

Augmenting everybody's life



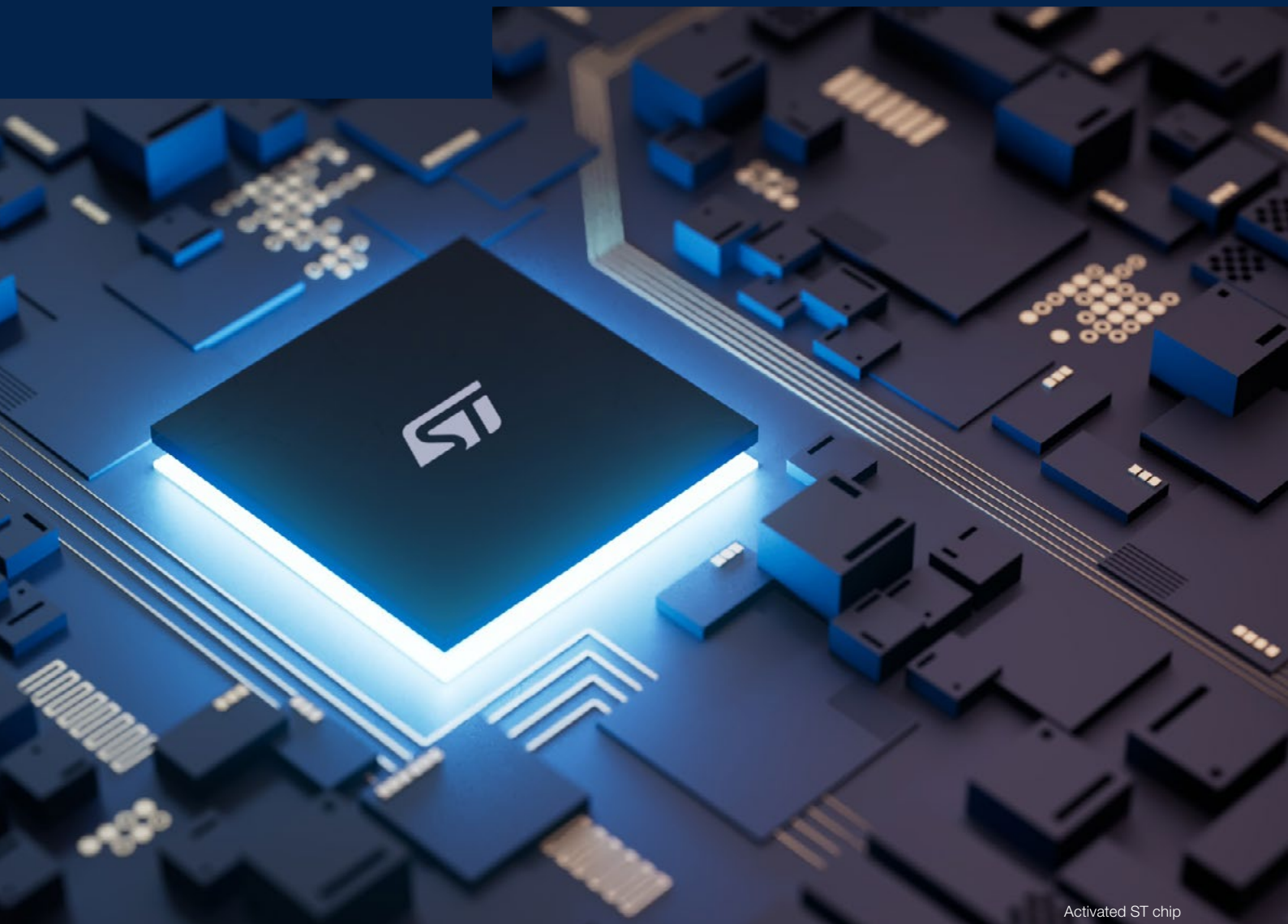
DJSI
included in
World and
Europe indices



9,500+
people
working
in R&D



23.2%
of revenue from
responsible
products



Activated ST chip

Sustainable financial performance

ST 300mm wafer

AUGMENTING EVERYBODY'S LIFE

We create profitable growth, managing risks and increasing long-term value for all stakeholders.

47.9%
gross margin

26.7%
operating margin

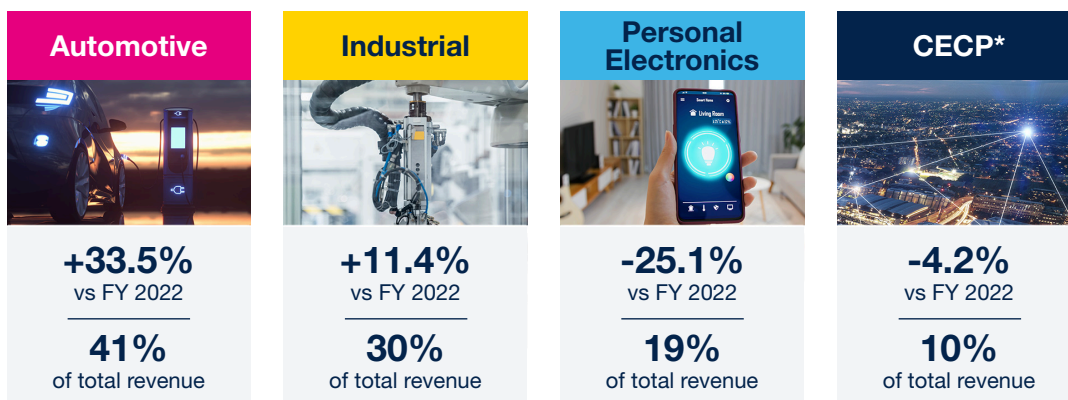
US\$4.21
billion net income

Our net revenues increased 7.2% to US\$17.29 billion in 2023, driven by strong demand in Automotive and, to a lesser extent, Industrial, partially offset by lower revenues in Personal Electronics.


Gross margin was 47.9%, up from 47.3% in 2022; operating margin was 26.7%, compared to 27.5%; and net income increased 6.3% to US\$4.21 billion.

