



Accelerating sustainability,
together

2021 Sustainability report

2020 performance

About this report

Scope and reporting period

This annual sustainability report outlines STMicroelectronics' (ST) sustainability strategy, programs and performance during the calendar year 2020. It is aimed at stakeholders who want to learn more about our commitment and approach to sustainability. Unless otherwise stated, the information and data cover all our activities and sites.

[I 102-1 | 102-50 | 102-52 |](#)

In 2017, ST acquired a manufacturing facility in Singapore. The facility was fully transferred to ST in May 2019. The data from this facility is integrated in this report.

[I 102-10 |](#)

There is no restatement of information given in previous reports. [I 102-48 |](#)

Report structure and content

This report is aligned with Global Reporting Initiative (GRI) Standards for stakeholder inclusiveness, sustainability context, materiality and completeness. It focuses on the 14 material topics of our sustainability strategy (see [page 22 and 23](#)), which are aligned with our business priorities. We identified these topics in 2020 through a materiality exercise that considered the sustainability context and involved a review of stakeholders' concerns (see [page 24](#)). For each material topic, we define ambitions and goals, and implement programs. In response to our stakeholders' expectations and for a better understanding of our performance, we disclose data and information from previous years. We also include examples of actions we have carried out at ST sites, as well as quotes from stakeholders, enabling them to express their own views on our sustainability performance. [I 102-46 | 102-49 |](#)

The report has been prepared in accordance with the GRI Standards: Core option. We use labels to disclose GRI Standards throughout the report and we list all references to GRI Standards and the corresponding page numbers in the GRI content index on [pages 88 and 89](#). [I 102-54 |](#)

Our disclosures are also aligned with the Sustainability Accounting Standards Board (SASB) semiconductor standard and the Task Force on Climate-related Financial Disclosures (TCFD) framework (see [page 91](#)).

Use of symbols

We use the following symbols in this report to indicate our progress towards our objectives:

Target achieved In progress No progress/not achieved

External verification

ST's Sustainability Group Vice President has appointed DNV Business Assurance France (DNV) to provide us with assurance services. DNV has verified the content and data in this report and confirmed that it has been prepared in accordance with the GRI Standards: Core option. DNV interviewed all relevant corporate departments and three categories of stakeholders. In addition, DNV audited three manufacturing sites – Ang Mo Kio (Singapore), Catania (Italy), and Kirkop (Malta) – to validate our data reporting process and provide assurance for this year's report. Information and data relating to the ST Foundation were not part of DNV's external verification exercise. DNV's assurance statement can be found on [pages 94 and 95](#). [I 102-56 |](#)

Availability

This sustainability report is available in PDF format at www.st.com/company-reports, along with last year's report (published on May 12, 2020) and those from previous years. You can access the online versions at sustainabilityreports.st.com. Printed copies are available on request at sustainable.development@st.com. [I 102-51 |](#)

Supporting the UN Global Compact and Sustainable Development Goals

We have been a signatory of the United Nations Global Compact since 2000 and we follow its 10 principles. This report describes the actions we have taken during 2020 to implement these principles. It therefore serves as our 2020 Communication on Progress (see [page 90](#)). [I 102-12 |](#)

ST supports the United Nations Sustainable Development Goals (SDGs). Our contribution to 11 of the 17 SDGs is highlighted throughout this report, including indicators to measure our performance against these goals: SDG

Feedback

[I 102-3 | 102-53 |](#)

We value feedback and encourage contributions and suggestions from all our stakeholders. You can email us at sustainable.development@st.com or write to us at our headquarters: Corporate Sustainable Development STMicroelectronics International NV 39, Chemin du Champ-des-Filles C.P. 21

CH-1228 Geneva – Plan-Les-Ouates Switzerland

This report has been prepared according to GRI Standards and is externally assured. It represents a balanced and reasonable presentation of our organization's economic, environmental and social performance. It also demonstrates our commitment to the UN Global Compact, to which we have been a signatory since 2000.

Jean-Marc Chery
President and CEO

Although reasonable efforts have been made to ensure the consistency of the summary financial information for the year 2020 in this report with ST's financial reporting, reliance should only be placed upon the complete financial reporting contained in ST's Annual Report on Form 20-F for the year ended December 31, 2020, as filed with the SEC on February 24, 2021, which can be found at www.st.com. Some of the statements contained in this report that are not historical facts are statements of future expectations and other forward-looking statements (within the meaning of Section 27A of the Securities Act of 1933 or Section 21E of the Securities Exchange Act of 1934, each as amended) based on management's current views and assumptions, and involve known and unknown risks and uncertainties that could cause actual results, performance, or events to differ materially from those in such statements. Certain such forward-looking statements can be identified by the use of forward-looking terminology such as 'believes', 'may', 'will', 'should', 'would be' or 'anticipates' or similar expressions or the negative thereof or other variations thereof or comparable terminology, or by discussions of strategy, plans or intentions. Some of the relevant risk factors are described in 'Item 3. Key Information – Risk Factors' included in our Annual Report on Form 20-F for the year ended December 31, 2020. We do not intend, and do not assume any obligation, to update any information or forward-looking statements set forth in this report to reflect subsequent events or circumstances.

2021 Edition

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We also would like to thank:

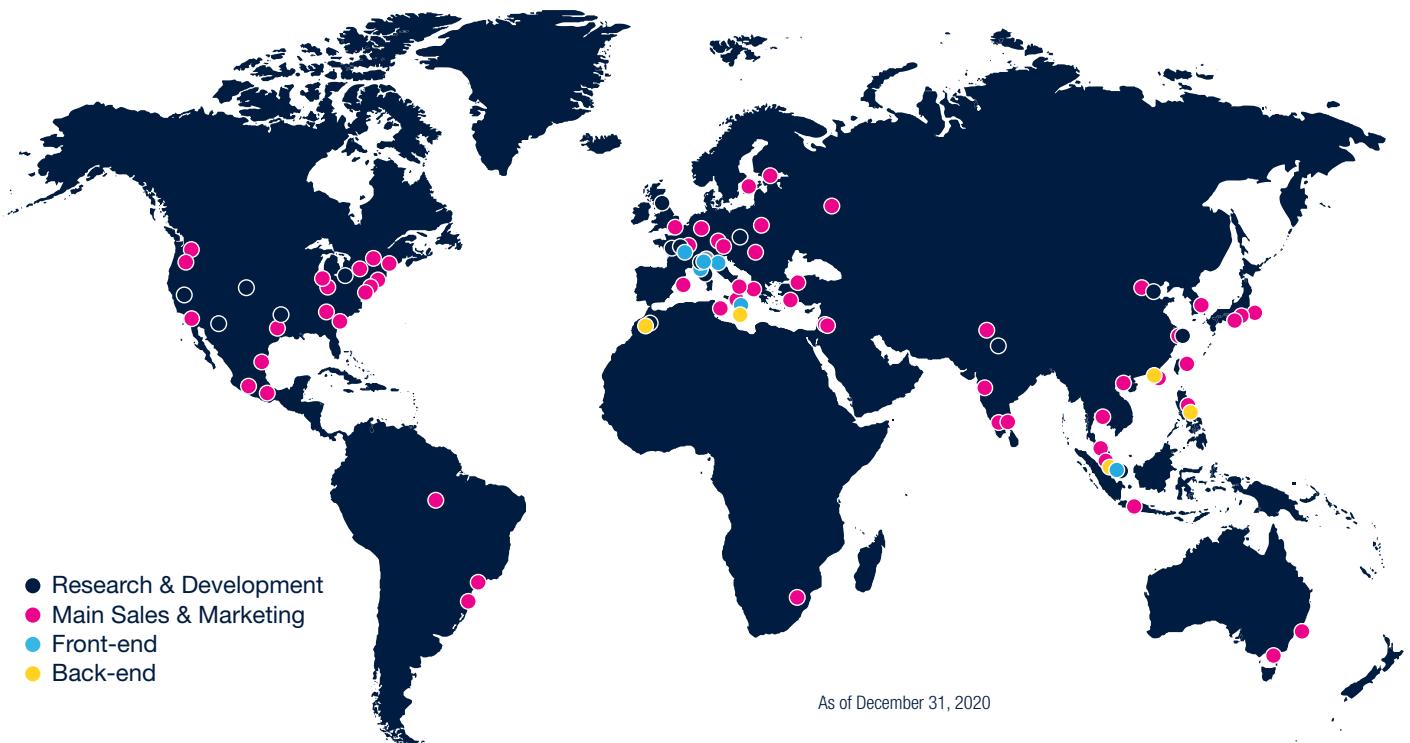
- everyone who kindly agreed to be quoted
in this report and provide testimony of their
collaboration with ST
- everyone who kindly agreed to have their
pictures published in the report
- our interfaces at ST sites, sustainability
champions and EHS teams who support our
activity all year round
- site directors and human resources managers
- the teams audited in Ang Mo Kio, Catania and
Kirkop for their availability

Content

4	ST at a glance
5	Foreword by our President and CEO
6	Our business model
8	ST products and solutions
10	Facing the pandemic
12	2020 highlights
13	Our long-term ambitions and goals
14	Living our values
14	Governance
16	Ethics and Compliance
19	Risk Management
22	Sustainability strategy
26	Augmenting everybody's life
27	Sustainable Financial Performance
30	Innovation
33	Sustainable Technology
36	Customer Satisfaction
39	Business indicators
40	Putting people first
41	Health and Safety
44	Labor and Human Rights
47	Talent Attraction and Engagement
50	Diversity and Inclusion
53	People indicators
58	Protecting the environment
59	Our approach to the environment
60	Energy and Climate Change
64	Water
67	Waste
70	Chemicals
73	Environmental indicators
75	Acting together
76	Responsible Supply Chain
80	Community and Education
83	Communities indicators
84	Decalogue results
86	Awards 2020 overview
88	GRI Content Index
90	International standards
91	SASB and TCFD indexes
92	ST supports the SDG
93	Glossary
94	External assurance statement

ST at a glance

| 102-2 | 102-4 | 102-7 |



As of December 31, 2020

- a global semiconductor leader
- 2020 revenues of **US\$10.2B**
- listed: NYSE, Euronext Paris and Borsa Italiana, Milan
- approximately **46,000** employees worldwide
- approximately **8,100** people working in R&D

- **11** manufacturing sites
- over **80** Sales & Marketing offices serving over **100,000** customers across the globe
- signatory of the United Nations Global Compact (UNGC)
- member of the Responsible Business Alliance (RBA)

Our value proposition

For our shareholders



Return value in line with our sustainable, profitable growth objective

For our customers



Provide differentiating enablers

For all our stakeholders



Committed to sustainability

Sustainable and profitable growth

Independent, reliable and secure supply chain

Our values:
Integrity – People – Excellence

Foreword by our President and CEO

| 102-14 |

Since early 2020 the world has changed, with the pandemic reshaping how we live, work and communicate. During these tough times, ST showed resilience at all levels. First, we have relentlessly focused on protecting the health and safety of our 46,000 employees, with equipment, extensive health and safety advice, and regular communication. In turn, ST employees demonstrated their commitment to the communities in which they live and work with multiple cash and in-kind donations to support local hospitals and stakeholders. They also maintained a high level of engagement despite the personal and professional constraints of this period.

All of us worked, and are working hard with our suppliers, partners and customers to protect both the short and the longer term, in a situation where global supply chain tension is strong across all end-markets. Our technologies are enablers of smart mobility, advanced power & energy management across all types of systems and are at the heart of next-generation devices and communication

infrastructure. They play a key role in helping our customers address their opportunities and solve their challenges, and we believe they also bring an important contribution to overcome global environmental and social challenges. Addressing these opportunities and challenges paves the way to long-term sustainable and profitable growth for ST, for shareholders, for customers, for all our stakeholders globally, and more broadly for society.



Providing innovative and sustainable solutions to our customers implies being an independent device manufacturer mastering the entire value chain: sourcing raw materials, investing in technology and product R&D for innovation, ensuring reliable and secure manufacturing, and relentlessly pursuing product quality. In 2020, we continued to progress with our strategic programs based on Silicon Carbide and Gallium Nitride, and with the construction of the 300mm fab in Agrate (Italy), which will manufacture power management devices. We continued to invest in R&D and open innovation with 143 partners worldwide to build the future. We are also improving our social and environmental footprint at every stage of the product lifecycle, with 63% of new products identified as responsible and 18.5% of total revenue derived from responsible products.

