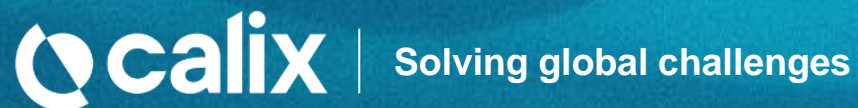


# CALIX LIMITED

## Investor Presentation

October 2022



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- Executive summary
- Technology and business overview
- Equity raising overview
- Key risks and international selling restrictions
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### CALIX LTD (ASX: CXL)

Calix is urgently developing great businesses that deliver positive global impact. Leveraging its patented technology, it is developing and scaling environmental solutions for CO<sub>2</sub> mitigation, sustainable mineral and chemical processing, advanced batteries, biotechnology and water treatment.

Because there's only one Earth. Mars is for quitters.

### Recent operational highlights

Calix has a rapidly growing pipeline of projects as we accelerate commercialisation and application of our core technology for industrial decarbonisation:

- **Leilac licence agreement with Heidelberg Materials:** The first full licence agreement, signed with Heidelberg Materials represents an important milestone for the Leilac technology, and a first-of-a-kind agreement for the industry. It also sets an attractive benchmark for future contract negotiations with future counterparties.
- **Australian Government grants of A\$41m for lime and cement projects:** The Australian Government has announced a total of A\$41m grant funding for two lime/cement decarbonisation projects for the deployment of Calix's Leilac technology with Adbri and Boral.
- **Full Documentation is in essentially final form for JV with Pilbara Minerals to develop sustainable lithium:** Calix is proceeding to commit to form a joint venture with Pilbara Minerals to develop sustainable lithium salt processing, supported by a grant of A\$20m from the Australian Government.
- **Promising new pathways to green steel with Calix's Zero Emissions Steel TechnologyY (ZESTY):** Initial testing shows highly promising results for a range of iron ore types. More comprehensive test runs and a demonstration scale plant are now in planning.

# Equity raising summary

Calix is undertaking an equity raising to accelerate commercialisation of its technology.



## The equity raising

- A fully underwritten institutional placement of \$60m comprising the issue of 13.2 million shares at an issue price of A\$4.55 per share; and
- A Share Purchase Plan ("SPP") to raise up to an additional A\$20m<sup>1</sup>.

## Use of funds

- Calix's key industrial decarbonisation solutions are being fast tracked and commercialised through a combination of joint ventures, licensing and spin-out strategies. Propelled by governments, companies and investors committing to net zero CO<sub>2</sub> emissions, Calix has a rapidly growing pipeline of projects across the globe, each addressing urgent decarbonisation challenges in industry.
- The equity raising will accelerate commercialisation of the Calix technology platform and enable rapid further technology development targeted at significant strategic market opportunities.

Application	A\$m
1. Accelerate commercialisation of Leilac's cement and lime decarbonisation technology.	38.0
2. Construct a lithium salt demonstration processing plant in JV with Pilbara Minerals.	17.5
3. ZESTY Green Iron / Steel – Plant Modifications, Further Trials and a FEED Study for 30kTpa Demonstration Facility	2.5
4. Transaction costs	~2.0
<b>TOTAL</b>	<b>60.0</b>

- SPP proceeds will fund discretionary spend of up to \$20m to accelerate alternative energy options - Electric, Alternative Fuels Development.
- Pro-forma cash post-equity raising of ~\$83m<sup>2</sup> will strengthen Calix's balance sheet & enhance its flexibility to fast-track & execute its growth strategy.

### Notes:

1. The SPP is non-underwritten. Calix reserves the right to increase the size of the SPP or may decide to scale back applications under the SPP at its absolute discretion.
2. Pro-forma cash balance calculated by taking 30 June 2022 cash balance of \$25m plus placement proceeds of \$60m less transaction costs of ~\$2m (excludes proceeds from the SPP).



# Market opportunity

## Industrial decarbonisation – the net zero challenge.



### A global challenge with strong tailwinds

- Governments, companies and investors are focused on the urgent decarbonisation of our industries in pursuit of a net zero CO<sub>2</sub> economy.
  - ~90% of global GDP now under net zero commitments.<sup>1</sup>
  - US\$391b – assets allocated to ESG Exchange Traded Funds in 2021, up from US\$78b in 2019.<sup>2</sup>

### Decarbonising our essential industries

- Indispensable, carbon intensive and hard-to-abate:
  - Cement, lime, iron and steel provide the foundations of our societies and economies. They will be indispensable to ensuring global living standards continue to rise in a net zero world.
  - They also account for an estimated 15% of global CO<sub>2</sub> emissions and are some of the hardest-to-abate sectors of our economy.
- Materials for a clean economy:
  - From lithium for batteries to metals for advanced manufacturing, the materials of our future also require sustainable processing solutions.

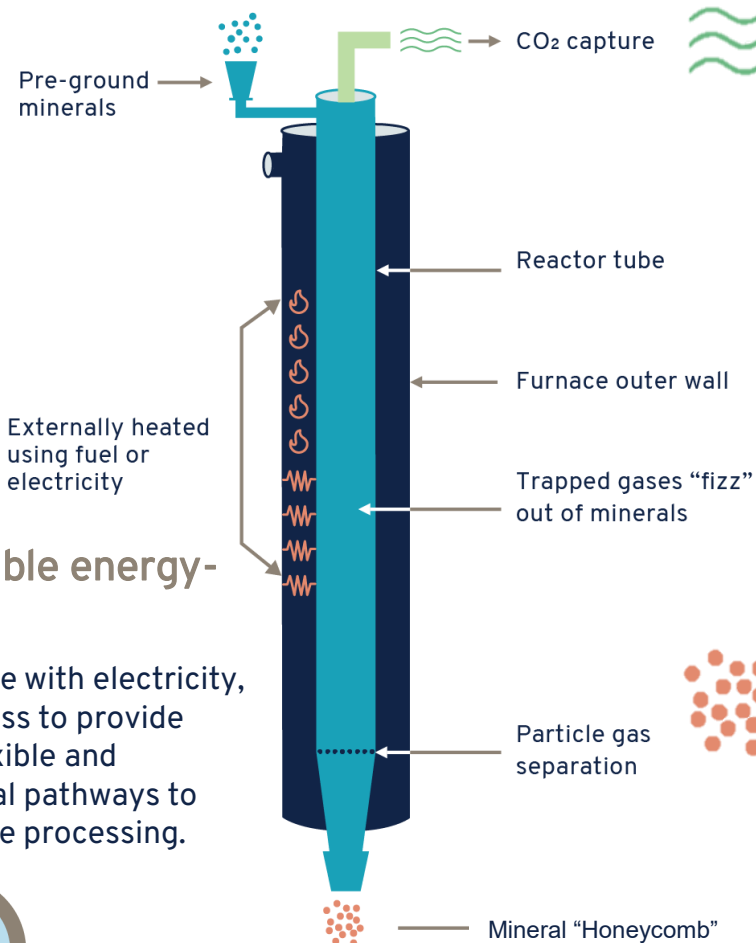
### Calix's decarbonisation solutions

- Calix's unique technology platform separates the heat source from the chemical reaction, providing three pathways to industrial decarbonisation:
  1. **Enabling the electrification of industry**  
Calix's technology is energy agnostic and electrification-ready, providing sustainable and economical pathways for industrial processes to enter the electric age.
  2. **Enabling efficient capture of unavoidable emissions**  
With no additional chemicals or processes, Calix's technology efficiently separates process CO<sub>2</sub> for use or storage, delivering low-cost abatement of unavoidable emissions.
  3. **Enabling green industrial processing**  
From enabling green steel through hydrogen reduction to lower the waste and CO<sub>2</sub> footprint of mineral processing with innovative refining solutions, Calix is enabling sustainable industrial processing.

1. Source: <https://zerotracker.net/>  
2. Source: Energy and Climate Intelligence Unit

# Our core technology platform

A new way to “heat stuff up”.



Leilac

## CO<sub>2</sub> capture

Unavoidable process CO<sub>2</sub> emissions from limestone are efficiently separated for use or storage.

## Renewable energy-ready

Compatible with electricity, and biomass to provide viable, flexible and economical pathways to sustainable processing.



