23 November 2023

Calix publishes its 2023 Sustainability Report

Sydney, Australia | 23 November 2023 – Australian environmental technology company Calix Limited (ASX: CXL) ("Calix") is pleased to publish its Sustainability Report for 2023. The report is attached overleaf.

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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 global challenges in industrial decarbonisation and sustainability, including CO_2 mitigation, sustainable processing, advanced batteries, biotechnology and water treatment.

Calix's patented core platform technology delivers efficient indirect heating of raw materials to enable electrification of industries, efficient capture of unavoidable emissions, and green industrial processing solutions. Its flash heating approach can also produce unique nanoporous materials with enhanced chemical and/or bio-activity.

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

Mars is for quitters.

www.calix.global

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calix

Calix Limited Sustainability Report

2023

Acknowledgement of country

Calix respectfully acknowledges the traditional custodians of the land on which we live and work, recognise their ongoing connection to the land, waters, and culture, and express our gratitude for the wisdom and knowledge that has been shared and preserved for generations. We pay our respects to their elders, past, present, and emerging, and extend our acknowledgement to all Aboriginal and Torres Strait Islander peoples.

Calix's head office is located on Kuring-gai land, our Myrtle Springs mine is located on Adnyamathanha land, our Bacchus Marsh operational site is located on Wathaurong land, and our Nerang plant is located on Yugambeh land.

Contents

Our mission and values

Calix is an environmental technology company that is developing a unique platform technology to solve global challenges in industrial decarbonisation and sustainability.

We are building multiple businesses to deliver positive global impact in CO_2 mitigation, sustainable processing, advanced batteries, biotechnology and water treatment.

Our dedicated team of employees span more than seven countries, five continents and nine operational sites. They are a highly connected network of scientists, engineers and technical specialists who work collaboratively to create innovative solutions for clients, partners, and communities globally.

Our shared values unite us in striving to achieve our purpose; to solve global challenges – because Mars is for quitters!

A LETTER FROM THE CEO

A message from the CEO

Phil Hodgson
Managing Director and CEO

At Calix, sustainability sits at the core of our organisational purpose. It steers our decision-making, shapes our strategies, and inspires innovation.

In the 2023 Financial Year (FY23), we proudly recommitted to the United Nations Global Compact (UNGC), the world's largest sustainability initiative, of which we have been a signatory since 2020. I am pleased to reaffirm Calix's support of the Ten Principles of the UNGC and our commitment to align all aspects of our operations with global sustainability ambitions.

As Calix works diligently to solve global challenges, I am pleased to report that we are also making progress towards our approach to sustainability internally. The heart of our sustainability program is the protection of our people and the planet.

The most important commitment we make at Calix is ensuring that our team operate within a safe environment and return home each day without injury. I am pleased that in FY23 we have continued to improve our safety performance across our global operations.

Our strong safety performance is complemented by various initiatives to foster health, wellbeing, diversity and inclusion. We aim to build a workforce that is as diverse as the communities we operate in. In FY23 we have set ourselves a target in line with the 40:40 Vision Initiative to ensure the advancement of a gender diverse workforce is embedded in our corporate strategy for years to come.

In honour of our commitment to measuring, monitoring, and reducing the emissions and waste that result from our operations globally, we have conducted our inaugural greenhouse gas assessment, under the guidance of Pangolin Associates. The outcome of this assessment has identified emission hotspots in both our operations and value chain, from which we will develop an emission reduction roadmap in FY24.

We are pleased to share our achievements over the past 12 months in our Sustainability Report for FY23, as well as outlining the targets we have set for ourselves, and the initiatives we are undertaking to further embed sustainable practices into all aspects of our strategy, culture and operations.

Sincerely

Phil Hodgson
Managing Director and Chief Executive Officer
Calix Limited

OUR COMMITMENT TO THE UN GLOBAL COMPACT

The United Nations Global Compact is the world's largest corporate voluntary initiative. It encourages organisations to adopt sustainable and responsible business practices.

The UNGC operates on the principle that businesses play a significant role in addressing global challenges and advancing sustainable development. It calls on participants to adopt ten universally accepted principles covering the areas of human rights, labour rights, environment, and anti-corruption.

Calix became a signatory of the UNGC in 2020, signifying our commitment to integrating these principles into our operations, strategies, and culture, and to take meaningful action to advance them. In November 2022, we publicly reported our progress towards embedding these principles into every aspect of our business by producing our second annual Communication on Progress Report.

In embracing the principles of the UNGC, we strive to make a positive impact, be a catalyst for positive change and contribute to a sustainable future for all.

WE SUPPORT

UN GLOBAL COMPACT

Sustainability Team

Calix's Sustainability Team was formed in August 2020 to oversee the implementation of the Company's sustainability strategy. This voluntary initiative is driven by Calix personnel who are passionate about people and the planet. It aims to steer the Company's development and implementation of sustainability initiatives across its global operations.

In FY23, our sustainability team doubled in size, increasing from nine voluntary members to 18, highlighting the momentum building within the organisation.

The diversity of our membership is pivotal to reaching our sustainability goals, with team members representing all geographic regions and business functions. Our diversity enables us to generate a rich pool of knowledge and ideas, provides a more comprehensive understanding of complex sustainability challenges, and encourages innovative thinking to develop meaningful solutions.

In FY23, our team formed dedicated working groups to advance three sustainability ambitions:

- Science-based emission reduction in line with the 1.5 °C pathway.
- Gender balance at all levels of the organisation.
- 100% sustainable material inputs that are reusable, renewable and recyclable.

It is our aim to achieve each of our ambitions by 2030. In FY23, our team focused on developing measurable short, medium and long-term targets and strategies to enable this.

Innovating for Earth

A combination of the commitment of Calix's purpose-driven team, our patented breakthrough technology, and a global network of research and development collaborations are propelling our mission to urgently address some of humanity's greatest global sustainability challenges.