We devote significant effort to lowering the impact of our operations. We continue to implement technical solutions to reduce emissions, reuse water, recycle waste and progressively switch to renewable energy sources. We have made further progress in reducing Greenhouse Gas (GHG) emissions, with another 19% reduction compared to 2019 in absolute terms. Our longstanding efforts across many areas, detailed in this report, were recognized again in 2020, with ST securing a CDP A list ranking and continued presence in the DJSI World index as well as in other key ESG rankings and international certifications.

Last year I wrote to you about my commitment to take the necessary actions to progress even faster in achieving ST's strong sustainability ambitions. In December 2020, we took an important step to accelerate our efforts with the announcement of our commitment to become carbon neutral by 2027. To achieve this very ambitious target we have built a comprehensive program and will mobilize the support of expert partners and stakeholders in a collaborative approach. In 2021 we start this journey together, and we will be reporting regularly to you on our progress.

A handwritten signature in black ink, appearing to read "Jean-Marc Chery".

Jean-Marc Chery
President and CEO

Our business model

Resources

Human

- ~46,000 employees
- 103 nationalities
- 34% women, 66% men
- Average age: 40

Financial

- US\$14 billion total assets
- US\$1.3 billion capital investments
- US\$1,099 million net cash

Intellectual

- ~8,100 employees in R&D
- US\$1.6 billion R&D investments
- 143 R&D partnerships

Manufactured

- 11 main manufacturing sites in 7 different countries
- ~65% of employees in manufacturing
- >6,000 suppliers

Natural

- 2,626GWh of energy consumed
- 40% of renewable energy
- ~20 million m³ of water withdrawn
- >5,900 chemicals used

Social and relationship

- ST values and Code of Conduct
- US\$2.1 million cash donated by ST to local communities
- >114,000 hours donated to local communities

Main steps in our value chain



Suppliers

We purchase raw materials, equipment, energy, gas, chemicals and services from many suppliers and subcontractors.

R&D concept and design

New products are created in a multi-step process including architecture conception, electrical layout, electrical and logic simulation, chip layout and generation of the mask that will be used to etch the design in silicon.

Front-end manufacturing

Manufacturing chips requires around 400 separate stages, starting with a plain wafer, and resulting in the etching of several hundreds to thousands of dies.

Management of our impacts

Suppliers

We require our suppliers to implement the Responsible Business Alliance (RBA) standards and encourage ISO and OHSAS certifications to address ethics, social, environmental, health and safety risks.

We participate in the Responsible Minerals Initiative.

Products

Through our Sustainable Technology program we design products systematically taking into consideration the environmental impact of the device during its whole lifecycle, including raw materials, transportation, manufacturing, usage and end of life.

People

We ensure the health and safety of our employees through advanced management systems and certification.

We implement our Code of Conduct and the RBA standards in all our sites to mitigate our ethics and labor and human rights risks, and carry out regular assessments and audits in all our production sites.

Value created



Electrical wafer sorting

Dies on the wafer are electrically tested. This step is known as wafer sort or probe.

Back-end manufacturing

The dies are cut from the silicon wafer before being assembled in a package. The chips are then tested prior to delivery to the customer.

Product use and end of life

We offer a large portfolio of products suitable for the wide range of applications addressed by our customers.

Environment

We deploy programs to reduce our direct and indirect greenhouse gas emissions from all our operations, including Perfluorinated Compounds (PFCs), which have a very long atmospheric lifetime and high global warming potential.

We minimize the environmental, health and safety risks related to the chemicals and materials used in the manufacturing process, by basing the selection, handling, and substitution on the precautionary principles.

We are continually reducing our water footprint through reuse and recycling and all our wastewater is treated before being discharged into the environment.

We reduce, reuse, recycle or recover as much of our waste as possible, rather than sending it to incineration or landfill.

I 102-2 I 102-9 I 201-1 I

Unless otherwise stated, all data refer to 2020.

Human

Engaged and skilled people in an inclusive and safe workplace

- average of 44 hours of training per employee
- 81% of employees recommend ST as a great place to work
- 0.14 recordable injury case rate

Financial

Sustainable financial performance

- US\$10.22 billion net revenues
- US\$3.07 billion salaries and benefits
- US\$174 million taxes paid
- US\$168 million cash dividend

Intellectual

Innovative products and solutions

- ~18,000 active patents
- 63% of new products classified Sustainable Technology
- 15% of revenues generated by new product lines

Manufactured

Responsible and effective business operations

- >100,000 customers served
- ISO 9001, 14001, 22301, 50001, 45001/OHSAS 18001 and IATF certifications
- 100% of main manufacturing sites covered by RBA audits
- 98% of new suppliers screened on social responsibility criteria

Natural

Mitigation of the impact of our activities

- 78% decrease in PFC emissions since 1994 (per unit of production)
- 88% of waste reused, recovered or recycled
- 41% of water recycled or reused

Social and relationship

Knowledge and values shared with all

- >163,000 beneficiaries in local communities
- 340 volunteering initiatives from 35 sites worldwide
- >770,000 people trained on computer basics by ST Foundation since 2003

ST products and solutions

ST delivers intelligent and energy-efficient products and solutions that power the electronics at the heart of everyday life. Our chips and systems are found in billions of products, from cars and factory machines, through washing machines and air conditioning systems, to smartphones and telecommunications equipment. Our technology helps our customers make all these products more intelligent, more energy efficient, more connected, safer and more secure. [I 102-21](#)

Our strategy is based on long-term trends: smart mobility, power & energy, Internet of Things (IoT) and 5G. We address four end markets – Automotive; Industrial; Personal Electronics; and Communications Equipment, Computers and Peripherals – where these trends drive the evolving requirements of our customers. [I 102-61](#)

Internet of Things and 5G

To support the needs of IoT and 5G, we provide a variety of products and solutions for embedded processing, connectivity, security, sensing and actuating.

STSAFE-A110 ecosystem for seamless security

Security is critical for all connected devices and our offer covers the full range of **secure solutions**. These include software and hardware embedded in general purpose microcontrollers and microprocessors, supported by the STM32Trust ecosystem, which offers a multi-level strategy to enhance security.

We provide dedicated secure microcontrollers that meet the highest security standards. They can be found in smartcards used for ID, transport, banking and SIM cards, as well as pay TV applications.

Microsoft® Azure RTOS to enhance STM32Cube™ ecosystem

To enable embedded processing capabilities at the heart of every smart object, we offer **general purpose microcontrollers**, such as our STM32 family. This family has over 1,000 part numbers so designers can find the best solution for their application, whether they require ultra-low power consumption, high performance, artificial intelligence (AI), advanced security or a high level of wireless and wired connectivity.

We also offer a comprehensive development ecosystem that saves on design costs and reduces time to market. Recent enhancements include new features in our STM32Cube software-development ecosystem, the addition of seamless connection to Microsoft Azure RTOS, and AI software packages from partners.

New STM32MP1 Series @ 800MHz for industrial and IoT applications

Our STM32 **microprocessor** family addresses demanding Industrial and IoT applications that require support for large open-source software. In 2020, we added to our offer new products that deliver more performance in audio and video, more powerful AI capabilities, and a better user experience.

Bluetooth 5.0 network processor boosts speed, scalability, and security



Our **wireless connectivity solutions** include STM32 microcontrollers with embedded wireless, standalone RF transceivers, and network processors for Bluetooth, Bluetooth Low Energy, Zigbee, Thread and sub-1GHz long-range networks. We work with partners to make it easier for our customers to use the services with Cloud connectivity software.

In 2020, we introduced the world's first LoRa® System on Chip for long-distance wireless connection to the IoT. We also acquired companies (for more information, see Innovation on [page 30](#)) in the wireless IoT space to build a complete wireless microcontroller portfolio for many IoT and industrial applications.

High-accuracy industrial inclinometer with advanced embedded functions



ST **motion and environmental MEMS and sensors** offer customers increased accuracy and sensitivity, with ultra-low power consumption. Our products power flagship personal electronics devices and help deliver the best user experience. We are present in many automotive and industrial applications, with products designed to meet the performance and reliability requirements of harsh environments.

Time-of-Flight sensors assure social distancing and enable touchless solution

Our patented FlightSense™ technology, based on the Time-of-Flight (ToF) principle, ensures a high-accuracy, low-power and all-in-solution for proximity and ranging sensors for personal electronics and industrial applications, as well as 3D sensing for smartphones and smart driving (LiDAR) features.

Our ToF sensors are integrated into devices that can help protect our health, ensuring both social distancing and touchless interaction. They can help users avoid contact with surfaces located in high-traffic areas, including self-service touchscreens, smart faucets, and push-button door openers.

ST Real-Time PCR molecular technology enables detection of genetic materials

Our innovative thin-film piezoelectric micro actuators ensure higher efficiency and lower costs for traditional applications such as inkjet printing, while enabling innovation with MEMS speakers, micromirrors and fluid dispensing technologies. Our MEMS technology also supports medical applications, such as the tiny disposable cartridges used in a portable point-of-care molecular diagnostic detection instrument recently introduced to the market by one of our customers.

Power and energy management

Our technology and solutions for power and energy management enable customers to increase energy efficiency everywhere and support the use of renewable energy sources.

STM32 Digital Power Ecosystem for beginners up to experts



In 2020, we created a **digital power ecosystem** that brings together resources to create innovative digital power supplies using STM32 microcontrollers. It includes embedded software, development kits, demo boards, and tools, with training delivered by specialist partners.

Digital power-supply controllers for interleaved boost-PFC



We address applications that require generic and application-specific solutions for **power management**. Our solutions enable energy-saving, high-power-density and lower-standby-power designs. Our offering includes Silicon Carbide (SiC) and Gallium Nitride (GaN) power discretes, Silicon MOSFETs, IGBTs and customized power modules, AC-DC and DC-DC converters, battery management ICs, wireless power ICs, digital controllers, and gate drivers. We provide an array of **motor control** solutions that enable motors to run with higher efficiency and greater precision. We cover the requirements of brushed DC motors, stepper motors and brushless DC motors over an extensive range of voltage and current ratings.

New STSPIN32 plug-and-play boards jumpstart cordless power-tool designs

Our **STSPIN motor drivers** embed all the functions needed to drive motors efficiently and with the highest accuracy. They include a low-voltage series designed for battery-powered smart devices, and a series embedding an STM32 microcontroller. We also provide tools and software for the STM32 in an integrated development environment to ease the design of motor control solutions.



High-power IPMs for Industrial and Automotive

We offer **power discrete devices** serving applications across our end markets. Our SiC and GaN power devices deliver efficiency and enhanced performance in automotive, industrial, and communications infrastructure applications. Other products are first choice solutions for high-end power conversion, home appliances, power supplies, and motor control.



Smart mobility

To meet the smart mobility needs of our global customer base, we provide products and solutions that serve the key trends in the automotive market – vehicle digitalization and electrification. We enable them to create the next generation of vehicles that are safer, greener and more connected.

Silicon Carbide solution for EVs and charging stations



Our **Silicon Carbide (SiC)** solution for electric vehicles (EVs) and charging stations enables our customers to create electric cars with longer range, that charge faster, and have a lower weight. We provide high-efficiency smart power solutions and processors to ensure that every device used to power, control and monitor car subsystems consumes less energy.

New battery-management product



For car electrification, we offer a range of products to support battery energy management and efficient energy conversion inside the vehicle.

In 2020, we introduced a new **battery-management product** line that increases the reliability, safety, driving range, and cost-effectiveness of EVs.

Innovative and powerful Integration MCU for next-gen automotive architecture



For car digitalization, we offer our **automotive microcontroller families**, which range from cost-sensitive to highly advanced applications.

Advanced Driver Assistance Systems (ADAS)



We work with partners such as Intel-Mobileye and Autotalks to provide **ADAS** solutions that make driving safer by reducing road accidents. The products we supply include cutting-edge RF and vision systems, as well as advanced vehicle communications solutions.

AutoDevKit™ ecosystem eases prototyping automotive ECUs



We offer ICs dedicated to body and convenience solutions, including body control modules and car lighting systems, as well as ASIC and ASSP solutions for **engine control**. Our in-vehicle infotainment systems cover everything from high-end integrated platforms and digital radio to audio power amplifiers.

In 2020, we introduced new tools to assist the development of the numerous electronic control unit (ECU) systems in today's vehicles. AutoDevKit library is a software tool that allows users to select the microcontrollers and functional boards from our wide automotive portfolio to easily prototype their solution.

Facing the pandemic

Protective measures

Since the beginning of the COVID-19 pandemic our top priority has been to protect the health and safety of our employees. We activated a Corporate Crisis Team (CCT) to implement immediate measures to protect our employees, ensure the continuity of our operations, and limit the spread of the virus at our sites.



