



Solving global challenges



United Nations Global Compact
**Communication
on Progress**

CALIX'S ANNUAL REPORT ON SUSTAINABILITY

Because Mars is for quitters.

SEPTEMBER 2021

WE SUPPORT



Delivering on our promises

Solving Global Challenges has been the basis of Calix's passion and business for more than a decade, with a mission to urgently develop great businesses, leveraging our patented technology, that deliver positive global impact.

At Calix, we continuously ask the following question to ourselves: with global climate, energy, and sustainability issues set to intensify, how can we use innovation and teamwork through to develop solutions that solve the challenges that are increasingly putting our planet at risk.

Sustainability means meeting our own needs without compromising the ability of future generations to meet their own needs. It is deeply embedded in our purpose, the reason we exist: "Because Mars is for quitters."

Sustainability is not just about environmentalism, but adds social and economic concerns on the world's development agenda. Since 2020, Calix has been a member of the United Nations Global Compact (UNGC), supporting its ten founding principles related to human rights, labour standards, environmental protection and anti-corruption.

The United Nations Global Compact is the world's largest corporate sustainability initiative, driven by the realisation that companies play a crucial part in enforcing human rights and building a more sustainable world.

With the broad-based support of all 193 participant countries of the United Nations General Assembly, the UN Global Compact remains the single, global normative authority and reference point for action and leadership within a growing global corporate sustainability movement. Currently, there are over 13,500 participants in 162 countries.

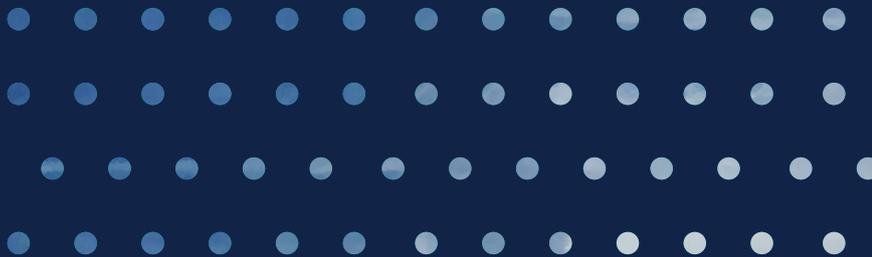
"Never doubt that a small group of thoughtful, committed people can change the world. Indeed, it is the only thing that ever has." Margaret Mead

Our annual Communication on Progress (COP) shares with you the progress we have made towards the Ten Principles and the development of our responsible business practices.

By living our purpose and delivering on our strategy, we believe we can make a positive difference on the society at large for the long-term while maximising positive outcomes and growth for our customers and shareholders.

Table of contents

Letter of Commitment from the CEO.....	04
About Calix.....	05
United Nations Global Compact	06
UN Global Compact Management Model	07
Relevant Existing Policies, Systems, Procedures and Values	08-09
Contributing to the United Nations Sustainable Development Goals.....	10-11
Sustainability	12
Ethics & Transparency	13
Review of the 17 SDGs.....	14-32



Letter of commitment from the CEO



Letter to:
H.E. Antonio Guterres
Secretary General
United Nations
New York, NY 10017
USA

11 November 2020

Dear Mr Secretary General,

I am pleased to confirm that Calix supports the Ten Principles of the United Nations Global Compact on human rights, labour, environment, and anti-corruption.

With this communication, we express our intent to implement those principles. We are committed to making the UN Global Compact and its principles part of the strategy, culture and day-to-day operations of our company, and to engaging in collaborative projects which advance the broader development goals of the United Nations, particularly the Sustainable Development Goals. Calix will make a clear statement of this commitment to our stakeholders and the general public.

We recognize that a key requirement for participation in the UN Global Compact is the annual submission of a Communication on Progress (COP) that describes our company's efforts to implement the Ten Principles. We support public accountability and transparency and therefore commit to report on progress within one year of joining the UN Global Compact, and annually thereafter according to the UN Global Compact COP policy.

This includes:

- A statement signed by the Chief Executive expressing continued support for the UN Global Compact and renewing our ongoing commitment to the initiative and its principles. This is separate from our initial letter of commitment to join the UN Global Compact.
- A description of practical actions (i.e., disclosure of any relevant policies, procedures, activities) that the company has taken (or plans to undertake) to implement the UN Global Compact principles in each of the four issue areas (human rights, labour, environment, anti-corruption).
- A measurement of outcomes (i.e., the degree to which targets/performance indicators were met, or other qualitative or quantitative measurements of results).

Yours sincerely



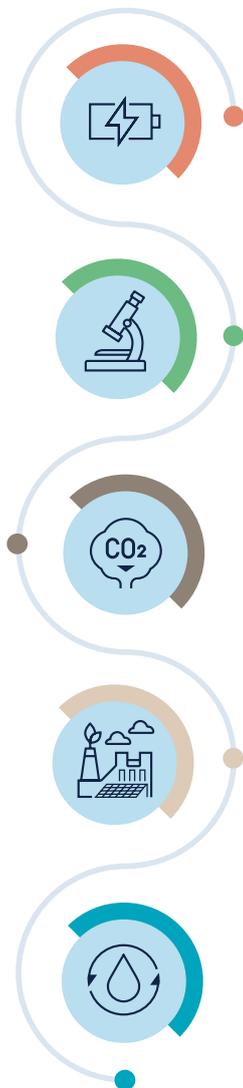
Phil Hodgson
Managing Director & CEO



About Calix

Innovating for the Earth

Driven by purpose, our mission to urgently develop great businesses, leveraging our patented technology, that deliver positive global impact.



At the core of Calix's diverse and versatile innovations is a pioneering technology that re-imagines the "calcination" (or kiln) process, enabling efficiency and performance improvement for key sustainability-focussed areas:

- Advanced Batteries
- Biotech
- CO₂ Mitigation
- Sustainable Processing
- Water

Calix believes that excellence in social responsibility gives us a competitive advantage and contributes to our long-term success. It helps the company attract and retain the best talent, and maintain successful working relationships with our customers, partners, suppliers, and authorities. We act according to our values, and our standards fulfil or exceed existing laws and regulations and take internationally recognised principles into account.



United Nations Global Compact

Since joining the UN Global Compact in November 2020, the Calix Sustainable Development Team has undertaken to review the Ten Principles, understand how the UN Sustainable Development Goals (SDGs) are connected, and set priorities for our company.

We use the Global Compact Management Model to help us assess risks, opportunities and impacts linked with the Ten principles.



- Launched in 2000 by the then Secretary General of the United Nations, Kofi Annan, the United Nations (UN) Global Compact is a call for companies to align their strategies and operations with Ten Principles on human rights, labour, environment and anti-corruption, and to take actions that advance societal challenges, through business innovation and collaboration, using the SDGs as the lighthouse.
- The Ten Principles of the United Nations Global Compact are derived from: the Universal Declaration of Human Rights, the International Labour Organization’s Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the United Nations Convention Against Corruption.

Participant Since 10 November 2020:

.....
<https://www.unglobalcompact.org/what-is-gc/participants/142168-Calix-Limited>

Sustainability begins with a company’s values and culture.

Solving Global Challenges - ranging from climate, water, food, and energy - requires solutions that Calix can help deliver.

The Calix Technology is being used to develop environmentally friendly solutions for advanced batteries, biotech, CO₂ mitigation, sustainable processing and water.

By incorporating the Ten Principles of the UN Global Compact into our strategy, policies and procedures, not only is Calix upholding its basic responsibilities to people and planet, but also setting the stage for long-term success.

At Calix, it’s not just about what we do, but also how and why we do it.



UN Global Compact Management Model

The UN Global Compact Management Model guides companies through the process of formally committing to, assessing, defining, implementing, measuring, and communicating a corporate sustainability strategy based on the Global Compact and its principles.

The UN Global Compact Management Model is comprised of six steps. Each step has one or more suggested activities and areas of focus.



