2023

Connecting the World through Sustainable Innovation

Innovating for a smarter world – impacting
sustainability with concrete solutions

SILICON LABS

A Message from Our CEO

"Sustainability is a fundamental responsibility for any forward-thinking organization. We are committed to supporting projects and initiatives that promote a more sustainable and energy-efficient world. Our focus on sustainability extends to reducing our environmental footprint, promoting eco-friendly practices in our operations, and actively investing in research and partnerships that drive advancements in clean energy technologies. By doing so, we contribute to the global effort to combat climate change and preserve the planet for future generations."

Matt Johnson, President and CEO, Silicon Labs

Our Sustainability Strategy

Silicon Labs is creating a smarter and more connected world. We are committed to advancing our environmental, social, and governance efforts and becoming a sustainability leader in the semiconductor industry. Our sustainability strategy is guided by our core values and focuses on areas where we believe we can make the biggest impact: creating innovative products with positive environmental and social impact: fostering and empowering an inclusive, innovative culture; conducting our business in an environmentally and socially responsible way; and sharing value creation with our stakeholders and communities, now and in the future.

Key Pillars:

- Create innovative products with positive environmental and social impact
- Foster an inclusive culture
- Conduct business responsibly
- Share value with stakeholders and communities

Our ESG Approach

We view sustainability through the lens of environmental, social, and governance (ESG) topics, focusing our sustainability goals in five strategic areas: employee well-being, product and services innovation, eco-efficient operations, climate change mitigation, and responsible supply chain.

Our stakeholders are a major source of insights on ESG and accountability. Annually, we solicit and integrate their feedback to determine which strategic areas to focus on.

EPA GREEN POWER PARTNERSHIP®

psacertified™
level three

Certified the first Sub-Ghz SoC

xG23x to PSA Level 3

SILICON LABS SoC

Initial production of the new SiWx917 Wi-Fi 6 SoC, the most IoT-optimized Wi-Fi SoC

1.5–2x

increase in speed for Silicon Labs MG24 SoC recognized in the MLPerfTM Tiny v1.0 benchmark

1st

worldwide "product" level security program for ETSI EN 303645 EU Standard

Strategic Focus Areas:

- Employee well-being
- Product and services innovation
- Eco-efficient operations
- Climate change mitigation
- Responsible supply chain

Our Goals

Renewable Energy

70%
renewable energy use in Austin headquarters by end of 2023

NEARLY ACHIEVED

In 2023, our Austin headquarters consumed 68% renewable energy and 88% renewable electricity

New Goal

100%
renewable energy use in all Silicon Labs facilities where programs are available by end of 2025

ON TRACK

In 2023, and we achieved 35% renewable energy globally and have programs in place to increase our global renewable energy use

Emissions

50%
absolute reduction in scope 1 and 2 GHG emissions in our Austin headquarters by end of 2025 versus the 2018 baseline

ACHIEVED

In 2023, we reduced our scope 1 and 2 GHG emissions by 60% versus the 2018 baseline

New Goal

90%
Science-based target of 90% absolute reduction in scope 1 and 2 GHG emissions by end of 2030 versus the 2021 baseline

Waste Management

70%
landfill diversion rate at our Austin headquarters by 2023

ACHIEVED

In 2023, we achieved a 75% landfill diversion rate

New Goal

5%
absolute waste reduction in Austin headquarters versus 2023 baseline

Supplier Management

100%
of major suppliers (corporate and facilities) to complete SAQ by 2024

80%
of all suppliers (corporate and facilities) to complete SAQ by 2024

80%
of high-risk major suppliers to complete a VAP – with a goal of silver recognition by 2025

ON TRACK

In 2023, we achieved our goal of reaching 100% SAQ response rate from our major suppliers and >80% for all suppliers (corporate and facilities)

New Goal

Engage by end of 2025 with major suppliers on science-based reduction targets for our scope 3 emissions

Inclusion

90%
global employee engagement score by 2025

90%
of employees participating in one or more Silicon Labs inclusion initiatives by 2025

ON TRACK

In 2023, we achieved an 83% employee engagement score and were certified for the fifth year running as a Great Place to Work**. Additionally, 88% of employees participated in at least one inclusion initiative

**Silicon Labs has participated in the Great Place to Work survey since 2019

Sustainable Innovation

Silicon Labs is committed to supporting the development and deployment of smart city, smart grid, and electrification technologies. We design reliable, secure, and adaptable hardware and software solutions and form productive partnerships with mission-driven IoT innovators to bolster rapid and efficient change in energy usage and consumption. By doing so, Silicon Labs is determined to turn the bright future envisioned by smart cities into a reality.