Our core platform technology is designed to deliver efficient indirect heating of raw materials to enable:

- The electrification of industries;
- Efficient capture of unavoidable emissions; and
- Sustainable industrial processing solutions.

Calix's flash heating approach can also produce unique nanoporous materials with enhanced chemical and/or bioactivity for use in advanced batteries and sustainable agriculture and water treatment products.

Every application of Calix's core platform technology is designed to: address a specific global environmental challenge consistent with our purpose, values and company ethos; present opportunities for shared value creation and economic growth; and deliver sustainable competitive advantage.

Our impact

The Sustainable Development Goals (SDGs) were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet and ensure that by 2030 all people enjoy peace and prosperity.

The 17 SDGs are integrated, recognising that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability.

Calix is committed to a journey towards sustainability and corporate social responsibility. Across our business, the Company is working towards ten SDGs.

Sustainable Processing

Emissions and waste reduction with electric mineral processing.

1 OUR AMBITIONS TO 2030

- **Transition mineral processing to clean energy and more sustainable processing methods by electrifying as many industries as possible, prioritising the heaviest emitting industries first.**
- **Develop relationships with large existing industry players to facilitate the rapid adoption of sustainable processing technology.**

SDG IMPACT

To reach the Sustainable Development Goals on climate change and clean energy, hard-to-abate sectors of our economy that traditionally rely on carbon-intensive heating sources and feedstocks must become compatible with clean alternatives.

Calix's technology is energy-agnostic and electrification-ready, providing sustainable and economical pathways for industrial processes to transition to clean energy sources, including renewable electricity.

From electrification to enabling green steel through hydrogen reduction, to reducing the waste and CO_2 footprint of mineral processing with innovative refining solutions, Calix is enabling sustainable industrial processing.

At Calix, teamwork is one of our Company's core values, and we acknowledge that collaboration is required to solve complex global issues. We highly value our partnerships with industry, academia and governments to electrify industries and develop sustainable industrial processing solutions.

2 OUR 2024 MILESTONES

- Commence construction of the demonstration plant at Pilbara Minerals' Pilgangoora project.
- Expand our Zero Emissions Steel TechnologY's (ZESTY) ore testing program.
- Complete a Front-End Engineering Design (FEED) study for the ZESTY demonstration plant.
- Complete Pre-FEED study for Alumina.

3 FY23 ACHIEVEMENTS

- √ **Entered into a Joint Venture agreement with Pilbara Minerals Limited (ASX: PLS) to develop a novel mid-stream lithium processing technology to produce low carbon, low waste, and high value lithium salt.**
- √ **Received Australian Renewable Energy Agency (ARENA) funding to support the design of a renewably powered direct hydrogen reduced iron (H-DRI) demonstration plant.**
- √ **Completed initial pilot-scale testing of multiple iron ore types showing excellent metallisation using Calix's Zero Emissions Steel TechnologY (ZESTY).**

PARTNERS

Pilbara Minerals, HILT CRC

Reducing emissions & waste through electrification

Traditional mineral and chemical processing methods present two significant environmental concerns: heavy emissions and waste.

Calix's electric calcination technology can reduce the emission profile of mineral and chemical processes by enabling the use of renewable sources of energy and eliminating reliance on fossil fuels. Through electrification and an indirect heating approach, Calix also removes sources of combustion, enabling cleaner and more efficient heating.

Calix's technology reduces waste by enabling the processing of fine materials that are traditionally discarded due to low mineral concentration or difficulty in handling or processing. Refining at the mine site can also rationalise supply chains and avoid the movement of waste material.

SUSTAINABLE PROCESSING

SUSTAINABLE PROCESSING

Decarbonising iron & steel

Iron and steel production is the second largest source of man-made industrial CO_2 emissions, responsible for an estimated 2.6 billion tonnes per year, or approximately 7%[1] of global industrial emissions. Mitigating CO_2 emissions from the iron and steel industry is critical to ensuring the planet meets global sustainability goals.

Currently, 80 – 85% of the industry's CO_2 footprint is linked to the production of iron, and 90% of iron is produced by metallurgical coal and coke-fuelled blast furnaces[2].

Calix's ZESTY technology for green iron & steel

Calix's ZESTY uses green hydrogen in a renewably powered reactor to produce green iron and ultimately, green steel.

ZESTY's electric indirect heating approach enables hydrogen to be consumed only as a reductant, rather than a fuel source, and for unused hydrogen to be recycled. These features allow ZESTY to target the most efficient use possible of hydrogen in the production of green iron and steel.

Initial pilot-scale testing has shown excellent metallisation of multiple iron ore types using ZESTY. In the 2024 financial year, an expanded ZESTY ore testing program will be completed. The ongoing R&D program is informing a FEED study for the 30,000 tonne per annum, zero CO_2 emissions ZESTY-iron demonstration plant, with support from the Australian Government's Australian Renewable Energy Agency.

[1]Climate Change and the Production of Iron & Steel. World Steel Association. 2021
https://worldsteel.org/wp-content/uploads/Climate-change-production-of-iron-and-steel-2021.pdf

[2]Climate Change and the Production of Iron & Steel. World Steel Association. 2021
https://worldsteel.org/wp-content/uploads/Climate-change-production-of-iron-and-steel-2021.pdf

SUSTAINABLE PROCESSING

Towards sustainable lithium

With battery markets expected to grow five-fold by 2030[3], demand for lithium is increasing. Australia is the world's largest supplier of lithium[4], with Australian lithium produced from the hard rock, spodumene. Currently, spodumene, containing around 6% lithium and 94% waste, is shipped from the mine site for processing by traditional coal- or gas-fired rotary kilns, creating significant emissions from the transport and processing of the raw material.