We invested US\$4.11 billion in net capital expenditure and increased our free cashflow by 11.3% to US\$1.77 billion. Our net financial position increased to US\$3.16 billion on December 31, 2023, from US\$1.8 billion the previous year.

US\$17.29 billion
revenues



* Communications Equipment, Computers and Peripherals

Full details of our financial results are available in our annual reports (Form 20-F and IFRS), which can be found on our website (investors.st.com )

Business dynamics

In Automotive, we again saw strong demand across all geographies, driven by increasing semiconductor pervasion and structural transformation. The year was also positively impacted by inventory replenishment and a high level of capacity reservation fees.

**Over
60%
increase in SiC
revenue vs 2022**

In 2023, we continued to execute our strategy to support car electrification. Our revenue for silicon carbide (SiC) products for the year was US\$1.14 billion, a growth of more than 60% versus 2022.

In car digitalization, we saw continued design win momentum, with our latest generation of automotive microcontrollers across applications such as software-defined vehicle architectures and car electrification systems.

In Industrial, demand was still strong during 2023, especially in power and energy, factory automation and robotics, and industrial infrastructure. Towards the end of Q3 we saw a progressive weakening of demand, that accelerated during Q4. In power and energy management applications, such as EV charging stations, renewable energy systems, and factory automation, we had a broad range of design wins. We further strengthened our embedded processing solutions leadership with our STM32 microcontroller and microprocessor families and related ecosystem, introducing many new products and tools.

During the year, we had a strong focus on Edge AI. We announced and provided updates on multiple hardware products, including microcontrollers, microprocessors, and smart sensors. We unveiled the world's first MCU-Edge AI Developer Cloud and held our first ST Edge AI Summit online, with over 2,000 attendees and participation from many customers and partners. We also made good progress with sensors for industrial applications, introducing new MEMS and optical sensors suitable for industrial robotics and embedded vision applications.

Edge AI focus

In Personal Electronics and Computer Peripherals, market demand remained weak in 2023, while Communications Equipment demand remained solid in our focus areas. In Personal Electronics, we continued to be successful with our focused approach, winning sockets in flagship devices with sensors, wireless charging, touch display controllers, and secure solutions.

In Communications Equipment, our RF communication business delivered strong results. We continued to progress well with engaged customer programs in satellite and cellular communication infrastructure. | 2-6 | 3-3 |



Lorenzo Grandi

President, Finance, Purchasing, ERM & Resilience,
Chief Financial Officer

“2023 was another year characterized by revenue growth and increased profitability, with our revenues and net income increasing 7.2% and 6.3%, respectively. The solidity and resilience of our financial results demonstrate the strength of our product and technology portfolio and the reliability of our integrated manufacturing and independent supply chain. The continued execution of our established strategy and operating model, the transformation of our manufacturing base, and our strong commitment to sustainability, enable our future growth and drive enhanced profitability. Our ultimate focus remains the creation of long-term value for our stakeholders.”

Manufacturing

We continued to transform our manufacturing base in 2023 to enable our future growth and drive enhanced profitability, with the expansion of our 300mm capacity and a strong focus on wide-bandgap semiconductors.

In SiC, we continued to ramp our front-end device production at our Catania (Italy) and Singapore facilities, and we increased back-end manufacturing capacity at our sites in Morocco and China. We also started production at our new integrated SiC substrate manufacturing facility in Catania as a significant step in our SiC vertical integration strategy.

As part of our SiC strategy, we announced a joint venture with Sanan Optoelectronics for high-volume 200mm SiC device manufacturing in China. Production is expected to start in Q4 2025. These are important moves to further scale our global SiC manufacturing operations and they will be key enablers of the opportunity we see to reach above US\$5 billion SiC yearly revenues by 2030.

We also advanced with our 300mm capacity expansion plans. At our Agrate site (Italy), our new 300mm wafer fab was qualified for production and capacity of slightly more than 1,000 wafers per week was installed as planned.

In June, we announced the conclusion of a three-party agreement among the State of France, GlobalFoundries and our Company, as approved by the European Commission for a new 300mm semiconductor manufacturing facility in Crolles.

All these initiatives are aligned with our sustainability strategy and our sustainable manufacturing commitment, in terms of energy consumption and greenhouse gas emissions, air, and water quality.

EU Taxonomy

On July 12, 2020, EU Regulation 2020/852 of the European Parliament and of the Council of June 18, 2020 (EU Taxonomy Regulation) entered into force. The EU Taxonomy Regulation establishes the basis for a classification system to determine which economic activities can be considered environmentally sustainable. It is part of the EU's efforts to achieve the objectives of the European 'green deal', Europe's strategy towards climate neutrality in 2050. The EU Taxonomy Regulation is designed as a transparency tool to help companies and investors make sustainable investment decisions, with the overall purpose of steering finance towards more sustainable economic activities. Under the EU taxonomy regulation, we are required to disclose information on how and to what extent our activities qualify as environmentally sustainable, see [EU taxonomy](#).

Extra-financial performance

Each year, socially responsible investment rating agencies, analysts, and investors evaluate our corporate behavior and performance based on a wide range of environmental, social, and governance (ESG) topics.

In 2023, we participated in the Dow Jones corporate sustainability assessment for the 25th consecutive year, making us one of the very few companies who have participated continuously since its inception. We maintained our presence in the Dow Jones Sustainability Index World and Europe indices and maintained a strong presence in other major sustainability indices, including FTSE4Good, EuroNext VIGEO Europe 120, Eurozone 120 and Benelux 120, CAC 40 ESG, MIB ESG, ISS ESG Corporate Rating, and Vérité40. As of 2023, we received an MSCI ESG Rating of AAA⁽¹⁾. Furthermore, we have been included in the Bloomberg Gender Equality Index since 2018.