## Highly-active materials

Produces materials with a porous honeycomb structure and extremely high surface area, delivering enhanced chemical and/or bioactivity.



calix



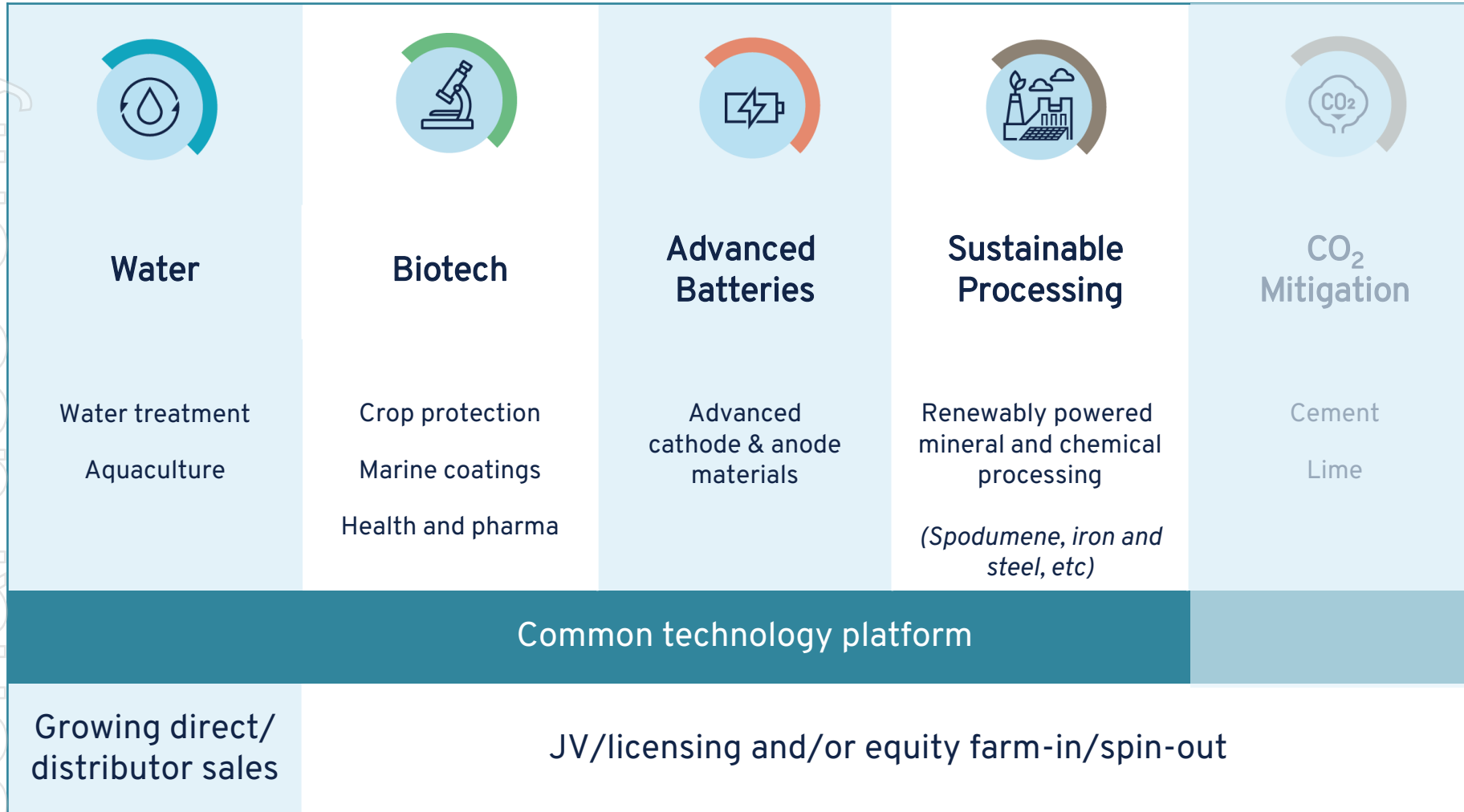
28 patent families covering core technology and applications.



>A\$120m has been invested to date in developing the technology.

# Multiple environmental business opportunities

Fast-track commercialisation and value-adding through JV/licensing and spin-out strategies.



**Leilac**  
(Calix 93.02%)

CO<sub>2</sub> mitigation for  
cement & lime

€15m equity  
farm-in (6.98%)



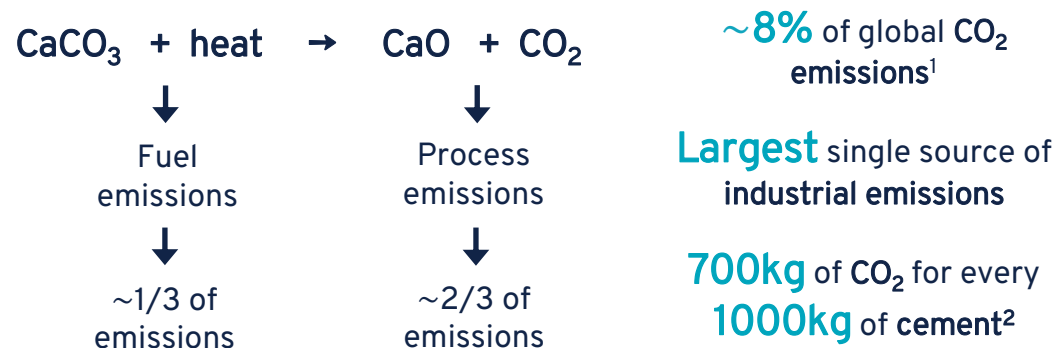


# Cement and Lime CO<sub>2</sub> solution comparison

Calix's technology is targeting >90% reduction in cement and lime CO<sub>2</sub> emissions at a materially lower cost than competing amine technologies.



## CO<sub>2</sub> emissions in cement & lime



## Fuel emissions



Today, external heating is achieved largely using fossil fuels. Emissions associated with fuel use typically account for ~1/3 of total CO<sub>2</sub> emissions.



Calix's Leilac technology is being developed to be energy agnostic and electrification ready. Calix is accelerating development of alternative (low carbon) fuels and renewable electricity to power Leilac and reduce fuel emissions to zero.

## Solution comparison

### Amine alternative

### Calix Leilac

Projected cost - avoided CO<sub>2</sub> (€/TCO<sub>2</sub>)

€55-189<sup>4</sup>

<€23-27<sup>3</sup>

Technology readiness level (TRL)

6<sup>6</sup>-8

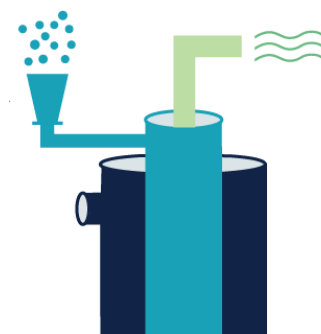
6<sup>5</sup>

Development pathway

Norcem Project  
(400kTpaCO<sub>2</sub>) to TRL 8 in 2025

Leilac-2 Project  
(100kTpaCO<sub>2</sub>) to TRL 7/8 in 2024

## Process emissions



Process emissions are released directly and unavoidably from the processing of limestone.

Typically accounting for ~2/3 of CO<sub>2</sub> emissions, process emissions require affordable and scalable abatement solutions.


Leilac targets the capture of >90% of process emissions at materially lower cost than competing amine technology solutions.

### Notes:

1. Trends in global CO<sub>2</sub> emissions; 2016 Report, The Hague: PBL Netherlands Environmental Assessment Agency
2. Material Economics (2019). Industrial Transformation 2050 - Pathways to Net-Zero Emissions from EU Heavy Industry.
3. Leilac-1 Output report: 2050 Roadmap, Coal ~27, RDF ~23 including cost of compression, for Leilac-2 module (FOAK). The "<" is for NOAK
4. The Swing Adsorption Reactor Cluster for Post-Combustion O<sub>2</sub> Capture from Cement Plants - Journal of Cleaner Production 223 (2019) 692 - 703
5. Based upon Leilac-1 project 20kTpa CO<sub>2</sub> capacity
6. Based upon Anhui Conch capture project 50kTpa CO<sub>2</sub> capacity

# Leilac – A growing pipeline of projects



	Project discussions	Initial scoping	Detailed scoping / MOU	Pre-FEED / BOD	FEED	FID + construction	Operational	Total
Aug 2021	21	7	4	1 <i>Leilac 2</i>			1 <i>Leilac 1</i>	34
Oct 2022	34	12	10	7 		1 <i>Leilac-2</i>	1 <i>Leilac-1</i>	65

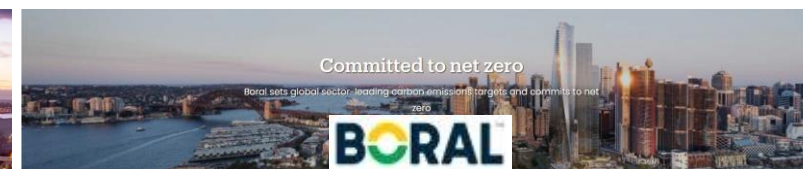
## Adbri Boral Tarmac

- Adbri, Boral and Tarmac have committed to net zero by 2050.
- These projects have commenced pre-FEED phase under project MOU's in parallel with commercial discussions regarding on-going use after demonstration.
- Government funding announced for Boral (\$30m) and Adbri (\$11m).
- Tarmac proceeding to stage 2 of the UK Department for Business, Energy & Industrial Strategy (BEIS) funding assessment for decarbonisation clusters (Hynet).
- Developing risked equity / Build-Own-Operate-Transfer (BOOT) business models to accelerate deployment.