COMMIT	Leadership commitment to mainstream the Global Compact principles into strategies and operations and to take action in support of broader UN goals, in a transparent way	During this step, company leadership publicly signals its commitment to stakeholders. Specifically, leadership commits to supporting the Global Compact and making the ten principles part of the strategy, culture, and day-to-day operations of the company, with oversight provided by transparent governance structures.
ASSESS 	Assess risks, opportunities, and impacts across Global Compact issue areas	Equipped with a commitment to the Global Compact and in support of UN goals, the company assesses its risks and opportunities—in financial and extra-financial terms—as well as the impact of its operations and activities on the issue areas, on an ongoing basis in order to develop and refine its goals, strategies, and policies.
DEFINE	Define goals, strategies, and policies	Based on its assessment of risks, opportunities, and impacts, the company develops and refines goals and metrics specific to its operating context, and creates a roadmap to carry out its program.
IMPLEMENT	Implement strategies and policies through the company and across the company's value chain	The company establishes and ensures ongoing adjustments to core processes, engages and educates employees, builds capacity and resources, and works with supply chain partners to address and implement its strategy.
MEASURE	Measure and monitor impacts and progress toward goals	The organization adjusts its performance management systems to capture, analyze, and monitor the performance metrics established in the Assess and Define steps. Progress is monitored against goals and adjustments are made to improve performance.
COMMUNICATE	Communicate progress and strategies and engage with stakeholders for continuous improvement	During this step, the company communicates its progress and forward-looking strategies for implementing its commitment by developing a Communication on Progress, and engages with stakeholders to identify ways to improve performance continuously.



I. HUMAN RIGHTS

II. LABOUR

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and

Principle 2: Make sure that they are not complicit in human rights abuses.

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;

Principle 4: The elimination of all forms of forced and compulsory labour.

Principle 5: The effective abolition of child labour; and

Principle 6: The elimination of discrimination in respect of employment and occupation.

Relevant existing policies / systems /procedures and values

Calix respects human rights as defined by the UN Guiding Principles on Business and Human Rights and has implemented them in our operational policies and procedures.

We respect the International Bill of Human Rights, the International Labor Organization's Declaration on Fundamental Principles and Rights at Work, and have been an active Participant of the UN Global Compact since 2020.

Calix aspires to be a leader in its field while operating openly, with honesty, integrity and responsibility and maintaining a strong sense of corporate social responsibility in accordance with the values set out in its Code of Conduct.

Calix is committed to endeavouring to provide a safe and inclusive place of work for its employees. Calix acknowledges that workplace diversity will benefit both of these aims. Workplace diversity enables Calix to recruit the best people from the widest possible pool of capable and qualified candidates. Organisational strength and problem solving is enhanced when the Company makes decisions with reference to a broad range of ideas, values and experiences.

Our [Diversity Policy](#) promotes equal opportunity for all employees and officers at all levels, regardless of factors such as gender, domestic responsibilities, marital status, religion, race, ethnicity, language, sexual orientation, disability or age.

Calix is committed to ensuring that all workers can work in an environment free of bullying, sexual harassment, threatening or violent behaviour. Such behaviour is not tolerated under any circumstances. We believe employees, contractors or visitors should be always treated with respect to maintain a safe work culture and good management standards.

Our [No Bullying, Sexual Harassment and Violence Policy](#) extends to all functions and places that are work related, for example, work lunches, conferences, Christmas parties and client functions.

Calix has increased the number of women in senior management and has gender equality as a key business priority. Our [Parental Leave Policy](#) has been designed to support gender equality by facilitating return to work and helping to facilitate equitable sharing in the care of young children.

Calix [Whistleblower Protection Policy](#) is underpinned by a strong commitment to building a culture in Calix that reflects sound governance and promotes ethical behaviour in the detection and management of fraudulent, corrupt or improper conduct.

Our ambitions

- Review our Code of Business Conduct to incorporate the UNGC Ten Principles.
- Roll-out an internal program to ensure all employees embrace our company values and culture across all regions.
- Calix is committed to ensuring the prevention of modern slavery and human trafficking in its business and supply chain. We will issue a Humans Rights Statement (including an explicit modern slavery commitment) with the help of human rights subject matter experts, and continue to ensure our stakeholders are not contributing to any adverse human rights incidents.
- Formally recognise the Freedom of Association and Collective Bargaining as a fundamental right in all countries where we operate.



III. ENVIRONMENT

Principle 7: Businesses should support a precautionary approach to environmental challenges;

Principle 8: Undertake initiatives to promote greater environmental responsibility; and

Principle 9: Encourage the development and diffusion of environmentally friendly technologies.

Relevant existing policies / systems / procedures and values

Calix's aspiration is to urgently develop great businesses, leveraging our patented technology, that deliver positive global impact. Driven by our purpose of Solving Global Challenges, we focus on four overlapping pillars of sustainability (climate, energy, food, and water) to develop environmentally friendly solutions for advanced batteries, biotech, CO₂ mitigation, sustainable processing and water treatment.

By aligning innovation and development initiatives with the UN Sustainable Goals (SDGs), Calix is driven to make an impactful and meaningful contribution to the environment. For more details on our contribution to the SDGs, read from pages 10 to 32 of this report.

Calix is committed to conducting our business in an environmentally aware and responsible manner. We seek the co-operation of our employees in ensuring our work practices are conducted with minimal environmental impact.

Calix is committed to implementing systems to decrease the volume of waste we generate. Where practical we use environmentally appropriate packaging and recycle wherever possible.

Calix nano-active materials are being used to improve the sustainability of water treatment, aquaculture, agriculture but also human health and battery technologies.

Calix technology also allows for the direct separation of CO₂, allowing it to be used for carbon dioxide reduction in traditionally carbon dioxide intensive industries, such as lime and cement production.

Calix's technology can help improve the sustainability of existing industrial processes through a more optimised use of mineral and chemical resources, and the use of renewable sources of energy.

Our ambitions

- Affirm our commitment to helping our customers, and society as a whole, achieve a net-zero economy through the successful development and deployment of our technology.
- Adhere to responsible sourcing and set responsible procurement standards.
- Innovate in our approach to product development with a focus on environmental improvement.

With global climate, energy, and sustainability issues set to intensify, Calix has identified some key challenges that have emerged in the last decade and are increasingly putting our planet at risk.

Our commitment to the planet is embedded in purpose, and at the heart of our business.

A PURPOSE-DRIVEN BUSINESS

Driven by our purpose of solving global challenges, our aspiration is to urgently develop great businesses, leveraging our patented technology, that deliver positive global impact.

At Calix, we believe it's not all about what we do, but also how, and why, we do it...

WHAT WE DO

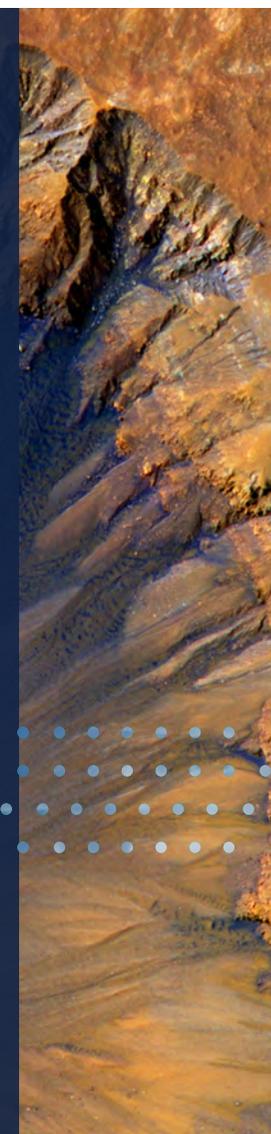
We solve global challenges.

HOW WE DO IT

By urgently developing great businesses, leveraging our patented technology, that deliver positive global impact.

WHY

Because Mars is for quitters!





IV. ANTI-CORRUPTION

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

Calix is committed to acting with integrity, and in accordance with anti-bribery and corruption laws and regulations in all our global locations.

To achieve this objective:

Relevant existing policies / systems / procedures and values

An integral part of our business culture is to behave in a responsible, honest and ethical way when dealing with all of our stakeholders (customers, suppliers, employees, partners and the community).

Calix's [Anti-corruption And Anti-bribery Policy](#) is based on eight principles that set clear rules when engaging with third parties and apply to all Calix directors, officers, executives, managers, employees and contractors (where they are under a contractual obligation to do so).

We strongly believe that honesty fosters competitiveness. By letting integrity direct our day-to-day actions from research and development to sales, from strategy to operations, we protect and ensure the long-term sustainability of our growth.

Our ambitions

- Review our Code of Business Conduct to incorporate our commitment to the UNGC Ten Principles, and our commitments on inclusion, diversity, and human rights.
- Develop an inclusive [Ethics Policy](#) that takes cultural differences into consideration, while building a culture of integrity and transparency.
- Include ethics into our supplier evaluation process to ensure our suppliers conduct their business with the highest standards of integrity, avoiding all forms of corruption, bribery, extortion, and unfair business practices.