We received an A- score for CDP water security, which is in the 'leadership' band. This is higher than the Europe regional average of C, and higher than the electrical and electronic equipment sector average of C. We received an A- for CDP climate change, which is also in the leadership band. This is higher than the Europe regional average of B, and higher than the electrical and electronic equipment sector average of C.

These achievements acknowledge our longstanding commitment to conducting our business responsibly, and recognize our performance in many areas, ranging from business ethics, innovation, and quality to environment and labor practices. Participating in these evaluations provides an opportunity to assess our performance within a wider context, benchmark ourselves against our peers, measure our progress, and identify areas for further improvement.



⁽¹⁾ The use by ST of any MSCI ESG RESEARCH LLC or its affiliates ("MSCI") data, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement, recommendation, or promotion of ST by MSCI. MSCI services and data are the property of MSCI or its information providers and are provided 'as-is' and without warranty. MSCI names and logos are trademarks or service marks of MSCI.



Innovation

ST Edge AI technology

AUGMENTING EVERYBODY'S LIFE

Innovation is the fuel that drives our sustainability and growth.

US\$2.1

billion invested in R&D

~20,000

patents

195

active R&D partnerships

Innovation is a crucial element that propels our growth and helps us achieve our business goals. Our focus is on creating technology-based products that provide solutions to real world challenges and contribute to a sustainable future. We believe technology plays a key role in solving environmental and social challenges. In 2023, we invested US\$2.1 billion in research and development (R&D) to support innovation, representing 12.2% of our net revenues.

How we innovate

Building an internal framework

Innovation is a collaborative effort that should involve the entire organization. We have therefore developed an ecosystem to initiate, develop, and sustain innovation throughout the Company and beyond.

Our Innovation Office provides a framework for accelerating innovation processes and searching for disruptive technologies and applications. Its mission is to create internal and external innovation opportunities by connecting emerging markets and technology trends with our internal technology expertise.

Innovation Office

Under the guidance of our Innovation Office, our Technology Council reviews the most advanced R&D activities and develops a three-to-five-year roadmap. The council is supported by world-leading academic and industrial experts in technologies relevant to our business. | 3-3 |

In 2022, our Technology Council launched cross-functional teams known as 'Affinity Teams' to drive innovation within crucial areas of business and sustainability. These teams facilitate knowledge sharing between internal and external innovators, including networking activities with startups, academia, and R&D leaders. In 2023, we built on this structure, creating communities of experts to advance our competencies.

Internal technology expertise

Over 9,500 ST employees work in R&D and design. This includes more than 800 technical staff members who are recognized for their advanced expertise.

Top

100

Global Innovator

This community drives our most advanced innovations, enabling us to develop new technologies and helping to foster R&D partnerships with prestigious universities and partners worldwide. Our expertise is recognized externally through our involvement and contribution at key scientific conferences.


Our sites around the world help to nurture the entrepreneurial spirit of our employees through our fab labs and hubs that connect our technical employees within local innovation ecosystems.

In 2023, we were named a Top 100 Global Innovator™ by Clarivate™, recognizing our position among the world's most innovative organizations.

Leading-edge technologies

The focus of our innovation and the evolution of our technology is centered on three long-term trends reshaping industry and society and supporting the transition to a more sustainable world. These trends are:

- smart mobility
- power and energy
- cloud-connected autonomous things

Thanks to our broad portfolio of patents and strong pipeline of innovation, we are one of the few semiconductor companies with expertise across a very broad range of chip manufacturing technologies. We currently have about 20,000 active and pending patents. See more details about our technologies at www.st.com .

~20,000

patents

Artificial intelligence

ST is a leading provider of software and hardware for edge artificial intelligence (edge AI) solutions for tiny devices, such as sensors and microcontrollers.

As technology advances and data becomes more abundant, artificial intelligence (AI) is poised to revolutionize many industries and change the way we live and work. Exploiting distributed systems located at the 'edge' allows significant advantages in end-to-end energy saving and data security. This is because information is directly processed on sensors and microcontrollers, therefore avoiding centralizing data transmission and processing in the cloud. By harnessing AI in a wide range of sectors and situations, it can contribute to new, more effective ways of managing environmental impacts and climate change.

In 2023, we made significant advances in AI solutions. We unveiled ST Edge AI Suite, which provides a comprehensive, integrated set of software and tools. We also announced the ST Edge AI Core as the fundamental technology used in our AI unified tool, see [ST products and solutions](#).



Alessandro Cremonesi

Executive Vice President, Chief
Innovation Officer,
General Manager, System Research
and Applications

“ST’s products are at the core of many connected, autonomous ‘edge’ devices addressing sensing, processing, connectivity, and actuation needs. Our products allow those devices to be AI enabled, coupling efficient ST hardware solutions with our unique, industry-leading edge AI software suite. This dramatically increases our customers’ productivity to develop more intelligent and sustainable edge-AI products.”

Innovation ecosystem

ST’s innovation model is based on a balance between internal and external initiatives that guarantee continuous capability to identify, develop, attract, absorb, and create innovation. In 2023, we introduced an innovative network-based organization model based on the 3-3-3 approach:

- 3 scouting channels: ST driven, partner driven, venture capital driven
- 3 scouting targets: ecosystem expansion, IP acquisition, new market segments and R&D exploration
- 3 funnels to feed: ST product groups and R&D funnels, ST partner ecosystem, ST technical community

The scouting network is led by innovation specialists nominated for their expertise. The system streamlines our processes so we can work more efficiently towards potential collaborations. It also allows us to conduct business and technical analysis to better understand potential synergies.

Fab labs are a crucial part of our innovation ecosystem. These are dedicated areas with the technical resources to drive innovation. The labs help form local ecosystems by connecting ST employees and technical communities with external innovators. In line with the ongoing expansion of our global network of fab labs, we opened two new labs in 2023, in Le Mans (France) and Sophia Antipolis (France), bringing the total to 13.

External partnerships

We recognize the importance of partnerships in the innovation process and build strategic alliances, engage in bilateral research cooperation, and participate in standardization bodies. These bring together industry leaders from along the value chain to accelerate innovation, mainly in the automotive and industrial sectors, and diversify our scouting process in the smart mobility sector. In 2023, we were involved in 195 active R&D partnerships.