**NET ZERO**  
Adbri's goal to operate at net zero emissions by 2050 aligns with our purpose of Building a Better Australia.

Acknowledgment of Country  
We acknowledge the Aboriginal and Torres Strait Islander peoples as the Traditional Custodians of the lands and waters of Australia. We recognise their continuing custodianship of Country and culture and pay respect to their Elders past, present and emerging.



Decarbonisation levers				Scope 1 & 2	Scope 3	
Energy	1. Kiln: Coal to alternative fuels		Low carbon energy solutions	✓		
	2. Renewable electricity supply			✓	✓	
	3. Electrification/energy efficiency			✓		
Cementitious Intensity	4. Kiln feed and cement plant optimisation			✓		
	5. Lower carbon concrete strategy			✓	✓	
Transport	6. Supply chain optimisation		Boral and contractor fleet transition		✓	✓
Sourcing	7. Prioritise lower CO <sub>2</sub> intensity suppliers				✓	
CCUS	8. Mineralised carbon products		Carbon capture, use and storage (CCUS)	✓		
FY				2025	2030	
				2050		

# Heidelberg Materials (HM) first global licence executed

The Heidelberg Materials licence agreement represents an important milestone for the Leilac technology, and a first-of-a-kind agreement for the industry.



## Heidelberg Materials



- One of the world's largest building materials companies.
- Headquartered in Germany, Heidelberg Materials operates 149 cement plants across 5 continents.<sup>1</sup>
- Annual revenue of ~A\$29.2b and ~A\$6.0b EBITDA in CY21.<sup>2,3</sup>
- Market capitalisation ~A\$12.3b.<sup>2,3</sup>

## Heidelberg Materials Licence



- The licence agreement applies to any Heidelberg Materials facility where the Leilac technology is installed.
- The technology licence fee is a first-of-a-kind for the industry.
- The technology licence fee comprises (i) a royalty floor; (ii) a variable component linked to the European carbon price/value; and (iii) a royalty cap linked to costs versus alternative technologies.
- The terms of the agreement with Heidelberg Materials require the royalty quantum to remain commercial-in-confidence.
- The technology licence is a perpetual licence with Heidelberg Materials.
- Calix will retain all improvements to Calix IP.

Source: Factset, Heidelberg Materials CY21 Annual Report

Notes:

1. Heidelberg Materials operates 149 cement plants globally, including 19 as part of JVs

2. 0.64 AUD EUR exchange rate used

3. As at 17-Oct-22

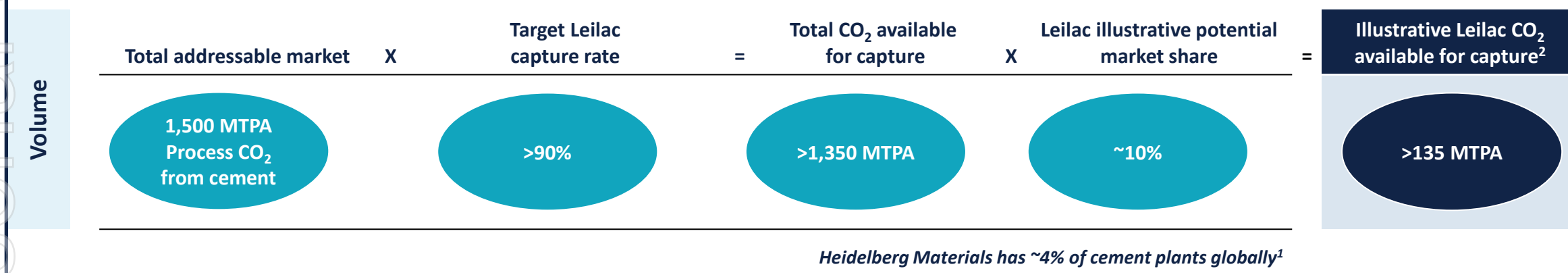
# Leilac business model

The Leilac business model is a capital light licensing model



- The Leilac business model is targeting a capital-lite licensing model where Leilac will earn a royalty fee per tonne of CO<sub>2</sub> avoided.
- The Heidelberg Materials licence agreement represents an important milestone for the Leilac technology, and a first-of-a-kind agreement for the industry.
  - It sets an attractive benchmark for future contract negotiations with counterparties.
- Leilac has a growing pipeline of projects in Europe, US and APAC, many of which are progressing with the aim of converting to licence agreements.
  - Leilac will continue to look at risked equity / Build-Own-Operate-Transfer (BOOT) support to accelerate deployment.

## Leilac illustrative example of CO<sub>2</sub> available for capture per annum



Source: IEA Technology road map, Statista, Cemnet

Notes:

1. Assumes that there are ~3,500 cement plants globally and that Heidelberg Materials operates 149 cement plants, including 19 as part of JVs.

2. Assuming development proceeds as planned the first full scale cement plant is planned for late CY 2026 / early CY2027

# Lithium processing JV

Full Documentation is in essentially final form for lithium processing JV with Pilbara Minerals (ASX:PLS).



## KEY TERMS OF JV

- Innovative midstream refining process utilising Calix's patented calcination technology to produce lithium salts for sale globally.
- Establish a demonstration plant JV at Pilbara Minerals' Pilgangoora Project.
- Participating interests: 55% Pilbara Minerals and 45% Calix.
- Each party funding their share of operating and capital costs and licensing their technology into the JV.
- Calix receives 10% carry by Pilbara Minerals on budgeted estimated construction costs for the demonstration plant in return for Calix providing an exclusive, worldwide, royalty free licence for its innovative calciner technology to the Joint Venture for lithium processing applications.
- Demonstration plant targeting 3,000 tonnes per annum lithium salt (phosphate) capacity, final investment decision targeted mid-2023, commissioning targeted late 2024/early 2025.
- Demonstrates the potential future commercialisation of the process to the global spodumene industry.

## Post-demonstration JV revenue potential (p.a.)

~3,000 tonnes <sup>1</sup>	Targeted lithium phosphate salt production
x ~US\$63,000 <sup>2</sup>	Illustrative price/tonne based upon current lithium value
= ~US\$190m	Illustrative JV revenue (100% basis)
+ additional revenue	JV licence revenue from other end-users
45%	Calix ownership in lithium processing JV

### Notes:

1. Pilgangoora "Mid-stream Project Scoping Study" – Lycopodium Minerals, Pilbara Minerals Limited and Calix Limited, May 2022.

2. Trading Economics <https://tradingeconomics.com/commodity/lithium> as at 17 October 2022 @ 0.14 Yuan / USD = ~\$US74,610 per tonne Lithium Carbonate (LCE). Assumed Lithium Phosphate price = 85% LCE



## Equity raising overview

Significant opportunity to build on accelerating momentum in Calix technology commercialisation.



Application	Use of funds	A\$m
1. Accelerate commercialisation of Leilac's cement and lime decarbonisation technology.	<ul style="list-style-type: none"><li>Capex requirements for completion of Leilac-2 construction at Heidelberg Materials' Hannover plant.</li><li>In conjunction with announced Australian Government grants, fully fund two decarbonised lime calciner build-own-operate-transfer (BOOT) projects with Boral and Adbri.</li></ul>	38.0
2. Construct lithium salt demonstration processing plant in JV with Pilbara Minerals.	<ul style="list-style-type: none"><li>Calix Capex share of construction costs for demonstration-scale lithium processing plant.</li></ul>	17.5
3. Accelerate ZESTY development for green iron and steel.	<ul style="list-style-type: none"><li>Plant modifications, further trials and a FEED Study for 30kTpa Demonstration Facility</li></ul>	2.5
4. Transaction costs		~2.0
Total		60.0

*SPP proceeds<sup>1</sup> will fund discretionary spend of up to \$20m to accelerate alternative energy options - Electric, Alternative Fuels Development.*

### Notes:

1. Assumes up to \$20m raised via the SPP.

# Accelerate Leilac commercialisation – Leilac-2 additional capital

Capex to complete construction of Leilac-2 – as part of consortium contribution.  
Investment: A\$8m



## Funding requirement

- Financial Investment Decision (FID) for the Hanover, Germany-based Leilac-2 project was taken on 23 March 2022, with an original budget of €25m (EU €16m; consortium partners €9m, of which Leilac's share is €3m).
- Leilac-2 construction cost likely to escalate due to supply chain inflationary pressures, extra contingency being planned ~30 to 40%.
- To facilitate and avoid long-lead purchasing delays in Leilac-2, Leilac is looking to contribute additional capital to the estimated escalation through JV / partial-BOOT partnership arrangements with Heidelberg Materials which are under discussion.