1. **Energy transition —** Silicon Labs offers diverse SoCs, expertise in IoT standards/protocols, and high-quality, secure solutions to support the shift to renewable energy. Our FG25 Sub-GHz Wireless SoCs, designed for smart cities, feature fast processing, large memory, and long-distance transmitters, ensuring efficient data transmission and interoperability. They are Wi-SUN FAN certified, making them ideal for dense environments.

2. **Energy efficiency —** Energy efficiency is essential for optimizing resources and reducing costs. We invest in IoT-powered monitoring systems for smart cities and advanced metering solutions, enabling real-time data collection and precise energy management. Our technology enhances power supply reliability, minimizes waste, and maximizes savings. By integrating smart meters with our IoT devices, utility companies can align energy production with demand, reducing costs and environmental impact, and driving economic growth.

CASE STUDY

CYANCONNODE

India Smart Metering with CyanConnode

To respond to India's advanced smart metering goal – replacing 250 million conventional electricity meters with smart meters by 2026 – to eliminate inefficiencies in the country's energy system and prevent energy theft, CyanConnode, a global leader in narrowband mesh networking, chose to work with Silicon Labs to integrate our FG25 Sub-GHz SoCs and FAN-certified Wi-SUN stack to deliver high-quality, low-latency, safe products that will stand the test of time to their customers.

3. Effective resource management — Sustainable smart city initiatives require robust, long-lasting solutions. Our advanced IoT hardware and software help municipalities detect water leaks, monitor energy use, and adjust provisioning in real-time, conserving resources and ensuring efficiency. For residents, integrated IoT solutions offer visibility into home energy use, enabling real-time tracking and automation to avoid peak hours. We empower municipalities and residents with tools for intelligent resource management, fostering sustainability and economic benefits through reduced waste and enhanced efficiency.

Wirepas **INGY**

CASE STUDY

Smart Building Management with Wirepas and INGY

A key sector for waste management, smart buildings address issues such as lighting and water wastage to reduce inefficiencies and monitor usage. Introducing an ultra-low-power IoT solution, like the MG24 multiprotocol SoC paired with the Wirepas mesh stack, enabled INGY, a leading software development company specializing in smart lighting, fulfills a wide range of requirements for its lighting customers, such as size constraints, shape requirements, high-temperature resilience, and high-performance wireless capabilities. This solution offered an output power up to 20 dBm, extensive Flash and RAM memory, and low-latency wireless connectivity, creating the most streamlined and optimized smart lighting portfolio on the market, with an energy conservation potential of up to 80%.

4. Connected health — Silicon Labs' Bluetooth SoC technology supports medical devices like glucose monitors, insulin pumps, pulse oximeters, smart scales, and medicine delivery patches. Our technology in wearables promote an active lifestyle and preventive health by providing feedback on activity levels, sleep quality, heart rate, and other health indicators.

CASE STUDY

Continuous Glucose Monitoring (CGM)

