

9 May 2024

Calix Newsletter – Issue 47 - May 2024

Sydney, Australia | 9 May 2024 – Australian environmental technology company, Calix Limited (ASX: CXL) (“Calix” or “the Company”) is pleased to provide a copy of its latest newsletter, providing a comprehensive update on activities across the business, including updates on Calix’s Zero Emissions Steel Technology (ZESTY) and the launch of the new Calix website. The newsletter is attached overleaf.

-ENDS-

This announcement has been authorised for release to the ASX by:

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About Calix

Calix Limited (ASX: CXL) is an environmental technology company solving urgent global challenges in industrial decarbonisation and sustainability.

Calix's unique patented core platform technology delivers efficient indirect heating of raw materials to enable renewably powered mineral processing and efficient capture of unavoidable industrial emissions.

With strong and increasing demand driven by global commitments to net-zero emissions, Calix is applying its core technology to the decarbonisation of cement, steel and alumina, sustainable processing of critical minerals, direct air capture of atmospheric carbon dioxide, and sustainable environmental products.

Each application of the technology is being deployed through a proven licensing, joint-venture and spin-out model. Subsidiary businesses focused on a specific application and target market accelerate commercialisation and enable a flexible equity funding model to support exponential growth.

Leveraging its core platform technology and a global network of partners, Calix is urgently developing multiple environmental businesses that deliver positive global impact. Because there's only one Earth.

Mars is for quitters.

calix.global

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Phil Hodgson
CEO & Managing Director

Welcome to Issue 47 of the Calix Newsletter

Welcome to issue 47 of the Calix newsletter, and our first edition for 2024. Following our special edition introducing the new Leilac newsletter, this edition takes a deep-dive into ZESTY, our highly promising solution for the production of green iron and steel, as well as providing further updates from across the Group.

Iron and steel, like cement and lime, are huge contributors to global CO₂ emissions, and represent an enormous opportunity for effective decarbonisation technologies to deliver significant environmental and economic impact. Calix continues to urgently develop its Zero Emissions Steel Technology, ZESTY, and following the completion of our pilot-scale testing campaign and FEED study for a ZESTY Demonstration Plant, we are increasingly excited by ZESTY's potential.

Our feature on ZESTY covers the why, what and how of ZESTY, and provides an update on our progress so far. Notably, our extensive testing campaign has repeatedly produced commercial grade green iron from a wide range of ore sources, including lower grade Australian ores. Perhaps most pleasingly, a techno-economic analysis found that, even at demonstration scale, ZESTY could produce green iron at a cost close to the range of conventional, coal-based iron production. This is a remarkable result, especially as it does not account for any benefit of carbon emissions reduction.

The economic production of green iron and steel will not only help solve an urgent climate challenge but could also add value to local iron ore exports, future-proof local industries, and support sustainable global development.

I am grateful to the dedicated ZESTY team and all our partners who have helped demonstrate the promise of the technology so far. We look forward to making further announcements as we scale and commercialise our industry leading solution for green iron and steel.

Staying with our Sustainable Processing business, we are also applying Calix' technology to electrify the processing of other minerals. Our joint venture with Pilbara Minerals continues to progress the build of a

demonstration plant for the sustainable processing of spodumene to a concentrated lithium phosphate salt. That project remains on time and budget, with construction expected to commence before the end of the financial year.

This newsletter also features another high potential application of Calix's electric calcination technology – alumina. Alumina is an important metal for many industries, but its production is extremely energy-intensive, and the use of fossil fuel energy inputs for high temperature heating is causing both environmental and economic pressures for producers. Electrifying the processing of bauxite to smelter grade alumina has the potential to deliver significant emissions reduction and efficiency benefits.

In other updates since our last newsletter, Calix has opened new hydration plants for our water business in the US, confirmed a new location for the Leilac-2 project at Heidelberg Materials' Ennigerloh cement plant, and welcomed two new directors to the Calix board. More recently, Calix received \$8.4m from the Australian Government's R&D Tax Incentive, further bolstering our balance sheet. And hot of the press is news that the HyGate funded Solar Methanol project – that aims to demonstrate a world first sustainable transport fuel made from captured industrial CO₂, green hydrogen and concentrated solar power – has received planning consent for the project in Port Augusta, South Australia.

Finally, I'm happy to share that Calix has a new website to help us better engage with industry, governments, people interested in working at Calix, and our shareholders. It includes new videos about the company, our technology and people, and overviews of our businesses and the industries in which we're working, as well as new interfaces for job applicants and shareholders that offer easy access to the information they may need in a single location.

I hope you enjoy the newsletter and browsing through our new website, and I look forward to discussing ZESTY and all things iron and steel decarbonisation at our upcoming special ZESTY webinar later this month. Stay tuned for more details.



ZESTY green iron and steel proves its credentials

With Calix's Zero Emissions Steel Technology (ZESTY) proven at pilot scale, following a successful FEED study and ore testing, identification of a preferred site for the ZESTY Demonstration Plant is coming soon. But why does ZESTY matter, how does it work, and what are the costs?

Our newsletter feature takes a deep dive on ZESTY's credentials.

Why it matters...

Iron and steel are essential materials for our economic prosperity and continued development, and yet, they are also one of the most carbon-intensive and hard-to-abate industries. Mitigating emissions from steelmaking is critical to ensuring industry and society can simultaneously meet social, economic and environmental sustainability goals.

Our results show that ZESTY has the potential to produce iron with near zero emissions at costs close to conventional fossil fuel based approaches¹.