Contributing to the United Nations Sustainable Development Goals



Together with partners, we are working to increase the efficiency and sustainability of our value chain, with the understanding that sustainable development can only be achieved by meeting ecological, economic and social targets at the same time and in equal measure.





What are the SDGs?

The Sustainable Development Goals (SDGs) represent a collective hope for a better future.

Adopted by 193 countries at the United Nations Sustainable Development Summit in New York in September 2015, the SDGs set out 17 global goals that together sketch a shared blueprint for action on sustainable development.

These Global Goals call for worldwide action among governments, businesses, and civil society to end poverty and create a life of dignity and opportunity for all, within the biophysical boundaries of the planet.

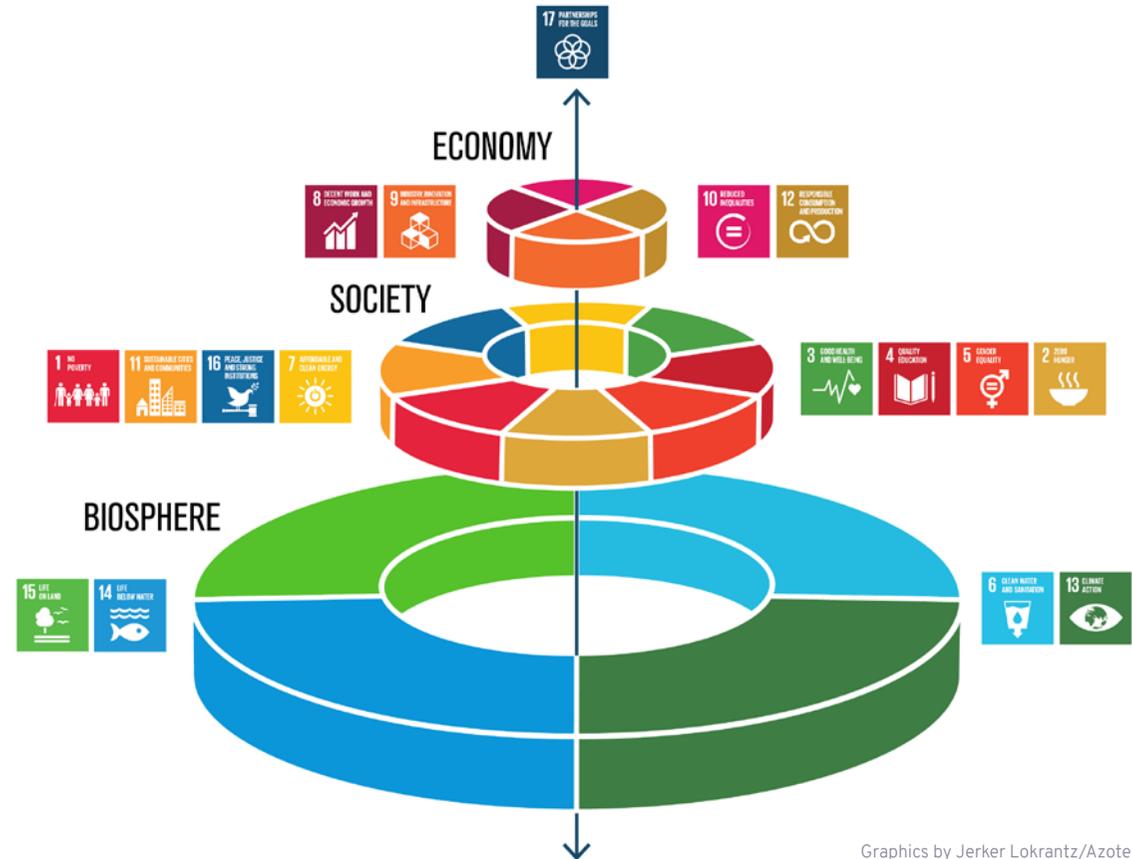


It is becoming increasingly clear just how important a role environmental and social responsibility will play in the future of all organisations. Acting responsibly is no longer a choice. It is a business imperative that will impact how you power your operations, source raw materials, innovate new products and protect your supply chain against extreme weather and natural disasters. Your decisions will affect the wellbeing of your employees and influence whether they want to work for you. Perhaps most important, your approach to how you run and build your business will be judged by a new generation of consumers who expect sustainable and ethical behaviour.

(PwC, SDG Reporting Challenge, 2018)



Calix supports the Sustainable Development Goals



Graphics by Jerker Lokrantz/Azote

The SDG ‘Wedding cake’ shows the biosphere as the foundation of economies and societies and as the basis of all SDGs. This representation of the SDGs is more in line with a more recent (and scientific) version of “sustainability”, where it is painted as integrated path where the economy serves society, so that it evolves within the safe operating space of the planet.



“Positive Impact” is one of our core values

Sustainability has been the basis of our passion and our business for over a decade, in our aspiration to urgently develop great businesses, leveraging our patented technology, to deliver positive global impact. At Calix, we continuously ask the following question to ourselves: with global climate, energy, and sustainability issues set to intensify, how can we use our technology, people and expertise to help solve the challenges that are increasingly putting our planet at risk.

Between 2020 and 2021, our Sustainability Team conducted a thorough review of all 17 SDGs, with the aim to understand better our connection to the Goals, identify associated risks, and define priority areas where we believe we can have the most meaningful impact.

Calix touches all 17 SDGs through innovation, development and partnership initiatives, day-to-day operations, and social investment opportunities. By aligning ourselves with the SDGs, we are driven to make an impactful and more significant contribution to Solving Global Challenges.

This review along with our commitment to the Ten Principles set by the UN Global Compact, has set us on a path of corporate social responsibility, and reaffirmed our commitment to innovate and collaborate to continue to build a more sustainable business model, while inspiring and helping all our stakeholders to do contribute to a more sustainable future.

We hope this report will help you learn about the Global Goals (SDGs) and some of the tangible actions behind our commitment towards sustainability.



Audrey Barucchi
on behalf of Calix
Sustainability Team

We are committed to make all of the UN Sustainability Development Goals (SDGs) part of our company culture and day-to-day operations, and we see the corporate social responsibility (CSR) as a journey towards long-term growth, competitiveness, big picture thinking, strong company culture, and a genuine team spirit. Because innovation in one area cannot make up for doing harm in another.

We believe sustainability is about more than operating responsibly. It's an opportunity to support the communities we're a part of and make a positive impact on the world.





Teamwork*

In August 2020, we formed a dedicated sustainability team that meets monthly and works to implement our overarching sustainability strategy and ensure alignment across all our teams.

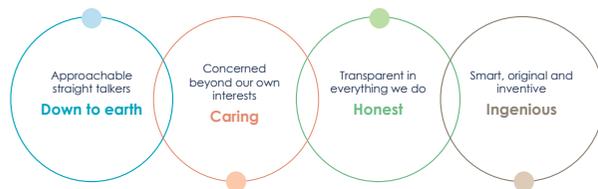
- Number of members – 8
- Countries of birth – 4
- Current living countries – 3
- Number of Gen X's – 2
- Number of Gen Y's – 6
- Gender – 7 ♂ and 1 ♀
- Languages spoken – 5

Together, we believe we can drive impactful change by embedding sustainability into everything we do.

Our team spans across all business functions (management, R&D, operations, sales, business development, engineering, and communications), with diverse levels of knowledge and expertise.

We will continue to provide insights and practical guidance to our colleagues and stakeholders, on delivering positive global impact.

Our personality traits



Calix Sustainability Team



Phil
MD & CEO
Sydney, Australia



Audrey
General Manager Marketing
Brisbane, Australia



Vincent
General Manager Operations
Bacchus Marsh, Australia



Michael
Manager Sustainable Processing
Melbourne, Australia



John
Business Manager
Asia Kuala Lumpur, Malaysia



Simon
Project Engineer
Paris, France



Terrance
Senior Site Engineer
Bacchus Marsh, Australia



Mark
Business Development Manager
Brisbane, Australia

Our Motto “DELIVERING ON OUR PROMISES.”





Ethics & Transparency

At Calix we are committed to a high level of governance and value, and reward excellent ethical standards, personal and corporate integrity and respect for others.

Calix's governing documents include a Corporate Governance Statement, Board Charter and Code of Conduct Policy (as more specifically described on Calix's website www.calix.global) and provide the overlying framework of governing principles which range from defining preferred individual behaviour to the strategic direction of the company.

The Leadership team recognises that sustainability is an important component of the Company's purpose of 'Solving Global Challenges' by managing our operations in a safe and sustainable manner.