Continuous Glucose Monitoring (CGM) is a 14-30 day operation requiring a small device fitted with a needle. It generates continuous readings sent to a cellphone, which in turn transmits the information to an insulin pump. This pump works as an artificial pancreas, delivering the required dose of medication. For use in the home by non-medical people, the equipment needs to be easy to use have an excellent battery life and strong RF performance. Our BG27 released QFN package was selected by one of the leading providers of CGM due to our expertise and innovations in low-power IoT hardware and software solutions.
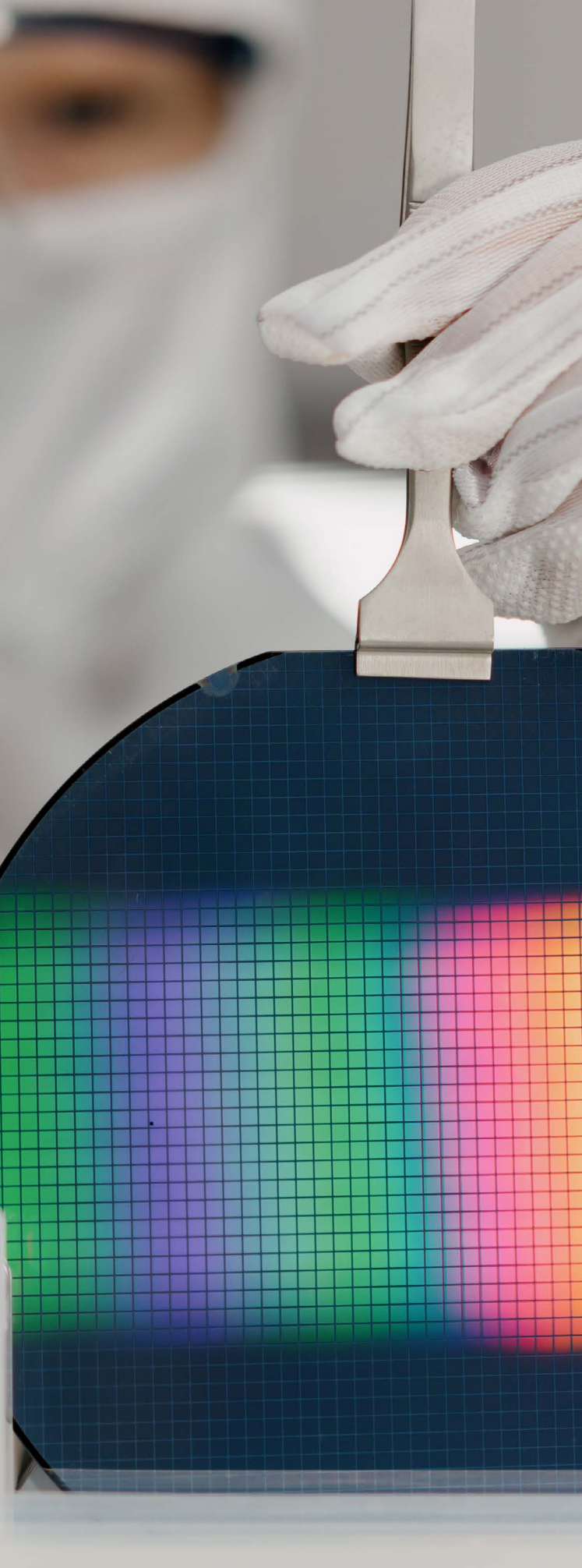
Latest Innovations Driving Sustainability

IoT xG27 – The xG27 range from **Silicon Labs** is our smallest form factor to date, bringing high-performance mesh networking for battery-powered smart home devices. The solution offers device designers greater energy efficiency, high performance, security, and wireless connectivity for the design of tiny battery-optimized devices for use in connected health applications, wearables, asset monitoring tags and smart sensors.

FG28 SoC supports long-range applications at the edge for smart agriculture, smart cities, and neighborhood networks. For use in smart metering solutions, as an example, the FG28 enables reliable communication between endpoints and utility companies by supporting multiple sub-GHz protocols. The Sub-GHz band is crucial for smart metering applications at the edge. It was also the first to have a built-in AI/ML accelerator.

Our new series 3 platform is the first embedded computing platform with the security, performance, power efficiency, and low cost required to tap into emerging IoT market opportunities. Our Series 3 22nm wireless platform will be the only multi-radio solution architected with a common code base and memory options for future-proofing and backward compatibility with our successful Series 2 platform.

Silicon Labs SiWG917 SoC is our lowest-power Wi-Fi 6 plus Bluetooth LE 5.4 SoC, ideal for ultra-low-power IoT wireless devices using Wi-Fi®, Bluetooth, Matter, and IP networking for secure cloud connectivity. Offering lower power consumption, this SoC ensures a longer battery life, which is essential for real-world applications such as smart metering, smart homes, smart cities, health and fitness, smart hospitals, and even monitoring bee colonies.

Environmental Highlights

Energy and Greenhouse Gas Emissions

In 2023, we consumed 16.355 GWh or 58,878 GJ of energy globally, with renewable energy at our Austin headquarters, and Montreal, Budapest, and Espoo facilities accounting for 35% of our total energy consumption. Our Austin headquarters consumed 68% renewable energy and 88% renewable electricity.

In our Austin headquarters, we achieved our goal of reducing scope 1 and 2 greenhouse gas (GHG) emissions by 50% to 1,212 MTCO2e compared to our 2018 baseline of 3,027 MTCO2e. This was due to the increased use of renewable energy, leading to a 60% reduction in greenhouse gas emissions.

Our new target for the reduction of scope 1 and 2 GHG emissions is based on the Science-based Target Initiative (SBTi) methodology. While we believe the target exceeds the minimum reduction required to meet the Paris Agreement's goal of limiting the rise in global temperatures to 1.5°C above pre-industrial levels, the target has not yet been validated by SBTi; Emissions from our supply chain are responsible for more than 90% of our total greenhouse gas emissions inventory. For this reason, we have focused on a supplier engagement program for alignment on environmental topics such as energy and greenhouse gas emissions.