Psychological support with
>5,000 connections
>3,000 surveys
244 blog updates answering employees' questions

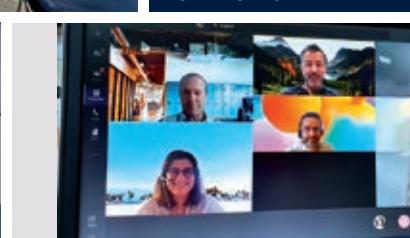


Protective barriers in areas such as canteens, meeting rooms, cloakrooms

~15,000 employees working from home



Social distancing measures



In-site production

To address the worldwide shortage of protection equipment at the beginning of the pandemic, our employees used their creativity and expertise to manufacture sanitizer and protection equipment using our facilities, innovation labs and 3D printers.



>14,700 liters of hand sanitizer



10 million protection masks provided to employees

Digitalization of processes and working methods

Strict control of site entrances and travel restrictions



>400 face shields



3D printed valves to transform snorkeling masks into breathing masks designed in our innovation labs

>100 corporate crisis team meetings

\$
Financial assistance (salary advances, accommodation fees) for vulnerable workers

Donations to support communities

We supported our local communities with donations, fundraising and in-kind giving, in particular for hospitals during the first wave of the pandemic but also to help disadvantaged populations.



2020 highlights

>3,500
people trained
on diversity and
inclusion

265
RBA-based supplier
audits since 2015



40%
renewable
energy

85%
of employees are
proud to work for ST

-19%
GHG emissions in
absolute vs 2019

Commitment
to become

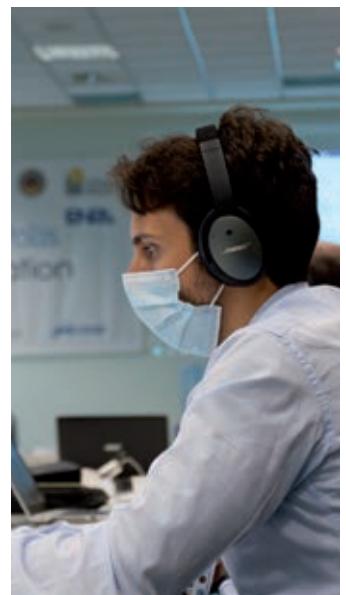


143
R&D partnerships



100%
ST main
manufacturing sites
covered by RBA
audits

0.15
recordable case
rate - among the
best-in-class



63%
of new products
classified as
responsible
products

100%
of products are
conflict-mineral
free

88%
of waste reused,
recycled or
recycled



41%
of water recycled
and reused

340
education
and volunteering
initiatives
worldwide

15.2%
of revenues
invested in R&D

Our long-term ambitions and goals

	Ambition	Goal	Status end 2020
Putting people first			
Health and Safety	Be a safe workplace with zero injuries, zero occupational diseases and ensure healthy lives and well-being for all.	<0.15% recordable cases (work-related injuries and illnesses) for employees and contractors by 2025.	0.15% recordable cases for employees. RC rate for contractors will be available in 2021.
Labor and Human Rights	Be recognized as a leader in labor and human rights and apply a zero tolerance approach to forced labor.	100% of ST manufacturing sites recognized in social responsibility by international external bodies by 2025.	18% 2/11 sites with RBA Platinum recognition.
Talent Attraction and Engagement	Offer the best employee experience in all the locations where we operate.	Employee engagement rate +10 points above country norms by 2025.	10/13 countries.
Diversity and Inclusion	Achieve full gender equality and be a leader in cultural and disability inclusion.	>20% of women in all management levels by 2025.	Experienced 19% Senior 13% Executive 10%
Augmenting everybody's life			
Innovation and Profits	Sustain profitable growth, with clear and focused leadership objectives in the four end markets we address.	>20% of revenues generated by new product lines by 2025.	15.4%
Quality	Lead our market in terms of product quality, with no severe quality incidents, while meeting the most stringent customer expectations.	-75% severe quality incidents by 2025. (2016 baseline)	-89%
Sustainable Technology	Design and manufacture products that have the greatest positive impact on the planet and society.	x3 % revenues generated by responsible products vs 2016 by 2025.	x1.8 18.5% revenues generated by responsible products.
Protecting the environment			
Climate Change	Reduce our impact on climate change.	Be compliant with the 1.5°C scenario by 2025, and carbon neutral by 2027. 100% renewable energy by 2027.	Carbon Neutrality program.
Energy	Continuously decrease our carbon footprint by improving energy efficiency.	-20% energy consumption vs 2016 by 2025. (normalized values)	-1.5%
Water	Maintain our leadership in water efficiency by reducing consumption, recycling more, and reinforcing our efforts in water scarcity areas.	-20% water consumption vs 2016 by 2025. (normalized values)	+6%
Waste and Chemicals	Strive for zero waste in landfill, reduce our consumption of chemicals and eliminate hazardous materials.	95% of our waste reused and recycled by 2025.	88%
Acting together			
Responsible Supply Chain	Systematically assess and mitigate social, environmental, health & safety, and ethical risks in our extended supply chain.	100% suppliers at risk audited by 2025.	17% 133/800 suppliers audited.
Community and Education	Prepare the future by supporting education in schools in all the countries where we operate.	STEM* education partnerships in 20 countries by 2025. * Science, Technology, Engineering, Mathematics.	7/20 countries.

Governance



ST headquarters, Geneva, Switzerland

ST's parent company, STMicroelectronics NV, is registered in the Netherlands and is listed on the New York Stock Exchange (NYSE), Euronext Paris, and Borsa Italiana, Milan. Our headquarters and operational offices are managed through our wholly owned subsidiary, STMicroelectronics International NV, located in Plan-les-Ouates, near Geneva, Switzerland. Our operations are also conducted through our various subsidiaries, which are organized and operated according to the laws of their countries of incorporation and consolidated by STMicroelectronics NV. [I 102-5 | 102-451](#)

We have a two-tier governance structure, in accordance with Dutch law, where our management is entrusted to our Managing Board under the supervision of our Supervisory Board.

Our corporate governance policies and practices are outlined in our Corporate Governance Charter, Supervisory Board Charter and Managing Board & Executive Committee Charter. These are available in the corporate governance section of our website (see [investors.st.com](#)).

97%
average attendance
rate at our Supervisory
Board meetings

Supervisory Board

Our Supervisory Board supervises the policies pursued by the Managing Board and the general course of affairs and business of ST, and supports the Managing Board with its advice. [I 102-181](#)

Our Supervisory Board comprises nine members (four women and five men), each appointed at our Annual General Meeting of Shareholders. Supervisory Board members are carefully selected in accordance with the Supervisory Board Charter and Profile, which are available in the corporate governance section of our website (see [investors.st.com](#)).

Our Supervisory Board is assisted in its duties by four standing committees, which are independent of the Managing Board and senior management.

- Audit Committee
- Strategic Committee
- Compensation Committee
- Nomination and Corporate Governance Committee

Our Supervisory Board met 12 times in 2020, with an average attendance rate of 97%. Full details of attendance at meetings of the Supervisory Board and its committees are shown in our annual report on Form 20-F, and in our statutory annual report, both of which are available on our website (see investors.st.com).

Managing Board

Our President and CEO, Jean-Marc Chery, is the sole member of our Managing Board. An Executive Committee acts under the authority and responsibility of the Managing Board, and in this respect manages the Company. Jean-Marc Chery is also the Chairman of our Executive Committee.

The other members of the Executive Committee are:

- Orio Bellezza, President, Technology, Manufacturing and Quality
- Marco Cassis, President, Sales, Marketing, Communications and Strategy Development
- Claude Dardanne, President, Microcontrollers and Digital ICs Group
- Rajita D'Souza, President, Human Resources and Corporate Social Responsibility¹
- Lorenzo Grandi, President, Finance, Infrastructure and Services, and Chief Financial Officer
- Marco Monti, President, Automotive and Discrete Group
- Steven Rose, President, Legal Counsel
- Benedetto Vigna, President, Analog, MEMS and Sensors Group.

Their biographies can be found in the 'About ST' section of our website (see www.st.com).

Corporate Audit

Corporate Audit is strictly independent from corporate and local management. Its primary objective is to enhance and protect organizational value by providing risk-based and objective assurance, advice, and insight.

Our Chief Audit and Risk Executive is Franck Freymond. He reports directly to the Audit Committee of our Supervisory Board and attends quarterly meetings with the Audit Committee and executive management.

The current functional reporting line and practices ensure he has the appropriate level of organizational independence and unrestricted access to executive management and the Supervisory Board.

The internal audit process is based on a formal and structured audit methodology, which ensures a risk-based approach. Corporate Audit activities are coordinated with other risk assurance functions within the Company, allowing effective risk coverage.

Corporate Audit performs its activities in accordance with the International Standards for the Professional Practice of Internal Auditing, published by the Institute of Internal Auditors.

Sustainability governance

Overall responsibility for sustainability lies with Rajita D'Souza, President, Human Resources and Corporate Social Responsibility, who chairs our Sustainability Council and updates our President and CEO at quarterly Executive Committee meetings.

Our President and CEO regularly updates our Supervisory Board on our sustainability risks and opportunities, including climate-related risks, as well as our sustainability strategy and performance.

Our Sustainability Council validates our sustainability strategy and ensures the means are in place for each organization and site to deploy the corporate programs. The Council comprises 14 Vice Presidents, representing Human Resources and Sustainability, Compliance, Ethics & Privacy, Sales and Marketing, Purchasing, Investor Relations, Front- and Back-end Manufacturing, Product Groups, Risk Management, Internal and External Communications, and Quality.

The Corporate Sustainability department is responsible for developing our sustainability strategy and programs. It is supported by a network of over 100 local Sustainability Champions who manage the programs and monitor our performance across all sites and organizations. [I 102-18 I](#)

ST has been a signatory to the Global Compact since 2000 and a member of the Responsible Business Alliance since 2005. [I 102-13 I](#)

⁽¹⁾ Rajita D'Souza has been a member of the Executive Committee since January 01, 2021.

Independent audit function

Sustainability Council comprises 14 Vice Presidents

Ethics and Compliance



Putting respect, accountability, and integrity at the core of our decision-making process is vital to support our ambition, create value and earn the trust of all our stakeholders. These values are some of our most valuable assets and an integral part of our long-term strategy. **I 102-16 I**

Our vision speaks for itself: we want to be everywhere microelectronics brings a positive contribution to people's lives. We must reflect this in everything we do. We believe that conducting our business with the highest ethical standards is critical to our long-term success. We believe that ethics and compliance are everyone's job and responsibility.

Code of Conduct

Our Code of Conduct is all about our values, which are shared throughout the Company. It sets clear expectations for all employees and other stakeholders, helps to foster a culture of integrity, and provides practical guidance on the way we conduct our business and make our decisions.

- **Integrity:** we conduct our business with the highest ethical standards, honor our commitments, and keep our promises; we are loyal and fair and stand up for what is right.
- **People:** we behave with openness, trust, and simplicity; we are ready to share our knowledge, encourage everyone's contribution, develop our people through empowerment, teamwork, and training; every one of us is committed and personally involved in the continuous improvement process.
- **Excellence:** we strive for quality and customer satisfaction and create value for all our partners; we are flexible, encourage innovation, develop our competencies, seek responsibility and are accountable for our actions; we act with discipline, base our decisions on facts, and focus on the priorities.

Our Code of Conduct is distributed to all our employees, including newcomers. It is available in 10 languages on our website (see www.st.com/code_of_conduct), our intranet and our ST Integrity app.



99%
eligible employees
signed our
Code of Conduct

Building Trust Together



Zero-tolerance
towards any forms
of bribery and
corruption

Yearly declaration

At the beginning of each year, we run a worldwide campaign asking all eligible employees to sign and confirm our business ethics declaration, in line with the values and principles described in our Code of Conduct.

At the end of the year, we updated our process and refocused the yearly declaration on three pillars:

- the principles described in our Code of Conduct
- the disclosure of (potential) conflicts of interest
- our speak up policy

We also refreshed our follow-up process to find out why some employees may not complete their yearly declaration.

E-signature of Code of Conduct⁽¹⁾ (%)

2016	2017	2018	2019	2020
94	97	97	98	99

⁽¹⁾ Percentage of eligible employees (all employees in the exempt category).