HSE (Health Safety and Environment) key performance indicators are embedded into executive remuneration, with non-financial performance components of short-term incentives including a range of metrics to drive performance in the areas of leadership, people, diversity, health, safety and environment.

Our core values

Staying true to our core values helps us create a company we're proud to work for. Our core values form a criterion for how we act and the choices that we make, from the markets we pursue to the people we hire.

S	P	I	R	I	T
Sense of Urgency	Positive Impact	Innovation	Resolute	Inclusive	Teamwork

Our Senior Leadership Team



Phil Hodgson
Managing Director & CEO

Focus Areas

Biotech
Division



Battery
Division



Sustainable Processing
Division



CO₂ Mitigation
Division



Water
Division



Robert Van Merkestein
Business Manager
Bioactive Materials
Bacchus Marsh, Australia



Matt Boot-Handford
R&D and Deputy Chief Scientist
Bacchus Marsh, Australia



Andrew Okely
General Manager
Sustainable Processing
Pymble, Australia



Daniel Renni
General Manager
Cement Decarbonisation
Paris, France



Doug Kelley
General Manager Water
(North America), President of IER



Michael Wheatland
Manager
Sustainable Processing
Melbourne, Australia



Adam Vincent
General Manager
Lime Decarbonisation
Bacchus Marsh, Australia



Bill Karis
General Manager
Water (ANZ, SEA, EU)
Bacchus Marsh, Australia

Support Functions

Strategy & Portfolio



Hinne Temminck Tuinstra
General Manager
London, United Kingdom

Finance



Darren Charles
CFO & Company Secretary
Pymble, Australia

Research and Development



Mark Sceats
Chief Scientist
Pymble, Australia

Engineering



Emma Bowring
General Manager
Engineering
London, United Kingdom

Operations



Vincent Nguyen
General Manager
Operations
Bacchus Marsh, Australia

Marketing



Audrey Barucchi
General Manager Marketing & Communications
Brisbane, Australia



We support
WaterAid

1 NO
POVERTY



No poverty

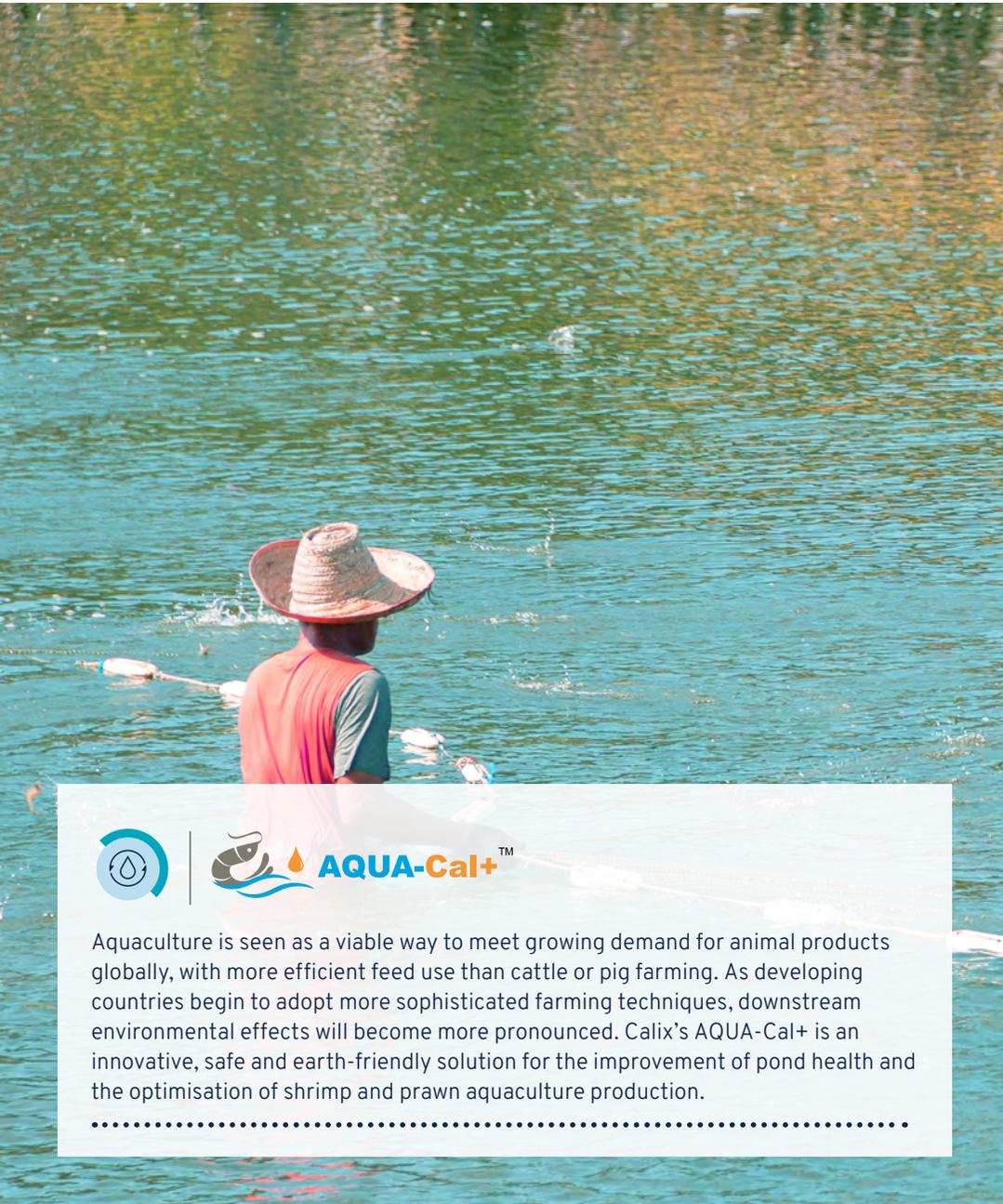
Sustainable Development Goal 1 calls for “no poverty”. It aims “*to end poverty in all its forms, everywhere.*”

Calix supports WaterAid programs to facilitate access to safe water, sanitation, and hygiene in the world’s poorest and most marginalised communities.

This partnership with WaterAid aligns perfectly with our purpose and core values, and the reason why we exist, “We Solve Global Challenges” with “Positive Impact”.

Our ambitions

To ensure that 100% of our employees across all continents earn a living wage as a minimum.



Aquaculture is seen as a viable way to meet growing demand for animal products globally, with more efficient feed use than cattle or pig farming. As developing countries begin to adopt more sophisticated farming techniques, downstream environmental effects will become more pronounced. Calix's AQUA-Cal+ is an innovative, safe and earth-friendly solution for the improvement of pond health and the optimisation of shrimp and prawn aquaculture production.

.....

2 ZERO HUNGER



Zero Hunger

HIGH PRIORITY

Sustainable Development Goal 2 aims to achieve “zero hunger”. It aims to “*end hunger, achieve food security and improved nutrition and promote sustainable agriculture.*”

Global population growth means that food production needs to increase by 70% by 2050. It's time to rethink how we grow and consume our food. If done right, agriculture and aquaculture can provide nutritious food for all, while generating decent incomes to support and protect rural development and the environment.

Calix has developed AQUA-Cal+, a water conditioner that helps aquaculture farmers increase their pond yield, while reducing energy costs and protecting the environment.

Calix has also developed BOOSTER-Mag, a revolutionary biotech solution that increases crop productivity, decreases the need for fertiliser usage, and improves insect / pest management and fungal control.

Both AQUA-Cal+ and BOOSTER-Mag are being developed and commercialised, with an aim to make food production more sustainable.

Our ambitions

- Continue to develop and commercialize AQUA-Cal+ as a more sustainable approach to aquaculture, recognised as an answer to the world hunger.
- Continue to develop and commercialize BOOSTER-Mag, as a crop protection solution that will help the agriculture sector face increasing pressure on food quality and safety.