2.8 billion tonnes of CO₂ per year²



~8% of global CO₂ emissions



>80% of emissions from steel come from the production of iron from iron ore³

A game changing opportunity

Today, ~90% of iron is produced by coal fuelled blast furnaces⁴. While alternative methods exist, such as using a 'syngas' of hydrogen and carbon monoxide, and new methods are emerging such as using green hydrogen to directly reduce iron ore for use in an electric arc furnace, they risk the simultaneous achievement of social, economic and environmental goals.

Syngas methods are not only more expensive, but still emit ~0.6 tonnes of CO₂ for each tonne of iron produced. Emerging hydrogen direct reduced iron (H-DRI) technologies are particular in their input material, generally requiring high grade and pelletised ores, and consume large amounts of expensive green hydrogen. For H-DRI to become economic, hydrogen and heat must be delivered as efficiently as possible. Solutions should also be compatible with a range of ore types, maintain existing supply chains and leverage existing infrastructure.

Australia perhaps encapsulates the risks and opportunity of decarbonising iron and steel production better than anywhere. Over half the world's iron ore comes from Australia⁵, and iron ore dominates Australia's export earnings⁶. Almost all Australian ore, however, is of the hematite / goethite variety, and not suited to use in an electric arc furnace⁷. For Australia, the compatibility of its iron ore with future low-carbon steelmaking is a significant sovereign risk.

Yet, Australia is the lucky country, abundant in both mineral and renewable energy resources. As Professors Rod Sims and Ross Garnaut point out, by combining these natural advantages with the right technology solutions, Australia could decarbonise around 8% of the world's emissions, not just the 1% of global emissions Australia produces domestically⁸. The supply of green iron to trading partners around the world would account for much of these emissions savings, and green iron exports can be expected to attract a green premium in a decarbonising global economy.

¹ ZESTY FEED Study assumptions:

- Total cash cost of iron ore of \$54 AUD/ tonne, based on average production prices.
 - Cost of electricity based on forecast spot market pricing, with an average cost of \$36-48 AUD/MWh, plus transmission and connection capital costs (included in the Capex analysis).
 - Effective levelised cost of hydrogen of AUD\$5.5-\$6.2/kg H₂ based on electrolyser CAPEX and electricity costs.
- Conservative (high) operational costs and other overheads based on averaged numbers from existing similar scale plants.

² IEA Emissions Measurement for NetZero Steel Apr 2023

³ Climate change and the production of iron and steel. World Steel Association. 2021

⁴ IEA. [Global iron production by technology in the Sustainable Development Scenario, 1990-2070](#)



Calix's solution | Zero Emissions Steel TechnologyY

Calix's Zero Emissions Steel TechnologyY (ZESTY) is a renewably powered H-DRI technology for the production of green iron and ultimately, green steel.

How it works...

ZESTY is yet another application of Calix's platform technology's indirect heating approach, which enables inefficient combustion to be replaced by precise and renewably powered electric heating. Like other H-DRI technologies, ZESTY uses hydrogen to remove oxygen from

the iron ore to produce metallic iron and water. Unlike other approaches, however, ZESTY separates the heat source from the reaction to ensure hydrogen is not combusted or used as a fuel, and is easily recycled.

No fossil fuels. No carbon emissions.

Through efficient electric heating, the theoretical minimum use of hydrogen, and the elimination of additional processing steps, ZESTY aims to deliver the lowest cost decarbonisation solution for green iron and steel.

