

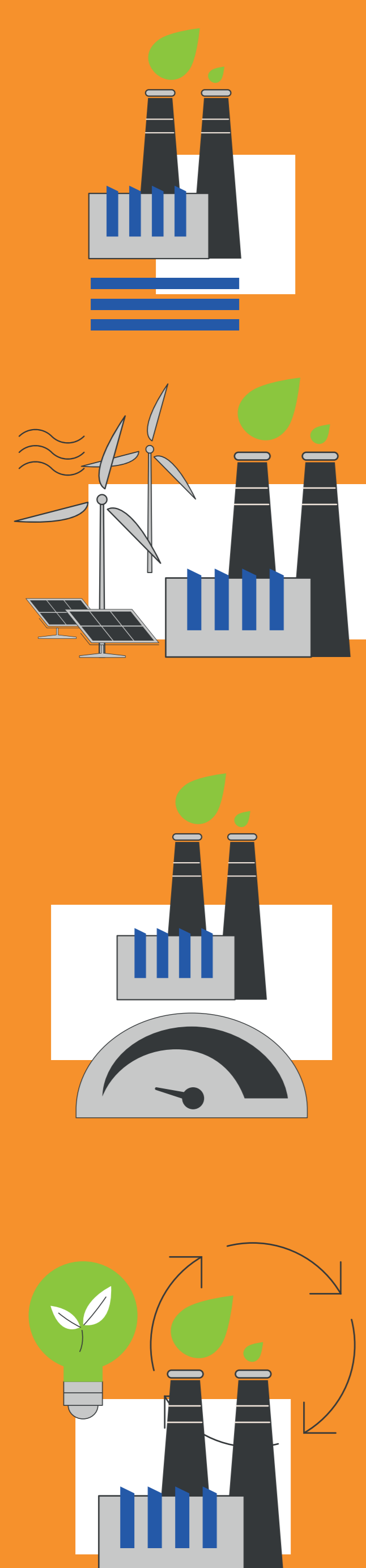


# ELECTRA

Electrification of high temperature and flexible technologies  
for transforming cement, lime and pulp industry

The ELECTRA project addresses the challenge of providing high-temperature heat to industrial processes, such as those in the cement, lime, and pulp industries, without compromising product quality or power input flexibility. ELECTRA aims to tackle hard-to-abate carbon dioxide emissions through flexible electrification and CO<sub>2</sub> capture. The project will develop new electrified manufacturing technologies to drastically reduce greenhouse gas emissions by substituting fossil fuels with renewable electrical energy and enabling efficient CO<sub>2</sub> capture and removal. Key technologies include plasma heating, resistive heating, rotary kiln, and fluidized bed technologies. Despite similarities in high-temperature processes, each industry has unique requirements, leading to the development of several tailored technology concepts within ELECTRA.

## OBJECTIVES



Demonstrate high temperature & flexible electrified industrial heating process units

Holistic design advancing new materials, increasing process flexibility and safety and matching renewable electricity generation to heat industrial processes

Validate the applicability at high performance through evidence-based analysis of ELECTRA technologies regarding economic, environmental, and societal impacts

Maximise impact by accelerating the adoption of electric kiln and fluidised bed technologies to decarbonise cement, lime and pulp industries and boosting Hubs for Circularity

## CONTACT US

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## STAY IN TOUCH



#high-temp-electrification



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