3 GOOD HEALTH AND WELL-BEING



Good health and well-being

HIGH PRIORITY

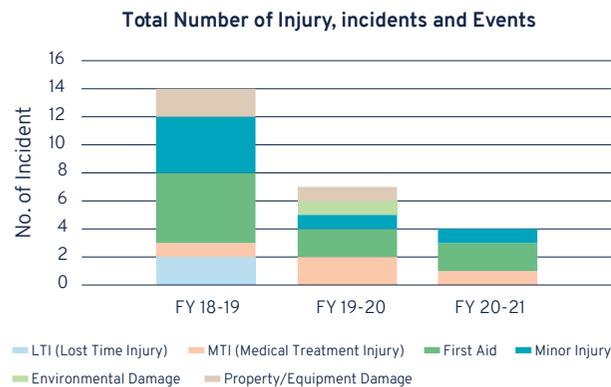
Sustainable Development Goal 3 relates to “Good Health and Well-Being”. It aims *“to ensure healthy lives and promote well-being for all, at all ages.”*

In 2021, Calix successfully adopted a new OHS Standard across its operations – AS/AZS 4801 to ISO 45001, meaning top management now takes overall responsibility and accountability for the protection of workers’ work-related health and safety.

There is also a great level of employee engagement, with campaigns such as “See Something, Do Something” being rolled out in multiple Calix locations in Australia, and overseas.

An “adapting work to workers” philosophy has also been included as a way of controlling processes and ensuring continuous reduction in workplace accidents and injuries.

In 2021, we also conducted an anonymous Employee Satisfaction Survey, to ensure we measure the mental health and well-being of our employees, and identify areas for improvement.



Our ambitions

- Ensure the safety and wellbeing of all its people (employees and contractors), visitors and anyone who could be affected by the conduct of its business.
- Support the achievement of an injury-and incident-free workplace within a fast-growing and more complex organisation.
- At Calix, we recognise that our commitment to the mental health and wellbeing of our people go hand in hand with our success. We are committed to identifying opportunities for improvement year on year.



Enhancing a safety positive culture

The team enjoys a lovely meal as part of International Food Month, which helped raise funds towards WaterAid.



Innovating for a healthier and more sustainable approach to food production

Calix’s unique bioactive materials are derived from natural minerals and are non-toxic and non-bio accumulative. Applied in agriculture, aquaculture and water treatment, they can substantially help in reducing our dependence on harsh chemicals with positive consequences for health and well-being.





The Innovation in Industrial Carbon Capture Conference 2020 was held in January, which brought together nearly 200 attendees. Policy makers, civil society, financiers and industry were invited to discuss the challenges facing the global community, and the role of the cement and lime industries.



4 QUALITY EDUCATION



Quality education

Sustainable Development Goal 4 is about quality education. It aims to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.”

Calix has identified some key challenges that have emerged in the last decade and are increasingly putting our planet at risk. We believe knowledge brings an opportunity for industry to adopt more sustainable technologies and practices.

Since 2017, we have recorded over 90,000 unique visitors on our websites and have built more than 2,450 followers on social media.

Calix subject matter experts provide insights on climate change and sustainability practices to help create a movement, reinvent industry, and play an integral role in solving the world’s most pressing challenges.

- The Innovation in Industrial Carbon Capture Conference;
- The “Calix Sustainability Series”;
- The Sustainable Aquaculture Series.

Our ambitions

- Help contribute to Target 4.7, and ensure that all people and stakeholders acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development.



5 GENDER EQUALITY

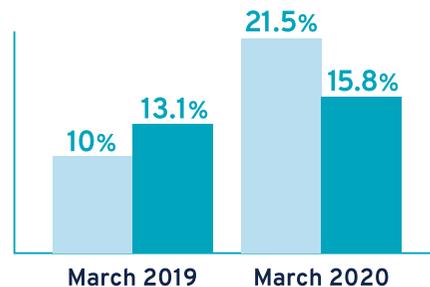


Gender equality HIGH PRIORITY

Sustainable Development Goal 5 concerns gender equality. It aims to “*achieve gender equality and empower all women and girls*”.

Calix provides equal opportunity to all qualified individuals, regardless of factors such as gender, domestic responsibilities, marital status, religion, race, ethnicity, language, sexual orientation, disability or age.

Calix is committed to the ongoing development of a work culture that is built on respect, diversity and is free from discrimination, bullying, and harassment, where all employees are treated with dignity, courtesy and respect.



As a result of our commitment to diversity and inclusion, we have increased our women employment population significantly, including representation of woman on our Board and Senior Leadership Team.

■ Percentage of Women Employees
■ Percentage of Women on Boards/Leadership Team

Settling a new child into the family, whether through birth or adoption is a significant event and one of life’s important milestones. In 2017, we introduced a Parental Leave Policy providing all Calix employees with both time and flexibility in how they establish new family and work-life routines, and support them with being present for this very important task.

We offer leave for both primary and secondary careers who may be welcoming a new baby into their family, and also have flexible working, part-time and home-working arrangements in place.

Our ambitions

Embed our commitment to diversity and gender balance into how we work at Calix:

- Achieve greater gender balance amongst our employees and management team.
- Set excellence in standards of workplace behaviour through a revised and more comprehensive Code of Business Conduct covering diversity, bullying, harassment and discrimination.
- Roll out a training program for all employees, on unconscious bias, when making decision’s or recruiting, to help progress the skills required to develop and manage diverse teams.
- Identify opportunities to promote gender diversity in STEM (Science, Technology, Engineering and Mathematics) careers by raising young people’s awareness through partnerships.





“Calix brands essence is “Innovating for the Earth.” This gives me a chance to challenge the team on how we can make a positive difference for the longer term. Beyond growing revenue, I need a higher, positive purpose for my role.”

Audrey Barucchi, General Manager Marketing & Communications



“I am excited to be part of the Calix Research Team and to contribute to a greater purpose by innovating in environmentally friendly products.”

Sajeewani Fernando, Materials Scientist



"I love working on projects that make a difference and contribute socially and environmentally. This, combined with the challenge of managing remote teams and complex international projects is what brought me into Calix."

Emma Bowring, General Manager Engineering



“I am excited to join the Calix team, because it enables me to contribute to commercialising Calix’s technology. I am confident that my skills in cross-border transactions and the global network that I’ve built will contribute to the growth story of Calix and aid in fulfilling its mission of solving global environmental challenges.”

Helen Fisher, Non-Executive Director



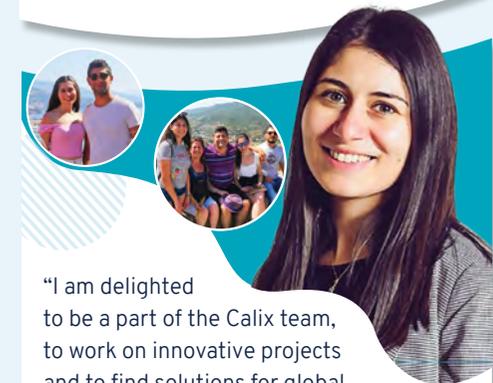
I feel so proud to be part of the Calix team, supporting them on their mission to solve some of the global challenges that will make the world a better place for future generations.

Tracy Wright, Assistant Accountant



“We can’t continue improving things if we are not learning together and improving together. Safety isn’t just safety, everybody contributes to safety and to quality as a team...”

Anna Tran, Safety Health Environment and Quality (SHEQ) Manager



“I am delighted to be a part of the Calix team, to work on innovative projects and to find solutions for global and environmental challenges. For a better future and better environment, I joined Calix.”

Sophie Klaimy, Process Engineer



Hardworking, Passionate, Inspirational



6 CLEAN WATER AND SANITATION



Clean water and sanitation HIGH PRIORITY

Sustainable Development Goal 6 is about “clean water and sanitation for all”, aiming to “ensure availability and sustainable management of water and sanitation for all.”

Water and wastewater management is a challenge that can threaten vital waterways and can impact health and the environment.

By 2030, we need to improve water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally (target 6.3).

Our ambitions

- Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally (Target 6.3).
- At Calix, we are committed to Targets 6.3 and 6.6 specifically; and we believe we can help contribute to a more sustainable approach to water and wastewater management, by minimizing the release of hazardous chemicals in waterways, reducing the proportion of untreated wastewater and substantially increasing recycling and safe reuse of water globally.



Calix leverages a culture of innovation to develop and supply innovative magnesium-hydroxide slurries along with customised services to provide turnkey solutions for wastewater management.



Calix is a proud corporate partner of WaterAid. Examples of our membership activities are: Walk for Water for World Water Day in March, and Water Challenge during National Water Week in October.



Key achievements FY 2021



32,000,000,000 litres

= The amount of wastewater we've treated



3,500,000 litres

= The amount of aquaculture pond water we've treated.



2,000,000 litres

= The amount of water needed by our production facilities in Australia, equipped with a rainwater harvesting system.



Water

Calix is developing safe, sustainable solutions to treat water and wastewater, protect infrastructure and prevent pollution by replacing harsh chemicals, while also improving treatment performance across multiple industries.