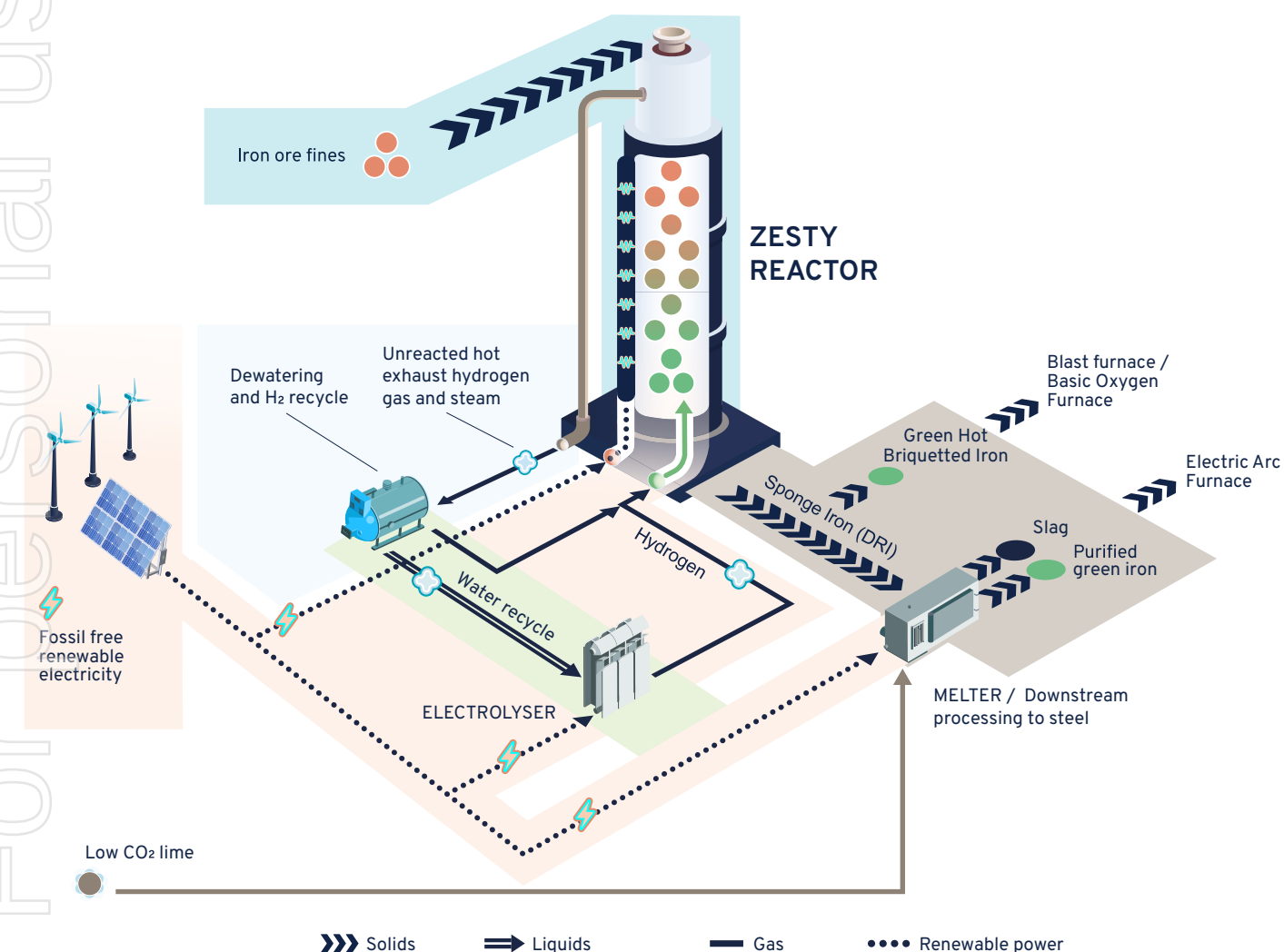


Figure 1

ZESTY process flow diagram.

ZESTY's key features & benefits

- **Electrification & renewable power** – The entire ZESTY process can be renewably powered, including the delivery of high temperature heat required to convert iron ore to metallic iron.
- **Minimum hydrogen consumption** – Calix's unique indirect heating approach ensures that hydrogen is used only as a reductant in the production of green iron and steel. Hydrogen is not combusted or used as a fuel, and unreacted hydrogen is simply recycled.
- **Process fines & lower grade ores** – ZESTY is ideally suited to process small particle sizes, creating multiple beneficiation opportunities for lower grade ores and fine material that may otherwise be discarded as waste. ZESTY's compatibility with lower grade ores provides a pathway to decarbonise much of the world's current iron ore supply that is otherwise not suitable for use in electric arc furnaces.
- **No pelletisation** – ZESTY removes the requirement for iron ore fines to be pelletised, eliminating process steps and avoiding significant capital and energy costs.
- **No fluidised beds** – ZESTY delivers a highly simplified process for the processing of iron ore fines and ultra-fines without fluidised beds.
- **Flexible operation** – Compatible with intermittent and renewable sources of electricity, ZESTY's electric heating provides a high degree of temperature control with fast start-up and shut down, and highly flexible production rates. As such, it may provide a versatile load balancing service to the energy grid.
- **Easily scalable** – Calix's modular technology can be simply scaled through duplication, de-risking technology scale up and enabling flexible production volumes.
- **Targeting lowest cost** – By enabling efficient electric heating, minimal hydrogen use, and eliminating additional processing steps, ZESTY aims to deliver the lowest cost decarbonisation solution for green iron and steel.

⁵<https://www.statista.com/statistics/300328/top-exporting-countries-of-iron-ore/>

⁶<https://www.minerals.org.au/news/record-high-resources-export-revenue>

⁷[Iron Ore | Geoscience Australia](#)

⁸Professor Rod Sims AO & Professor Ross Garnaut AC. [Realising Australia's economic and climate opportunities.](#) Address to the National Press Club of Australia. 2024.





Flexible pathways to green steel

ZESTY can be integrated directly at the iron ore source for the export of green iron, or by a steelmaker to feed a blast furnace, basic oxygen furnace, or electric arc furnace. Multiple processing routes provide flexible near-, medium- and long-term decarbonisation pathways for the industry.

For a fast and efficient route to emissions reduction, ZESTY can produce low emissions Direct Reduced Iron (DRI) or Hot Briquetted Iron (HBI) to replace some of the iron ore charge to a blast furnace. This pathway leverages existing steelmaking infrastructure, and as over 80% of the emissions from steelmaking come from the conversion of iron ore to metallic iron, it can provide significant emissions reduction in the near-term. However, it is anticipated around 30% of the overall charge to the blast furnace can be replaced by DRI.

ZESTY can also deliver low emissions DRI/HBI to a renewably powered electric smelter, such as that proposed in the collaboration between BHP, Rio Tinto and Bluescope⁹. The smelter provides an additional process step that removes impurities from DRI to deliver an iron product suitable for use in basic oxygen steelmaking. In this way, a DRI to electric smelter route can replace coal and blast furnaces altogether to make steel with ~80% reduction in emissions, while maintaining compatibility with a variety of input ores.

Alternatively, ZESTY may process higher grade ores, or provide sufficient beneficiation of lower grade ores, such that the DRI product can be used directly in an electric arc furnace for close to zero emissions steel.

Testing ZESTY's economic and environmental credentials

To demonstrate the ZESTY technology at a commercially relevant scale, Calix is targeting the construction of a 30,000 tonne per annum ZESTY Demonstration Plant. The FEED study for the plant, completed in February 2024, was part funded by the Australian Renewable Energy Agency (ARENA) and supported by an expanded ore testing program at Calix's pilot scale facility in collaboration with the Australian Heavy Industry Low-carbon Transition Cooperative Research Centre (HILT CRC) and its partners.