Throughout 2023, we continued to develop our program of external partnerships. To achieve this, we improved the way we work with accelerators to recruit startups. ST also launched a new initiative to attract and work with startups in France. In India, we launched a similar project with a rolling innovation application format, where a startup may apply to be part of ST India’s incubation program.

ST FOR STARTUPS SUSTAINABILITY CHALLENGE FRANCE

For many years, our French sites have been developing support and assistance initiatives for startups. As part of this approach, in 2023 we launched 'ST for Startups – Sustainability Challenge France' to address pressing topics such as energy efficiency, water management, and positive social or environmental impact.



We received 75 entries from startups, SMEs, microenterprises, and student entrepreneurs in France. After careful consideration, 10 were shortlisted by ST managers from across the country. The final of the event took place in Paris, where the finalists pitched their ideas to a jury including Frédérique Le Grevès, ST's Executive Vice President Europe & France Public Affairs and President of STMicroelectronics France. The evaluation was based on criteria such as adherence to the theme, level of innovation, and the quality of the business plan. Based on this, three winners were selected:

- Usense, a company that enables the detection, monitoring, and evolution of disease through urine analysis
- Fractal Energy, which provides a plug-and-play energy storage system to maximize the use of clean energy
- Cixi, which has designed an electric vehicle powered in part by a chainless crankset

The winners will benefit from technical and material support, such as access to equipment, products, and tailored advice from ST engineers via quarterly check-ins. Above all, the initiative demonstrates the combined benefits of collaboration and innovation in accelerating sustainability.

In 2023, ST France, Italy and Malta joined the second Important Project of Common European Interest on microelectronics and communication technologies (IPCEI ME/CT). This strategic initiative involves 14 European Union member states and nearly 100 companies, SMEs, startups, and more than 600 research and technology partners.

The project aims to advance R&D and innovation, and the first industrial deployment of microelectronics and communication technologies across the entire European semiconductor value chain, including materials, design, chip manufacturing, and integration into final systems. The impact of IPCEI ME/CT goes beyond technical achievements. It also significantly increases collaboration within the microelectronics ecosystem and European scientific communities.

Alongside this, the first IPCEI program on microelectronics (IPCEI ME) is still running in Italy, with additional objectives for technologies and products to be achieved by the end of 2024 on energy efficient chips, power semiconductors, and smart sensors.



We continually nurture our open innovation ecosystem through a range of programs.

ST internal programs include:

- **ST Partner Program** raises the profile of authorized high-quality partners, showcasing their products and services through our website. We have more than 300 partners, including startups.
- **ST Proof-of-Concept (PoC) Centers** provide coworking spaces for small and medium-sized enterprises to speed up their proof-of-concept phase.
- **ST for Startups Program** provides a number of different ways that ST engages with eligible startups. These include providing advanced technologies and support, sharing knowledge, or direct business engagement. We also give visibility to startups through ST's events and communications activities.
- **ST-Up accelerator program** supports hardware and technology startups through an 18-month, five-step process.

External programs include:

- **Accelerators** – we collaborate with accelerator initiatives such as Motor Valley and Startup Autobahn within the Plug and Play ecosystem.
- **Incubators** – we work with a global network of expert partners, such as Software République, Silicon Catalyst and e-novia.

Through our various initiatives and our partnership programs, ST was actively engaged with 80 startups in 2023. We also continued to improve our process for managing the startup lifecycle to further enhance our capability to drive successful partnerships.

Thanks to these programs, we are constantly exploring new sustainable solutions and enabling responsible applications for safer, greener, and smarter living (see [Sustainable technology](#)) via a model that supports both a push (inside-out) and pull (outside-in) approach to innovation.

Contributing to the SDGs

Our commitments and programs described above contribute to UN Sustainable Development Goals (SDGs):



SDG target 9.5 – Enhance scientific research, upgrade the technological capabilities of industrial sectors, and increase private research and development spending.

2025 sustainability goal	Status	Comments
SG1: Generate at least 20% of our revenues from new product lines by 2025.		10.2%

Sustainable technology

ST development board

AUGMENTING EVERYBODY'S LIFE

Our technology plays a key role in helping to solve environmental and societal challenges.

2011

launch of product stewardship program

23.2%

of revenue from responsible products

95%

of our products exceed RoHS directives

At ST, we develop technologies that are key enablers for creating a more sustainable future. Sustainable technology is our comprehensive product stewardship program that aims to ensure sustainability is considered when we develop new products and technologies. It helps us create value for our Company, our customers, and society in general. | 3-3 |

Our responsible products

Our sustainable technology program enables us to classify our products into four categories of 'responsible products' that provide environmental and social benefits.

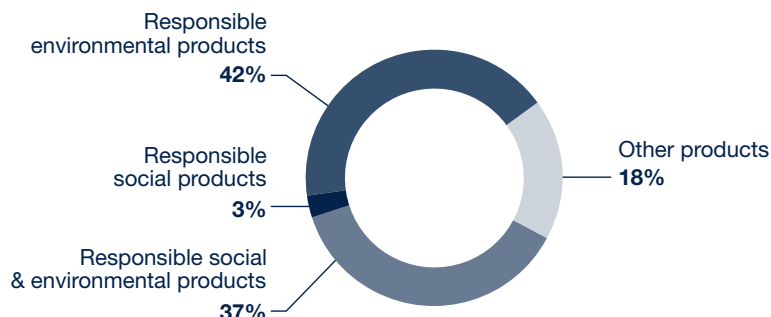
Responsible products

Environmentally responsible products			Socially responsible products
Power-efficient products	Low-carbon products	Green applications	Well-being applications
Reducing power consumption: <ul style="list-style-type: none"> • Increased chip power efficiency • Lower power loss • Electronic system improved efficiency in power dissipation/consumption 	Reducing manufacturing footprint: <ul style="list-style-type: none"> • Reduced die size • Reduced package size • Lower number of metal layers • Higher ECOPACK grade 	Enabling ecological technologies: <ul style="list-style-type: none"> • Renewable energy • LED lighting • Car electrification • Emissions control • Energy management 	Enabling fundamental usages: <ul style="list-style-type: none"> • Health • People safety • Security of private property • Security of private information
Eco-design products		Responsible applications	

A product is given a 'responsible product' label when it can demonstrate that it enables social or environmental benefits. Examples of responsible products are available at www.st.com .