A mid-stream process for low-carbon lithium

In a joint venture (JV) with Pilbara Minerals (ASX: PLS), Calix is developing a novel 'mid-stream' process to produce a low carbon and low waste lithium phosphate salt product at the mine site.

A Lifecycle Assessment (LCA) completed by Minviro Ltd found that carbon emissions intensity of spodumene calcination by electric calcination would be reduced by 90% compared with a coal-fired rotary kiln, and 80% compared with a natural gas-fired rotary kiln[5].

The ability to treat very fine spodumene concentrates at lower lithium grades has the potential to reduce waste and improve lithium recovery. Lithium phosphate is also a safer and less corrosive material than lithium hydroxide and has the potential for 100% utility in downstream battery manufacturing.

In FY23, the Boards of Calix and Pilbara Minerals approved the Financial Investment Decision on a demonstration plant at Pilbara Minerals' Pilgangoora Project.

The demonstration plant will use Calix's patented electric calcination technology and is supported by $20m in Australian Government funding announced under the Modern Manufacturing Initiative.

Successful demonstration of the mid-stream process may lead to its commercialisation, with the JV able to license the technology to Pilbara Minerals' commercial scale plants and the global spodumene processing industry.

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[3]Reuters, Feb 2023.
https://www.reuters.com/markets/commodities/global-demand-lithium-batteries-leap-five-fold-by-2030-li-bridge-2023-02-15/

[4]Global Data. 2021.
https://www.globaldata.com/data-insights/consumer/the-top-three-lithium-producing-countries-thousand-tonnes-2021/

[5]Based on cradle-to-gate Life Cycle Assessment studies completed by Minviro Ltd.: evaluating production of Lithium Hydroxide Monohydrate (LHM) from Pilgangoora spodumene concentrate using conventional calcination; and evaluating the production of lithium phosphate from Pilgangoora spodumene concentrate using Calix's electric calcination technology. The assessments calculated the carbon footprint for the production of each chemical from the mine to the factory gate. A further study evaluated the product carbon footprint of β-spodumene production via conventional and electric calcination.

Leilac

Leilac exists to accelerate a just transition to net zero by providing the most compelling decarbonisation solution for global cement and lime.

1 OUR AMBITIONS TO 2030

- **To develop the lowest cost carbon abatement solution, equipping producers to take urgent action against climate change and protect their industries' jobs and prosperity.**
- **To enable a sustainable future for cement and lime in a carbon neutral world.**

SDG IMPACT

Leilac is the collaborative technology partner seeking to enable a sustainable future for cement and lime in a net-zero world. Our potentially lowest cost carbon abatement solution aims to equip producers to take urgent action against climate change, protecting their industries' jobs and prosperity.

Like the SDGs, Leilac and Calix recognise the need to balance social, economic and environmental sustainability. Leilac's innovation, development and global partnerships with industry, academia and government are aligned with the SDGs, helping to accelerate the transition to a carbon neutral world.

2 OUR 2024 MILESTONES

- **Complete permitting and civil works for Leilac- 2.**
- **Progress projects through the Leilac project pipeline.**

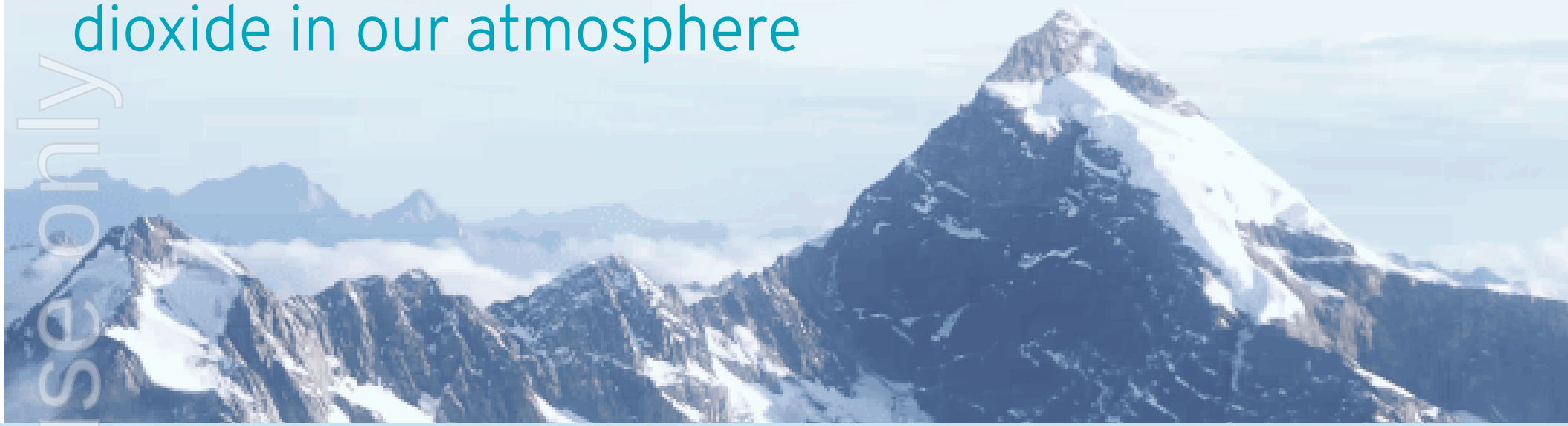
3 FY23 ACHIEVEMENTS

- **√ Signed first global licence agreement with Heidelberg Materials, one of the world's largest cement companies (FWB: HEI).**
- **√ Announced three projects with CEMEX S.A.B. de C.V. (NYSE: CX) in Germany, Poland and the USA.**
- **√ Announced partnership with Direct Air Capture (DAC) Company, Heirloom to integrate Leilac's electric kiln technology into Heirloom's DAC process for removal of atmospheric CO_2.**

SOME OF OUR PARTNERS

Heidelberg Materials, Cemex, Centre for Research and Technology Hellas, Cimpor, Geological Survey of Belgium, Heirloom, IKN, Imperial College London, ENGIE Laborelec Research & Innovation, Lhoist, Politecnico Milano, Porthos Co, PSE, Quantis, Tarmac and TNO.