The extensive pilot-scale tests included over 130 test runs using nine different Australian ores from multiple providers, covering a range of grades and particle sizes. The results are extremely encouraging.

Even at pilot-scale in a multi-purpose R&D plant, ZESTY delivered excellent metallisation rates. Most test runs at the targeted temperature range achieved the level of metallisation suitable for downstream use in either a melter or blast furnace, while several tests reached sufficient metallisation levels typically required by an electric arc furnace. Notably, these results are for hematite / goethite ores, representative of around 96% of Australia's iron ore exports.

⁹[Australia's leading iron ore producers partner with BlueScope on steel decarbonisation](#). BHP, Rio Tinto, Bluescope Joint Media release. 2024

The ZESTY Demonstration Plant FEED study found that HBI from low grade iron ore could be produced for ~AUD\$630-\$800 / tonne¹⁰. This cost includes the capital cost of the plant and processing costs, and excludes the cost of land and transport of the input and output materials.

The study showed that, even at demonstration scale, ZESTY could produce zero emissions iron at a cost close to the range of existing conventional HBI processing costs¹⁰, despite using hydrogen as a reductant. Furthermore, it does not take credit for any carbon price, carbon border adjustment mechanism, or other green premium that a near zero emissions iron product may attract.

The estimated production cost is made possible by a combination of ZESTY's minimal use of hydrogen, the relative simplicity and efficiency of the electrically heated process, and the elimination of the agglomeration and induration process steps.

ZESTY's energy requirement is projected to be 4.2-4.6MWh / tonne of iron, with most of this energy going towards the generation of green hydrogen. Excluding hydrogen production, ZESTY is projected to require 0.9-1.3MWh / tonne of iron.

The overall capital and operating costs are expected to reduce further as the core technology is scaled and refined.

¹⁰Simplified levelised cost of competing low-carbon technologies in steel production. IEA. 2020

Pilot testing and FEED study completed


130+
Tests completed


9
Australian ores variants tested


75-98%
Metallisation degree

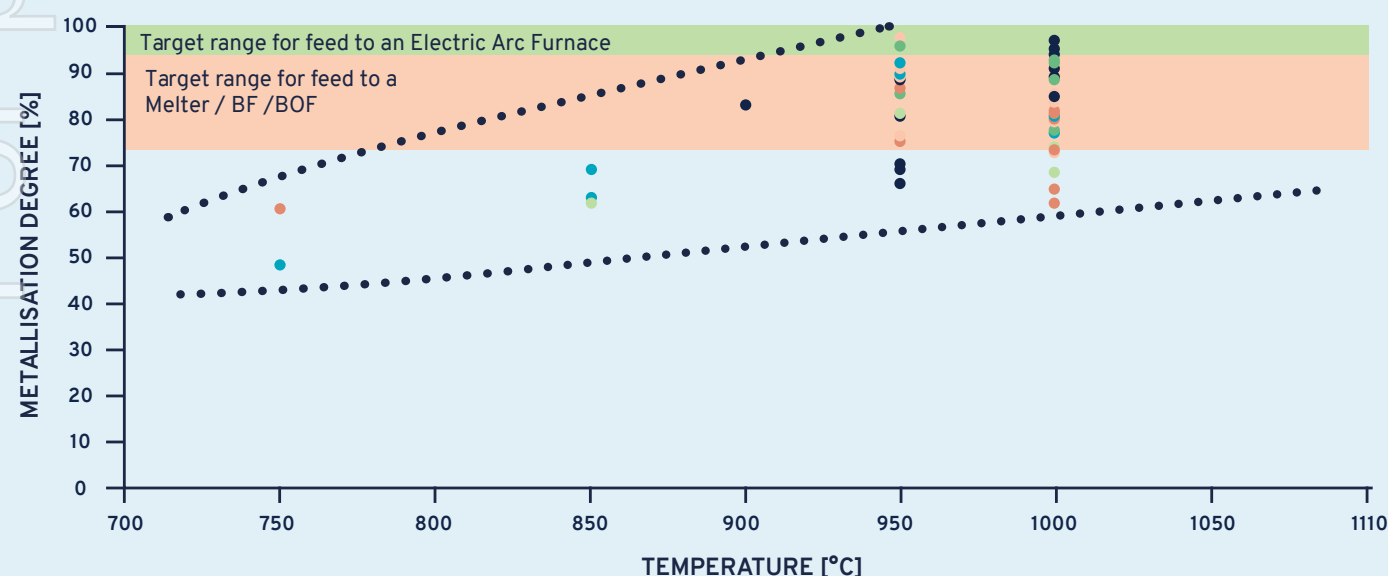

0.9 – 1.3 MWh
per tonne of HBI
– highly efficient


US\$410-520
per tonne of HBI
production cost


Near
ZERO
emissions


Scalable
Multiple tubes for
modular scale-up


ARENA Grants
Broader Australian
government support



- ▶ 130+ tests with 9 x Australian iron ores completed
- ▶ Metallisation up to 98% suitable for melter and EAF routes
- ▶ Suitable for low grade iron ores (as low as 53% Fe tested)
- ▶ Fines with size range of 50-500 µm tested without pelletising
- ▶ System can be tuned to produce a consistent commercial grade H-DRI
- ▶ ZESTY pilot scale result using an 18m electric tube
- ▶ ZESTY demonstration plant will use an ~36m electric tube

Figure 2

Pilot-scale results showing metallisation as a function of processing temperature for a range of ores.