Calix magnesium hydroxide solutions help control pH and alkalinity in wastewater while addressing significant environmental issues such as phosphate or fats, oils, and greases.

In 2019, Calix acquired IER with the goal to expand in the United States and Canada with solutions that improve sustainability of water and wastewater treatment.



ACTI-Mag™

AMALGAM-55

AMALGAM-60



7 AFFORDABLE AND CLEAN ENERGY



Affordable and clean energy

HIGH PRIORITY

Sustainable Development Goal 7 focuses on affordable and clean energy. It aims to “ensure access to affordable, reliable, sustainable and modern energy for all.”

Energy accounts for around 60% of total global greenhouse gas emissions. Increasing energy efficiency, developing sustainable energy storage options and the use of renewable energy is crucial to creating more sustainable communities and businesses and resilience to environmental issues like climate change.

By 2030, we need to increase substantially the share of renewable energy in the global energy mix.

Calix’s core technology is currently “fuel agnostic” which means low carbon intensity energy sources can be used. An example is the Calix LEILAC calciner, where the technology is being developed to capture CO₂ emissions from the production of cement. Cement together with lime is the second most consumed substance on Earth after water – and accounts for around 8% of global CO₂ emissions.

The rapid shift needed towards renewable energy also creates a global need for more efficient, cheaper, higher-capacity, and more sustainable energy storage options. Calix is developing advanced materials for lithium-ion batteries, based on its nanoactive electrode materials that have the potential to deliver superior performance at a fraction of the cost, with improved ease-of-recycling.

In support of large-scale renewable energy storage, Calix has joined a 3-year EU Horizon 2020 project called SOLar Calcium-looping integRation for ThermoChemical Energy Storage (SOCRATCES).

More recently Calix has teamed up with SaltX Technology, to build a unique salt-based energy storage system in Sweden, a system that has great potential for load balancing applications as the grid de-carbonises.

In a very different approach to developing clean, affordable energy sources, Calix has developed a solution to be used in anaerobic digesters to help convert waste water into biogas, an environmentally friendly, renewable energy source.

Our ambitions

- Design and build an industrial scale, operational electrically powered calciner by 2024.
- Accelerate our R&D on advanced battery materials, to help facilitate the transition towards renewable energy in the global energy mix (Target 7.3).
- Continue to leverage partnerships to facilitate research in clean and renewable energy (such as biogas), and identify opportunities for energy efficiency of our technology.



Senator David Van and Calix CEO Phil Hodgson at the official opening of the BATMn reactor in Bacchus Marsh on 21st November 2019





8 DECENT WORK AND
ECONOMIC GROWTH



Decent work and economic growth

Sustainable Development Goal 8 is about decent work and economic growth. It aims to “*promote sustained economic growth, higher levels of productivity and technological innovation.*”

Calix owns and operates a mine, production and testing facilities and close-to-customers manufacturing plants. Calix encourages suppliers, consultants and other business partners within its sphere of influence to follow the company’s Core Values, Code of Conduct and its standards for health and safety, environment, quality assurance and training and competence.

Our ambitions

- Embed respect for human and labour rights into everything we do, and use our influence to contribute to a fairer, more inclusive and more equitable way of doing business.
- Set the standard of workplace behaviour, through a revised and more comprehensive Code of Business Conduct covering UN Global Compact’s Principles 1 to 6 on Human Rights and Labour.





Calix is a key participant - as the core technology provider and project leader - in LEILAC (Low Emissions Intensity Lime and Cement), a European Union Horizon 2020 research and innovation project that will help Europe's cement and lime industries reduce their CO₂ emissions dramatically without significant energy or capital penalty.

.....

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Industry, innovation and infrastructure

Sustainable Development Goal 9 is about industry, innovation, and infrastructure. It aims to “*build resilient infrastructure, promote sustainable industrialisation and foster innovation.*”

Cement is one of the most widely used substances on the planet, after water, fulfilling an essential role in providing society's need for housing and infrastructure.

Cement and concrete directly employ more than 384,000 people in Europe, and combined with indirect jobs, more than 1,000,000.

At the same time, both sectors have relatively high carbon dioxide (CO₂) emissions and are responsible for around 8% of global CO₂ emissions.

Calix technology allows for the direct separation of CO₂, allowing it to be used for CO₂ mitigation in traditionally CO₂ intensive industries, such as lime and cement production.

Our ambitions

Calix is leading a consortium of some of the world's largest cement and lime companies with the aim to help industry reach EU's emissions reductions targets by 2030, and global carbon neutrality ambitions by 2050.

More info: <https://www.project-leilac.eu>



Reduced inequalities

Sustainable Development Goal 10 is about reduced inequality. It aims to “reduce inequality within and among countries”.

Calix supports WaterAid programs to facilitate access to safe water, sanitation, and hygiene in the world’s poorest and most marginalised communities. This partnership with WaterAid aligns perfectly with our purpose and the reason why we exist, “We Solve Global Challenges” and with our core value of “positive impact”.

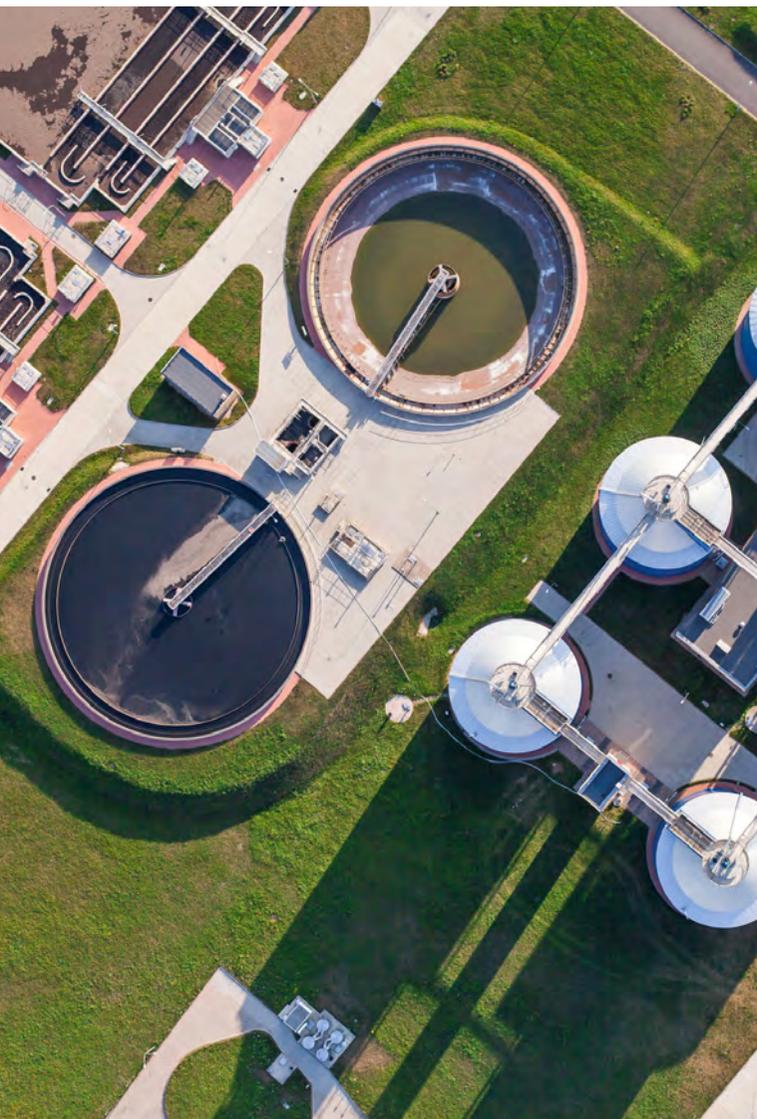
Calix offers a workplace-specific Indigenous cultural competency online training to all employees. An initiative that helps us contribute to Targets 10.2 and 10.3.

10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

Our ambitions

- Give equal opportunities for employees, including employees with diverse backgrounds or disabilities.
- Set the standard of workplace behaviour, through a revised and more comprehensive Code of Business Conduct covering diversity, bullying, harassment and discrimination.





11 SUSTAINABLE CITIES AND COMMUNITIES



Sustainable cities & communities

Sustainable Development Goal 11 is about sustainable cities and communities. It aims to “*make cities inclusive, safe, resilient and sustainable.*”

Climate change coupled with population growth results in water and energy becoming increasingly critical challenges for all cities and communities.