Removing excess carbon dioxide in our atmosphere



Decarbonising our industries alone will not be enough to achieve global climate goals. The Intergovernmental Panel on Climate Change projects that carbon dioxide removal in the order of 1–10 billion tonnes of CO_2 per year could mitigate residual emissions and, in most scenarios, achieve net negative emissions to return global warming to 1.5°C, following a peak.

Leilac and Heirloom's partnership for Direct Air Capture

Leilac and Heirloom's partnership aims to bring together two complementary climate technologies to provide an efficient approach to atmospheric carbon dioxide removal by DAC.

Heirloom will employ Leilac's electric kiln technology to heat limestone to produce high purity CO_2, which will go for permanent storage, and calcium oxide, which is looped through Heirloom's process to remove CO_2 from the atmosphere.

The integrated Heirloom and Leilac DAC solution will be 100% renewably powered to deliver the maximum net reduction of atmospheric CO_2.

The partnership aims to accelerate the deployment of renewably powered electric calcination technology for DAC and the decarbonisation of hard-to-abate industries, such as cement and lime.

Leilac

Decarbonising cement & lime

Cement is the key ingredient in concrete, the second most consumed substance globally, after water[6]. The 4.5 billion tonnes of cement produced each year accounts for about 8% of global CO_2 emissions.

Unlike other industries, most of the CO_2 produced in the manufacturing of cement and lime is unavoidable. Cement is made by heating limestone with clay and other materials. When heated to high temperatures, limestone is converted into calcium oxide or quicklime, releasing the CO_2 trapped inside the limestone in the process.

For every 1,000kg of cement, around 700kg of carbon dioxide is emitted in processing[7]. Unavaoidable process CO_2 emissions account for around two-thirds of total emissions, with the balance resulting from energy required to heat the rection.

To achieve its net-zero commitments, the cement industry will need to capture and store approximately 1.4 billion tonnes of CO_2 every year by 2050[8].

Leilac's solution

Leilac's unique technology seeks to enable the affordable abatement of unavoidable CO_2 process emissions in cement and lime production. With no additional chemicals or processes, Leilac's indirectly heated calcination approach is designed to efficiently separate the limestone reaction products from the exhaust gases and air, enabling process emissions to be efficiently captured as high-purity CO_2. This innovation marks a step change from other carbon capture solutions that require energy-intensive processes and additional chemicals or solvents to separate gases from gases.

Leilac's technology is designed to be scalable, retrofittable, and clean energy ready to enable the sustainable decarbonisation of cement and lime production.

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[6]Cement Concrete & Aggregates Australia.
https://www.ccaa.com.au/CCAA/CCAA/Public_Content/INDUSTRY/Concrete/Concrete_Overview.aspx

[7]Predicting the Mechanical Properties of Concrete Using Intelligent Techniques to Reduce CO_2 Emissions. H. H. Ghayeba *, H. A. Razaka , N.H. R. Sulonga , A. N. Hanoonb , F. Abutahac , H. A. Ibrahima , M. Gordana , M. F. Alnahhala
https://eprints.qut.edu.au/199501/1/45811931.pdf

[8]Required carbon capture and storage capacity for net-zero industries worldwide by 2050, by segment. Statista.
https://www.statista.com/statistics/1326423/global-carbon-capture-capacity-net-zero-industry/

Advanced Batteries

Developing a renewably powered, energy efficient and low-cost chemistry agnostic platform technology for high-performance battery materials.

1 OUR AMBITIONS TO 2030

- Accelerate research and development on advanced battery materials to help facilitate the transition to renewable energy and the decarbonisation of our energy and transport sectors.
- Develop relationships with large existing industry players to accelerate the development and adoption of our advanced battery materials.
- Increase safety, environmental impact and battery performance, with a commercial format demonstration cell using our cathode material.

2 OUR 2024 MILESTONES

- Include Calix's battery module in a consumer product format.
- Complete the FEED study for a demonstration facility for cathode production.
- Develop a commercial format cell with a new Calix electrode chemistry.

3 FY23 ACHIEVEMENTS

- √ Commenced Basis of Design (BOD) for a cathode production demonstration facility.
- √ Successful production of 4Ah commercial-prototype battery cell using Calix Lithium Manganese Oxide (LMO) cathode powder.
- √ Expansion of cathode production portfolio to include additional battery chemistries; Lithium Iron Phosphate (LFP) and Lithium Nickel Manganese Oxide (LNMO) cathode materials.

SDG IMPACT

Energy accounts for around 60% of global greenhouse gas emissions. The transition to renewable energy sources is crucial to decarbonisation efforts, however, it requires the development of sustainable energy storage options and increased energy efficiencies.

The rapid growth in electric vehicle and renewable energy storage solutions is creating a global need for efficient, inexpensive, high-capacity, safe and sustainable energy storage options. Calix's platform technology offers significant potential to reduce the complexity, cost and energy use of advanced cathode material production.

SOME OF OUR PARTNERS

AMTE Power, Deakin University, Future Battery Industries CRC

Biotech

Developing novel bioactive products for sustainable agriculture, marine anti-fouling, and antimicrobial resistance.

1 OUR AMBITIONS TO 2030

- Develop effective in market-products that enable reduced dependence on lethal mode of action insecticides and fungicides, helping to prevent biodiversity loss and the development of antimicrobial resistance.
- Effective in-market products that enable intensive livestock producers to reduce dependence on lethal mode of action biocides and antibiotics, helping to minimise the development of antimicrobial resistance and ensure animal health, food quality and producer productivity.
- Develop effective in-market antifoul coatings that enable ship and boat owners to reduce heavy metal biocide leaching and environmental accumulation, fuel consumption and greenhouse gas emissions.