## Investment thesis

- A successful Leilac-2 project provides a catalyst for deployment of technology into multiple cement projects, targeting 2024 for initial FIDs.
- Leilac technology once deployed at scale has potential to be lowest cost solution available – targeting €23-27 cost per tonne of CO<sub>2</sub>.
- Significant pipeline of 54 deployment opportunities in Europe, US and APAC, an increase of 20 in the last 12 months.



## Targeted outcomes

- ✓ Fulfillment of the Leilac-2 project to demonstrate that it is capable of capturing 20% of a cement plant's CO<sub>2</sub> emissions at very low cost.
- ✓ Recycle of additional capital if Leilac-2 is successful and a JV / partial-BOOT approach agreed with Heidelberg Materials.
- ✓ Completion of Leilac-2 will help accelerate conversion of the pipeline opportunities at Leilac-2 and Leilac-3 scale to Design, Construction and Operational phases.

# Accelerate Leilac commercialisation – Adbri and Boral

Support development arrangements for 2 lime calciner JV / BOOT projects.  
Investment: A\$30m



## Funding requirement

- A\$41m of government funding announced for 2 lime calciner projects with Boral (ASX:BLD) and Adbri (ASX:ABC).
- Both projects have commenced pre-FEED phase under project MOUs.
- Commercial BOOT + licence arrangements under discussion.
- A full BOOT development is projected to require capital of ~A\$15m to build each plant, in conjunction with government funding.



## Investment thesis

- Provides the capital required to support and finalise BOOT arrangements for both projects.
- Successful demonstration leading to long-term use of the technology by Adbri and Boral under BOOT + licence arrangements, with capital recycle.
- Illustrates and accelerates decarbonisation through fuel-switching and removing the dependency on immediate CO<sub>2</sub> storage infrastructure.
- Acceleration of cement and lime commercialisation, as well as clay calcination into lower-CO<sub>2</sub> cement formulations such as “LC3”.

## Targeted outcomes

- ✓ Boral project targeting up to 100kt CO<sub>2</sub> abatement per year – cement / lime / clay with different energy options and CO<sub>2</sub> utilisation.
- ✓ Adbri project targeting 20kt CO<sub>2</sub> abatement per year for lime with different energy options and CO<sub>2</sub> utilisation and/or sequestration.
- ✓ Successful completion would lead to capital recycle as well as licence for on-going use for each project.

# Formation of Pilbara Minerals JV and development of lithium salt project



Capital for mid-stream product demonstration plant.

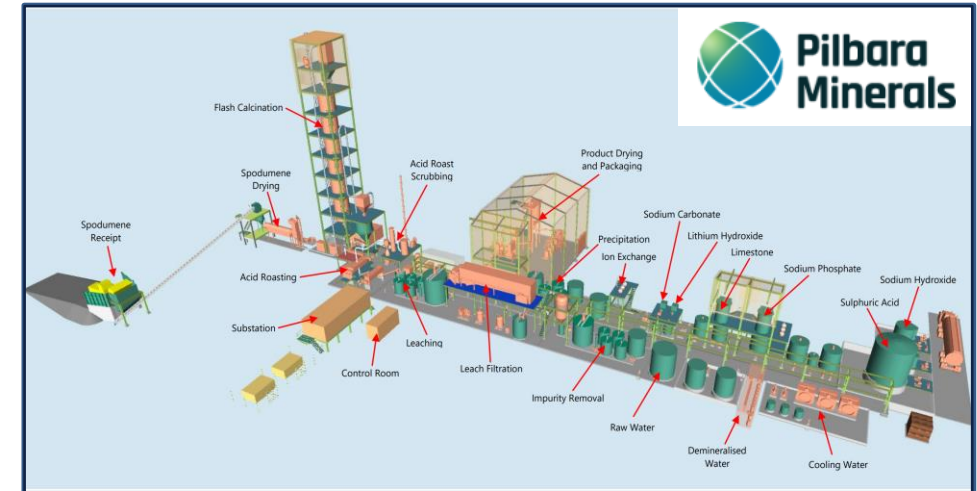
Investment: A\$17.5m

## Funding requirement

- Pilbara Minerals (ASX:PLS): Full Documentation is in essentially final form with A\$20m in Australian Government funding announced under the Modern Manufacturing Initiative.
- Project capex budget estimate from scoping study is A\$50-70m.
- After subtracting the A\$20m MMI grant, project capex to be funded by the JV is estimated between A\$30-50m.
- Calix will own 45% of the JV and contribute 35% of the capital (10% free carry negotiated as compensation for Calix IP licence contribution).
- Calix estimated share of Capex is 35% of A\$30-50m = A\$10.5-17.5m.

## Investment thesis

- Australia produces nearly half the world's lithium<sup>1</sup>, around 40,000 tonnes, predominantly through mining and beneficiating spodumene (~2.8% Li, or 6% Li<sub>2</sub>O).
- The global market for Lithium Carbonate and Equivalents (LCE) is projected to grow ~6x, from 0.54 MTpa in 2021 to 3.3 MTpa by 2030.<sup>2</sup>
- The demonstration plant will have 2 distinct advantages from the Calix technology:
  - Low-carbon: able to be renewably powered.
  - Recovery: higher recovery from ore body when processing flotation fines.
- At current lithium prices, the demonstration scale plant could generate ~US\$190m revenue for the JV<sup>3</sup> on an annual basis (Calix share ~US\$86m).



## Targeted outcomes

- ✓ FID targeted H1 2023.
- ✓ Market development – lithium phosphate salt.
- ✓ Commissioning and testing late 2024 / early 2025, on way to achieving full production and sales, subject to market developing for lithium phosphate sale product.
- ✓ Li-salt production technology to be licensed by the JV to Pilbara Minerals and the global spodumene industry.

Notes:

1. <https://www.visualcapitalist.com/sp/charted-lithium-production-by-country-1995-2020/>

2. Lithium mining: How new production technologies could fuel the global EV revolution - McKinsey Apr 2022

3. Trading Economics <https://tradingeconomics.com/commodity/lithium> as at 17 October 2022 @ 0.14 Yuan / USD = ~\$US74,610 per tonne Lithium Carbonate (LCE). Assumed Lithium Phosphate price = 85% LCE. Calix share of JV 45%



## ZESTY FEED Study

30 kTpa Calix ZESTY green iron / steel demonstration facility  
Investment: A\$2.5m.



### Funding requirement

- Since filing a patent for ZESTY in November 2021, Calix converted BATMn to run hydrogen reduction within 3 months, then conducted 3 months of iron ore reduction testing producing highly encouraging results.
- Further BATMn modifications to optimize performance, as well as commencing a Front-End Engineering and Design study for a 30kTpa demonstration facility, will accelerate ZESTY technology development. Basis of Design work has commenced.
- Proposed \$2.5m FEED study including external engineering engagement, additional BATMn plant modifications, more extensive ore trials, iron passivation, beneficiation, briquetting and smelting tests.



### Investment thesis

- Iron and steel industry contributes ~7% of global CO<sub>2</sub> emissions. Australia exported over 53% of the world's iron ore in 2021<sup>1</sup> with 96% of Australia's exports comprising haematite ore that is generally processed in blast furnaces (BF/BOF)<sup>2</sup>.
- Many alternative developing technologies are considering green hydrogen reduction processes connected to electric arc furnaces (EAFs), which require higher grade (beneficiated) ores than haematite.
- ZESTY is being developed to produce green iron from various ore grades suitable for BF/BOF (for a proportional reduction in CO<sub>2</sub> emissions into existing steel making) and, eventually, EAF, allowing fully renewably powered, zero emissions steel.

Notes:

1. <https://www.statista.com/statistics/300328/top-exporting-countries-of-iron-ore/>

2. <https://www.ga.gov.au/scientific-topics/minerals/mineral-resources-and-advice/australian-resource-reviews/iron-ore>

BATMn	ZESTY Concept	ZESTY Advantage
		<ul style="list-style-type: none"> <li>• Minimises expensive green hydrogen use</li> <li>• Can be renewably powered</li> <li>• Can process fines currently unsuitable for pelletisation</li> <li>• No carbon capture required</li> </ul>

### Targeted outcomes

- ✓ BATMn additional upgrades Q4 2022.
- ✓ Extensive ore testing Q1 2023, as well as iron passivation, beneficiation, briquetting and smelting trials.
- ✓ +/-25% capex for 30kTpa ZESTY Green Iron by end 2023.