We support research and commercialisation that helps build sustainable cities in the future.

A growing sewer network creates issues such as infrastructure damage, odour complaints and potential health and safety hazards, as well as accelerated corrosion of sewer assets, pump station wells, discharge manholes and treatment plants. Calix’s ACTI-Mag and AMALGAM, two magnesium hydroxide slurries, can help tackle these challenges, safely and cost-effectively while preventing pollution.

While wastewater management and pollution prevention are a priority, waste-to-energy programs are increasingly needed to improve the productivity of treatment facilities by maximising the economics of biogas generation from anaerobic systems. Calix’s ACTI-Mag can increase the quality and quantity of biogas coming from anaerobic systems, and provide a significant economic boost for food processing plants and water utilities.

Energy accounts for around 60% of total global greenhouse gas emissions. Increasing energy efficiency, developing sustainable energy storage options and the use of renewable energy is crucial to creating more sustainable communities and businesses and resilience to environmental issues like climate change. Calix is developing advanced materials for lithium ion batteries that deliver superior performance at a fraction of the cost, with improved ease-of-recycling.

Our ambitions

- Contribute to Target 11.6 by reducing the amount of carbon released into the atmosphere; and help improve the sustainability of waste management.
- The development of our Advanced Batteries business line will have an impact on the transition towards renewable energy, and the ability of cities and communities to mitigate climate change (Target 11.B).



Responsible consumption & production

Sustainable Development Goal 12 is about responsible consumption and production. It aims *“to ensure sustainable consumption and production patterns.”*

At Calix, we acknowledge that unsustainable consumption and production habits are increasingly putting our planet at risk.

All Calix solutions - ACTI-Mag, BOOSTER-Mag and AQUA-Cal+ - are being developed with efficiency in mind, to reduce the use of additional resources, while also enabling energy savings.

Some examples:

Calix magnesium hydroxide-based slurries are non-hazardous/non-dangerous, they do not require sophisticated tools for application, which reduces hurdles for consumption and application.

BOOSTER-Mag in particular, has a long shelf-life, enabling bulk purchases for long-term storage and longer delivery times to remote areas.

Calix “Tip of the Month” encourage all staff to impact on their own home and office consumption patterns. We also use fully recycled paper for our branding, communications collaterals and all our marketing materials.

Our ambitions

- Calix solutions help our customers to manage chemicals and wastes throughout their life cycled, and significantly reduce the release to air, water and soil, in order to minimize their adverse impacts on human healths and the environment (Target 12.4).
- Continue to identify opportunities to reduce our waste generation through prevention, reduction, recycling and reuse. “Be the change you want to see in the world.” -Gandhi



By implementing re-usable drinking bottles for all staff, we have **saved 3,825 plastic bottles** from landfill this year at our operations in Bacchus Marsh in 2021.





13 CLIMATE ACTION



Climate action

HIGH PRIORITY

Sustainable Development Goal 13 is about climate action. It aims to “take urgent action to combat climate change and its impacts”.

SDG impact to date

Calix’s technology is also being developed and adapted to mitigate CO₂ emissions in mineral and chemical processing, to develop advanced battery materials, or increase biogas efficiency, all of which could have direct and indirect impact on greenhouse gas emissions and their impact on climate warming.

Cement is one of the most widely used substances on the planet, after water, fulfilling an essential role in providing society’s need for housing and infrastructure. Lime is used in a variety of applications including in the iron & steel, chemical, paper and pharmaceutical industries. Cement and concrete directly employ more than 384,000 people in Europe, and combined with indirect jobs, more than 1,000,000. At the same time, both sectors have relatively high carbon dioxide (CO₂) emissions and are responsible for around 8% of global CO₂ emissions. The majority of CO₂ emissions are released directly and unavoidably from the processing of the raw materials – not from the combustion of fossil fuels.

Calix aims to enable the cement and lime industries to capture those unavoidable CO₂ emissions emitted from the raw limestone. Calix’s Technology engineers the existing process flows of a traditional calciner indirectly heating the limestone via a special steel reactor. This unique system enables pure CO₂ to be captured as it is released from the limestone, as the furnace exhaust gases are kept separate.

To quickly and effectively apply this technology, the European-Australian collaboration LEILAC projects include consortia of some of the world’s largest cement, and lime companies, as well as leading research and environmental institutions.

Our ambitions

- It is broadly accepted that reducing man-made carbon dioxide (CO₂) emissions is crucial to respond to the threat of climate change, and for the future of the planet.
- At Calix, we believe our technology and all our solutions and R&D work across all our business lines can make a meaningful contribution to limit the increase in global warming to 1.5°C, and reduce the risks and impacts of climate change.

The Paris Agreement on climate change

The historic Paris Agreement provides an opportunity for countries to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. It entered into force on 4 November 2016.





Life below water

Sustainable Development Goal 14 is about life below water. It aims to “conserve and sustainably use the oceans, seas and marine resources for sustainable development.”

Calix is developing solutions to help conserve our water and marine resources.

Aquaculture is seen as a viable way to meet the growing demand for animal products globally with more efficient feed use than cattle or pig farming. However, aquaculture feed and waste produce nitrogen and phosphorus, the build-up of these elements on water beds may lead to negative ecological disruptions. If uncontrolled, the spread of algae could lead to the deaths of many species, and affect the biodiversity of ecosystems.

To help, Calix has developed AQUA-Cal+, a water conditioner for aquaculture that helps prevent polluting drainage and loss of coastal habitats, while maintaining pond viability. Its high reactivity and surface area are proven to help prevent the buildup of free ammonia and phosphate, which leads to blue-green algae runaways. AQUA-Cal+ is also being developed for freshwater lake and pond remediation.

AQUA-Cal+ enhances the productivity of aquaculture food farming. If practiced sustainably, aquaculture can not only improve nutrition and food security in many parts of the world, but also help restore habitat, replenish wild stocks, and rebuild populations of threatened and endangered species.

Calix solutions can help reduce nutrients (phosphate and nitrogen) from wastewater entering our waterways. If not removed, these nutrients can cause eutrophication in our rivers and coastal areas, destroying wild life and natural habitats.

Our ambitions

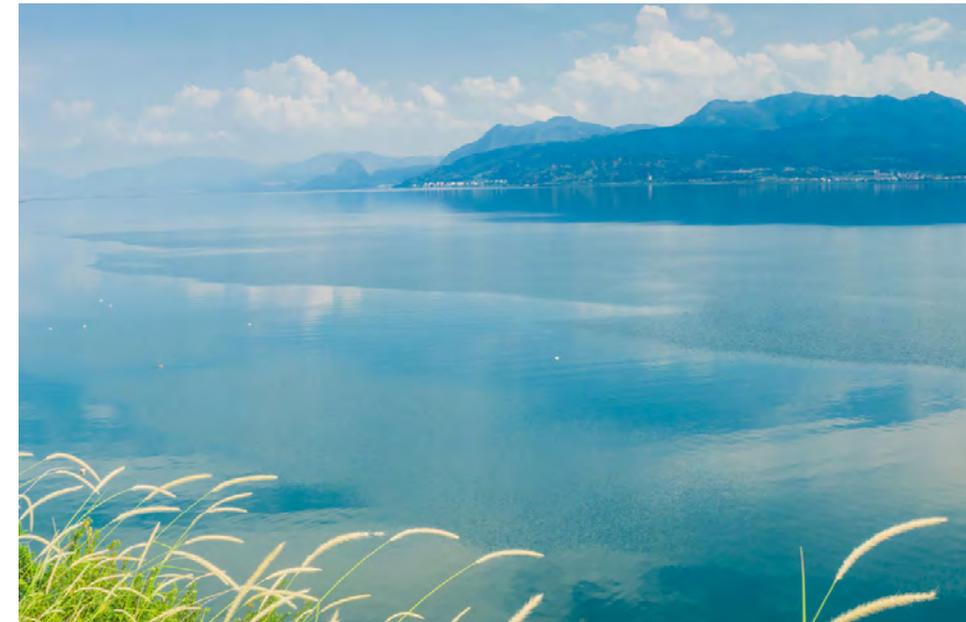
- Develop more sustainable solutions for aquaculture and agriculture that help customers reduce the toxicity of their wastewater discharge, or reduce the use of harsh chemicals that end up in our waterways and have negative impacts on aquatic habitats.

Calix is a proud Official
Supporter of the Ocean Impact
Organisation, supporting
innovation for a healthy ocean.