2 OUR 2024 MILESTONES

- Continue to develop and commercialise Calix's core technology for applications in agriculture, anti-foul marine coatings and antimicrobial resistance.
- Complete successful end-user trials with two anti-foul marine coating manufacturers and one major end-user in cold and tropical waters.
- Commence next-stage trials of our novel bioactive materials in crop and intensive livestock within the CRC SAAFE collaborative research programs focusing on addressing antimicrobial resistance.

SDG IMPACT

Reliance on harsh chemicals in agricultural practices damages our ecosystems both on land and below water, threatening biological diversity and risking future outbreaks of infectious diseases. To reach the Sustainable Development Goals, solutions that enable the sustainable use of our land and oceans must be developed.

Calix's magnesium oxide-based products are non-toxic and exhibit unique bioactive properties. Their continued development offers multiple potential applications that can replace polluting or damaging products in agriculture and marine coatings and help address the rise of antimicrobial resistance.

3 FY23 ACHIEVEMENTS

- √ Commenced phase two trials with Material Transfer Agreement (MTA) partners.
- √ Continued field trials of BOOSTER-Mag in Europe.
- √ Joined CRC SAAFE and ATC CEA-Star, collaborative Australian research programs as foundation partners.

PARTNERS

FEPASA, ProfytoDSD, CRC SAAFE, ATC CEA-Star

Water

A more sustainable approach to water and wastewater management.

1 OUR AMBITIONS TO 2030

- Protect freshwater systems, our oceans and human health by preventing detrimental pathogens, nutrients and other types of pollutants from entering the environment.
- Contribute to a more sustainable approach to aquaculture.

2 OUR 2024 MILESTONES

- Deliver continued growth in the US and Asia.

3 FY23 ACHIEVEMENTS

✓ Progressed two new hydration plants in Ripon, Wisconsin and Lufkin, Texas. Both plants are planning to commence operations by the end of the 2023 calendar year, with a full pipeline of prospects to replace caustic soda with MHL.

✓ Development of ALKA-Mag+ secured new business within existing hydration plants in Pacific Northwest and Upper Midwest of USA.

✓ Zero wastewater stream or solids disposal at operational sites in the USA.

✓ 100% recycled or refitted packaging of all Magnesium Hydroxide Liquid (MHL) products manufactured by USA operations.

✓ Re-established new China AQUA-Cal sales.

SDG IMPACT

Access to clean water and sanitation is a universal human right and underpins economic development, poverty reduction and environmental sustainability.

Calix's safe, economical and sustainable products for water and wastewater management reduce pollution and minimise the release of hazardous chemicals into our water systems.

WATER

The need for sustainable water treatment

80% of wastewater generated globally flows back into the ecosystem without being treated or reused[10]. As populations continue to grow and natural environments become degraded because of climate change, ensuring global access to safe and sufficient water supplies will become increasingly challenging.

A more sustainable approach to wastewater management reduces contamination of ecosystems and enables recycling and safe reuse of wastewater.

Challenges with conventional wastewater treatment

Traditionally, wastewater systems have been treated with caustic soda to reduce the acidity of the water. However, caustic soda also raises sodium levels, increasing the salinity of any body of water it is discharged into. Caustic soda is also strongly irritating and corrosive, causing severe burns and permanent damage to human skin tissue when handled incorrectly[11].

Calix's wastewater treatment solution

Calix's water and wastewater treatment solutions provide safe, effective, economical and sustainable water and wastewater treatment solutions. Based on an inherently non-hazardous and non-corrosive magnesium hydroxide material, Calix's water products enable safe and easy handling and do not negatively impact water salinity.

[10]Water Quality and Wastewater. UN Water 2018.
https://www.unwater.org/sites/default/files/app/uploads/2018/10/WaterFacts_water_and_watewater_sep2018.pdf

[11]Medical Management Guidelines for Sodium Hydroxide (NaOH). Agency for Toxic Substances and Disease Registry.
https://wwwn.cdc.gov/TSP/MMG/MMGDetails.aspx?mmgid=246&toxid=45#:~:text=Sodium%20hydroxide%20is%20strongly%20irritating,lead%20to%20permanent%20eye%20damage.

INTRODUCING MAGNESIA

MgO

In FY24, Calix combined its Water and Biotech businesses into a new Magnesia line of business to increase the scale and reach of Calix's magnesium-based products. In addition to water treatment products, the Magnesia business is developing and commercialising applications for agriculture, marine and antimicrobial resistance, as well as the sustainable processing of magnesium metal.

By combining our resources and expertise across the spectrum of magnesia, we will increase the scale and speed with which we can impact global sustainability challenges.

SUSTAINABILITY

Sustainability at Calix

At Calix, we recognise that our actions profoundly impact the environment, society and communities we serve. This motivates us to design operational systems that enable us to meet our own needs without compromising the ability of future generations to meet theirs.

Through purpose-driven innovation and technological development, we are addressing the global need for urgent decarbonisation, and developing solutions for other environmental challenges. As we work to solve global challenges, we are pleased to report our progress towards our own sustainability.

The UNGC and SDGs ambitions have been beacons for Calix's sustainability journey thus far. As we look to the future, we are translating these ambitions into measurable targets and actions that align with Environment, Social and Governance (ESG) bodies and industry standards.

calix | SUSTAINABLE DEVELOPMENT GOALS

Calix supports the Sustainable Development Goals

Emissions

FY23 at a glance

- Inaugural greenhouse gas assessment completed
- Scope 1 & 2 emissions: 2,806 tCO_2-e
- Working group formed to complete greenhouse gas data collection, and develop emission reduction strategies

FY24 areas of focus

- Strengthen greenhouse gas data collection
- Review environmental policy
- Conduct lifecycle analyses of material inputs

Greenhouse gas assessment

In FY22, Calix committed to reducing our greenhouse gas emissions in line with the 2015 Paris Agreement. In FY23, we took the first critical step towards achieving this outcome by completing our inaugural greenhouse gas assessment, under the guidance of carbon management consultancy, Pangolin Associates. This assessment covered the FY22 period, and measured scope one, two and three emissions.