Communication, awareness, and training

Our compliance and ethics communication and awareness campaign ‘Building Trust Together’ continued in 2020. It now includes a variety of tools to engage our employees and managers. Much of this was done remotely in 2020 while the COVID-19 pandemic prevented us from holding face-to-face and townhall meetings. For example:

- Our ST Integrity app, which includes useful and easy-to-use resources on compliance and ethics topics, has now been downloaded by more than 11,700 employees worldwide.
- Our Ethics and Compliance intranet (beST@compliance) was refreshed and updated. It received nearly 12,000 unique visitors and more than 100,000 page views during the year.
- Our e-learning modules on ST Code of Conduct, Data Privacy and Conflict of interest, were taken by more than 17,000 employees.

In 2020, we organized our annual Distribution and Sales Convention for Asia Pacific, with more than 900 business partners (physical and virtual) invited. Due to COVID-19 travel restrictions, the event was decentralized and held simultaneously across Wuhan (China), Hong Kong (China), New Delhi (India), Tokyo (Japan), Seoul (South Korea), Singapore, and Taipei (Taiwan), as a hybrid event with both virtual and (when possible) physical activities. Compliance, Ethics and Privacy were themes of the convention, focusing this year on topics such as bribery and corruption, data privacy, respect for intellectual property and our speak up hotline. We received very positive feedback from participants.

Privacy

We respect the privacy of our stakeholders, including our employees, in the way we collect and use their personal data.

In 2020, our personal data protection program became part of the Ethics and Compliance organization, renaming it Compliance, Ethics and Privacy.

We updated our public website www.st.com with a privacy portal to explain how we process the personal data of our visitors, and undertook several initiatives to strengthen our compliance with personal data protection laws and regulations.

Bribery and corruption

We have a zero-tolerance approach towards any forms of bribery and corruption, regardless of the identity or position of the originator or recipient of the bribe. It is also strictly forbidden for anybody in ST to use Company funds or assets to make a political contribution.

This applies to all of our employees, organizations and third parties acting on behalf of ST and all transactions in any country where we operate and do (or seek to do) business. Any violation will be deemed a serious violation of our Code of Conduct and lead to disciplinary action, including termination of the relationship with ST.

Our Anti-Bribery and Corruption Policy (see investors.st.com/highlights) provides clear definitions regarding instances of bribery and corruption and includes detailed descriptions of the Company’s rules for engaging with third parties. It also explains how to report actual or suspected violations and outlines the potential disciplinary actions and legal consequences of any non-compliance.



5
ethics committees

Speak up and misconduct reporting

We encourage everyone, including external business partners, to express any concerns they might have regarding possible violations of our Code of Conduct, the Company's policies, or the law. Managers are accountable for maintaining a working atmosphere where employees are comfortable about speaking up and expressing their concerns freely. All concerns raised are taken seriously.

Our misconduct reporting process is communicated to all employees through, among other things, our Code of Conduct, dedicated intranet web pages and our ST Integrity app. In addition to internal local and corporate reporting channels, we have an independent multilingual misconduct reporting hotline. A link to our hotline is accessible on our intranet, our website (see www.st.com) and our ST Integrity app. It can be used by any employee, business partner or stakeholder.

We apply the highest standards of confidentiality in the handling of all reports received, either through local management or through the hotline. We ensure that no employee who reports a concern in good faith suffers retaliation in the form of harassment, or adverse employment or career consequences.

Misconduct reporting

	2020
Total number of incidents under review as of January 01	5
Total number of incidents reported or identified during the year ⁽¹⁾	26
Actual misconduct cases identified through audit or management review	1
Incidents closed by a formal investigation report	3
Number of confirmed external misconduct cases	2
Number of confirmed internal misconduct cases	2
which led to employees being dismissed or disciplined	2
which led to terminating or not renewing contracts with business partners	0
Incidents closed after preliminary assessment	21
Incidents still open at year end	7
Number of public legal cases regarding corruption brought against ST or its employees	0

⁽¹⁾ Relates to cases managed at corporate level.

Ethics committees

We have a Corporate Ethics Committee whose purpose is to support ST management in its efforts to foster an ethical culture consistent across all regions, functions, and organizations. This committee was formed in 2007 and is chaired by our Chief Compliance Officer, Philippe Dereeper. The committee comprises senior managers representing various Company organizations, appointed for three-year terms by our President and Chief Executive Officer. It met three times in 2020.

The role of the Corporate Ethics Committee includes:

- regularly evaluating the principles in our Code of Conduct, with reference to our culture and commitment to business ethics
- a quarterly review of the main ethical breaches, allegations, and related investigations
- upon request from the Managing Board or the Chief Compliance Officer, providing guidance, in an advisory capacity, on ethical dilemmas that may be faced by the Company
- promoting and coordinating the activities of our local ethics committees in France, Italy, Asia Pacific and the Americas

Our four local committees were established to contribute to this mission within their respective geographical areas. Their activities are complementary to the Corporate Ethics Committee, with which they are in regular communication.

Risk Management



As a listed company operating worldwide in the global semiconductor market, we manage and monitor risks related to the volatility and complexity of our industry.

In 2020, the unprecedented situation of the COVID-19 pandemic highlighted our resilience in highly challenging conditions.

In January 2020, we triggered our crisis management and business continuity protocols, focusing on two overarching priorities:

- first, maximizing measures to prevent infection and supporting our employees and their families
- second, executing our business continuity plans, closely monitoring the situation across our whole supply chain, and working with our customers, suppliers and partners

These priorities have remained unchanged throughout the pandemic (see Focus).

ERM process aligned with ISO 31000

Enterprise Risk Management (ERM)

Our approach to ERM is formalized in a specific policy and is aligned with ISO 31000. It enables us to perform systemic identification, evaluation and treatment of risk scenarios, allowing us to set our Company strategy, manage our performance, and capitalize on opportunities.

The ERM approach is embedded in all ST organizations and key processes. It takes a holistic view, combining both 'top-down' and 'bottom-up' perspectives, to ensure that risk identification, evaluation, and management are performed at the right level.

Managing risk according to our risk appetite

Our risk appetite depends on the nature of the risk. We regularly determine the amount of risk we are willing to eliminate, mitigate, pursue or retain, depending on the expected rewards, opportunities and costs.

Throughout 2020, we refreshed our Company risk assessment with executive management. The output from this exercise was a risk map linked to our strategic objectives, including 13 'priority 1' risk areas.

Risk owners (members of senior management) were appointed for each priority risk area to develop risk response plans and enhance monitoring and reporting capabilities. The risk plans are regularly reviewed by senior management and periodically discussed with the Supervisory Board and Audit Committee.

Each organization throughout the Company, including Marketing and Sales regions, Product Groups, Manufacturing and Technology, corporate functions and large transformation initiatives, also completed its own risk assessment.

Extending our improvement roadmap

The three-year improvement roadmap we defined in 2018 was further rolled out in 2020. This included deploying our ERM framework. Designed to consider the interests of all stakeholders and explicitly address uncertainty, the ERM framework is practical and tailored to our needs. Based on the best available information, it supports our decision-making.

ST's ERM framework

Governance, organization and culture	<ul style="list-style-type: none">• Risk oversight and governance• Risk culture• Risk appetite• Risk functions and communities
Managing risk and opportunity	<ul style="list-style-type: none">• Risk and opportunity response and monitoring (enabling strategy and performance)
ERM enablers	<ul style="list-style-type: none">• Risk reference documentation (policies and procedures)• Risk processes (definition and methodologies)• Risk tools

Resilience management

Since 2018, our ERM approach has been extended to explicitly address resilience topics. This led us to set up a 'corporate resilience competence center' in 2019 to drive a global network of resilience champions in our main sites and critical functions.

Business continuity

We have implemented a business continuity management system (BCMS) across our main sites and selected organizations. It provides a consistent methodology to address potential business disruptions that may affect our supply chain and operations through scenarios such as:

- site unavailability
- people unavailability
- IT system disruptions (e.g. cyber-attacks)
- facilities disruptions
- critical sourcing disruptions
- logistics/transportation disruptions
- security violations

As such, our approach encompasses potential disasters due to natural hazards (such as earthquakes, floods, snowstorms, volcanic eruptions or tsunamis), industrial accidents (such as fires and explosions), and major impacts related to human activities (such as terrorism, strikes or pandemics).

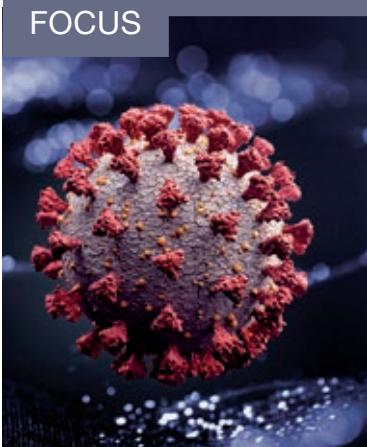
In 2019, ST obtained its ISO 22301 recertification for three years. Throughout 2020, surveillance audits from the certification body and internal audits were performed and those audits will continue in 2021.



Franck Freymond
Chief Audit and Risk Executive

The COVID-19 pandemic has been a global challenge that required the continuous mobilization of our management and our dedicated crisis teams to provide our people with a safe working environment and maintain business continuity. Our efforts were effective as we put in place the most stringent health and safety measures, kept all our manufacturing sites operational and mitigated the impact of the crisis on our business and that of our customers.

FOCUS



Facing the pandemic

Our Corporate Crisis Team (CCT), directly reporting to ST's Executive Committee, orchestrated our global response to the COVID-19 pandemic, driving our network of Crisis Teams at regional, country and site levels to address the complexity of local conditions. In addition, we set up dedicated taskforces, for domains such as supply chain and information technology.

The CCT coordinated our response across all relevant areas, including:

- monitoring international developments
- global travel and health and safety management (including psychological support)
- monitoring the ST-specific situation and the deployment of measures in ST regions/sites
- monitoring our business, supply chain and manufacturing
- internal and external communications
- support function continuity management

Our rapid response and action-focused approach not only confirmed the effectiveness of our crisis management model, but also its ability to build trust and confidence in addressing crisis situations.

Annual risk assessment of tier 1 supply chain

Sustainability risks

The identification of our priority sustainability risks (and opportunities) is formalized through a regular multi-stakeholder materiality exercise, which was renewed in 2020 (see Sustainability strategy on [page 22](#)).

Company-level sustainability risks are then fully integrated into our ERM program.

At an operational level, our approach to sustainability risks is transversal across the different sustainability domains we cover. It comprises an overall environmental and social due diligence process that considers any potential and actual adverse impacts we may generate, either through our own operations or through our supply chain. By identifying these risks and mitigating them through dedicated programs, we can reduce our environmental and social footprint and find new opportunities to create positive value for our Company and our community.

This includes:

- adopting reference standards such as ISO 45001 for safety, ISO 14001 for the environment, and the Responsible Business Alliance (RBA) standard for corporate social responsibility, and cascading them throughout our supply chain
- defining policies that include risk identification and risk mitigation strategies with concrete actions
- controlling both our own and our suppliers' performance, and correcting deviations

More specifically, we are committed to reducing our impact on climate change and therefore we pay particular attention to climate-related risks (see Energy and Climate Change on [page 60](#)).

We conduct an annual risk assessment of our entire tier 1 supply chain, to determine the risks related to Labor and Human Rights; Environment, Health and Safety; and Ethics (see Responsible Supply Chain on [page 76](#)).

In 2020, we also launched a 'supply chain risks' taskforce to improve the consistency of our approach to supply chain risks in the different domains we manage (Quality, Business Continuity, Ethics and Sustainability) and better integrate them in our procurement and supplier monitoring strategy.

Sustainability strategy



A sustainability strategy focused on priorities

Focusing on what really matters for ST and our stakeholders is the cornerstone of our sustainability strategy. Not only does stakeholder feedback support our transformation programs related to our own processes and culture, but it also supports our development of new technologies, products, and applications. We are convinced that our technologies have a key role to play to overcome global environmental, social, and societal challenges, and to ensure a more sustainable future.

To better understand the needs and expectations of our stakeholders, in 2020 we conducted a new materiality assessment. This included a comprehensive analysis of industry issues, the Responsible Business Alliance sensing exercise, international reporting standards, peer benchmarks, extra-financial questionnaires, and broader sustainability megatrends. The outcome enabled us to create a pool of more than 90 topics that were most relevant to our Company and our stakeholders. We reviewed all topics and consolidated the most important ones into a list of 42.