## Future strategic opportunities

Discretionary capital for future strategic opportunities and capability  
Investment: up to A\$20m<sup>1</sup>

Target application	Opportunity	Strategy
<b>Alternative Fuels Development</b>	<ul style="list-style-type: none"> <li>The use of alternative fuels is a central pillar of cement and lime fuel decarbonisation. It also adds energy options for other Calix applications.</li> <li>Alternative fuel prices are often negative and are more stable than traditional energy options.</li> <li>An alternative fuel combustion approach is being developed within Leilac-2, but multiple approaches should be developed, given different fuel availabilities globally.</li> <li>Waste gasifiers represent another waste to energy pathway and would complement the program in Leilac-2, providing additional alternative fuel options.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Target several additional alternative fuel technologies coupled with Calix technology demonstrated at relevant commercial scale.</li> <li>✓ Diversify and grow the pipeline of Leilac projects, given interest in the flexibility of using either lower carbon and/or lower cost energy sources.</li> <li>✓ Ensuring Leilac is the lowest cost and most flexible decarbonisation solution for industry.</li> </ul>
<b>Electrification Development</b>	<ul style="list-style-type: none"> <li>Pilot electric calciner at Bacchus Marsh (“BATMn”) was built for battery material development but has proven highly adaptable for testing multiple applications.</li> <li>BATMn has been used extensively in testing including for cement and lime, ZESTY (green iron / steel), alumina, rare earths, LC3 clays and magnesite.</li> <li>Electrification of industrial calcination is a rapidly growing opportunity.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Target increased development of electrification options – conventional elements, induction, tube electrification, plasma – and scaling options.</li> <li>✓ Accelerated technology commercialisation of electric calcination into multiple industries.</li> </ul>

Notes:

1. Assumes up to \$20m raised via the SPP. The SPP is non-underwritten.

# Equity raising summary



Fully underwritten Placement to raise A\$60m and Director sell down of A\$2.4m in conjunction with a non-underwritten Share Purchase Plan to raise up to A\$20m

Placement structure and size	<ul style="list-style-type: none"><li>Fully underwritten Placement to raise approximately A\$60m via the issue of 13.2 million new ordinary fully paid shares (“<b>New Shares</b>”) at A\$4.55 per share (“<b>Placement Price</b>”).</li><li>It is intended that eligible institutional shareholders who bid for up to their ‘pro-rata’ share of New Shares under the Placement will be allocated their full bid, on a best endeavours basis<sup>1,2</sup>.</li></ul>
Placement Price	<ul style="list-style-type: none"><li>Placement Price will be A\$4.55 per share representing:<ul style="list-style-type: none"><li>a 11.1% discount to closing price of A\$5.12 per share on 18 October 2022;</li><li>a 9.5% discount to the 5-day VWAP of A\$5.03 per share on 18 October 2022.</li></ul></li></ul>
Ranking	<ul style="list-style-type: none"><li>New Shares issued under the Placement and SPP will rank pari passu with existing ordinary shares from the date of issue.</li></ul>
SPP	<ul style="list-style-type: none"><li>Calix will offer eligible Australian and New Zealand shareholders the opportunity to acquire up to A\$30,000 in New Shares via a SPP.</li><li>The issue price for New Shares issued under the SPP will be at the lower of the Placement Price and the price that is a 2.5% discount to the volume weighted average price of ordinary shares in Calix traded on the ASX over the five trading days up to, and including, the day on which the SPP closes.</li><li>The SPP aims to raise up to A\$20m, which may be increased or subject to scale back and is non-underwritten.</li><li>No brokerage or transaction costs are payable for New Shares issued under the SPP.</li><li>New Shares issued via the SPP will rank equally with existing ordinary shares from the date of issue.</li><li>An SPP Booklet containing further details of the SPP offer will be sent to eligible shareholders in due course.</li></ul>
Director’s selldown	<ul style="list-style-type: none"><li>In conjunction with the Placement, via a fully underwritten selldown, Dr. Phil Hodgson (Managing Director and Chief Executive Officer) and Dr. Mark Sceats (Executive Director and Chief Scientist) are selling a very minor proportion of their shareholdings to fund respective tax and debt obligations created by options vesting.</li><li>Dr. Hodgson and Dr. Sceats to realise approximately 4% of each of their shareholdings respectively (\$2.4m in aggregate at Placement Price). Both remain committed to Calix and are selling largely for meeting tax obligations and debt repayments, including to Calix.</li></ul>

## Notes:

1. For this purpose, an eligible institutional shareholder’s “pro-rata” share will be estimated by Calix’s latest beneficial register, but without undertaking any reconciliation and ignoring shares that may be issued under the SPP. Accordingly unlike in a rights issue, this may not truly reflect the participating shareholder’s actual pro-rata share. Nothing in the presentation gives a shareholder a right or entitlement to participate in the Placement and Calix has no obligation to reconcile assumed holdings (e.g. for recent trading or swap positions when determining a shareholder’s “pro-rata” share. Institutional shareholders who do not reside in Australia or other eligible jurisdictions will not be able to participate in the Placement. See foreign selling restrictions for eligible jurisdictions and selling restrictions relevant to these jurisdictions. Calix and the Underwriters disclaim any duty or liability (including for negligence) in respect of the determination of a shareholder’s “pro-rata” share.

2. Eligible institutional shareholders who bid in excess of their “pro-rata” share as determined by Calix and the Underwriters are expected to be allocated a minimum of their “pro-rata” share on a best endeavours basis as set out in footnote 1 above, and any excess may be subject to scale back.

# Equity raising timetable



Institutional Placement	Date <sup>1</sup>
Trading halt and announcement of Placement and SPP	Wednesday, 19 October 2022
Placement bookbuild	Wednesday, 19 October 2022
Trading halt lifted and Calix shares recommence trading on ASX	Thursday, 20 October 2022
Settlement of Placement	Monday, 24 October 2022
Allotment of New Shares issued under the Placement	Tuesday, 25 October 2022

Share Purchase Plan	Date
Record date for determining eligible participation to subscribe for New Shares via the SPP	7:00pm Tuesday, 18 October 2022
SPP Booklet dispatched to eligible shareholders	Wednesday, 26 October 2022
SPP opens	Wednesday, 26 October 2022
SPP closes	Thursday, 10 November 2022
Announce SPP results	Monday, 14 November 2022
Allotment of New Shares issued under the SPP	Thursday, 17 November 2022
Dispatch of holding statements in respect of New Shares issued under SPP	Friday, 18 November 2022

**Note:**

1. These dates are indicative only and are subject to change. Calix, reserves the right, subject to the Corporations Act 2001(Cth) and the ASX Listing Rules, to amend this indicative timetable. In particular, Calix reserves the right to extend the Closing Date, accept late applications under the SPP Offer (either generally or in particular cases), and to withdraw or vary the Placement or SPP Offer without prior notice. Any extension of the closing date will have a consequential effect on the date for the allotment and issue of New Shares. Calix will consult with the Underwriters in relation to any proposed change to this indicative timetable and any such change will require the consent of the Underwriters.



## Key risks and international selling restrictions

# Risks specific to an investment in Calix



All investments carry risk, including loss of some or all of the capital invested and failure of investments to generate a positive return. You should carefully consider whether an investment in Calix is a suitable investment for you. Some of the risks of investing in Calix include the following:

## Competitive Environment

Calix's technology, products and applications compete in each of its markets against alternative technologies, products and solutions. There is no guarantee that Calix's technology, products and applications will not be superseded by superior technologies, products and applications, or will achieve the growth, margins and competitive position that constitutes a valuable, growing business, and there is no guarantee that existing customers of Calix's technology, products and applications will continue to purchase from Calix, nor that new customers can be attracted to purchase from Calix.

## Market Development and Expansion Risk

There are aspects of Calix's current technology, products and applications, as well as those under development, that represent additional features or customer value propositions as a result of the novel applications of the technology or materials produced by the technology. Products or applications that are not direct replacements of those currently in existence may take some time for the customer to understand, and thus there is a risk that take-up will take longer and involve more cost and effort (such as trials) to bring to market than planned. There is also the risk that existing products cannot continue to be developed into new applications that exploit the unique properties of the technology, or that technologies that are developed are unable to be effectively commercialised.

## Research and Development Risk

Whilst Calix's calciner has been running with minimal maintenance or operating issues for over 9 years, its robustness as a process has not been demonstrated over decades, which could impact more rapid acceptance of the technology into established industries. With respect to Calix's CO<sub>2</sub> business, the Leilac project process has not been tested beyond pilot scale and may not work in a way that is efficient and robust enough to be of commercial interest to the cement and lime industries. With respect to Calix's Sustainable Processing business, all potential applications, other than magnesite and calcined clays, have not been tested beyond pilot scale and may not work in a way that is efficient and robust enough to be of commercial interest to the industry. With respect to magnesite and calcined clays, different ore bodies, feed-stocks or energy sources or different downstream processes may present technical difficulties that may make application of the technology insufficiently commercially different to sustain a business, or justify further investment to create a business. With respect to Calix's battery materials development, there is the risk that the technology will not produce materials of sufficient commercial difference to sustain a business, or justify further investment to create a business. With respect to research and development of other potential opportunities for Calix technology, there is the risk that the technology will not work, or not produce materials or processes of sufficient commercial difference to sustain a business, or justify further investment to create a business.