To complete the greenhouse gas data collection, a dedicated working group was formed, including members from our European and Australian teams, spanning finance, administration and engineering functions. Data was collected from financial software and supported by an employee survey. We then worked together to develop short, medium and long-term emission reduction strategies.

Our first greenhouse gas inventory identified the main activities generating greenhouse gas emissions, and also identified opportunities to strengthen data collection. We will soon complete a greenhouse gas inventory for the FY23 period, which will act as our baseline year from which we will measure our emission reduction efforts going forward.

Emissions data

Pangolin Associates estimated that the total carbon emissions for Calix in FY22 were 7,089 tonnes of carbon dioxide equivalents (tCO_2-e). This estimated total includes scope three emissions, being indirect upstream and downstream contributions along the value chain.

Scope one and two emissions accounted for 2,806 tCO_2-e (39.6%) of the Company's total emissions. Stationary fuels and electricity accounted for the largest emissions categories, being 1,106 and 1,089 tCO_2-e respectively.

Emissions reduction actions

To reduce emissions generated through electricity use, we have installed solar panels at our Bacchus Marsh operational site in Victoria Australia. These solar panels generate 408Mwh/year preventing an estimated 437 tonnes of CO_2 equivalent emissions per year.

Calix recognises the important role we can play in contributing to the decarbonisation of our value chain. In FY24, we will improve our supplier selection and evaluation processes to include emission disclosures and reduction efforts.

Emissions governance

In FY23, a Sustainability Committee was established by the Board of Directors to oversee development, monitor execution and review the effectiveness of the Company's strategies, policies and initiatives related to sustainability.
The Sustainability Committee Charter is available on the Company's website: https://calix.global/wp-content/uploads/2023/07/Sustainability-Committee-Charter-Calix-Limited-July-2023.pdfIn

The development of an emissions reduction strategy will be governed by the Company's Environmental Policy. This policy was last reviewed and adopted by the Board of Directors in February 2022 and is available on the Company's website: https://calix.global/wp-content/uploads/2019/09/BP-10-Environmental-Policy.pdf

Workplace health & safety

FY23 achievements

- Reductions in total recordable injury rates and near miss rates across global operations.
- Formed a Psychosocial Health Committee to assist in safeguarding employees' mental health.

FY24 areas of focus

- Review and update of Safety Management System.
- Enhance contractor management processes to reduce contractor related risks.

Calix is committed to achieving zero harm in our business through the provision of a safe workplace and systems of work. We believe that everyone has the right to work in a safe environment and return home without injury. Safety continues to be our primary operational focus, and all injuries, incidents, and near misses are thoroughly investigated and reported to the board to help prevent reoccurrence and ensure continual improvement to Calix's safety management system.

The Company's Safety, Health, Environment, and Quality Action Plan Key Performance Indicators (KPIs) are agreed with the board each year an act as the first performance gateway for the Company's Employee Incentive Scheme (EIS). Rights or options made available as part of the EIS can only be awarded if the KPIs are achieved for that year. This performance gateway is designed to ensure that safety, health and environmental performance of our team members, and quality of our products and services remain paramount, at all times. The Action Plan reflects International Standard ISO45001, against which the Company is audited annually.

Safety is the first item discussed at every board and leadership team meeting and is regularly communicated across the business via monthly staff communications sessions and operational site-specific monthly meetings.

Total recordable incident rate

Across Calix's global operations, the Company recorded seven injury incidents in FY23. Consistent with ISO 45001, Calix defines an injury incident as any adverse incident where harm was caused to personnel.

Six incidents involved Calix's direct employees, and one involved a contract employee. Three occurred in Australia, three in the USA, and one in Europe. Every incident was thoroughly investigated, and reported to the board, to help prevent reoccurrence and ensure continuous improvement.

The total recordable injury rate for FY23 was one injury per 22,900 hours worked, down from one injury per 6,900 hours worked in FY22.

The improvement reflects ongoing improvements to our Safety Management System, and a safety first culture in which all employees are actively engaged in promoting safe work practices.

Near miss frequency

Calix recorded 115 near miss incidents in FY23. Consistent with ISO 45001, the Company defines a near miss incident as an incident that could have resulted in an injury or illness to people, danger to health, or damage to property or the environment.

The high number of near miss reports is regarded by Calix as a positive leading indicator of safety culture, whereby all employees are required to, and feel empowered to, report all safety incidents, including near misses. The Company has no minimum criteria for incident reporting and all reports undergo detailed investigations, analysing root causes, sharing learnings across the business and implementing preventative actions where possible.

Psychosocial health

In FY23, the psychosocial health of Calix's employees and contractors was identified as a particular area of focus. An internal Psychosocial Health Committee has been formed to develop a psychosocial health strategy.

With committee members spanning safety, operations, engineering, finance and human resources functions, we are confident the committee reflects the diverse needs of our employee base.

To promote good psychosocial health outcomes, all employees and their families are provided with access to an independent employee assistance program (EAP). The EAP program provides anonymous support and counselling in response to meet the diverse needs of Calix's employees.

Safety governance

Calix's health and safety systems are governed by the Safety, Health, and Environment Policy, which was last reviewed and adopted by the board in February 2022. It outlines the Company's commitment to ensuring the health and safety of its employees.

Calix's Bullying, Harassment and Discrimination Policy, which was last updated in 2022, has provided a safe and respectful environment for employees and contractors. In FY24, this policy will be replaced with the Respect at Work Policy. The new policy is an expansion of the existing policy in relation to sexual harassment, victimisation and conduct that may cause a workplace environment to be hostile on the grounds of sex.