In 2023, we identified 82% of our new products as responsible, compared to 77% in 2022. We progressed towards our 2027 goal to generate at least 33% of our revenues from responsible products, reaching 23.2%, compared to 22.6% in 2022.

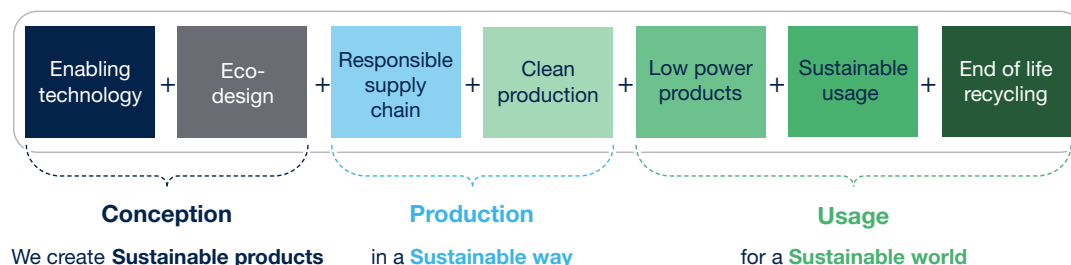
ST new products in 2023 | 417-1 |



Our lifecycle approach

Since launching our product stewardship program in 2011, we have applied a robust product lifecycle approach. This means we seek to improve the social and environmental impact at every stage of a product's life. Our lifecycle assessment (LCA) methodology has been developed in line with ISO standards 14040 and 14044.

In 2023, to better support our customers and enhance data accuracy and robustness, we scaled up our LCA methodology. We can now provide the carbon footprint for 98% of our products based on semi-automated LCA methodology. Furthermore, we can undertake an LCA for any product in our portfolio based on specific product parameters. At the end of 2023, we initiated the certification of our LCA process to ISO standard 14067.



Enabling technologies and eco-design

ST creates advanced semiconductor technologies by offering innovative power electronic solutions based on wide-bandgap technologies, such as silicon carbide (SiC) and gallium nitride (GaN). These technologies enable the creation of energy-efficient responsible applications (see [ST process and packaging technologies](#)).

By keeping eco-design at the heart of our product development, our designers innovate to create low-carbon and power-efficient products. Our product management system tracks key indicators to encourage our product development teams to implement green designs wherever possible.

Responsible supply chain

Our responsibility begins with the raw materials and resources we use to manufacture our products. All our raw materials are sourced in line with the latest environmental and social guidelines, and sustainability criteria are included in our purchasing processes (see [Responsible supply chain](#) and [Responsible mineral sourcing](#)).

Clean production

We strive to reduce the impact of our manufacturing activities on natural resources by managing our greenhouse gas (GHG) emissions, reducing our energy, water, and chemical consumption, and recycling waste.

Low power products and sustainable usage

Reducing the power consumption of electronic devices is a major focus of our strategy, helping to reduce our environmental footprint year after year. Yet our products go beyond power efficiency and contribute in other ways to address environmental and social challenges (see ‘Considering our product handprint’ below).

End of life recycling

We strive to ensure our products meet or exceed applicable environmental requirements, such as REACH⁽¹⁾, RoHS⁽²⁾, and HSPM⁽³⁾ (see [Chemicals](#)). ECOPACK processes and classification help us monitor the substances used in our products, which in turn facilitates end of life and recycling when our devices are disposed of. By the end of 2023, 95% of our products exceeded RoHS directives and were rated ECOPACK2 or ECOPACK3.

95%
of our products
exceed RoHS
directives

Considering our product handprint

As well as continually working on reducing our product footprint, we also strive to increase our product handprint. Handprint refers to a positive impact on the system or the application in which the product is integrated. This might be by enabling a green or social application, contributing to a reduction in the footprint of the application, or by consuming less energy than current alternatives.



Jean-Louis Champseix

Group Vice President, Corporate
Sustainability

“ At ST, we view sustainability as a question of balance. We strive to reduce our environmental footprint while increasing our product handprint with sustainable technologies. By doing so, we enable our customers to create products that have a more positive impact on the world. This approach supports our sustainable growth, minimizing risks and creating long-term value for our stakeholders, as we move towards a more responsible future. ”

⁽¹⁾ REACH: Registration, Evaluation, Authorization and Restriction of Chemicals.

⁽²⁾ RoHS: Restriction of Hazardous Substances.

⁽³⁾ HSPM: Hazardous Substance Process Management.

