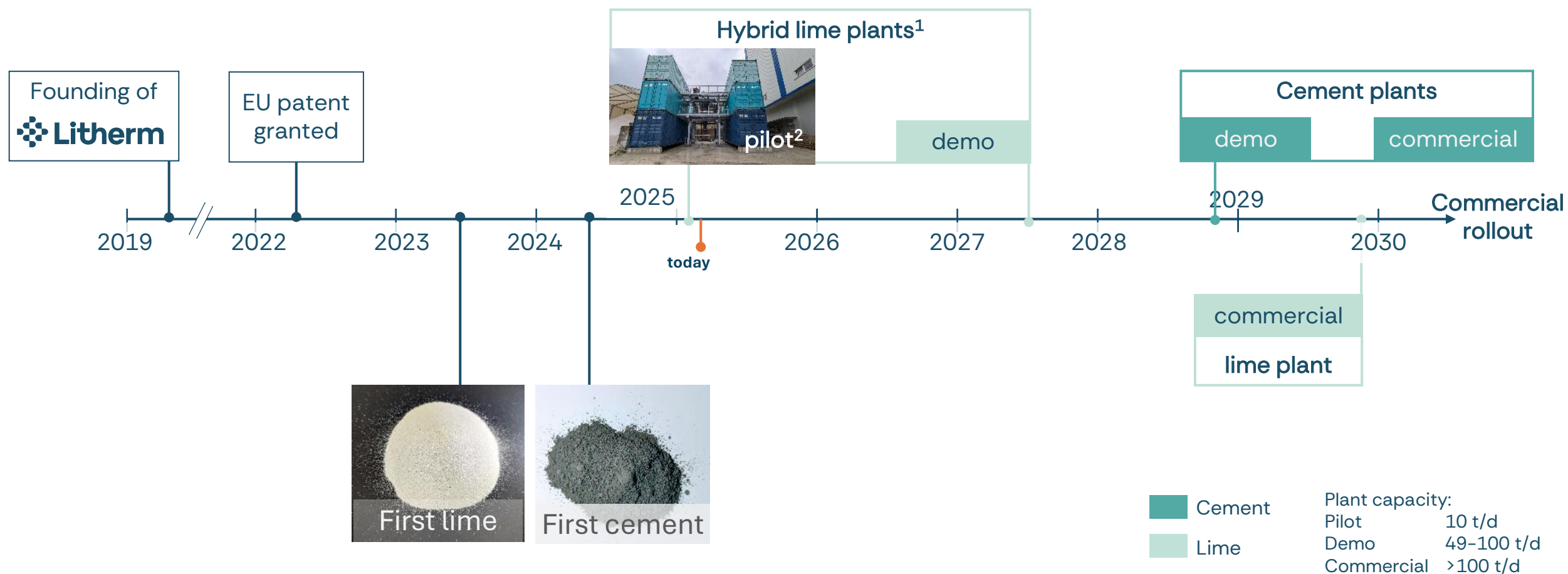
## R&D – Proof of concepts



## First fully electric produced lime & cement



# Technology development and commercialization roadmap



Our ask for the next phase on our commercialization roadmap is 6.4 m€

### Milestones until end of 2027

#### Pilot plant – 10 tpd lime

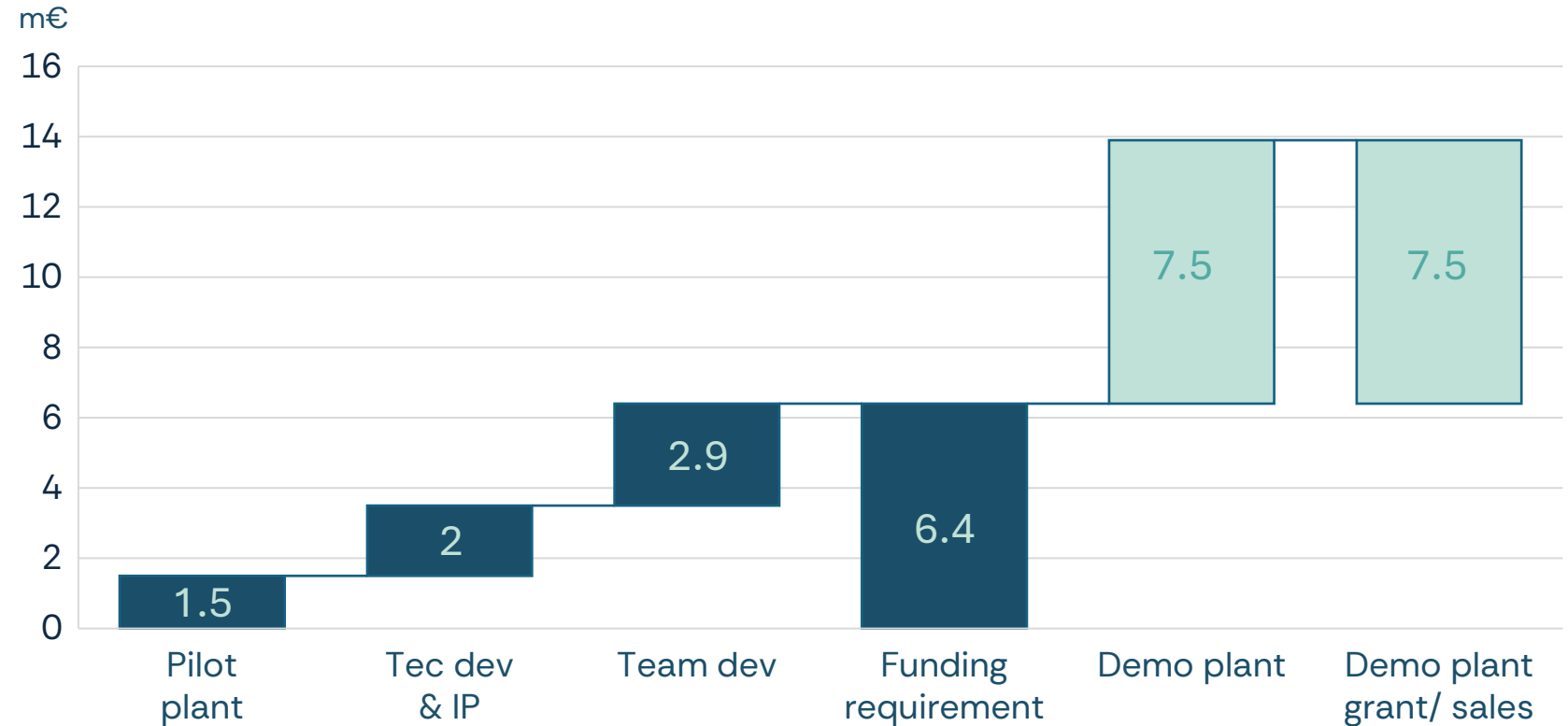
- Product test campaigns
- Long term operation