Nich Chiarelli
CEO and Co-Founder at Ocean Impact Organisation

Phil Hodgson
Managing Director & CEO at Calix

Find out more, watch the discussion between our CEO
Phil Hodgson and Nick Chiarelli, OIO's founder and CEO.
<https://youtu.be/pPXkyPrG8vQ>





BOOSTER-Mag 

15 LIFE ON LAND



Life on land

Sustainable Development Goal 15 is about life on land. It aims to *“protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss.”*

Population growth, a renewed focus on biofuels and on food quality and safety is putting increasing pressure on agriculture. The need for innovative crop protection chemicals that can sustainably increase productivity and produce healthy and nutritious food has never been greater.

Calix's BOOSTER-Mag is a revolutionary agricultural solution for increased yield, more efficient fertiliser usage, insect / pest management, and fungal control, while protecting people and the earth.

BOOSTER-Mag helps maintain biodiversity and beneficial insect populations.

Our ambitions

- Develop safe and more environmentally friendly solutions for agriculture and aquaculture to reduce the use of harsh chemicals that can degrade natural habitats, to prevent the loss of biodiversity in land and water ecosystems.

In 2020, we launched a 'plant a tree' campaign in Australia, facilitating the planting of trees to help further mitigate the negative environmental consequences while raising climate change awareness.



Peace, justice and strong institution

Sustainable Development Goal 16 is about peace, justice and strong institutions. It aims to *“promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.”*

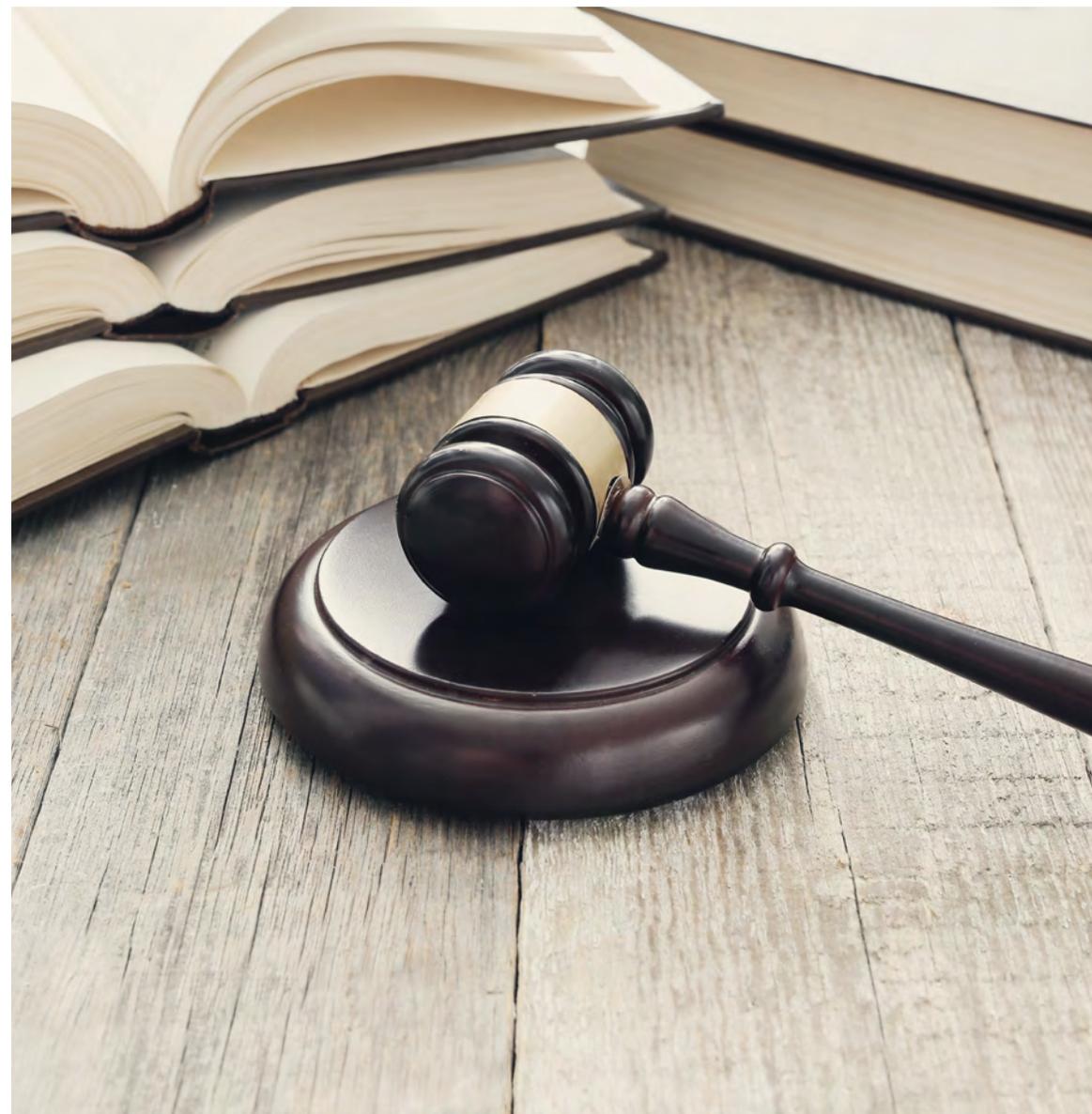
At Calix, we are committed to a high level of governance and value and reward, excellent ethical standards, personal and corporate integrity and respect for others.

Our business operates in accordance with the following policies: Anti-Corruption & Anti-Bribery Policy, No Bullying & No Violence Policy, and a Whistle-blower Protection Policy.

Calix’s Board is the body within Calix to which concerns about possible breaches of Calix’s Code of Conduct and violations of human rights can be reported. Referrals can be made by sending an e-mail to info@calix.global or by sending an anonymous letter to: Calix Limited, 9 Bridge Street, Pymble NSW 2073 – Australia. All such reporting is handled with discretion and in a professional manner, with no retaliation imposed on those who report suspected or unethical behaviour.

Our ambition

- Review our governance structure to bring more focus and accountability to ethical and sustainable behaviour, including the establishment of a Board Sustainability Committee.
- Set the standard of workplace behaviour, through a revised and more comprehensive Code of Business Conduct covering corruption, bribery and whistleblower protection.





17 PARTNERSHIPS FOR THE GOALS



Partnerships

HIGH PRIORITY

Sustainable Development Goal 17 is about partnerships for the goals. It aims to “strengthen the means of implementation and revitalise the global partnership for sustainable development.”

Calix develops its technology and products via a global network of research and development collaborations, including governments, research institutes and universities, some of the world’s largest companies, and a growing customer base and distributor network for its commercialised products and processes.

Calix is a key participant in LEILAC (Low Emissions Intensity Lime and Cement), a European Union Horizon 2020 research and innovation project that will help Europe’s cement and lime industries reduce their CO₂ emissions dramatically without significant energy or capital penalty. Calix is the core technology provider and project leader.

In another approach to developing clean, affordable energy sources, Calix is working to establish an advanced and sustainable lithium-ion battery manufacturing industry in Australia. Calix is leading the Australian Cooperative Research Centre Project (CRC-P) to develop advanced batteries and just received \$3 million in funding. Calix will work with some of Australia’s and the world’s foremost battery experts in Professor Maria Forsyth and Dr. Patrick Howlett of Deakin University and the BatTRI-Hub.

Calix supports UN Global Compact, WaterAid, Ocean Impact Organisation and Bacchus Marsh Football and Netball Clubs, as a way to give back to local, regional and global communities. These partnerships are a testament to our value of positive impact.





Plant a tree and help us capture CO₂

Calix's world first, patented technology involves "flash" heating minerals in an externally heated kiln – to create nano-active materials that can be used in a range of different industrial applications. Calix technology allows for the direct separation of CO₂, allowing it to be used for carbon dioxide reduction in traditionally CO₂ intensive industries, such as lime and cement production. The technology is also being developed to use alternative and waste fuels, biomass or even renewable energy, to ultimately achieve carbon neutrality.

Help us reduce the impact of climate change, by planting a tree:
<https://www.calix.global/news/plant-a-tree-with-calix-and-help-us-capture-co2/>

To learn more about Calix technology, products, applications and services:
www.calix.global

Or call 1300 0 CALIX

Share
#MARSISFORQUITTERS



Calix is committed to sustainable practices that contribute to saving the planet. This means we try to reduce printing where possible or make sure that when we do print it is on 100% recycled paper. We appreciate your support in this important initiative.