Calix's safety management system operates across the Company's entire organisation globally, and was independently accredited under ISO45001, the International Standard for Work Health and Safety Systems in 2021. The accreditation continued to be retained in FY23, and in FY24 will undergo an external surveillance audit, a routine annual audit conducted in line with the International Standard's accreditation criteria.

The policies are available on the Company's website:

https://calix.global/wp-content/uploads/2022/02/Calix-SHE-Policy-Feb22-update.pdf

https://calix.global/wp-content/uploads/2022/02/Calix-Bullying-Discrimination-Harassment-Policy-Feb-22-update.pdf

Workforce diversity

FY23 at a glance

- Parental leave entitlements increased for Australian employees
- Multi-purpose quiet spaces introduced at Calix's key operational site, Bacchus Marsh for lactation, prayer, and other cultural or privacy needs

FY24 areas of focus

- Development of guidelines to promote gender balance in hiring practices
- Implementation of a cultural survey
- Adoption of a pay data analysis tool

Gender diversity

At Calix, we believe fostering a diverse and inclusive culture is not just a moral imperative; it is foundational to driving innovation and business success. It is a key focus for our Company.

As a global Company, we have a naturally culturally diverse team. Much of our work, however, is in traditionally male-dominated fields, such as engineering and science. As such, we acknowledge the need for a more deliberate and strategic approach to encourage greater gender diversity within our workforce.

In FY21, Calix's Sustainability Team adopted the UNGC's Sustainability Development Goal Ambition Benchmark of achieving gender balance at all levels of management by 2030.

To this end, in FY23, the Company's Sustainability Team set a goal, aligned with the 40:40 Vision Initiative, of achieving a gender balance of 40% male employees, 40% female employees and 20% of any gender identity by 2030. A strong pipeline of diverse people at all levels of the organisation will help to develop and nurture our emerging leaders.

FY23 role breakdown by gender

- Women represented 18% of all employees
- Women occupied 17% of senior leadership roles
- Women occupied 40% of board roles

The decrease in the percentage of women employees was in part, due to a recruitment drive in traditionally male-dominated industries.

Promoting and achieving diversity

In support of the diverse needs of our current and future workforce, Calix completed the following initiatives in FY23:

- Established two multi-purpose ‘quiet’ spaces at our key operational site in Bacchus Marsh, Victoria that are available for all employees and contractors.
- Increased our parental leave benefits for our Australian operations, expanding the policy to include all genders.
- Provided diversity and inclusion awareness training to all staff to learn more about unconscious bias and better understand how to create a curious, respectful and innovative culture.

Diversity working group

The Calix Sustainability Team appointed a diversity working group in FY23 to give special focus to the development and implementation of strategies to promote diversity.

The group is made up of six members spanning three countries and represents corporate, engineering, operations, and administrative functions. The gender balance of the working group is 50:50.

In FY24, the diversity working group aims to deliver the following initiatives to promote and achieve greater diversity in Calix's workforce:

- Review hiring practices to attract a greater diversity of high-quality candidates to honour our Company values of inclusivity and team-work.
- Develop guidelines to promote gender-balance in the Company's hiring practices.
- Adopt a pay data analysis tool to identify if pay gaps exist, analyse root causes, and develop strategies to close any gaps.
- Develop a mentorship program to support the development of career pathways at all levels of the organisation.

Diversity governance

Calix operates in accordance with the following relevant Company policies to promote diversity, inclusion and engagement:

- Diversity Policy: aims to provide a safe and inclusive place of work for all employees and promote equal opportunity for all.
- Bullying, Harassment & Discrimination Policy: aims to provide a safe and respectful environment for all employees, contractors and clients that is free from all forms of bullying.
- Parental Leave Policy: aims to support employees by providing time and flexibility in how new family and work-life routines are established.
- Work From Home Policy: aims to promote work-life balance, and assists employees to identify potential hazards and risks around their dedicated home working area.

The policies are available on the Company's website: https://calix.global/governance

Governance Structure

The Calix Limited Board of Directors (the board) is responsible for the overall operation and stewardship of Calix, including the Company's strategies and financial objectives, monitoring progress against these objectives, and monitoring compliance with regulatory requirements and ethical standards.

In accordance with the Australian Securities Exchange (ASX) Corporate Governance Principals and Recommendations, the Company's policy and charter documents are reviewed and approved annually. The Company's current ASX Appendix 4G has been lodged with the ASX and is also on the Company's website.

In February 2023, Calix announced the appointment of Alison Deans as a Non-Executive Director and the retirement of Non-Executive Director, Dr Jack Hamilton from the board. The board has continued to maintain a proactive approach to board succession and renewal. The goal of this approach is to ensure the size and composition of the board is appropriate to support the continued delivery of Calix's growth strategies, as well as being positioned to meet prevailing best practice governance standards.

Ms Deans' appointment, in addition to further renewal planned for the future, will strengthen the cumulative skills and experience of the Calix board, bolstering its ability to deliver its growth strategies and fulfil the promise of its technologies for industrial decarbonisation and other environmental solutions.

Human rights, modern slavery and child labour

Calix respects human rights as defined by the UN Guiding Principles on Business and Human Rights and has implemented the Principles in our operational policies and procedures. We support the elimination of all forms of forced and compulsory labour and the effective abolition of child labour, modern slavery, and human trafficking.

It is a violation of our Code of Conduct and company policies for any Calix employee, in any way and in any process to: participate, enable, or cause any individual under the legal working age to be employed or engaged by Calix; contribute to, participate in, or enable any use of child, forced, or exploited labour or forced or exploitative conditions; and assist our clients in doing so in any way and in any process.

Calix proactively ensures that our innovation and business practices protect and respect fundamental human and labour rights, building on policies introduced in FY22 to help ensure that human rights are strictly upheld throughout our supply chain and operations.