Greenhouse Gas Emissions

	2021	2022	2023
Total (GWh) from Grid	16.713	17.039	16.355
Percent from Grid	100%	100%	100%
Renewable Energy (GWh)	4.056	5.256	5.740
Renewable Energy (%)	24%	31%	35%
Non-Renewable Energy (GWh)	12.656	11.783	10.615
Non-Renewable Energy (%)	76%	69%	65%

Greenhouse Gas Emissions

	2021	2022	2023
Scope 1	**155**	**137**	**39**
Generation of Electricity	2	3	2
Generation of Heat	153	134	37
Scope 2 (market-based)[1]	**2,207**	**1,853**	**1,592**
Purchased Electricity	1,654	1,360	1,195
Purchased Heating	2	4	0
Purchased Cooling	550	489	397
Scope 3	**98,617**	**105,744**	**131,355**
Category 1: Purchased Goods & Services	92,499	96,964	120,261
Category 2: Capital Goods	-	-	3,443
Category 4: Upstream Transportation & Distribution	5,154	4,985	3,173
Category 5: Waste Generated in Operations	56	86	29
Category 6: Business Travel	135	3,025	2,404
Category 7: Employee Commuting	-	-	1,395
Category 13: Downstream Leased Assets (market-based)[2]	772	685	650
Total Scope 1, 2, and 3 Emissions (metric tons CO2e)	100,979	107,734	132,986
Other Significant Air Emissions (metric tons)[3]	1.085	1.402	1.398

Note 1: Location-based emissions were FY21: 3,190, FY22: 3,156 and FY23: 2,832.
Note 2: Location-based emissions were FY21: 1,018, FY22: 1,004 and FY23: 1,141.
Note 3: Include NO_x, CO, VOC, PM and SO_2

United Nations SDG Target 7.2
Increase substantially the share of renewable energy in the global energy mix by 2030.

Social Highlights

Increasing Employee Inclusion through Measurable Progress

Our annual inclusion assessment is executed by a third-party group, and all responses are anonymous. This year, 77% of employees participated in the survey, a 10% "year-on-"year" increase, providing feedback in the following topics:

- Inclusion & Belonging
- Talent Acquisition
- Talent Management
- Organizational Capacity & Agility
- Marketplace & Community Impact
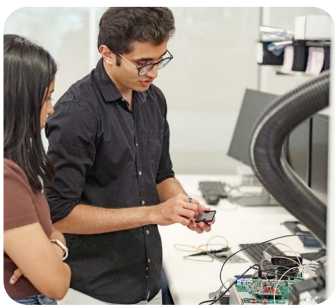
The assessment provides us with a strong measurable indicator for gauging our progress year on year on our inclusion initiatives. This helps us to identify challenges and opportunities, which we turn into action plans and share with the full team during a special Town Hall meeting.

77%
of employees participated in the survey

10%
year-on-year increase, providing feedback

Sustainable Supplier Engagement

Silicon Labs engages with our suppliers with RBA tools, and we evaluate the risk of all suppliers based on their location and RBA tool results. We require annual RBA SAQs at both the corporate and facility levels and, as needed, VAP audits. In 2023, Silicon Labs introduced the Sustainable Supplier Engagement Program that promotes our engagement on ESG and corporate sustainability topics with our suppliers and strengthens our relationships and alignment on corporate sustainability goals. Using the RBA platform, we created a custom ESG SAQ survey deployed with our major suppliers that measures the overall risk level and supplier performance by summarizing information in six categories: Environmental, Labor & Human Rights, Ethics, Health and Safety, Supply Chain Management, and Cybersecurity. We kicked off the program with a goal of 100% ESG SAQ completion from our major suppliers by the end of the year, which was achieved.

Topic	ESG SAQ Score	Overall Risk leve
Environmental	84.2	Moderate
Labor & Human Rights	91.6	Low
Ethics	92.6	Low
H&S	98.4	Low
Supply Chain	97.4	Low
Cyber Security	99.1	Low
Average	91.5	Low

Governance Highlights

Human Rights Commitment

Silicon Labs strongly opposes slavery, human trafficking, and forced labor. We do not use any slave or forced labor and do not knowingly conduct business with any supplier engaged in such practices. We are committed to working with suppliers who can prove that their manufacturing and supply chain operations adhere to the most stringent practices for workers and human rights, specifically related to safe conditions for workers, no forced or child labor, and fair wages for all. We require this throughout our supply chain with contractual agreements and review compliance with RBA tools and audits.