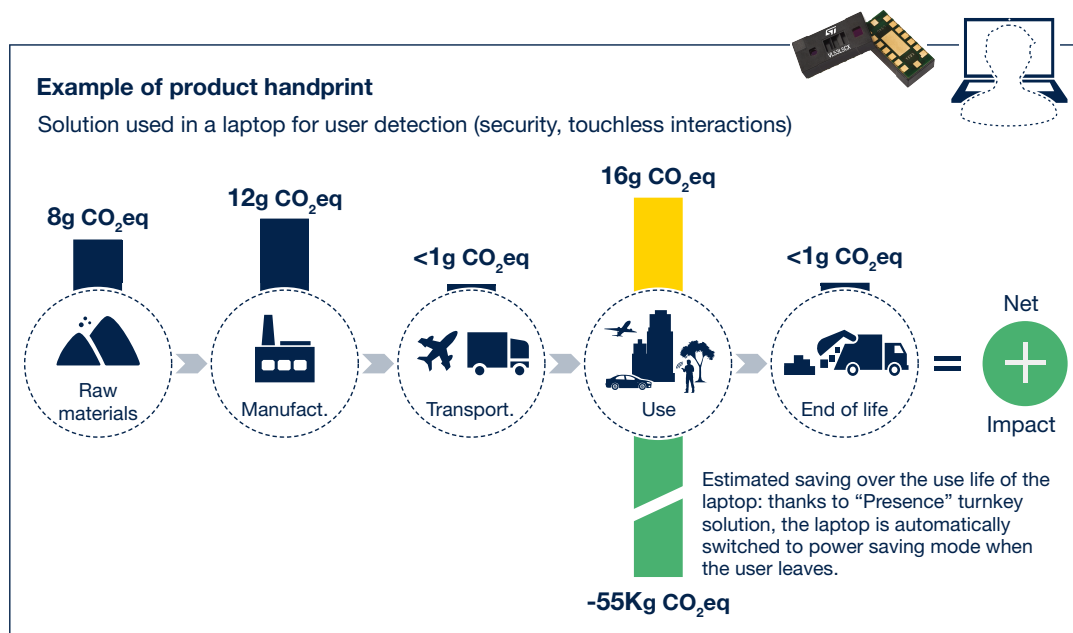
Enabling green or social applications

Enabling the transition to planet-friendly alternatives, our semiconductor solutions are used in a wide variety of environmental applications, from electric mobility and renewable energy grids to smart industries. In addition, our products and technologies cater for a wide variety of human-welfare applications with social benefits.

As an example, several ST products are indispensable for car electrification, such as traction inverters and onboard chargers. (see [ST products and solutions](#)). In 2023, a collaborative smart farm project was completed that uses ST chips and technical expertise for an air probe aimed at optimizing efficiency and reducing GHG emissions.

Reducing power consumption

Thanks to specific product features, our products can significantly contribute to reducing power consumption (and thus GHG emissions) of the application they are embedded in. For example, a Time-of-Flight sensor embedded in a laptop with the [Presence turnkey solution](#), can save a significant amount of electricity by automatically switching to power saving mode when the laptop is idle. This carbon saving exceeds by far the emissions generated by the production and use of the chip itself. See focus, below, for another example.



A ZEST TO CREATE POSITIVE ENVIRONMENTAL IMPACT

In 2023, we launched 'STM32 ZeST' (zero speed full torque), a new embedded software that reduces electricity consumption. When applied to a washing machine, it can reduce electricity consumption by at least 10%. This represents approximately 110kWh of energy saved over the lifespan of the machine. It is a clear demonstration of product handprint, as the embedded device brings a substantial positive environmental impact.



All ST devices required for the washing machine to operate, such as voltage regulators, inverters, microcontrollers, converters, and diodes, generate carbon emissions during their lifecycle. This is mainly due to manufacturing and use. However, thanks to the ZeST, the handprint outweighs the carbon footprint, resulting in a net positive impact.

Additionally, we use Edge AI (NanoEdge AI Studio) technology to estimate the weight of the laundry to be washed, based on motor current measurements. We have created a virtual sensor that determines the weight of the laundry using data already available in the microcontroller that controls the motor. The washing machine can then adjust its water consumption according to the actual load, reducing water consumption.

This is not restricted to high-end washing machines. Since it does not require additional devices to perform the function, it is accessible to mid-range appliances at virtually no extra cost and can be deployed on a large scale.

Consuming less

Our Stellar automotive microcontrollers (MCUs) are an example of reduced energy consumption, as they significantly improve the efficiency of cars (and therefore their energy consumption) and reduce CO₂ emissions. Stellar MCUs offer a reduced lifetime carbon footprint compared to previous-generation MCUs. A case study was conducted using the body platforms of a major original equipment manufacturer (OEM), to compare the emissions of a next-generation platform using Stellar MCUs, with a current platform using current-generation MCUs.

The results showed that:

- The manufacturing process for the Stellar device produced 40% less CO₂ emissions compared to the previous generation solution for the platform.
- Over the lifetime of the vehicle, the CO₂ emissions of the Stellar MCU solution were 30% lower than the previous generation solutions, while maintaining the same level of performance.
- Overall, the calculations revealed a significant reduction in CO₂ emissions for the Stellar MCU solution throughout the manufacturing and lifetime of the vehicle.

2027 sustainability goal	Status	Comments
SG2: Generate at least 33% of our revenues from our Sustainable Technology's most advanced responsible products by 2027.		23.2%



Customer satisfaction

AUGMENTING EVERYBODY'S LIFE

We have adopted a proactive approach to addressing our customers' expectations, helping us build strong relationships.

84%

of customers satisfied with online support

RBA

audit results shared with customers

IATF

16949 certified since 2018

Building strong and trusting relationships with our customers, considering their needs, and serving them effectively is essential for our business. This includes the range, performance, quality, and reliability of our products, as well as our approach to the environment, health and safety, and social responsibility.

Among the most important factors influencing customer satisfaction at ST are sustainability, product quality, and continuous dialog. | 3-3 |

Unlocking value with sustainability

We value the voice of our stakeholders. In our materiality review in 2023, we focused on our customers and their priorities. Therefore, we prepared a short survey that helped us identify, evaluate, and prioritize the sustainability topics that best reflect our customers' expectations.

Analysis showed that climate change is a high priority for our customers. In 2020, we announced our commitment to becoming carbon neutral by 2027 on scope 1 and 2, and partially scope 3. We were the first semiconductor company to have near-term targets validated by the science-based targets initiative (SBTi). Our carbon neutrality roadmap gives us the opportunity to actively contribute to our customers' climate commitments and become the partner of choice on this important journey.

Climate change
high priority

Other priorities identified include water, circular economy, and chemicals, where we have many established programs, as detailed in this report (see [Water](#), [Chemicals](#), and [Waste](#)).