To assess the importance of the topics for our stakeholders, we collected 344 survey results from our nine categories of stakeholders (see stakeholder engagement on [page 24](#)). We also invited our top leaders to rate each topic according to its impact – positive or negative – on the social, environmental and economic value of ST. We then asked our sustainability experts to evaluate the level of maturity and margin for improvement for each topic. After an in-depth analysis of the results, we selected the highest priorities and combined some of them, to end up with a final selection of 14 material topics. For each material issue, we have a specific ambition and long-term goal. The related programs and performance for these are described throughout this report. [I 102-46 I](#)

Three-step materiality exercise



Rajita D'Souza

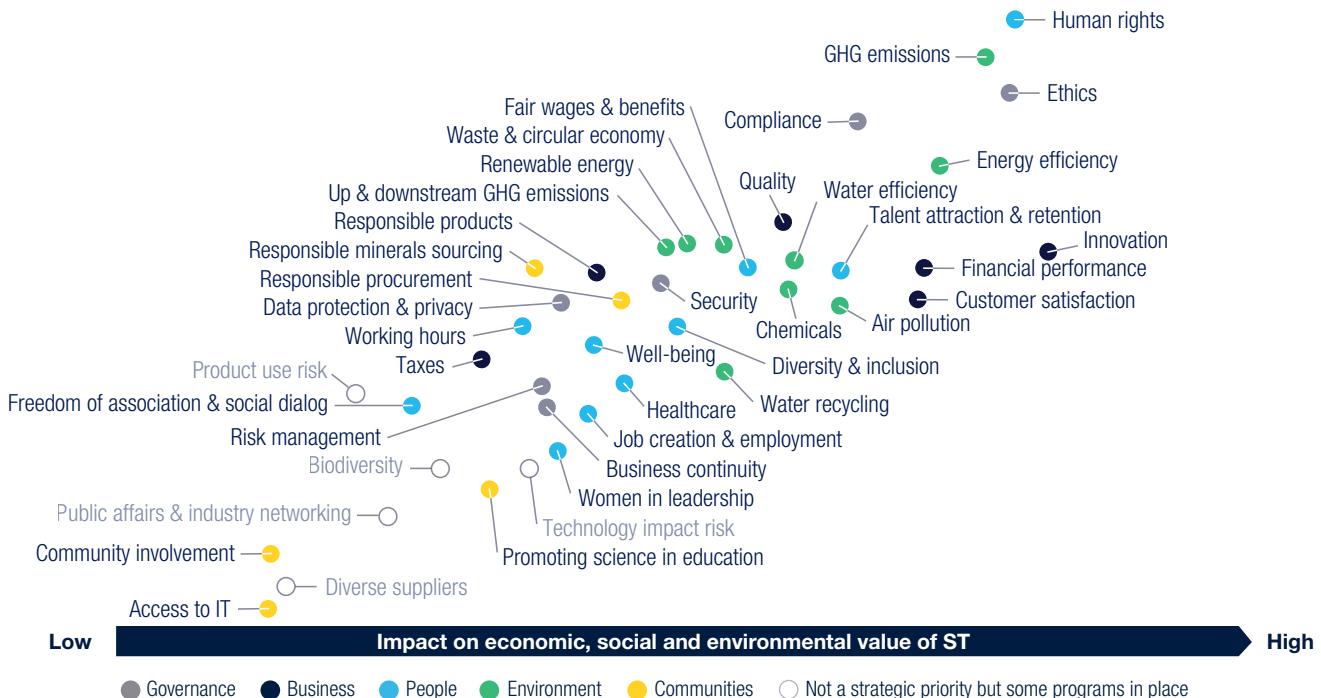
President, Human Resources and Corporate Social Responsibility

Embedding sustainability practices in our Company strategy is essential to our people, our business, and society at large. As a leading global company, we must embrace our role to minimize our consumption of resources, maximize value creation and partner with all our stakeholders. As the new Human Resources and Corporate Social Responsibility President, I am counting on everyone's contribution to accelerate sustainability, together."

Material topics

I 102-47 I 103-1 I

Health & safety —●



Jean-Louis Champseix
Group Vice President,
Corporate Sustainability

Interview

How did the COVID-19 pandemic impact ST's sustainability practices?

The crisis reinforced our sustainability practices. It again demonstrated the role of sustainability as a driver of resilience, agility, and competitiveness.

Our business continuity preparedness enabled us to face the pandemic with a high sense of urgency and in line with our principles: protect people at any cost, while ensuring business continuity. People are at the heart of our sustainability strategy and our employees demonstrated a high level of engagement and solidarity. This helped us maintain our operations and continue to serve our customers, while at the same time donating to medical institutions in our local communities.

How did ST's sustainability strategy evolve in 2020?

Managing the pandemic crisis effectively gave us the opportunity to accelerate our sustainability commitments and programs.

In 2020, we refreshed our sustainability strategy through a full materiality assessment, as outlined above. This assessment plays an important role in strengthening the integration of sustainability into our business. The top three material topics that emerged from this exercise reflect the challenges facing society as a whole: health and safety, human rights and greenhouse gas emissions. We have updated our strategy, started to accelerate our efforts on all priority topics and upgraded our roadmap for the coming years.

We also updated our ambitions for the next seven years. In 2021, a new Sustainability Charter will replace our previous 2014-2020 Decalogue.

In alignment with our ambitions, in 2020 we integrated specific sustainability objectives into our senior executives' compensation scheme, focusing on four key priorities: safety, climate change, gender diversity, and employee engagement. In 2021, we plan to extend the practice to the 19,000 employees eligible for short-term incentives.

What are the next challenges for ST?

Beyond the pandemic, climate change remains the biggest global economic and environmental challenge. Despite the situation in 2020, we advanced our sustainable development objectives and developed a roadmap to become carbon neutral by 2027. This is an important step in our commitment to combat climate change – a global battle that requires collective action.

Commitment to be



by 2027

Stakeholder engagement



Our stakeholders are employees, customers, suppliers, investors, organizations and other entities that can affect or be affected by our activities and products. Maintaining an open dialog with our stakeholders is essential to understand their interests and expectations. In addition to corporate-level dialog with key stakeholders such as customers (see Customer Satisfaction on page 36) and investors, each site conducts specific actions depending on its activity, size, location and culture, but all sites have regular exchanges with major local stakeholders, such as local authorities, schools and universities.

During the verification process of this report, the auditor interviewed three stakeholders (education partner, security services, material supplier) about their relations with ST. [I 102-40 I](#) [102-42 I](#) [102-43 I](#)

Stakeholders	Key expectations	Engagement channels
EMPLOYEES	<ul style="list-style-type: none"> • Health and safety at work • Respecting human rights • Ethics 	<ul style="list-style-type: none"> • Seminars, conferences, forums • VP communication meetings • Recognition, awards, contests • Intranet, internet, news, emails, videos • Training, workshops • Employee surveys • Application week, EHS week
CUSTOMERS	<ul style="list-style-type: none"> • Health and safety at work • Respecting human rights • Greenhouse gas emissions 	<ul style="list-style-type: none"> • Trade shows • Conventions, technical seminars • Audits and site visits • Joint seminars, conferences, blog, technodays, workshops, webinars • Meetings
INVESTORS & ANALYSTS	<ul style="list-style-type: none"> • Health and safety at work • Greenhouse gas emissions • Talent attraction & retention 	<ul style="list-style-type: none"> • Investors and analysts day • Annual reports • Extra-financial questionnaires
SUPPLIERS	<ul style="list-style-type: none"> • Health and safety at work • Ethics • Respecting human rights 	<ul style="list-style-type: none"> • Meetings • Audits • Supplier training • Surveys • EHS week • Technical roadshows
LOCAL PARTNERS	<ul style="list-style-type: none"> • Respecting human rights • Greenhouse gas emissions • Health and safety at work 	<ul style="list-style-type: none"> • Partnerships • Conferences, conventions, meetings • Site visits • Donations, training, volunteering, local initiatives
NATIONAL & LOCAL AUTHORITIES	<ul style="list-style-type: none"> • Ethics • Greenhouse gas emissions • Respecting human rights 	<ul style="list-style-type: none"> • Partnerships with municipalities • Meetings, conferences, seminars • Annual reports • Site visits
ACADEMIC & LABORATORIES	<ul style="list-style-type: none"> • Ethics • Respecting human rights • Product and technology innovation 	<ul style="list-style-type: none"> • Internships, scholarships, PhDs • Joint R&D projects, joint labs • Conferences, technical seminars • Site visits
INDUSTRY ASSOCIATIONS	<ul style="list-style-type: none"> • Ethics • Respecting human rights • Renewable energy 	<ul style="list-style-type: none"> • Memberships in public-private partnerships, international and European associations • Participation in consortiums, in working groups of electronic industry associations • Meetings, conferences, seminars
MEDIA	<ul style="list-style-type: none"> • Fair wages and benefits • Greenhouse gas emissions • Renewable energy 	<ul style="list-style-type: none"> • Conferences, conventions, meetings • Press releases

Key expectations are the top three issues retained by each group of stakeholders in our 2020 materiality exercise.

[I 102-44 I](#)

Contributing to the Sustainable Development Goals (SDGs)

SUSTAINABLE DEVELOPMENT GOALS

The SDGs set by the United Nations define global sustainable development priorities and aspirations for 2030, highlighting the world's biggest social and environmental challenges.

As a multinational company, we believe we have a responsibility and a role to play to help achieve these goals. We mapped the 17 SDGs to our material topics and business strategy. We then identified the 11 goals that are most relevant to our sustainability strategy. Our performance against these SDGs is highlighted throughout this report.



3 GOOD HEALTH AND WELL-BEING



- We aim to ensure healthy lives and well-being for all.
- We are engaged in minimizing risks of negative impact on people due to our activities.

4 QUALITY EDUCATION



- We support education in all the countries where we operate.
- We develop the competence of our employees through a blended approach.

5 GENDER EQUALITY



- We aspire to achieve full gender equality.
- Our Women in Leadership program prepares the next generation of women leaders.

6 CLEAN WATER AND SANITATION



- We are committed to reducing our water consumption and recycling more.
- All our wastewater is treated before being discharged into the environment.
- We strive for zero waste in landfill.

7 AFFORDABLE AND CLEAN ENERGY



- We deploy programs to improve energy efficiency in all our manufacturing sites.

8 DECENT WORK AND ECONOMIC GROWTH



- We apply a zero tolerance approach to forced labor.
- We assess and mitigate social risks in our extended supply chain.
- We focus on providing a safe workplace with zero injuries and zero occupational diseases.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



- We promote open innovation and partner with a wide range of universities and research institutes throughout the world.

10 REDUCED INEQUALITIES



- We promote equal opportunities for all.
- Our ambition is to be a leader in cultural and disability inclusion.
- Our ST Foundation is bridging the digital divide.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



- We strive for zero waste in landfill, reduce our consumption of chemicals and eliminate hazardous materials.

13 CLIMATE ACTION



- We are committed to being carbon neutral by 2027.
- We deploy programs to reduce our GHG emissions.
- We actively participate in industry initiatives for action on climate change.

17 PARTNERSHIPS FOR THE GOALS



- As a member of the Responsible Business Alliance and other industry associations, we share knowledge and expertise to help achieve the SDGs.

Augmenting everybody's life



Inclusion in
DJSI
World



15.2%
of our revenues
invested in R&D



63%
of new
ST products
are responsible
products



Gallium Nitride (GaN) technology

Sustainable Financial Performance



Capital Markets Day 2020

Innovation & Profits

OUR AMBITION

Sustain profitable growth, with clear and focused leadership objectives in the four end markets we address.

2025 GOAL

>20%
of revenues generated by
new product lines

2020

15.4%

In 2020, ST showed its resilience during the first half of an unprecedented year, while in the second half we demonstrated our ability to cope with a strong and sudden upswing in demand. Our business continuity plans enabled us to support our customers and continue to execute our R&D programs, while maintaining the most stringent health and safety measures. We achieved this by working alongside our customers and partners throughout the year.

During 2020, we returned to solid revenue growth, outperforming the markets we serve. Our net revenues increased by 6.9% to US\$10.2 billion, better than our initial expectations. Sales to OEMs represented 73% of total 2020 revenues, while distribution represented 27%. For the full year 2020, we maintained our profitability with an operating margin of 12.9% and net income of US\$1.1 billion, translating into diluted earnings per share of US\$1.20. We also strengthened our net financial position to US\$1.1 billion, with strong growth in operating and free cash flow.

Cash dividends paid to stockholders totaled US\$168 million. As part of our existing share buyback program, we repurchased shares totaling US\$125 million during the year.