Corporate Social Responsibility

In FY23, Calix continued its support for WaterAid, an international not-for-profit determined to make clean water, decent toilets and good hygiene normal for everyone, everywhere within a generation.

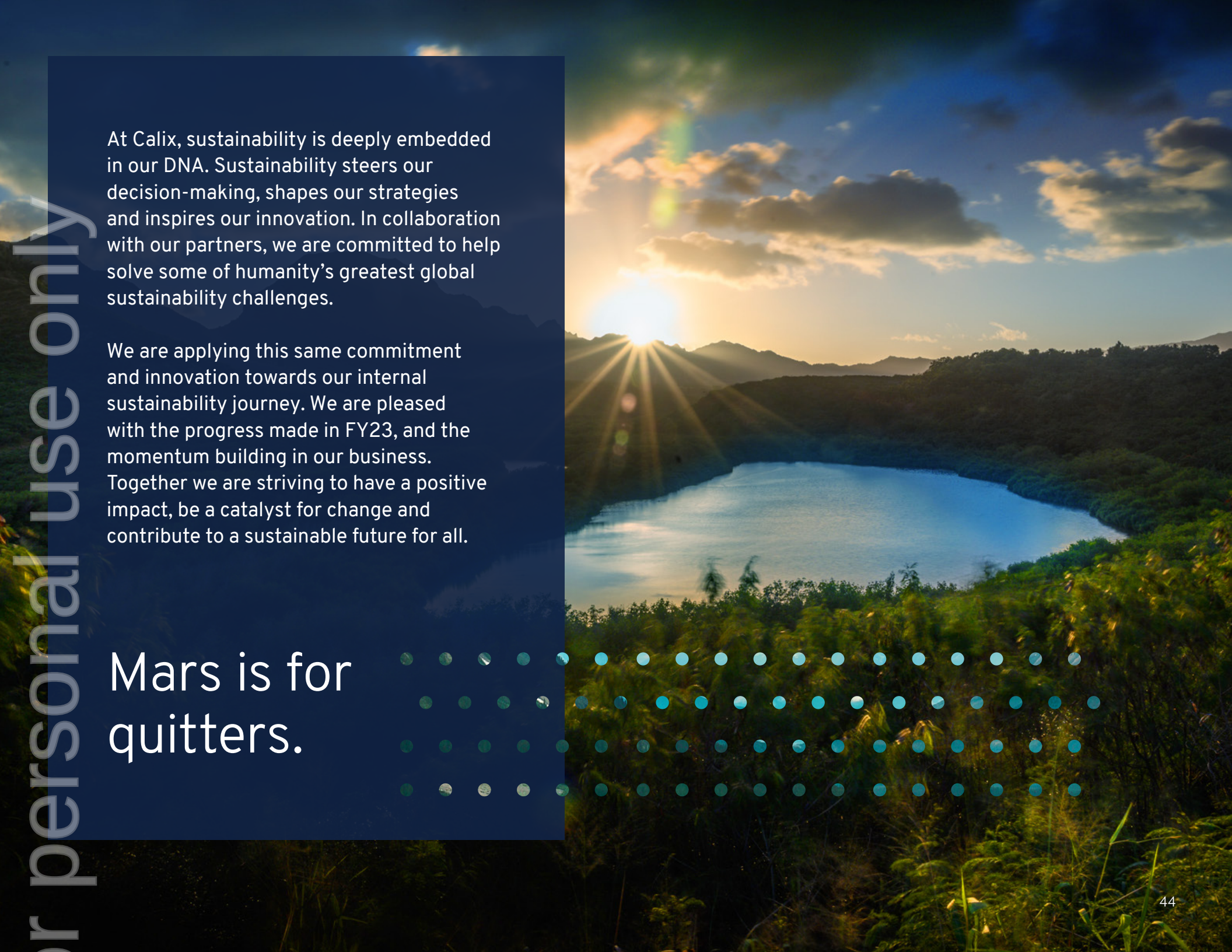
Additionally, Calix continued its support for the Ocean Impact Organisation, Australia's first ocean impact ecosystem and startup accelerator for businesses dedicated to transforming ocean health.

Calix was also pleased to renew its sponsorship of the Cobras – the Senior Women's Australian Football League team in Bacchus Marsh, Victoria.

WaterAid is a global non-profit organization dedicated to transforming lives by improving access to clean water, sanitation, and hygiene. Founded in 1981, WaterAid works in some of the world's poorest communities to provide essential services that not only save lives but also empower individuals and communities to break the cycle of poverty. With a strong commitment to sustainable solutions, WaterAid has made significant strides in ensuring that everyone, everywhere has access to clean water and sanitation, promoting health, education, and economic development around the world.

Ocean Impact Organisation is a non-profit on a mission to drive positive change for our oceans. Founded with the understanding that our marine ecosystems face unprecedented threats, they lead innovative initiatives and support entrepreneurial ventures that focus on sustainability, conservation, and the responsible use of ocean resources. By connecting environmental awareness with business innovation, Ocean Impact Organisation strives to create a healthier and more prosperous future for our oceans and the communities that rely on them.

Calix is a proud sponsor of the Bacchus Marsh Women's & Under 19 Girls' AFL football teams. As we make progress to develop a diverse and inclusive culture internally, we are proud to support the communities in which we operate to do the same. The achievement of gender equality and empowerment of all women and girls is a key focus area of our sustainability agenda.



At Calix, sustainability is deeply embedded in our DNA. Sustainability steers our decision-making, shapes our strategies and inspires our innovation. In collaboration with our partners, we are committed to help solve some of humanity's greatest global sustainability challenges.

We are applying this same commitment and innovation towards our internal sustainability journey. We are pleased with the progress made in FY23, and the momentum building in our business. Together we are striving to have a positive impact, be a catalyst for change and contribute to a sustainable future for all.

Mars is for quitters.

calix

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www.calix.global

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