We have also adopted a proactive approach with other important topics, such as safety, corporate governance, human rights, and supply chain management. We have been an active member of the Responsible Business Alliance (RBA) since 2005. Our largest manufacturing sites are subject to RBA third-party audits (see [Labor and human rights](#)). We share the results of these questionnaires, audits, and corrective actions with our customers through the RBA platform or via our online support. In addition to this, we regularly complete an assessment from EcoVadis, an independent sustainability rating platform, and share the results with our customers. In 2023, we received a platinum medal, placing us in the top 1 % of companies evaluated for sustainability performance.



To better align with our customers we have also joined the CSR Europe Drive+ initiative, a partnership of 16 leading automotive companies and their suppliers that have made a collective commitment to improve supply chain sustainability in the automotive industry.

Sustainability is a collective responsibility. We prioritize traceability and openly communicate the environmental and social impacts of our products to our customers. This includes information on product compliance, material declaration, working conditions, environmental impact, and the sourcing of materials. Where relevant, we publish this information on our website at www.st.com or provide it through online support.



Jérôme Roux
President, Sales and Marketing

“At ST, our leadership in sustainability is integral to the value we offer. Our commitment to sustainability is a key pillar of our customer partnership, setting new industry requirements and standards in our search for continuous innovation and mutual success.”

Customer satisfaction through quality

We are committed to delivering the highest-quality products and services that meet or exceed customer expectations. We are constantly looking for ways to improve and innovate in quality. This focus on quality helps us build strong, trusting relationships with our customers. By delivering the highest-quality products and services, we aim to ensure our customers are satisfied with their experience with ST. Our quality policy is available at www.st.com.

Our approach to quality

Our quality strategy sets out how we can be our customers' most valued and trusted partner by focusing on excellent quality, reliability, and responsiveness. Our company-wide quality program, structure, and working model focus on meeting the needs of our global customers, bringing all our organizations and sites together to work as one unified team.

Our strategy is supported by our quality excellence culture, which we see as a competitive advantage and a differentiating factor for our Company and the products and solutions we provide. It is driven by our principles of strength, teamwork, resilience, innovation, value, and expertise.

This global approach has contributed to an improvement in our quality KPIs and customer perception. Our people, programs, and processes have helped us improve our quality performance and increase overall customer satisfaction and trust.

In 2023, we continued our journey to ensure our products meet the highest quality and reliability requirements of our customers, with a quality performance management model called ‘Strive for excellence’.

FOCUS

‘STRIVE FOR EXCELLENCE’

Our quality management program, ‘Strive for excellence’, is designed to anticipate and proactively achieve excellence, rather than react to existing situations. It is implemented in three-year cycles, based on five strategic pillars:

- boost innovation
- digitalize solutions
- transform governance
- enhance leadership and culture
- excel in operation

We have established a project management office to define the program structure, choose and apply methodologies, and monitor objectives daily.

Between 2018 and 2023, we have seen significant improvements in quality indicators such as defect rate, leading to lower product returns, confirming the effectiveness of our approach. In 2023, we entered a new phase focused on consolidating our achievements and strengthening our assets, processes, programs, and working models, while remaining committed to our core pillars of design flow quality: prevention, detection, and innovation. We have also enhanced our network of experts and invested in digitalization and data analytics to drive our ambitions of excellence further.



Nicolas Yackowlew

Executive Vice President,
Product Quality & Reliability

“Embedding quality and reliability into the design of ST solutions is part of our eco-responsible approach. We integrate quality management into the development phase and continually assess reliability along the product lifecycle. This enables us to create sustainable value for our stakeholders and offer robust and durable solutions to the market.”

Moving forward, we will continue to focus on quality prevention measures through R&D and new product development, investing in leadership and expertise, and digitally transforming our quality processes to improve prediction, prevention, and detection. By continually improving our quality processes and investing in our people, we believe we can better serve our customers and drive customer satisfaction.

Management systems

Our quality management system is the foundation of our quality approach. We have been certified to internationally recognized quality standards, such as ISO TS 16949, IATF 16949:2016, and ISO 9001:2015, which demonstrate our strong commitment to quality governance and compliance. Our company-wide certification has been renewed every three years since 2003, and ST has been certified IATF 16949:2016 and ISO 9001:2015 since 2018.

ISO 9001

certified

Quality performance

In 2023, our customer incidents increased slightly, due to exceptional circumstances associated with a specific product. Despite this, our general level of quality performance remained stable, and we continued to increase customer perception.

Quality

	2019	2020	2021	2022	2023
Customer incidents	84	66	57	50	65
Cycle time to process customer incidents	98	102	93	84	89

Baseline 100 in 2016.


A continuous customer dialog

We maintain a continuous, wide-ranging dialog with customers at all levels to understand, assess, and address their needs and concerns.

Multiple channels for seamless customer support

The materiality assessment is one of many examples of how we gather feedback from our customers.

In addition, we offer our customers various channels to obtain information about our products or find answers to any questions they may have about our business.

- Our website (www.st.com ) provides a wealth of information and insights into ST customer solutions, including product brochures and flyers, product datasheets, application solutions, and short videos on key products and how they can help in application designs. Customers can also purchase samples and tools online.
- Online communities for specific product families or applications enable people to share knowledge and post questions to other members of the community.
- Phone and online support are available for customer support requests. We regularly review customer feedback and use it to improve our customer support processes. In 2023, 84% of users were satisfied with our online support service.
- In-person and online seminars and training courses to help customers understand and use our products, either directly hosted by ST or in partnership with third parties.
- Regular newsletters to keep customers and partners up to date on new products and events, including seminars, conferences, webinars, and online courses.
- Social media channels, YouTube videos, and blog posts to reinforce communication and awareness.

84%

**of customers satisfied
with online support
service**

Maintaining close relationships at all levels

To maintain an even closer relationship with our customers, in 2023, we created sustainability functions in Sales and Marketing to support our customers in achieving their sustainability strategies.