Our employees and other stakeholders are encouraged to report any concerns they may have about human trafficking through our EthicsPoint Hotline (online and telephone-based) or the Global Human Trafficking hotline at 1-844-888-FREE and help@befree.org. As described in our Global Human Rights policy, harassment, discrimination, or retaliation against anyone who reports in good faith a concern about actual or suspected violations of this policy will not be tolerated.

Enhancing Product Security

At Silicon Labs, we understand that to deliver the highest levels of product security to our customers, we must first ensure the security and integrity of our own organization and product development processes. We were the first semiconductor company to achieve PSA Certified Level 3, the highest level of IoT hardware and software security protection. PSA Level 3 certification was awarded to our wireless SoCs with Secure Vault, our secure key storage solution, as proof of our commitment to providing top-of-class security in our products.

Our Product Security Incident Response Team (PSIRT) responds to reported security vulnerabilities and issues in our products (hardware and software), manufacturing and development services. It ensures that security vulnerabilities are analyzed, remediated, and responsibly communicated. We also sponsor product-specific bug bounty programs employing hacker crowd-sourced platforms such as HackerOne.

Silicon Labs Board of Directors ESG Oversight

The Silicon Labs Board of Directors oversees the ESG Steering Committee and receives quarterly reports on ESG issues, practices, and reporting. The Board helps establish the organization's purpose, strategy, and values, working within an effective set of controls that enable risk assessment and management.
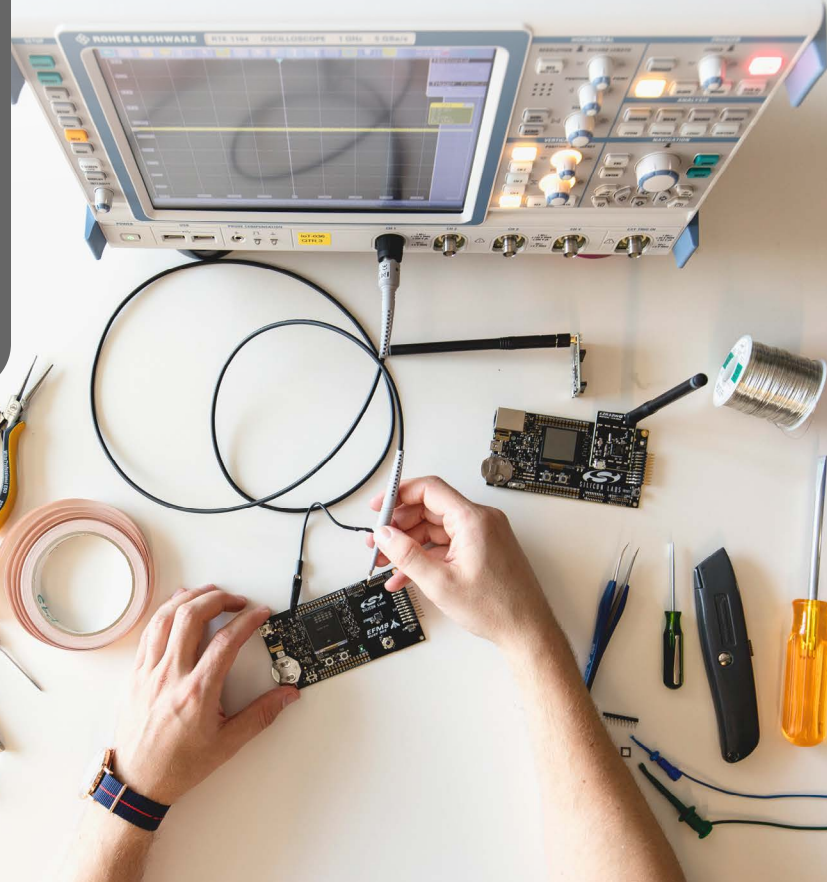
Looking Ahead: Building a Sustainable Future Together

At Silicon Labs, our journey toward sustainability is ongoing, driven by our commitment to innovation, responsibility, and collaboration. As we continue to develop cutting-edge IoT solutions, we remain steadfast in our dedication to reducing our environmental footprint, fostering inclusive and ethical practices, and advancing the well-being of our global community. We believe that by working together with our stakeholders, partners, and customers, we can create a smarter, more connected world that thrives on sustainable principles. Our efforts today pave the way for a greener, more resilient future for generations to come. Thank you for joining us on this vital journey.

Explore further insights in our 2023 Corporate Sustainability Report.