Revenues
US\$10.2 billion

In US\$m	2020	2019
Net Revenues	10,219	9,556
Gross Margin	37.1%	38.7%
Operating Income	1,323	1,203
Net Income	1,106	1,032
Free Cash Flow	627	497
Net Financial Position	1,099	672

Net revenues by region of origin



Product revenues

After a decrease in demand in the first half of 2020, from the third quarter onwards we saw a much faster and stronger than expected resurgence in demand, which further accelerated in the fourth quarter.

This was driven by car production volumes, inventory replenishment across the automotive supply chain and, more broadly, an increasing need for semiconductors related to electrification and digitalization.

In terms of revenues by product group, two groups grew year over year, while one declined.

Analog, MEMS and Sensors Group (AMS) revenues increased 18%, mainly driven by imaging and analog products for personal electronics.

Microcontrollers and Digital IC Group (MDG) revenues increased 14.9%, driven by strong growth in microcontrollers from both OEMs and distribution. This was partially offset by a strong decline in RF Communications products in the fourth quarter.

Automotive and Discrete Group (ADG) revenues decreased 8.9%. Revenues from our Automotive Product sub-group decreased, mainly due to a decline in legacy automotive, partially offset by growth in advanced driver-assistance systems (ADAS) products. Revenues for the Power Discrete sub-group saw a smaller reduction, with soft market conditions for industrial in Europe and the Americas partially offset by growth in car electrification. [I 103-2](#) [I 103-3](#) I

**Faster
and stronger
than expected
rebound**

 **Lorenzo Grandi**

President, Finance, Infrastructure and Services, and Chief Financial Officer



In 2020, amid the COVID-19 pandemic and global trade tensions, ST's transformation to support growth and demonstrate resilience was evident. Our net revenues grew 6.9% year over year driven by the breadth of our product portfolio, the diversity of the markets we address and the wide, and in many cases, intimate relationships with our customers that supported us in a challenging environment. ST has a bright future. We see significant opportunities to grow our revenues, improve our profitability and make ST financially stronger and even more resilient."

Looking forward

We plan to invest between US\$1.8 billion and US\$2 billion in 2021, to meet strong market demand and advance our strategic initiatives.

This includes investments in expanding the capacity of our existing 300mm fab at Crolles (France), developing the product mix for our most advanced 200mm fabs, and the substantial expansion of our Silicon Carbide capacity.

It also includes around US\$400 million of investment in strategic initiatives, including:

- continued investment in our new Agrate 300mm fab (Italy)
- R&D for Gallium Nitride power technologies
- fabrication of Silicon Carbide substrates

**Investment
in strategic initiatives**



Manjit Jus

Global Head of ESG Research
and Data, S&P Global

Member of

**Dow Jones
Sustainability Indices**

Powered by the S&P Global CSA

We congratulate STMicroelectronics for being included in the DJSI World. A DJSI distinction is a reflection of being a sustainability leader in your industry. With a record number of companies participating in the 2020 Corporate Sustainability Assessment and more stringent rules for inclusion this year, this sets your company apart and rewards your continued commitment to people and planet."

Extra-financial reporting

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 2020, we maintained a strong presence in the major sustainability indices, including Dow Jones Sustainability Index World, FTSE4Good, Ethibel, EuroNext VIGEO Europe 120, Eurozone 120 and Benelux 120.

We were also included in the Bloomberg Gender Equality Index for the third consecutive year and in the CDP A list for climate change for the first time (see Focus).

Our sustainability performance was recognized by the Wall Street Journal that ranked ST 71st among 5,500 publicly traded companies around the world.

In July, ST was awarded Prime status by the Institutional Shareholder Services (ISS), and ranked in the top 10% of semiconductor companies. We received the highest rating of the semiconductor industry for both environmental and social topics.

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.



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FOCUS

ST recognized as a leader in managing climate change

Transparently disclosing our environmental data to all stakeholders is an essential part of our commitment to addressing climate-related issues.

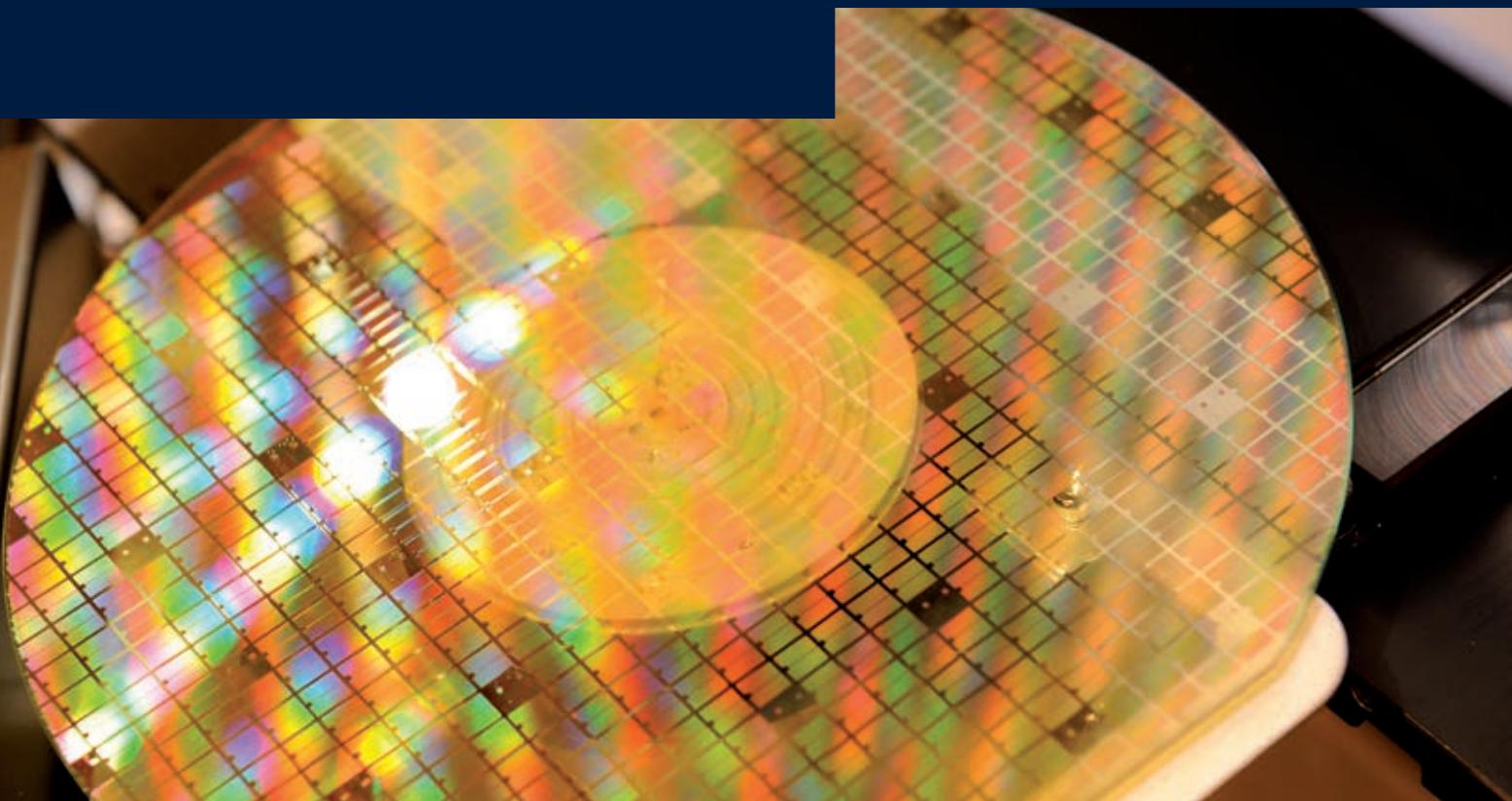
Often referred to as the gold standard of environmental reporting, CDP is a not-for-profit organization that runs a global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts.

We have been participating in the CDP's annual climate change questionnaire since 2006 and use it as an opportunity to identify emerging environmental risks and opportunities for action to ensure we stay on track.

In 2020, ST was one of the 277 companies out of more than 5,000 that was included in the CDP A list for climate change. This recognizes our commitment and actions to tackle climate change issues. We are leading on corporate environmental ambitions to cut greenhouse gas emissions and to manage climate change within our own operations and our extended supply chain.



Innovation



Silicon Carbide technology

Innovation & Profits

OUR AMBITION

Sustain profitable growth, with clear and focused leadership objectives in the four end markets we address.

2025 GOAL

>20%
of revenues generated by
new product lines

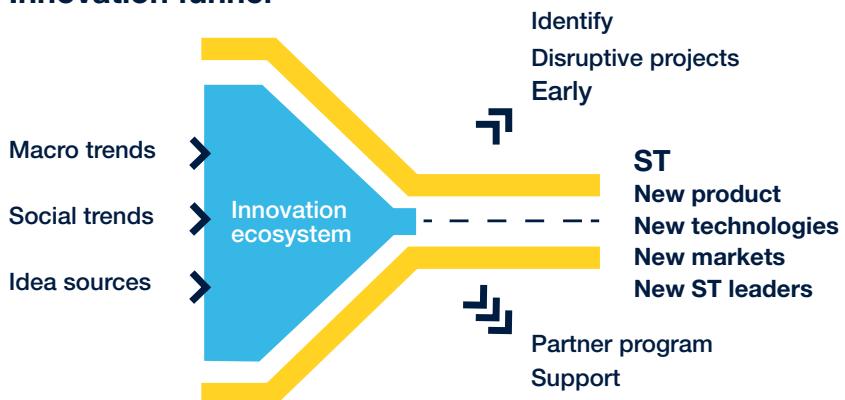
2020

15.4%

ST is a technology company driven by innovation. Our technology developments are guided by the long-term market trends enabling or enhancing applications for the end-user by turning state-of-the-art chip fabrication technologies into cutting-edge commercial products. To support innovation, we invested US\$1.55 billion in research and development (R&D) in 2020, representing 15.2% of our net revenues.

We create a funnel of innovation that allows us to develop the market-leading products and solutions that fuel our future growth. It enables us to continue pushing the boundaries of disruption in technologies and applications, in line with our strategic objectives. | 103-1 |

Innovation funnel



US\$1.55 billion
invested in R&D

Our innovation capability has been enhanced by a new ST Innovation Office (see quote) tasked with creating more external and internal innovation opportunities and connecting emerging market trends with our internal technology expertise. This will enable us to identify opportunities, be ahead of the competition and lead in new or existing technology domains. | 103-2 |



Alessandro Cremonesi

Chief Innovation Officer, Innovation Office

We created an Innovation Office in 2020 to sustain, stimulate, facilitate, and coordinate the process of continuous innovation within ST, in line with our strategic objectives.

Innovation is a collaborative task requiring the best of collective intelligence to succeed. To enhance our ability to assimilate and generate innovation, we are improving the exploration and transformation phase of the innovation process, increasing both internal and external scouting and cooperation capabilities."

Leading-edge technology

ST is currently well positioned in disruptive technologies and applications. We are focused on bringing to market disruptions that have been enabled by our past investments. We leverage our process technology to create opportunities to penetrate new markets, form new partnerships or acquire new competencies.

Process technology

Thanks to our wide portfolio of patents and strong pipeline of innovation, today we are one of the few semiconductor companies mastering a very broad range of chip fabrication technologies.

Among these technologies, Gallium Nitride (GaN) technology is part of our strategy to invest in wide bandgap technologies, complementary to Silicon Carbide for power devices. In 2020, we acquired a majority stake in the French GaN innovator, Exagan, whose expertise in epitaxy, product development and application know-how will broaden and accelerate our power GaN roadmap and strengthen our business for automotive, industrial and consumer applications. We also started the epitaxy step of the 200mm GaN line in our Tours site (France).

During the year, a technology breakthrough, combining embedded phase change memory (e-PCM) with the advantages of 28nm FD-SOI technology and advanced packaging, enabled us to develop a new automotive microcontroller product line, called Stellar, in partnership with our customer, Bosch. It provides advanced connectivity and security features to support the transition to service-oriented automotive systems.

Application technology

In 2020, to complement and strengthen our STM32 microcontroller offer, we acquired companies and assets focused on radio frequency (RF) and wireless connectivity: Riot Micro for its expertise in low-power cellular IoT; BeSpoon, which specializes in ultra-wide-band connectivity; and SOMOS semiconductor, which specializes in silicon-based power amplifiers and in RF front-end modules (FEM). Acquiring these companies and integrating them into our business will enable ST to provide all IoT connectivity system-on-chip solutions and accelerate our time to market for our STM32 portfolio (see Focus). In the increasingly important field of artificial intelligence, we capitalize on synergies between our microcontrollers, sensors, and automotive application groups. Leveraging this expertise, in 2020 we demonstrated a prototype IoT sensor that enables new building management services and efficiency gains by understanding building occupancy levels and usage for our customer, Schneider Electric.

