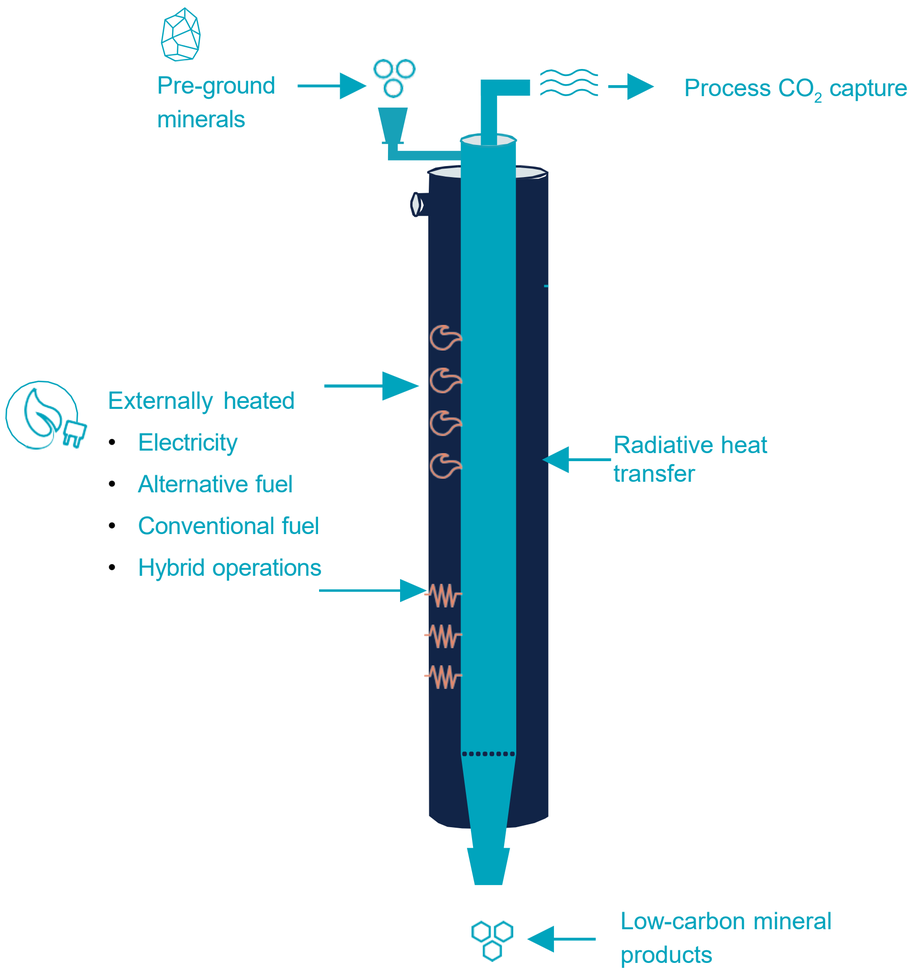
calix | Mars is for quitters

Decarbonising Industrial Heat & Electrification

decarb(na) connect
25-27 FEBRUARY 2025
DECARB CONNECT NEXT GEN AWARDS

Calix’s core platform technology

A new way to heat stuff up



calix

Solving global challenges

Electrification of industrial processing | Capture of unavoidable emissions | Sustainable environmental solutions

7 COUNTRIES
5 CONTINENTS
9 OPERATIONAL SITES

120+ EMPLOYEES

18 LANGUAGES SPOKEN BY EMPLOYEES

12 COUNTRIES IN WHICH WE WORK

2020 BECAME UNGC PARTICIPANT

29 PATENT FAMILIES

$120m+ INVESTED TO DATE

Progress so far

Development & deployment into target markets

Magnesia, Clay
CFC15000
Natural Gas calciner
2013
Victoria, Australia
TRL 9

Cement & Lime
Leilac-1
Natural Gas calciner
2019
Lixhe, Belgium
TRL 6

Iron & Steel
ZESTY H_2-DRI pilot
Electric Elements calciner
2023
Victoria, Australia
TRL 5

Cement & Lime
Electric Elements
calciner
2021
Seville, Spain
TRL 5

Lime
Electric Elements
calciner
2021
Stockholm, Sweden
TRL 5

Grid balancing
Thor's Hammer
Direct Electric calciner
2024
Victoria, Australia
TRL 4