# Risks specific to an Investment in Calix



All investments carry risk, including loss of some or all of the capital invested and failure of investments to generate a positive return. You should carefully consider whether an investment in Calix is a suitable investment for you. Some of the risks of investing in Calix include the following:

## Supply and Operational Risk

Due to the nature and scale of Calix's operations there is the potential for varied disruptions to the supply chain that may unduly impact the scale and scope of Calix's activities. This risk is present in several stages of Calix's value chain, for example:

- **Magnesium Oxide Supply:** Calix sources its magnesium oxide, which it uses to produce MHL, from several different suppliers, as well as its own mine. However, a loss of one or more supply arrangements could significantly impact Calix's ability to service its customers, through either time lost to re-arrange supply arrangements, or additional cost;
- **Distribution:** In some cases, Calix delivers product directly to customers and in other cases, it relies on distribution partners. Failure to deliver Calix's products and services, or delivery of the products and services below an acceptable level, could occur as a result of multiple factors. Such failure could lead to loss of reputation, and ultimately loss of customers, and thus revenues and growth

## Regulatory Risk

In Australia, Calix's ACTI-Mag can be sold as non-dangerous goods, without specific regulatory approvals. There is a risk that regulations covering these products may change, in which case Calix may need to apply for approvals to continue with this part of its business, and may not obtain such approvals. In addition, a change in regulatory approvals may trigger additional risks under product liability, if it is deemed that such change in regulation has been brought about by information on the safety or efficacy of Calix's products that is unknown to Calix at this time.

In the US, Calix's AMALGAM and Alka-Mag product is manufactured and sold as a non-dangerous good. Whilst all reasonable efforts have been made to ensure that Calix has the necessary regulatory approvals to carry out its business, there is a risk that regulations covering these products may change, in which case Calix may need to apply for approvals to continue with this part of its business, and may not obtain such approvals. In addition, a change in regulatory approvals may trigger additional risks under product liability, if it is deemed that such change in regulation has been brought about by information on the safety or efficacy of Calix's products that is unknown to Calix at this time.

In the EU, Calix anticipates its products can be manufactured and sold as non-dangerous goods. Whilst all reasonable efforts will be made to ensure that Calix has the necessary regulatory approvals to carry out its business, there is a risk that regulations covering these products may change, in which case Calix may need to apply for approvals to continue with this part of its business, and may not achieve such approvals. In addition, a change in regulatory approvals may trigger additional risks under product liability, if it is deemed that such change in regulation has been brought about by information on the safety or efficacy of Calix's products that is unknown to Calix at this time.

Apart from Calix's products, Calix's operations require compliance with multiple regulatory systems.

# Risks specific to an Investment in Calix



All investments carry risk, including loss of some or all of the capital invested and failure of investments to generate a positive return. You should carefully consider whether an investment in Calix is a suitable investment for you. Some of the risks of investing in Calix include the following:

## Regulatory Risk (continued)

Apart from general regulatory risks, Calix's operations require adherence to, for example, multiple safety, health, environmental, employment and privacy standards at national, state, and county / shire / local levels, and across multiple jurisdictions where Calix currently operates, or may choose to operate. There is a risk that Calix may now, or in the future, be in breach of such standards, warranting correction, or involving financial penalties, or possibly other more serious business impacts.

## Grant Related Risks

Calix receives considerable grant income across multiple development projects. In each case, the grant is extended under legally binding agreements that outline, amongst other things, the mechanism for cancelling, or even claw-back of, grant monies. There is a risk that, despite putting in place appropriate governance, project management and accounting structures to manage this risk, Calix does not follow, or is deemed not to have followed, grant protocols with regards to valid expenditures of grant monies, or that the relevant clauses in these agreements could be exercised by the counter-parties (typically government bodies) to cancel or claw-back the grants. The Pilbara, Adbri and Boral grants were announced in May 2022 in the lead-up to the last Federal election. The Pilbara grant has been reviewed and ratified by the new Government but the grant agreement is yet to be produced by the Government, and executed. The Boral and Adbri grants are being reviewed and await ratification by the new Government. There is a risk that some, or all of these grants may not proceed.

## Ability to Attract and Retain Key People

The Company currently employs a number of key management and scientific personnel. Calix's success is dependent upon a number of highly qualified and experienced personnel and a stable workforce. Calix's future will be dependent upon the continued performance, efforts, abilities and expertise of its key personnel. While Calix has in place long-term or evergreen employment contracts, there can be no assurance that it will be able to retain its key personnel or attract other suitably qualified personnel in the future, if required. The inability to attract and retain the necessary technical and managerial personnel could have a material and adverse effect upon Calix's business, results of operations and financial condition.

## Reliance on Key Utilities

Gas and Electricity are material inputs in our cost of goods sold ("COGS") for our Water business. If the price of these utilities increased significantly, or their availability became unreliable, and Calix was not able to pass some or all of such cost increases onto its customers, there is a risk that Calix's Water business could be significantly interrupted, or even uneconomic. Alternative energy sources such as fuels from waste, are key inputs into the Leilac technology, as well as other application of the Calix calciner technology. A significant development program is underway to incorporate such energy sources into the technology, however there are no guarantees that Calix's technology will be able to process such waste fuels efficiently, or at all, which may render the technology less attractive versus competitive technologies, or uneconomic.

# Risks specific to an Investment in Calix



All investments carry risk, including loss of some or all of the capital invested and failure of investments to generate a positive return. You should carefully consider whether an investment in Calix is a suitable investment for you. Some of the risks of investing in Calix include the following:

Calix is exposed to potential product and process liability risks, which are inherent in the research and development, manufacturing, marketing and use of its products and / or applications, or products and / or applications that are developed in the future. Although Calix endeavours to work to rigorous standards, there is still the potential for its products and / or process applications to contain defects that may result in damage to customers' systems, in turn causing a financial or reputational loss. For Calix, these defects or problems could result in the loss of or delay in generating revenue, loss of market share, failure to achieve market acceptance, injury to Calix's reputation or increased insurance costs. If Calix fails to meet its customers' expectations, Calix's reputation could suffer and it could be liable for damages.

Whilst Calix has product liability insurance to help manage such risks, and will be seeking the same wrt process liability insurance as it commercialises its process technologies, Calix may not be able to maintain insurance for product, service or process liability on reasonable terms in the future and, or Calix's insurance may not be sufficient to cover large claims, or the insurer could disclaim coverage on claims. Calix gives no assurance that all such risks will be adequately managed through its insurance policies to ensure that such loss does not have an adverse effect on its performance.

Calix's products and applications are typically sold in B2B markets under purchase order terms and conditions or longer-term contracts. Whilst every effort is made to limit potential contractual and common law liabilities associated with Calix's products and applications, exposure to potential product liabilities exist and can be broadly categorised as:

- ACTI-Mag / AMALGAM / Alka-Mag: Despite these products being non-hazardous, non-toxic and being used in waste water treatment, there are risks that incorrect delivery or use of the product may lead to claims against Calix; and
- AQUA-Cal+: Despite the product being non-hazardous, non-toxic and being used in aquaculture applications, there are risks that incorrect application (such as over-dosing) of the product may lead to claims against Calix; and
- BOOSTER-Mag: Despite the product being non-hazardous, non-toxic and being used in agriculture applications, there are risks that incorrect application (such as over-spraying) of the product may lead to claims against Calix. ; and
- If Calix is successful in commercialising its pre-Commercial products, or even during the trial phases before successful commercialisation, product liability risk associated with those product may arise, as per our Commercial products.

## Product and Process Liabilities

## Risks specific to an Investment in Calix



All investments carry risk, including loss of some or all of the capital invested and failure of investments to generate a positive return. You should carefully consider whether an investment in Calix is a suitable investment for you. Some of the risks of investing in Calix include the following:

### Product and Process Liabilities (cont'd)

Calix / Leilac Group is also now entering a phase where liability exposure starts to increase wrt process guarantees and other operational exposures associated with the deployment of its technology.

Particularly in the Leilac Group and in Sustainable Processing, all applications of Calix's technology, including for cement, lime, iron and steel, spodumene, magnesite, calcined clays, alumina, rare earths, and potentially multiple new applications, will carry performance and process liability risk, which will be dealt with as best as possible via appropriate licensing and JV arrangements and insurance, however there is no guarantee such arrangements or insurance can be formed cover all eventualities.