Innovation ecosystem

The innovation process begins with an exploration phase that enlarges our funnel of opportunities, combining internal know-how with external sources of innovation and partners. [I 102-12 I](#)

External scouting for technology

Recognizing the importance of partnerships in the innovation process, we build strategic alliances, engage in bilateral research cooperation, and participate in standardization groups. Overall, we were involved in 143 active R&D partnerships in 2020.

Our ST Partner Program provides our partners with the ecosystem needed to help them reduce development effort and accelerate time to market. The program continues to grow, reaching 292 members in 2020 (see www.st.com/partner-program). [I 103-3 I](#)

We are also members of many industry associations. In 2020, we joined Silicon Catalyst, an incubator focused on accelerating solutions in silicon, to expand our network of contacts investigating innovative IP and to be involved in discussions around industry standards.

**Acquired
majority stake
in Exagan,
a French GaN epitaxy
innovator**

**Acquired
RF and wireless
connectivity
companies**

143
active R&D
partnerships

FOCUS**Strengthening our RF and wireless connectivity capability**

Today, ST offers reference designs to serve the global embedded connectivity market. To enhance the range of connectivity standards we offer, in 2020 we acquired Riot Micro, BeSpoon and SOMOS semiconductor.

Riot Micro designs cellular IoT solutions, applying proven techniques from Bluetooth Low Energy to create narrowband IoT solutions optimizing system cost and power. The integration of cellular communication capabilities into the STM32 microcontroller portfolio will strengthen our offer for customers developing applications such as asset tracking, metering, and fleet management services for the industrial market.

BeSpoon technology enables secure real-time indoor location with centimeter accuracy even under adverse conditions. The integration of this secure positioning technology in the STM32 portfolio will enable developers of IoT, automotive and mobile communication applications to provide services such as secure access, and precise indoor and outdoor mapping.

With the SOMOS acquisition, we have reinforced our specialist staff, IP and roadmaps of front-end modules for the IoT and 5G markets.

We also launched a ‘Lab-in-Fab’ in collaboration with the Institute of Microelectronics at Singapore’s Agency for Science, Technology and Research (A*STAR) and ULVAC, a leading Japanese vendor of manufacturing tools. This ‘Lab-in-Fab’ R&D line brings together three partners with leading-edge and complementary competencies in piezo materials, piezo MEMS technologies, and wafer-fab tools. The objective is to boost innovation and accelerate development of new materials, process technologies, and ultimately, products.

**Incubated
>30
startups**

~750
technical staff,
including 32 Fellows

Working with startups

We are involved in a number of initiatives to support electronics-related startups in various locations relevant to our business. These initiatives are tailored to address the typical challenges faced by startups and to drive mutually beneficial collaboration.

In the early stages, we provide support to external innovation and co-working spaces called Proof of Concept (PoC) centers, spread across countries where we operate. The aim is to help innovative small businesses and startups speed up their proof-of-concept phase. Including the new centers opened in 2020, such as ComoNext in Italy, we now support 15 PoC centers.

Later in the startup journey, we provide tailored incubation services, including hosting, technical support, and mentoring, through our ‘Innovation Booster’ program. Since its inception, the program has incubated more than 30 companies in France and India and we are now extending it to other countries.

Furthermore, we have an accelerator program, ST-UP, for technology startups. This is an 18-month, five-step program to support startups which have cutting-edge technology that can complement or augment existing ST solutions. The program was launched in Israel in 2018 and is now replicated in other countries, including France and Italy. It has so far accelerated more than 10 startups and is currently working with a further three (see www.st.com). | 103-3 |

Internal technology expertise

Around 8,100 ST employees work in R&D and product design. This includes nearly 750 members of our technical staff who are recognized for their advanced expertise. Within this community, we have 32 Fellows and nine Company Fellows, with three new Company fellowship nominations in 2020.

Our experts are extending their role and exposure by working closely with our Innovation Office and Fellows Scientific Committee. This community drives our most advanced innovation, enabling us to develop new technologies and helping to foster R&D partnerships with prestigious universities and partners worldwide.

Our sites around the world are also helping to nurture the entrepreneurial spirit of our employees through local innovation labs and hubs that help to connect our technical experts within the local ecosystem. We now have seven labs, with three new labs opened in 2020: the Acelab at our Tunis (Tunisia) site, and two Opus labs in Castelletto (Italy) and Catania (Italy).

In 2021, we plan to launch a global internal innovation challenge, open to all employees, which will include sustainability topics.

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:

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



Sustainable Technology



Industrial Summit, Shenzhen, China

Sustainable Technology

OUR AMBITION

Design and manufacture products that have the greatest positive impact on the planet and society.

2025 GOAL

x3

% revenues generated by responsible products*

* vs 2016

2020

x1.8

At ST, we are convinced that technology plays a key role in helping to solve environmental and social challenges. [I 103-1 I](#)

Sustainable Technology, our product stewardship program initiated in 2011, is about being responsible and managing our impact throughout the product lifecycle, from raw material extraction to end of life. It is also about identifying and promoting innovative products that provide society with environmental and social benefits. At the end of 2020, we released a video to illustrate the program (discover the video on [st.com](#)). [I 103-2 I](#)

More and more responsible products

The Sustainable Technology program enables us to classify our products into four categories of 'responsible products' that provide environmental and social benefits.

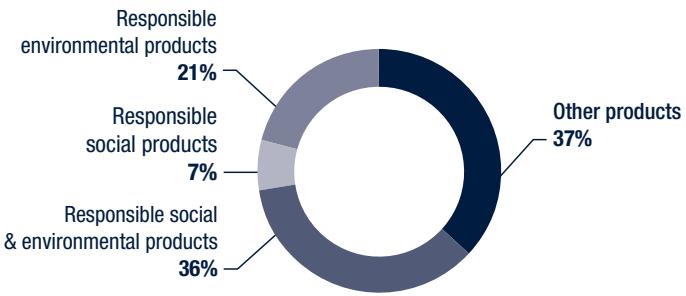
Responsible products			
Eco-design products		Responsible applications	
Low carbon Reduce manufacturing footprint	Power-efficient Consume less electricity	Planet-friendly Enable green solutions	Human-welfare Improve end-user quality of life
Environmental benefits			Social benefits

In 2020, 63% of new products were classified as responsible products, a one-point increase compared to 2019.

In line with our 2025 goal, we estimate that the revenues generated from our responsible products represented 18.5% of ST's total revenues in 2020. [I 103-3 I](#)

63%
of new ST products are
responsible products

ST new products in 2020 | 417-1 |



Our internal STAR classification system combines responsibility and innovation. It shows that ST products are particularly strong in terms of environmental innovation, thanks to the very significant gains in the energy performance of our devices in their end application.

STAR classification for new products in 2020 (%) | 417-1 |

	Social products ⁽¹⁾	Environmental products ⁽²⁾
★ Incremental improvement to existing offer	78	48
★★ Significant improvement to existing offer	16	28
★★★ New or dramatic improvement to existing offer	6	24

⁽¹⁾ Provides new social solutions that improve end-user quality of life (education, medical, health, safety, security of personal information or social solution for developing countries).

⁽²⁾ Power-efficient or low-carbon products (resulting from eco-design assessment) or products included in end-user applications that contribute to saving energy or resources, environmental preservation (water, chemicals, emissions) or generating renewable energy.

Responsible design and manufacturing

Raw materials

Our responsibility begins with the raw materials we use, which are sourced in line with the latest environmental and social guidelines (see Responsible Supply Chain on [page 76](#)).

Eco-design to reduce environmental footprint

The starting point of our eco-design activity is based on the lifecycle assessment (LCA) methodology developed by ST in accordance with ISO standards 14040 and 14044. Eco-design assessment takes into consideration the environmental impact of the device during its whole lifecycle. A product management system tracks key indicators to encourage our product development teams to implement green designs wherever possible, thus minimizing the impact of our products on the environment.

In recent years, we have also invested in new silicon technologies that enable the industry to switch to greener manufacturing and greener products without compromising innovation (see Focus).

Manufacturing

We are engaged in ensuring our products are manufactured in accordance with environmental, social and ethical standards (see Health and Safety on [page 41](#), Labor and Human Rights on [page 44](#), and Our approach to the environment on [page 59](#)).

Complying with legislation and customer requirements on Environment, Health and Safety is also fundamental. We are therefore committed to ensuring our products meet or exceed applicable environmental requirements such as REACH¹, RoHS² and HSPM³ (see Chemicals on [page 70](#)). This also helps us to better monitor substances used in our products, which in turn facilitates end of life and recycling when our devices are disposed of.

Applications providing a positive contribution

We classify as responsible any end application that provides society with environmental and social benefits.

Human-welfare applications

The COVID-19 pandemic highlighted the importance of innovation and technology. Our broad product portfolio contributes to the fight against the virus by being embedded in applications such as mask production, testing solutions, respirators and ventilators, access control, social distance tracking, and patient monitoring systems.

We maintain strong relationships with medical companies and participate in advanced R&D projects (see quote) to develop innovative healthcare technology.

96%
of our products
exceed RoHS
directives

ST devices helping in
the fight against
COVID-19



Armand Castillejo

Collaborative R&D Program Manager, MDG Grenoble (France)

It is essential to provide reliable and secure medical solutions that support hospitals by ensuring continuity of care for people at home. Since 2017, I have been leading the European SERENE-IoT⁴ project with the objective of developing high-quality individual connected medical devices. ST's STM32 wireless microcontrollers and STSAFE secure solutions are being used in devices that monitor patients remotely. These devices are being clinically tested at the Grenoble Alpes Hospitals in France."

Planet-friendly applications

Our semiconductor solutions help our customers deploy smart, environmentally friendly applications. Some examples of responsible applications we contribute to are car electrification, air pollution control and reduction, energy consumption monitoring, improving efficiency of energy intensive equipment, power-efficient solutions for personal electronics, and converters for solar panels and wind turbines.

In 2020, we initiated a partnership with Schneider Electric to develop joint products, technologies, and solutions to improve energy efficiency and support digital transformation in buildings, datacenters, industrial applications, and infrastructure (see ST products and solutions on [page 8](#)).



Sustainable Technology label – a unique offer

Our Sustainable Technology label is used to designate devices that have followed an eco-design approach to reduce their ecological footprint, comply with environmental and social legislations, and deliver environmental or social benefits. The label is applied to the most innovative responsible products. By the end of 2020, more than 250 of our products carried the Sustainable Technology label (a full list is available on www.st.com/responsible-products).

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

⁽²⁾ RoHS: Restriction of Hazardous Substances.

⁽³⁾ HSPM: Hazardous Substance Process Management.

⁽⁴⁾ SERENE-IoT (Secured & Energy Efficient Healthcare Solutions using IoT technologies) is a project from PENTA, the EUREKA cluster for Application and Technology Research in Europe on Nanoelectronics.

FOCUS



Our technologies offer responsible, innovative solutions

ST is accelerating society's transition to clean, energy-efficient systems through investments in wide bandgap technologies such as Silicon Carbide (SiC) and Gallium Nitride (GaN). SiC and GaN products can outperform conventional semiconductor devices in developing new equipment and infrastructure to address today's decarbonization priorities.

The benefits of wide bandgap technologies include:

- improved energy efficiency
- minimum application size and weight
- extended life span
- reduced cost of ownership

Efficiency and reduced impact are essential to enjoy a more sustainable world while maintaining the quality of our daily life.

SiC products improve performance in high-power applications, such as traction inverters, DC-DC converters, motor control for electric vehicles and motor drives, energy conversion and energy storage for industrial applications.

GaN products improve performance in high-frequency applications, such as on-board chargers, LiDAR and 48V hybrid solutions for electrified vehicles, and power supplies for personal electronics, such as laptops and smartphones, as well as industrial devices such as home appliances.

Customer Satisfaction



Industrial Summit, Shenzhen, China

Quality



Customers are among our main stakeholders and are an important part of our value proposition. It is therefore vital that we build strong and trusting relationships with them, take their needs into consideration and serve them effectively, whether in relation to our product offering, the quality and reliability of our products and services, or our approach to the environment, health and safety, and social responsibility.

Two key enablers of customer satisfaction are product quality and continuous dialog. [I 103-1 I](#)

Driving satisfaction through quality

The objective of our three-year quality strategy is to be our customers' most valued and trusted partner through excellent quality, reliability and responsiveness. We aim to achieve this through customer focus, results-driven improvement programs and a sustainable culture of quality excellence.