#### Demo plant – 50 tpd lime

- Engineering completed
- Customer contract signed

#### Commercial

- EPC partnership
- Sales pipeline development



We are looking for 6.4 m€ in funds to hire key staff, upgrade the pilot plant, execute pilot plant test campaigns & develop the demo plant.





Litherm

**Contact**

Felix Nelles

T +49 151 64342494

E [felix.nelles@litherm.de](mailto:felix.nelles@litherm.de)

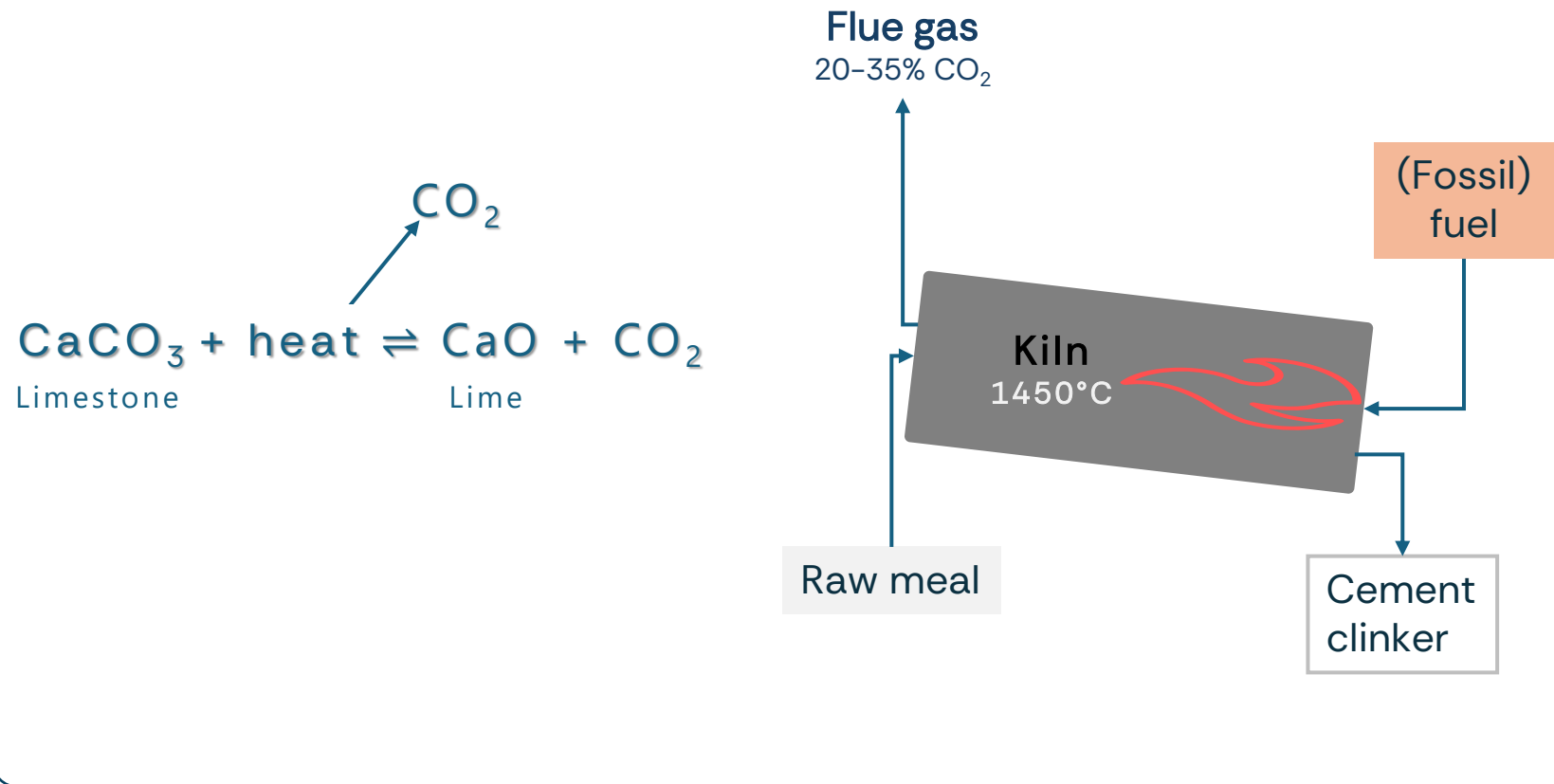
Litherm Technologies GmbH

Oberstr. 3

D-47829 Krefeld



## Conventional cement kilns



- Highly efficient
- $\text{CO}_2$  from two sources
- Low  $\text{CO}_2$  conc. in flue gas