Towards commercial demonstration

With the ZESTY technology proven at pilot scale, and a FEED study for a commercial demonstration plant completed, commercial and financing contracts are now being negotiated to enable the location of the Demonstration Plant to be selected and a Final Investment Decision to be made. Announcements will be made as key milestones are achieved.

“The economic production of green iron and steel will not only help solve an urgent climate challenge, but could also add value to local iron ore exports, future-proof local industries, and support sustainable global development.”

“I am grateful to the dedicated ZESTY team and all our partners who have helped demonstrate the promise of the technology so far. We look forward to making further announcements as we scale and commercialise our industry leading solution for green iron and steel.”



Phil Hodgson – Calix CEO and Managing Director

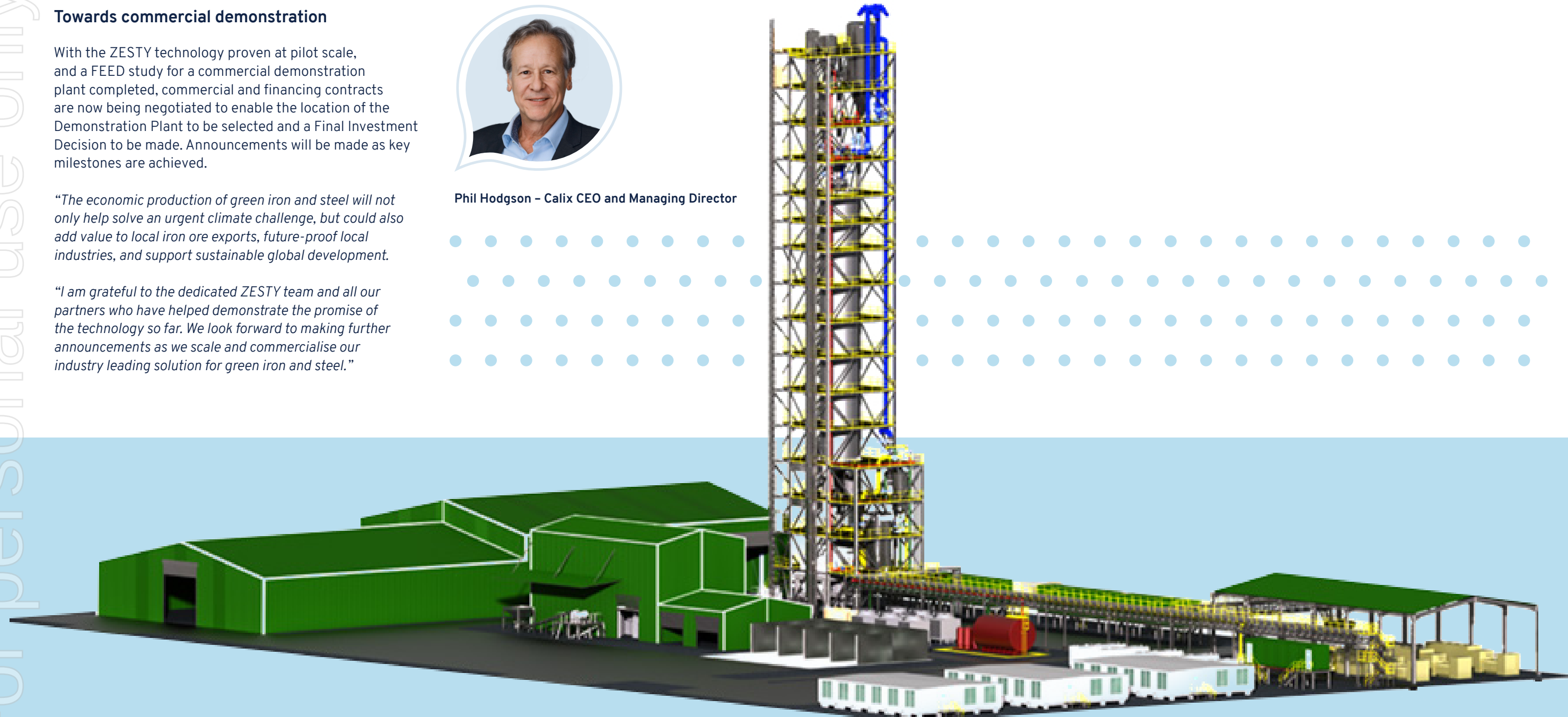


Figure 3



Render of 30ktpa ZESTY demonstration plant



Mars is for quitters

Calix is solving global challenges in industrial decarbonisation and sustainability. Because there's only one Earth.



Visit our new website!

Curious to know more about how we're solving global challenges? Visit our new website to learn more about how our technology works and the industries in which we're operating, uncover insights into what it's like working at Calix, visit our investor centre, plus much more!