Also, the proposed licence, BOOT / JV / partial BOOT plus licence business models under the Leilac Group development plan may involve elements of repayment of capital back to Calix / Leilac Group should the plants deployed achieve certain operational outcomes, to be agreed in each case. However, given the early deployment of the technology into its first commercial applications, there is no guarantee that certain operational outcomes can be met, or even partially met, resulting in exposure of Calix / Leilac Group to non-recycle of the capital deployed, and may even expose Calix / Leilac Group to additional costs to remove the plant, or correct operational short-comings.

# Risks specific to an Investment in Calix



All investments carry risk, including loss of some or all of the capital invested and failure of investments to generate a positive return. You should carefully consider whether an investment in Calix is a suitable investment for you. Some of the risks of investing in Calix include the following:

## IP Risk

Calix relies heavily on its technologies and know-how and there can be no assurance that competitors of Calix or other parties will not seek to imitate or develop technology and know-how that competes with Calix, or supersedes Calix's technology. The unauthorised use or disclosure of its intellectual property may have an adverse effect on the operating, marketing and financial performance of Calix which could erode Calix's competitive advantage. Calix cannot be certain that others will not independently develop the same or similar technologies on their own or gain access to trade secrets or disclose such technology, or that Calix will be able to meaningfully protect its trade secrets and unpatented know-how and keep them secret. There is an inherent risk with any licensed technology that the licence may be terminated in accordance with its terms or the patent invalidated by a third party.

## Commercial Risk

The proposed licence, BOOT / JV partial BOOT plus licence business models under the Leilac Group development plan are under discussion with numerous counter-parties. While these discussions are positive and on-going, Calix / Leilac Group cannot guarantee these discussions will result in a commercial outcome. The licence agreement with Heidelberg Materials represents a significant step forward in realising this business model, but Calix/ Leilac Group cannot guarantee that other licence agreements will follow, or follow the same format, or be struck at better terms than the Heidelberg Materials agreement, or indeed may need to be struck at worse terms to deploy the technology, in which case the Heidelberg Materials agreement would need to be re-set under the "most favoured nation" status of that agreement.

## Foreign Exchange Risk

Calix is exposed to movements in exchange rates, due to its North American Water operations, a material portion of grant funding being earned in Europe, the commencement of product sales into New Zealand, and expansion of its technology licensing arrangement globally. Financial statements are maintained in Australian dollars, and currently a majority of revenues and expenses are settled in Australian Dollars. As Calix expands its product offering internationally, a greater foreign exchange risk is foreseen. The Directors will implement foreign exchange hedging policies for the Company if, and when considered appropriate.

## Competitive and Dynamic Capital Requirements

Whilst Calix's cash-flow is built on its historical ability to sell products and applications, achieve grant funding, and receive the Australian Government R&D rebate (until its revenues exceed A\$20m, after which this rebate reverts to a tax concession, as has occurred in FY22), changes in Calix's ability to access such funding in the future, whether through regulatory change, failure in grant funding applications, or failure to grow sales and licence revenues, may impact the ability of the business to carry out some, or all of its current activities, including funding its R&D pipeline.

Through this placement, the current business plan will be fully funded. In the event that risks arise that affect Calix's ability to execute the business plan, there is a risk that Calix may have to change its business plan, and/or raise additional capital to continue to pursue the current, or indeed a modified, business plan.



## Risks specific to an Investment in Calix



All investments carry risk, including loss of some or all of the capital invested and failure of investments to generate a positive return. You should carefully consider whether an investment in Calix is a suitable investment for you. Some of the risks of investing in Calix include the following:

### Inability to pay Dividends or Make Other Distributions

The ability of Calix to pay any dividend in the future is dependent on many factors including its ability to generate sufficient revenue. Many of the factors that will affect Calix's ability to pay dividends and the timing of those dividends will be outside the control of Calix and its Directors. The Directors cannot give any assurance regarding the payment of dividends in the future.

### Taxation

Future changes in taxation law, including changes in interpretation or application of the law by the courts or taxation authorities, may affect taxation treatment of an investment in Calix shares or the holding and disposal of those shares. Further, changes in tax law, or changes in the way tax law is expected to be interpreted, in the various jurisdictions in which Calix operates, may impact the future tax liabilities and performance of Calix. Any changes to the current rates of income tax apply to individuals and trusts will similarly impact on shareholder returns.

### Unforeseen Risk

There may be other risks of which the Directors are unaware at the time of the Offer which may impact Calix, its operations and/or the valuation and performance of Calix. The above list of risks ought not to be taken as exhaustive of the risks faced by Calix or by investors in Calix. The above risks and others not specifically referred to above may in the future materially affect Calix, its financial performance or the value of Shares.

### Force Majeure Events

Events may occur that could impact upon Calix and the value of its business. These events include but are not limited to acts of terrorism, an outbreak of international hostilities, fires, floods, earthquakes, labour strikes, civil wars, natural disasters, outbreaks of disease or other natural or man-made events or occurrences that can have an adverse effect on the demand for Calix's technology and products and its ability to conduct business. Calix only has a limited ability to insure against some of these risks.

### Global and local economic Downturn

As a business operating in both local and international markets, the Group's revenue is subject to fluctuations in the global and domestic economy or country specific economic circumstances. Accordingly, adverse economic conditions overseas or in Australia may potentially have an adverse effect on the Group's revenue. Any significant downturn in investment in research and development may result in a reduction in demand for the Group's services and a reduction in revenue earned.

# Risks specific to an Investment in Calix



All investments carry risk, including loss of some or all of the capital invested and failure of investments to generate a positive return. You should carefully consider whether an investment in Calix is a suitable investment for you. Some of the risks of investing in Calix include the following:

## Sovereign Risk

Calix has operations in a number of overseas jurisdictions and is exposed to a range of different legal and regulatory regimes, including in new jurisdictions in which Calix may establish businesses and/or in geographies which Calix is expanding its operations. As Calix expands its presence in new international jurisdictions, it is subject to the risks associated with doing business in regions that may have political, legal and economic instability or less sophisticated legal and regulatory systems and frameworks, including:

- Unexpected changes in, or inconsistent application of, applicable foreign laws and regulatory requirements;
- Less sophisticated technology standards;
- Difficulties engaging local resources; and
- Potential for political upheaval or civil unrest.

As Calix enters newer and less familiar regions there is a risk that Calix fails to understand the laws, regulations and business customs of these regions. This gives rise to risks relating to labour practices, foreign ownership restrictions, tax regulation, difficulty in enforcing contracts, changes to or uncertainty in the relevant legal and regulatory regimes and other issues in foreign jurisdictions in which Calix may operate. This could interrupt or adversely affect parts of Calix's business and may have an adverse effect on Calix's operations and financial performance.

## COVID Risk

The on-going global pandemic may adversely impact Calix's business in several ways:

- Inability to travel due to COVID restrictions leads to impaired ability to grow new customer and business opportunities for both products and technical services
- Customers may themselves be impacted by COVID restrictions, forcing closure or turn-down and therefore impacting their suppliers, such as Calix, accordingly
- Service providers and suppliers may be impeded in their ability to supply to Calix, leading to supply disruptions to Calix's customers and / or project disruptions to Calix's development projects or technical services

## Liquidity

- Calix's Shares are only listed on the ASX and it is not intended that they will be listed for trading on any other securities exchange. There is no guarantee of an active market in the Shares which may make it difficult for investors to sell their Shares at the time or for the price they seek. Further, the market price for Shares may fall or be made more volatile because of the relatively low volume of trading in Calix's securities. When trading volume is low, significant price movements can be caused by the trading in a relatively small number of shares.

# International offer restrictions



This document does not constitute an offer of new ordinary shares ("New Shares") of the Company in any jurisdiction in which it would be unlawful. In particular, this document may not be distributed to any person, and the New Shares may not be offered or sold, in any country outside Australia except to the extent permitted below.

## United Kingdom

Neither this document nor any other document relating to the offer has been delivered for approval to the Financial Conduct Authority in the United Kingdom and no prospectus (within the meaning of section 85 of the Financial Services and Markets Act 2000, as amended ("FSMA")) has been published or is intended to be published in respect of the New Shares.

The New Shares may not be offered or sold in the United Kingdom by means of this document or any other document, except in circumstances that do not require the publication of a prospectus under section 86(1) of the FSMA. This document is issued on a confidential basis in the United Kingdom to "qualified investors" within the meaning of Article 2(e) of the UK Prospectus Regulation. This document may not be distributed or reproduced, in whole or in part, nor may its contents be disclosed by recipients, to any other person in the United Kingdom.

Any invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) received in connection with the issue or sale of the New Shares has only been communicated or caused to be communicated and will only be communicated or caused to be communicated in the United Kingdom in circumstances in which section 21(1) of the FSMA does not apply to the Company.