Proven at pilot-scale

Cement & Lime

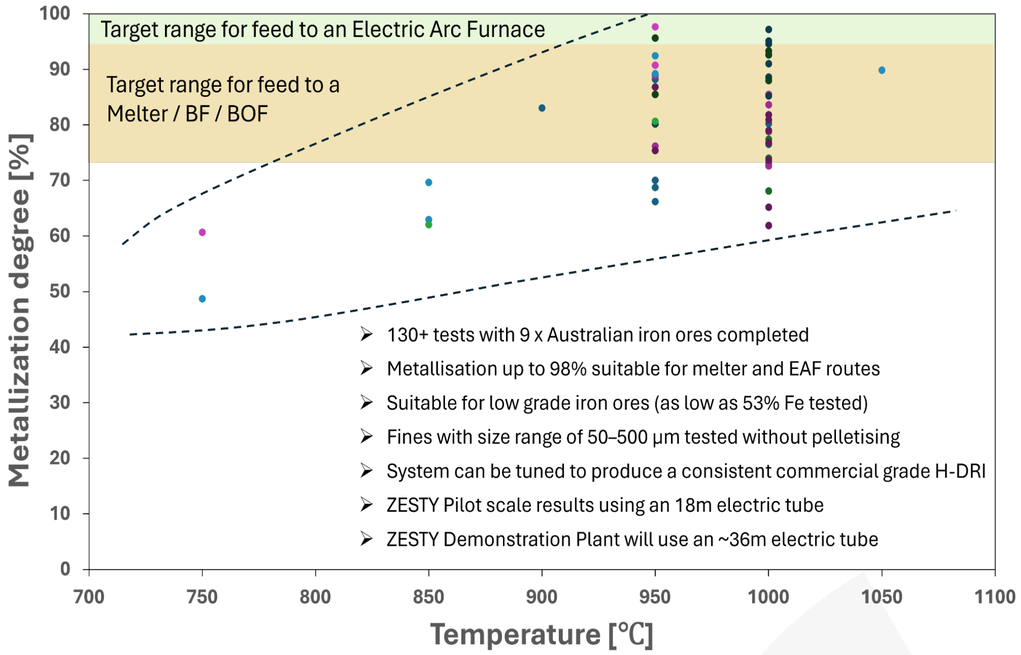
Electric calcination & high purity process CO_2 capture

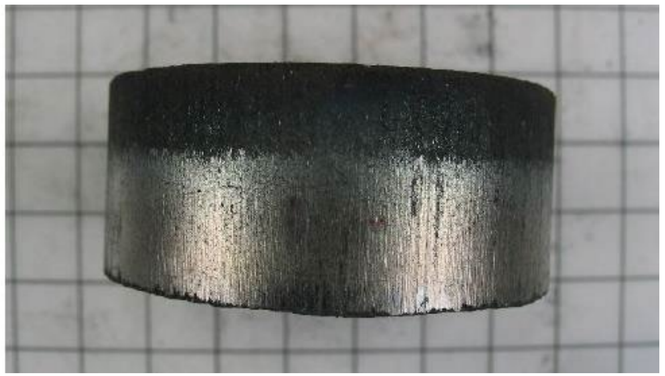
- Multiple runs since 2019 on cement meal and limestone
- No impact on clinker quality
- >98 % CO_2
- Tube didn't melt (!) or foul
- Techno-economics points to potential lowest cost CO_2 avoidance
- Upgrades underway for full hybrid operation

Cement & Lime
Leilac-1
Natural Gas calciner
2019
Lixhe, Belgium
TRL 6

Iron & steel

Green iron briquettes from low-grade hematite ores





- Target metallisation achieved across multiple ore grades
- Briquettes made from Zesty H_2-DRI approaching target densities for safe shipment
- Techno-economics points to potential lowest cost H_2-DRI

Commercial strategy

Delivering impact targeted at the world's largest sources of industrial emissions

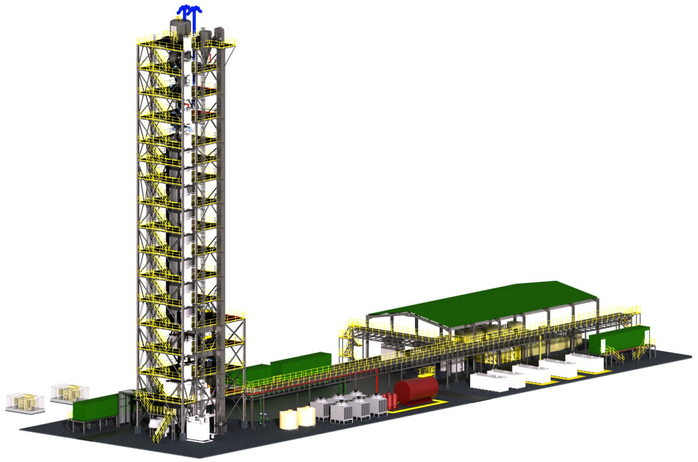
Industry	Cement & Lime	Direct Air Capture	Iron & Steel	Alumina	Critical Minerals
Business Subsidiary	Leilac	Leilac	zesty by calix	ZEAL	calix | PLS JOINT VENTURE
Addressable market	Royalties of $3-10Bpa	Royalties of $3-10Bpa	Royalty % of $640 Bpa	Royalty % of $45 Bpa	Royalty % of $7 Bpa
Potential climate impact	~9% Global CO_2	Removing legacy emissions	~8% Global CO_2	~3% Global CO_2	Enabling the clean energy transition
Partners	Heidelberg Materials, CEMEX, TITAN, MLC, CIMPOR, Lhoist, BORAL	Heirloom	HILTCRC	HILTCRC	PLS
Strategy	Capital-light licensing model for rapid deployment & cost alignment				

Towards Commercial Demonstration

Cement & Lime

Leilac-2
Heidelberg Materials
Ennigerloh, Germany
100ktpa process CO_2 capture – Alternative Fuels
Target Commissioning 2026

Iron & Steel



ZESTY Iron Demo Plant
Calix
Australia
30ktpa green iron – fully electric, minimal H_2 use
Target Commissioning 2027

Lithium

Mid-Stream Lithium Processing
Pilbara Minerals
Pilgangoora, Australia
3ktpa lithium phosphate – fully electric
Target Commissioning 2025

Investor relations
Investorrelations@calix.global

Media enquiries
media@calix.global

calix.global

Subscribe to our Newsletter

Mars is for quitters