Working with teams from across ST, including representatives from Sales, Logistics, Technical Support, and Quality, enables us to develop a deeper understanding of our customers, their internal processes, and their preferences. It also helps to increase trust and satisfaction. We work to build close relationships between ST executives and key customer executives, further strengthening trust and satisfaction at the highest levels.

Relationships with smaller customers are managed by the ST distribution partner network. This comprises ST personnel and distribution partners from across the globe. Network personnel regularly visit customers to assess opportunities, present our product portfolio, and support them in their product design and development.

Collecting customer feedback on our performance

We collect feedback on our performance during our interactions with customers. Feedback may be communicated informally during meetings or phone calls, or it may be provided formally via a scorecard. Each customer scorecard is closely reviewed so the various components of the performance evaluation (such as technology, delivery, sustainability, and quality) can be analyzed and communicated to the appropriate functions within ST.

We make these scorecards and customer feedback available via our ‘Vivavoce’ internal portal, visible to all organizations within ST. This visibility provides each organization with customer feedback on its performance, helping to drive continuous improvement.

2027 sustainability goal	Status	Comments
SG21: Further reduce defects by 20% per production unit by 2027 (vs 2020).		+10%*
* Increase due to an isolated incident with a specific product.		

Business indicators

This section includes indicators and GRI Standard disclosures.

ST key figures | 201-1 |

	2019	2020	2021	2022	2023
Net revenues (US\$m)	9,556	10,219	12,761	16,128	17,286
Gross profit (US\$m)	3,696	3,789	5,326	7,635	8,287
Gross profit as a percentage of sales (%)	38.7%	37.1%	41.7%	47.3%	47.9%
Net earnings (US\$m)	1,032	1,106	2,000	3,960	4,211
Diluted earnings per share (US\$)	1.14	1.20	2.16	4.19	4.46
Market share versus TAM (%) (Total Available Market)	2.32%	2.32%	2.30%	2.81%	3.28%

Operating income and cash flow (US\$m) | 201-1 |

	2019	2020	2021	2022	2023
Operating income	1,203	1,323	2,419	4,439	4,611
Net operating cash flow	497	627	1,120	1,591	1,774

Net revenues by location of order shipment^(1,2) (%)

| 2-6 | 201-1 |

	2019	2020	2021	2022	2023
Americas	14	11	12	14	16
Asia Pacific	62	69	68	63	56
EMEA	24	19	20	22	28

⁽¹⁾ Net revenues by location of order shipment are classified by location of customer invoiced or reclassified by shipment destination in line with customer demand. For example, products ordered by US-based companies to be invoiced to Asia Pacific affiliates are classified as Asia Pacific revenues. Furthermore, the comparison among the different periods may be affected by shifts in shipment from one location to another, as requested by our customers.

⁽²⁾ The sums may not add up to 100% due to rounding of the figures.

ST sales by market channel⁽¹⁾ (%) | 2-6 |

	2019	2020	2021	2022	2023
OEM	70	73	66	67	66
Distribution	30	27	34	33	34

⁽¹⁾ Original Equipment Manufacturers (OEM) are the end-customers to which we provide direct marketing application engineering support, while Distribution customers refers to the distributors and representatives that we engage to sell our products around the world.

Dividends paid (US\$m) | 201-1 |

	2019	2020	2021	2022	2023
Dividends	214	168	205	212	223

Research partnerships SDG 9.5

	2019	2020	2021	2022	2023
Contracts with higher education institutions or research labs	138	143	187	186	195

On-time delivery

	2019	2020	2021	2022	2023
Delivery date in line with customer request	105	79	67	66	87
Delivery date in line with ST commitment	103	90	80	78	88

Baseline 100 in 2016.

ECOPACK® labelling⁽¹⁾ (%) | 417-1 |

	2019	2020	2021	2022	2023
Non ECOPACK®	0.2	0.1	0.2	0.1	0.1
ECOPACK® 1: Compliant with the RoHS/ELV directives, second level interconnect lead-free ⁽²⁾	6.3	4.2	3.9	3.8	4.5
ECOPACK® 2: as ECOPACK® 1, plus free of brominated, chlorinated and antimony oxide flame retardants	85.2	88.4	87.4	88.5	86.1
ECOPACK® 3: as ECOPACK® 2, plus free of halogens with no RoHS exemptions	8.3	7.3	8.5	7.5	9.3

⁽¹⁾ The sums may not add up to 100% due to rounding of the figures.

⁽²⁾ Including exemptions for the RoHS directive to ensure reliability for soldering at higher temperature, necessary mainly for the automotive market.

ST site certifications

ST is ISO 9001, ISO 22301 and IATF 16949 certified company-wide

	ISO 45001 Health & Safety	ISO 14001 Environ- ment	EMAS Environment performance disclosure	ISO 14064 GHG Emissions	ISO 50001 Energy
Manufacturing sites					
Agrate	✓	✓	✓	✓	✓
Ang Mo Kio	✓	✓	✓	✓	✓
Bouskoura	✓	✓	✓	✓	✓
Calamba	✓	✓	✓	✓	✓
Catania	✓	✓	✓	✓	✓
Crolles	✓	✓	✓	✓	✓
Kirkop	✓	✓	✓	✓	✓
Marcianise	✓	✓	✗	✗	✗
Muar	✓	✓	✓	✓	✓
Norrköping	✗	✗	✗	✗	✗
Rennes ⁽¹⁾	✓	✓	✗	✓	✓
Rousset	✓	✓	✓	✓	✓
Shenzhen	✓	✓	✗	✓	✓
Tours	✓	✓	✓	✓	✓
Other sites					
Castelletto	✓	✓	✓	✓	✗
Geneva	✗	✗	✗	✗	✗
Greater Noida	✓	✗	✗	✗	✗
Grenoble	✓	✓	✓	✓	✗
Le Mans	✗	✗	✗	✗	✗
Loyang	✓	✓	✗	✗	✗
Napoli	✓	✗	✗	✗	✗
Toa Payoh	✓	✓	✓	✗	✓
Total	19	17	13	14	13

⁽¹⁾ Rennes Space & High-Reliability Products.