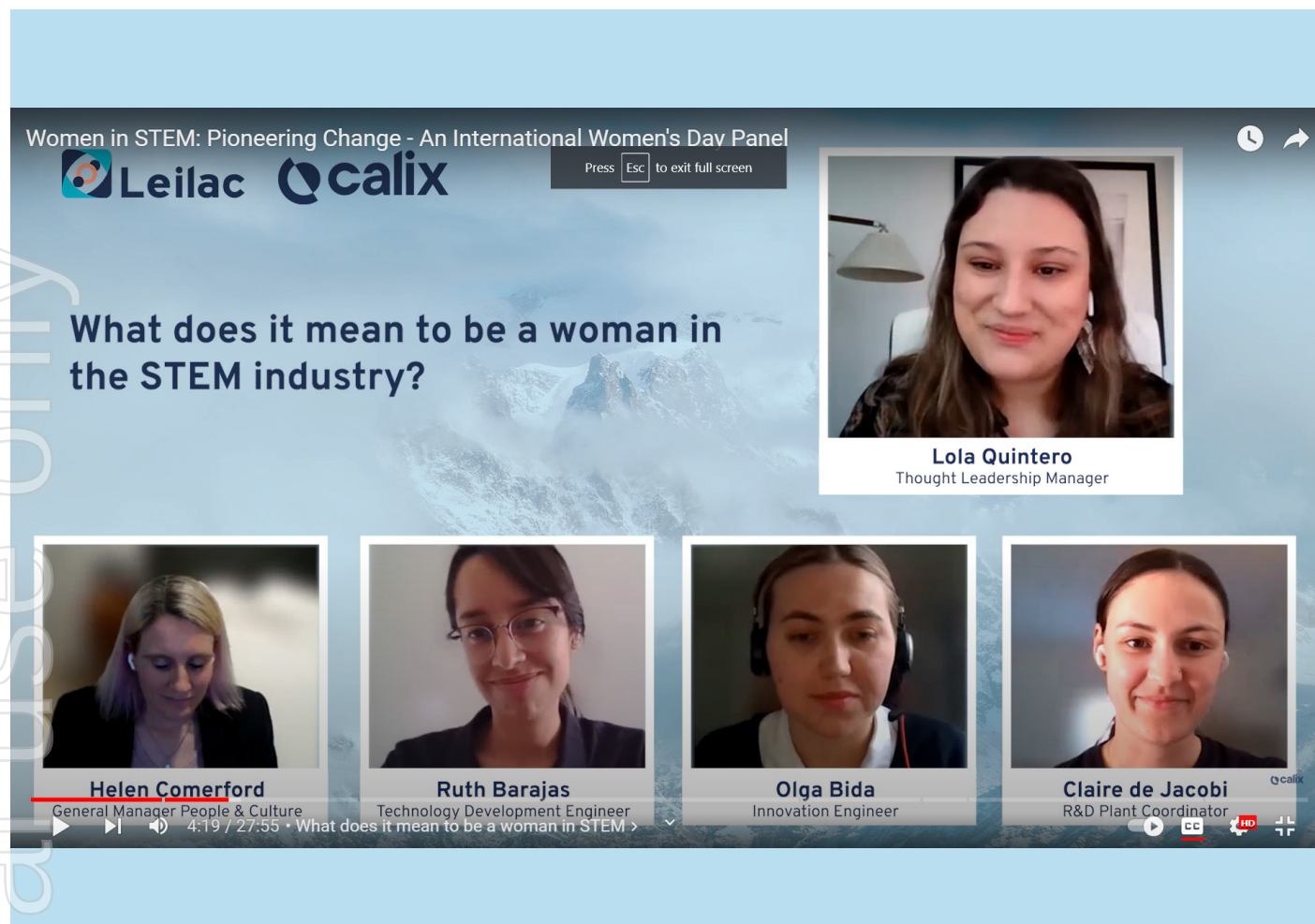
Visit: [calix.global](https://www.calix.global)

Watch our story of innovation and resilience

Watch our CEO & Managing Director, Phil Hodgson with our Founder and Chief Scientist, Mark Sceats share our company's story of innovation and resilience as we set about revolutionising the way industry makes things.

<https://www.youtube.com/watch?v=roMDqufmPxY>





International Women's Day Panel 2024: Women in STEM – Pioneering Change

This International Women's Day, Calix was proud to present a special panel discussion, "Women in STEM: Pioneering Change" as the first in a new series focused on diversity and inclusion.

At Calix, our dedication goes beyond technological advancements; we're passionate about fostering an environment where inclusiveness is our strength.

This year's panel focuses on the experiences, challenges, and achievements of women in STEM, emphasising the urgent need for equality and representation in these critical sectors. Watch again as we connect across continents, from Europe to Australia, to celebrate and deliberate the role of women in STEM fields.

Calix receives \$8.4m R&D tax incentive

Calix received \$8.4m through the Australian Government's Research and Development (R&D) Tax Incentive program for the 2023 Financial Year (FY23). The receipt of \$8.4m further strengthens Calix's balance sheet and will support the delivery of key projects and continued technology development.



New location confirmed for Leilac-2

Decarbonisation technology company, Leilac, is pleased to announce the Leilac-2 project will be hosted at Heidelberg Materials' Ennigerloh cement plant in North Rhine-Westphalia, Germany.

The selection of Ennigerloh as the Leilac-2 host plant is the result of a thorough site assessment process by Leilac, Heidelberg Materials, and IKN, a Leilac-2 project partner, and follows Heidelberg Materials' decision to end clinker production at the previous site in Hanover, Germany.

The Leilac-2 project has already delivered a robust detailed design ready for implementation. Construction of Leilac-2 at Ennigerloh, based on the existing engineered design, is targeted to begin promptly following the conclusion of the permitting process.



Leilac CEO, Daniel Rennie said, "The swift and successful selection of Ennigerloh as the new Leilac-2 host plant is the result of the proactive, positive, and committed approach by Heidelberg Materials, the European Commission, and our partners, and the dedication of an exceptional collective project team."