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- meets the investment activity criteria specified in clause 38 of Schedule 1 of the FMC Act;
- is large within the meaning of clause 39 of Schedule 1 of the FMC Act;
- is a government agency within the meaning of clause 40 of Schedule 1 of the FMC Act; or
- is an eligible investor within the meaning of clause 41 of Schedule 1 of the FMC Act.

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In accordance with Article 1(4)(a) of the Prospectus Regulation, an offer of New Shares in the European Union is limited to persons who are "qualified investors" (as defined in Article 2(e) of the Prospectus Regulation).



# Appendix

Board of Directors and Equity Structure





# Board of Directors



**Peter Turnbull, AM**  
Non-Executive Chair

Experienced chair and non-executive director with significant board and senior executive experience in the Australian and global resource, energy and technology commercialisation sectors.

Non-Executive Director of Karoon Energy Ltd. (ASX: KAR), Chair of medtech Auxita Pty Ltd, Chair of Airlie Energy. Peter is the Immediate Past President of the Chartered Governance Institute (London), a former President, Life Member and Fellow of Governance Institute of Australia and a fellow of the Australian Institute of company Directors.

Chair of Calix Remuneration and Nomination Committee, and Member of Audit and Risk Management Committee.



**Helen Fisher**  
Non-Executive Director

CEO and Managing Director of Bio Capital Impact Fund (BCIF), a Non-Executive director and Chair of the Audit and Risk Management Committee of Paradigm Biopharmaceuticals Ltd (ASX:PAR) and Chair of the Victorian branch of AusBiotech.

Previously a partner of Deloitte for over 11 years, and led Deloitte's life sciences practice in Australia for 5 years, specialising in the financial services sector, with significant M&A transactions and strategic tax advice to publicly listed and large multinational companies.

Chair of Calix Audit and Risk Management Committee and member of the Rem and Nom Committee.



**Jack Hamilton**  
Non-Executive Director

30 years multidisciplinary experience in local and overseas energy industries, including as a Director of NWS Ventures (Woodside North-West Shelf project).

Currently a Non-Executive Director of Hazar Group (ASX:HZR). Previous Non-Executive Director positions include AnteoTech Ltd (ASX:ADO), Renu Energy (ASX:RNE) and DUET Group (ASX:DUE). Jack is a Fellow of Australian Institute of Energy and a Fellow of the Australian Institute of Company Directors.

Chair of Calix Technology Committee, and member of Audit and Risk, and Rem and Nom Committees.



**Phil Hodgson**  
Managing Director & Chief Executive Officer

14 years of multidisciplinary experience with Shell, including as the General Manager and Alternate Director of its subsidiary Fuelink Pty Ltd, a \$700m revenue, 300-employee distribution and sales subsidiary.

7 years running a private consultancy providing strategy and M&A services across energy, food, infrastructure and water sectors.

Joined Calix in 2013 as CEO, became a Director in 2014 and is a member of Calix's Technology Committee.



**Dr Mark Sceats**  
Executive Director And Chief Scientist

Co-founder of Calix, and a member of Calix's Technology Committee.

Qualified physical chemist with over 52 years' experience, numerous academic roles, and numerous fellowships and recognitions.

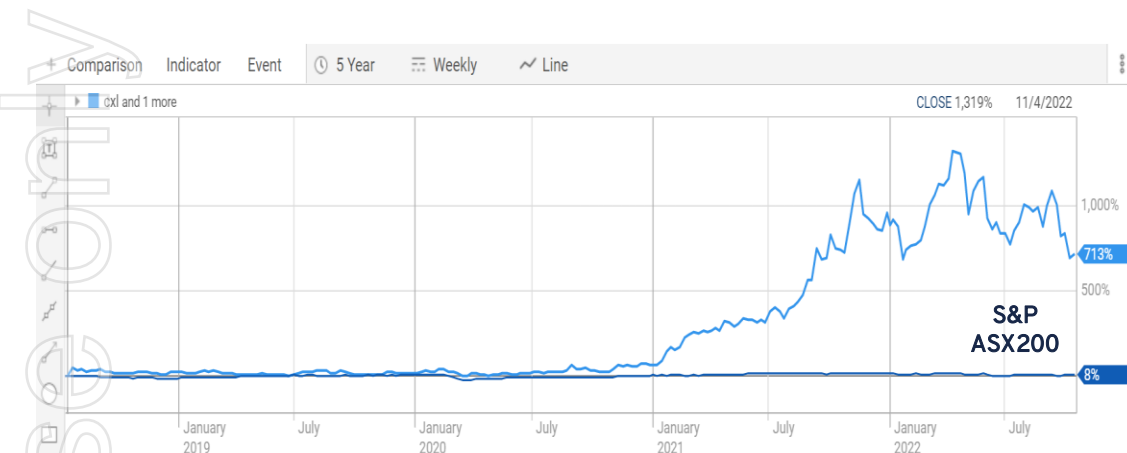
CEO of the Australian Photonics CRC for 14 years.

Author of more than 165 academic papers in physical chemistry and inventor of 55 patented inventions.

# Listed on the ASX in July, 2018

ASX:CXL

## Share Price Performance Since Listing



### Further Equity Detail

As at 18 Oct 2022

Free Float	161.6m shares
Employee Incentive Scheme Options	5.6m options



As at 18 Oct 2022

Shares on issue	~161.6m
Share price for IPO Capital Raise	\$0.53 per share
Share price on IPO	\$0.62 per share
Current Share price	\$5.12 per share
Market capitalisation	~\$827m

### Major shareholders

As at 18 Oct 2022

Board & Management	14.5%
Australian Super Pty Ltd	8.2%
Nicholas Merriman and associates	6.8%
Paul Crowther and family	5.3%

Term	Meaning
Alumina	The most commonly occurring form of aluminium oxide, with the chemical formula $Al_2O_3$
Amines	A chemical compound that can be used for the removal of $CO_2$ from other gases
Anode	The negative electrode of a battery
BATMn	Calix's core kiln technology, electrified – for battery and catalyst materials production and modified for the reduction of iron ore with hydrogen.
Beneficiating	Treatment of a raw material to improve its properties
BF	Blast furnace
BOD	Basis of Design
BOF	Basic Oxygen Furnace
Briquetting	The compaction of loose fragments into briquettes
Calcination	The thermal treatment of a chemical compound to remove impurities and/or cause thermal decomposition
Cathode	The positive electrode of a battery
CCS	Carbon Capture and Storage
CCUS	Carbon Capture, Utilisation and Storage
$CO_2$	Carbon Dioxide
EAF	Electric Arc Furnace
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation
ESG	Environment, Social and Governance considerations
FEED	Front-End Engineering Design
FID	Final Investment Decision
Fines	Small particles, which are usually very difficult to handle in kilns etc as they simply get blown out
Green Hydrogen	Hydrogen that is produced from an electrolyser using renewable energy

Term	Meaning
Haematite	A common iron oxide compound with the chemical formula $\text{Fe}_2\text{O}_3$
Lithium ion	The ionic form of lithium ( $\text{Li}^+$ ) – a positively charged atom of lithium
Iron	The chemical element, represent by “Fe” on the periodic table
Iron Ore	Iron oxide mixed with various other minerals, as mined and “pre-processed” (purified) as best as possible
Leilac	Calix’s core kiln technology for Low Emissions Intensity Lime and Cement production with $\text{CO}_2$ capture
Lithium (Li)	Chemical element with the symbol Li
Lithium Concentrate / Lithium Salt / “Mid-Stream” Lithium	A form of lithium that is high in lithium content, to be shipped and utilised by battery producers
Lithium ion	The ionic form of lithium ( $\text{Li}^+$ ) – a positively charged atom of lithium
MHL	Magnesium Hydroxide Liquid
MOU	Memorandum of Understanding
Passivation	A treatment process used to improve the corrosion resistance of surfaces
Pelletisation	The formation of pellets from finer materials to aid in handling
Process emissions	Process emissions are inherent to the chemical reaction and are released directly and unavoidably from the chemical processing of raw material. They are distinct from energy related emissions that may result from the consumption of fuel to heat the reaction.
Spodumene	A high lithium-containing ore, and the source of the majority of the world’s lithium supply
$\alpha$ -Spodumene	A tight Li-crystal formation, from which extraction of Li is difficult
$\beta$ -Spodumene	A loose Li-crystal formation, from which extraction of Li is much easier than the alpha-form

Term	Meaning
Reduce / Reduction	The process by which oxygen is removed
Reductant	A material that, through its chemical properties, carries out reduction
Steel	Mainly iron, with some carbon and other trace metals such as nickel, manganese etc depending upon the grade of steel being made
Tpa	Tonnes per annum
ZESTY	Calix's Zero Emissions Steel TechnologY

Because there's only one Earth...



...Mars is for quitters

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