Low Emissions Intensity Lime and Cement

Fact Sheet

Project Information

LEILAC
Grant agreement ID: 654465

Status
Ongoing project

Start date
1 January 2016

End date
31 December 2020

Overall budget
€ 20 970 635

EU contribution
€ 11 932 231

Coordinated by
CALIX - EUROPE
France

Funded under
H2020-EU.3.3.2.3.

Objective

LEILAC, Low Emissions Intensity Lime And Cement, will successfully pilot a breakthrough technology that will enable both Europe’s cement and lime industries to reduce their emissions dramatically while retaining, or even increasing, international competitiveness. LEILAC will develop, build and operate a 240 tonne per day pilot plant demonstrating Direct Separation calcining technology which will capture over 95% of the process CO2 emissions (which is 60 % of total CO2 emissions) from both industries without significant energy or capital penalty.

Direct Separation technology uses indirect heating in which the process CO2 and furnace combustion gases do not mix, resulting in the simple capture of high quality CO2. This innovation requires minimal changes to the conventional processes for cement, replacing the calciner in the Preheater-Calciner Tower. For lime there is no product contamination from the combustion gas. The technology can be used with alternative fuels and other capture technologies to achieve negative CO2 emissions. The project will also enable research into novel building materials with a reduced
CO2 footprint, as well the upgrade of low value limestone fines and dust to high value lime applications.

The high potential of the project is complemented by high deliverability. The requested grant will secure €8.8m of in-kind funding and support from the LEILAC consortium members, which include world leading engineering, cement, lime and R&D organisations.

To accelerate further development, LEILAC will deliver a techno-economic roadmap, and comprehensive knowledge sharing activities including a visitor centre at the pilot site near Brussels. In order to reach the required 80% emissions reductions by 2050, CCS will need to be applied to 85% of European clinker production, and LEILAC is uniquely placed to allow Europe to achieve these targets in a timely, effective and efficient manner.

Field of science

/technology/environmental engineering/energy and fuels/fossil energy/gas
/technology/environmental engineering/energy and fuels

Programme(s)

Topic(s)

Call for proposal

H2020-LCE-2015-1-two-stage

Funding Scheme

RIA - Research and Innovation action

Coordinator

CALIX - EUROPE

Address
16 Rue Du Pere Brottier
92190 Meudon
France

Activity type
Private for-profit entities
(excluding Higher or Secondary Education Establishments)

EU contribution
€ 1 051 428,75

Contact the organisation
Participants (14)

HEIDELBERGCEMENT AG
Germany
EU contribution
€ 2,431,095
Address
Berlin Strasse 6
69120 Heidelberg
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Website
Contact the organisation

CEMEX RESEARCH GROUP AG
Switzerland
EU contribution
€ 0
Address
Romerstrasse 13
2555 Brugg Bei Biel
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Website
Contact the organisation

TARMAC TRADING LIMITED
United Kingdom
EU contribution
€ 0
Address
Millfields Road Ettingshall
WV4 6JP Wolverhampton
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

LHOIST RECHERCHE ET DEVELOPPEMENT SA
Belgium
EU contribution
AMEC FOSTER WHEELER ENERGY LIMITED

United Kingdom

EU contribution € 528 738

Address Booths Park Chelford Road
Knutsford
WA16 8QZ Cheshire

Activity type Private for-profit entities
(excluding Higher or Secondary Education Establishments)

Contact the organisation

CALIX LTD

Australia

EU contribution € 0

Address Level 1 9-11 Bridge Street
2073 Pymble Nsw

Activity type Private for-profit entities
(excluding Higher or Secondary Education Establishments)

Contact the organisation

STICHTING ENERGIEONDERZOEK CENTRUM NEDERLAND

Netherlands

EU contribution € 197 510

Address Westerduinweg 3
1755 LE Petten

Activity type Research Organisations

Contact the organisation
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<td>€ 366 282</td>
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<td>Netherlands</td>
<td>€ 149 267.25</td>
<td>Anna Van Buerenplein 1 2595 DA Den Haag</td>
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<td>SOLVAY SA</td>
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**Last update:** 15 November 2019  
**Record number:** 199288