Heidelberg Materials General Manager Germany, Christian Knell said, "Heidelberg Materials has again demonstrated its commitment to develop the Leilac technology and is pleased to host the Leilac-2 project at the Ennigerloh cement plant. Leilac continues to be an important technology solution for our industry-leading efforts to meet societies' net-zero commitments."



use only

ZEAL: targeting lowest cost, lowest emissions alumina

Global decarbonisation goals, energy security and price pressures are combining to create significant headwinds for industries heavily reliant on fossil fuels, including alumina. The electrification of industrial heating can decouple energy and carbon intensity, enabling energy-intensive processes to reduce and eliminate carbon dioxide emissions.

Calix's core platform technology – capable of delivering efficient electrification of conventional carbon-intensive mineral processing – also promises to provide a robust solution for zero emissions alumina.

The opportunity: ~2% of global CO₂ emissions

The production of aluminium, a critical metal for many technologies, is amongst the most energy-intensive of industrial processes and contributes ~2% of global CO₂ emissions. In line with global net-zero commitments, electrification can eliminate the majority of the alumina industry's carbon emissions by enabling 100% use of renewable energy inputs.

Electrification can also reduce costs, swapping volatile supplies of fossil fuels for increasingly low-cost local renewable generation, and increasing efficiency by removing combustion and enabling steam recycling.

Calix's solution: calcination for the electric age

Zero Emissions Alumina (ZEAL) is yet another application of Calix's core indirectly heated electric calciner technology. ZEAL is designed to provide the lowest cost, lowest emissions, and highest efficiency solution for smelter grade alumina calcination.

Ideally suited to renewable energy sources and grid-load balancing applications, ZEAL builds upon many years of development of Calix's core platform technology to replace inefficient and carbon-intensive combustion processes with clean, efficient, and precise electric calcination.

In addition to enabling near-zero scope 1 emissions, Calix's ZEAL technology aims to deliver the lowest cost calcination solution to the industry through the elimination of fuel and combustion exhaust, elimination of hard face refractory, and steam recycling.



Sustainable Processing Manager, Michael Wheatland described Calix's solution as next generation alumina calcination.

"It's with great excitement that we take Calix's platform technology and apply it to developing a sustainable and future-proof solution for the energy-intensive alumina industry," Mr Wheatland said. "Our solution promises to deliver lower cost, lower emissions, and lower risk energy inputs."

Fast-tracking commercialisation: feasibility studies are underway

Calix has successfully completed pilot scale testing of ZEAL. Feasibility studies are underway for both a 40T/hr demonstration plant and full-scale Calix ZEAL calciners.

Features & benefits

- Electric calciner for smelter grade alumina
- More efficient & cost-effective operations
- No combustion
- Sustainable & secure energy supply
- Low particle breakage & alpha alumina



Calix was delighted to present a keynote lecture, "Alumina Calcination Using Renewable Electricity for Zero Emissions Alumina Production" at the recent 2024 Alumina Quality Workshop Conference and Exhibition in Dubai.

To learn more visit:

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calix.global/alumina/



IER, Lufkin, Texas (L to R) Calix Managing Director & CEO, Phil Hodgson; Lufkin Plant Operator, Dakota Gilbert; Lufkin Plant Manager, Asa Thunder Eagle; Asa's canine buddy, Patriot; and President of IER, Dr Doug Kelley.

New hydration facilities in Wisconsin and Texas boost IER's capacity

IER, Calix's water and wastewater treatment business in the USA, has boosted its capacity with the official opening of new hydration facilities in Ripon, Wisconsin and Lufkin, Texas. The combination of the new facilities, the addition of two new employees in key roles, and significant regulatory tailwinds, sees the business well-positioned for growth.

The new plants are supporting the expansion of sales into new regions, including Wisconsin, Illinois and Texas, as well as supporting new business in the existing regions of the Pacific Northwest and Upper Midwest.

The demand for additional capacity follows the development of ALKA-Mag+, a safe, sustainable and cost-effective alternative to caustic soda.

To further support the increased demand and growth IER is experiencing, two new employees were recently appointed. Daren Ruggles has been appointed as the Manager of North American Operations, and Candice Yamaura has been appointed to the role of Human Resources and Fleet Manager.



President of IER, Dr Doug Kelley spoke with enthusiasm about the exciting growth prospects for the business.

"Following the challenges of the pandemic, this is a particularly exciting time to be part of IER, especially as we feel the momentum building from regulatory tailwinds, opening two new facilities, and expanding our team," Dr Kelley said.

"Opportunities abound as the desire grows to replace caustic soda in numerous process water and wastewater applications, as well as replacing nitrate-based chemicals for odour and corrosion control in the collection system."

"IER can meet the demand with our safe, sustainable, more reactive, and more cost-effective ALKA-Mag+ magnesium hydroxide product."

Dr Sarah Ryan & Peter Dixon join Calix's board

Calix is pleased to welcome Dr Sarah Ryan and Peter Dixon to the Calix board of directors as non-executive directors.

At the Calix 2022 Annual General Meeting, Calix Chair, Peter Turnbull noted the board's proactive approach to board succession and renewal to ensure the composition of the board is appropriate at all times to support the delivery of Calix's strategic goals. This process has been underway for some time and these latest appointments represent a major next step in Calix's board renewal.

A further step is the expected retirement of Peter Turnbull prior to 30 June 2024, with Alison Deans set to become the new chair following Peter Turnbull's retirement. These changes will result in the Calix Board being comprised of four highly experienced non-executives and two executive directors, further enhancing the governance of the company.

Calix Chair, Peter Turnbull said, "I am very pleased to welcome Dr Sarah Ryan and Peter Dixon to the Calix board in our next stage of board succession at Calix.

"Dr Ryan brings to Calix extensive global experience from across the energy, mining and investment sectors, including a deep understanding of heavy industry, complex project management, technology commercialisation and company scale-up processes. Her combination of deep technical expertise and breadth of executive and board experience will enhance the board's ability to support Calix's strategic growth objectives.

"Mr Dixon brings to Calix a unique and valuable mix of global expertise in investment banking, equity capital markets, mergers and acquisitions, strategy formulation, organisational growth and scale-up issues as well as legal expertise which will complement the board's current and future skills base."

Incoming Non-Executive Director, Dr Sarah Ryan said, "I am very pleased to be joining the board of Calix at a time where it is becoming recognised that decarbonisation of heavy industry is an essential part of the energy transition globally. I see Calix as a key part of this effort and its technology has immense potential across many sectors such as critical mineral processing, cement production and green steel production."

Incoming Non-Executive Director, Peter Dixon said, "I am excited to join the board of Calix at an important time in its growth journey. I look forward to working with the board of Calix and its management team to help achieve Calix's strategic initiatives and thereby deliver sustainable impactful solutions to some of the world's largest challenges."



Dr Sarah Ryan appointed as a non-executive director

As a non-executive director and former senior operational executive, Dr Ryan brings extensive global engineering and commercial experience, encompassing private equity, investment management, energy sector operations, marketing, research, and team management. With a particular emphasis on innovation and technology enabled solutions, Dr Ryan has led and helped to build organisations across the energy, natural resources, and infrastructure sectors.

Dr Ryan is currently a non-executive director of Viva Energy Group Limited (ASX:VEA), Aurizon Holdings Limited (ASX:AZJ), Transurban Group (ASX:TCL) and the Future Battery Industries Co-operative Research Centre. Until recently, Dr Ryan was a non-executive director of Oz Minerals Limited (ASX:OZL) and Woodside Energy Group Limited (ASX:WDS). Dr Ryan is also a Strategic Advisory Panel Member of the ARC Centre of Excellence for Green Electrochemical Transformation of Carbon Dioxide and Chair of the Energy Forum for the Australian Academy of Technological Sciences and Engineering.

Dr Ryan holds a Bachelor of Science in Geology from the University of Melbourne, a Bachelor of Science (First Class Honours) in Geophysics from the University of Adelaide, and a PhD in Petroleum Geology and Geophysics from the University of Adelaide. Dr Ryan is also a Fellow of the Australian Academy of Technological Sciences and Engineering (ATSE), a Fellow of the Australian Institute of Energy, a Member of the Australian Institute of Company Directors, a Member of Women Corporate Directors, and a member of Chief Executive Women.



Mr Peter Dixon appointed as a non-executive director

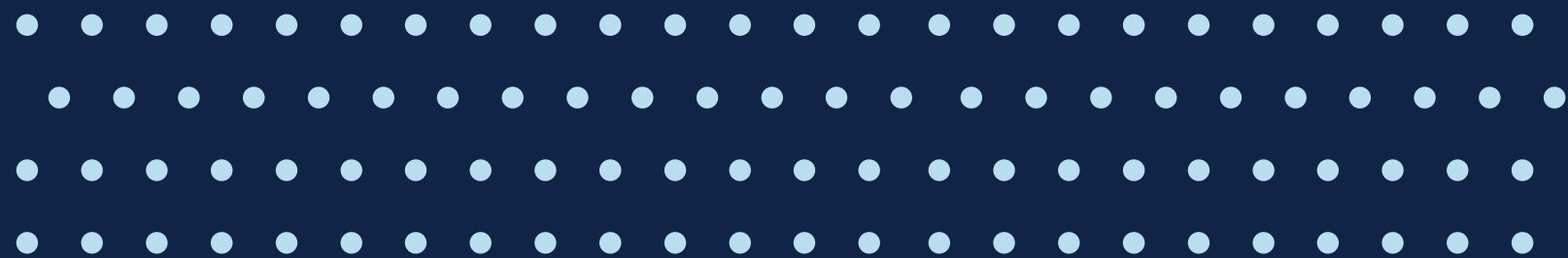
With over 25 years of deep and diverse experience across the legal, investment banking and funds management sectors, Mr Dixon brings expertise across corporate strategy, investment management, corporate advisory (including equity capital markets) and legal governance issues to the Calix board.

Mr Dixon is currently Chief Strategy Officer for HPX Group (which provides legal, compliance, governance and workplace services to a diverse range of clients across Australia and New Zealand), and is a non-executive director at Johns Lyng Group Limited (ASX:JLG).

Mr Dixon's investment banking and legal experience includes private legal practice experience at Mallesons Stephen Jacques in Sydney and Linklaters in London, as well as over nine years executive experience at MA Financial Group (ASX:MAF) initially as an investment banker and ultimately as the group's General Counsel. Mr Dixon also spent time earlier in his career at Macquarie Group Limited (ASX:MQG) in various roles across corporate strategy, investment management and corporate advisory. Peter's unique combination of skills and experience including in relation to complex corporate transactions and strategic options and execution will directly support Calix's strategic goals.

Mr Dixon holds a Bachelor of Commerce (Finance) and a Bachelor of Laws from the University of New South Wales. Mr Dixon has previously been admitted to practice as a solicitor in New South Wales and in England and Wales.

Meet Calix R&D Plant Coordinator,
Claire de Jacobi du Vallon



Careers at Calix

Meet Claire de Jacobi du Vallon, R&D Plant Coordinator

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