Strengthening our quality culture

Quality is the collective responsibility of all ST employees. To strengthen our quality culture, in 2020 we launched our STRIVE for Excellence program, where STRIVE stands for our values: Strength, Teamwork, Resilience, Innovation, Value and Expertise. The V of STRIVE, Value, means maximizing value for our customers in all our processes across the full product lifecycle. We held a Digital Quality Week around STRIVE for Excellence, including Company-wide webcasts from senior leaders.

To strengthen our focus on customer satisfaction, we also launched a new recognition scheme, with quality awards to recognize successes and significant improvements with customers.

Our approach to quality

These initiatives are part of our Company-wide quality program involving all ST organizations and encompassing all aspects of quality. The program leverages the quality organization and working model set up in 2019, with a cross-organizational Quality Steering Committee that drives our quality strategy.

Our quality and reliability focused approach to customers is also enabled by a framework that includes regular strategic customer review meetings (internal and external) and robust tracking of customer KPIs and scorecards.

**STRIVE
for Excellence
program**

IATF 16949 and ISO 9001 certified

>80%
of customers satisfied
with online support
service



This approach helps us build closer relationships with our customers, creating an environment for optimized exchange. As a result, we are better able to understand their needs and expectations and, through regular monitoring of performance and expectations, adjust and sustain our quality performance.

Management systems

Our quality approach is based on our Quality Management System (QMS), as documented in our Quality Manual. The manual details how we implement the processes to guarantee that our products meet or exceed the highest standards and customer requirements. [I 103-2 I](#)

ST adheres to internationally recognized quality management standards. We received our first Company-wide ISO TS 16949 certification in 2003 and it has been renewed every three years. Since 2018, ST has been certified IATF 16949:2016 and ISO 9001:2015, demonstrating our robust quality governance, effective QMS and quality compliance across the Company. [I 103-3 I](#)

Quality performance

Our overall quality performance improved significantly again in 2020 with positive results on our customer scorecards as well as our quality KPIs, an acknowledgment of our efforts and commitment to continuous improvement.

Quality

	2016	2017	2018	2019	2020
Customer complaints	100	84	79	84	66
Cycle time to process failure analysis	100	97	88	98	102
Customer quality returns	100	40	35	105	45

Baseline 100 in 2016.

Maintaining a continuous customer dialog

Customer satisfaction is enabled by a continuous, wide-ranging dialog with customers at all levels.

Support channels

There are many support channels available to our customers through which they can obtain information about our products or find an answer to any questions they may have about our business.

- Our website (www.st.com), which 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 even purchase samples and tools via our website.
- ST online communities, dedicated to product groups or applications, which allow people to share knowledge and post questions to other members of the ST community.
- Phone and online support that enables customers to contact us with their requests or concerns. More than 80% of our customers are satisfied with our online support service.
- In-person and online seminars and training courses on our products, either hosted directly by ST or in partnership with third parties.
- Regular newsletters to inform our customers and partners about new products and upcoming events, including seminars, conferences, webinars, and online courses.
- Social media posts, YouTube videos, and blog posts.

 **Brian Mielewski**
Vice President of Quality, Region Americas

The COVID-19 crisis came upon us quickly, so we rapidly implemented our Business Continuity Plan to support our customers and continue to execute our R&D programs. Our customers immediately understood that we were well prepared due to our actions. During this period, we managed to keep all our manufacturing sites operational while maintaining the most stringent health and safety measures to protect our personnel. I believe our customers were very satisfied with our response to the challenges created by the pandemic, further strengthening their trust in ST."

Audit results shared with customers

FOCUS



Addressing customers' concerns about COVID-19

From the outset of the COVID-19 pandemic, it was clear that our customers had wide-ranging concerns about the potential impacts. They were apprehensive about the effect the pandemic could have on our business continuity. They were worried about possible delays in product deliveries due to supply chain issues with raw materials, production at our factories, and the logistics of shipping and delivering our products to their facilities. They also voiced concerns about any potential impact on the health and safety of our workers. As part of ST's Business Continuity Plan, we formed a dedicated communications team to collate and respond to customer concerns. All enquiries were organized and categorized, enabling our communications team to systematically prepare and distribute, in a timely manner, appropriate responses to every customer.

Close relationships at all levels

Dialog with larger customers is managed by dedicated cross-functional teams, composed of representatives from Sales, Logistics, Technical Support, and Quality. Through daily interaction with their customer, the entire team forms a deep understanding of the customer, their internal processes, and preferences. They also form relationships with customer personnel that enable a high level of trust and satisfaction. Relationships are fostered between ST executives and key customer executives, helping to further strengthen trust and satisfaction at the highest levels.

Dialog with smaller customers is managed by the ST Distribution Partner Network. The Partner Network is composed of a large group of ST personnel and distribution partners covering all the regions of the globe. Network personnel regularly visit customers to assess opportunities, present our product portfolio, and assist with design-in activity.

A continuous dialog is maintained to understand, assess, and address customer needs and concerns.

Sustainability – a growing expectation

Driven by better awareness and regulatory changes, customers are increasingly interested in our sustainable practices in our operations and our supply chain. Over the last few years, we have adopted a proactive and transparent approach to satisfying customers' sustainability expectations. As a member of the Responsible Business Alliance (RBA), all our manufacturing and major sites undertake an annual self-assessment questionnaire on labor and human rights, safety, ethics and environmental topics. All our manufacturing sites are subject to RBA third-party audits (see Labor and Human Rights on [page 44](#)). We share the results of these questionnaires, audits and corrective actions with our customers through the RBA platform or via our online support. Transparency and traceability about the positive environmental and social impacts of the products they buy is fundamental for our customers. This includes information on product compliance, material declaration, working conditions, environmental impact and the sourcing of materials. We publish and provide relevant information for customers on our website www.st.com or through [online support](#).

Business indicators

This section includes indicators and GRI Standard disclosures.

ST key figures | 102-7 | 201-1 |

	2016	2017	2018	2019	2020
Net revenues (US\$m)	6,973	8,347	9,664	9,556	10,219
Gross profit (US\$m)	2,459	3,272	3,861	3,696	3,789
Gross profit as a percentage of sales (%)	35.3%	39.2%	40.0%	38.7%	37.1%
Net earnings (US\$m)	165	802	1,287	1,032	1,106
Diluted earnings per share (US\$)	0.19	0.89	1.41	1.14	1.20
Market share versus TAM (%) (Total Available Market)	2.06%	2.02%	2.06%	2.32%	2.32%

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

	2016	2017	2018	2019	2020
Operating income	227	1,005	1,400	1,203	1,323
Net operating cash flow	316	308	533	497	627

Net revenues by location of order shipment⁽¹⁾ (%)

| 102-6 | 102-7 | 201-1 |

	2016	2017	2018	2019	2020 ⁽²⁾
Americas	15	13	13	14	11
Asia Pacific	58	61	61	62	69
EMEA	27	26	26	24	19

⁽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⁾ (%) | 102-6 |

	2016	2017	2018	2019	2020
OEM	67	66	65	70	73
Distribution	33	34	35	30	27

⁽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 |

	2016	2017	2018	2019	2020
Dividends	251	214	216	214	168

Taxes (US\$m) | 201-1 |

	2016	2017	2018	2019	2020
Tax expense for the year	74	86	95	165	174

ST new patents filed | SDG 9.5

	2016	2017	2018	2019	2020
Patents filed	492	509	549	588	557

Research partnerships | SDG 9.5

	2016	2017	2018	2019	2020
Contracts with higher education institutions or research labs	228	234	160	138	143

On-time delivery

	2016	2017	2018	2019	2020
Delivery date in line with customer request	100	85	88	105	79
Delivery date in line with ST commitment	100	89	92	103	90

Baseline 100 in 2016.

ST site certifications

ST is ISO 9001 certified Company-wide

	OHSAS 18001/ ISO45001 Health & Safety	ISO 14001 Environment	EMAS Environment performance disclosure	ISO 50001 Energy	ISO 22301 Business Continuity	IATF 16949
Main manufacturing sites						
Agrate	✓	✓	✓	✓	✓	✓
Ang Mo Kio	✓	✓	✓	✓	✓	✓
Bouskoura	✓	✓	✓	✗	✓	✓
Calamba	✓	✓	✓	✓	✓	✓
Catania	✓	✓	✓	✓	✓	✓
Crolles	✓	✓	✓	✓	✓	✓
Kirkop	✓	✓	✓	✗	✓	✓
Muar	✓	✓	✓	✓	✓	✓
Rousset	✓	✓	✓	✓	✓	✓
Shenzhen	✓	✓	✗	✓	✓	✓
Tours	✓	✓	✓	✓	✓	✓
Other sites						
Castelletto	✓	✓	✓	✗	✓	✓
Geneva	✗	✗	✗	✗	✓	✓
Greater Noida	✓	✗	✗	✗	✓	✓
Grenoble	✓	✓	✓	✗	✓	✓
Le Mans	✗	✗	✗	✓	✗	✓
Loyang	✓	✓	✗	✗	✓	✓
Marcianise	✓	✓	✗	✗	✗	✓
Napoli	✓	✗	✗	✗	✗	✓
Rennes ⁽¹⁾	✓	✓	✗	✗	✓	✗
Toa Payoh	✓	✓	✓	✓	✓	✓
Total	19	17	13	11	18	20

⁽¹⁾ Rennes Space & High-Reliability Products.

ECOPACK® lead-free labelling (%) | 417-1 |

	2016	2017	2018	2019	2020
Non ECOPACK®	0.3	0.2	0.2	0.2	0.1
ECOPACK® 1: Compliant with the RoHS/ELV directives, second level interconnect lead-free ⁽¹⁾	7.8	6.7	6.8	6.3	4.2
ECOPACK® 2: as ECOPACK® 1, plus free of brominated, chlorinated and antimony oxide flame retardants	84.0	86.0	85.1	85.2	88.4
ECOPACK® 3: as ECOPACK® 2, plus free of halogens with no RoHS exemptions	7.9	7.1	8.0	8.3	7.3

⁽¹⁾ With adapted reliability for soldering at higher temperature, as some exemptions are necessary mainly for the automotive market regarding the RoHS Directive.

Putting people first



0.14
recordable
injury
case rate



>3,500
employees trained
on diversity and
inclusion



85%
of employees
are proud to
work for ST



Calamba team — Winner of the 2020 STAR CEO award

Health and Safety

Health & Safety

OUR AMBITION
Be a safe workplace with zero injuries, zero occupational diseases and ensure healthy lives and well-being for all.

2025 GOAL
<0.15%
recordable cases (RC)*
for employees and contractors

2020
RC for employees 0.15%
RC for contractors will be available next year.

**Proactive
measures to protect
our employees**

We are committed to protecting the health and safety of employees and subcontractors by providing a safe working environment, preventing work injuries and illnesses, and providing access to healthcare. We were even more vigilant in 2020. Since the beginning of the COVID-19 pandemic, ST has had two priorities:

- the protection and safety of our employees and our subcontractors by maximizing all preventive measures that can be put in place
- the continuity of our activities to fulfill our commitments

Despite the challenges we have faced around the world, we have shown great resilience, whether to strengthen our culture of health and safety alongside our employees, or to promote well-being everywhere and for everyone and ensure the continuity of our business and the performance of our Company. [I 103-1 I](#)

Health

COVID-19: proactive health risk management

At the beginning of 2020, before the pandemic was officially declared by the World Health Organization, we activated a Corporate Crisis Team (CCT) to implement immediate measures to protect our employees, ensure the continuity of our operations, and limit the spread of the virus at our sites. As the virus began to spread globally, we set up regional and local crisis teams to adapt to local regulations and needs, and rapidly deployed the following measures across all our sites:

- regular and specific communication to all ST employees according to the alert levels of each site
- strict control of site entrances with a self-declaration and filtering process
- distribution of personal protective equipment: masks with clear instructions on how and when to wear, temperature checks and hand sanitizer everywhere and for all
- social distancing: protective measures in canteens, flow management in staircases, lifts and corridors, strict minimum distance to be respected everywhere and restrictions on the use of meeting and training rooms
- working from home for eligible employees (more than 15,000 employees worldwide) with a dedicated home office intranet page and 24/7 psychological support (see Focus)
- adapted measures to minimize potential COVID-19 transmission in some areas, such as cafeterias or air conditioning systems
- planning for 'back to normal' progressive measures driven by site managers and adaptable to the health situation of each country (planning was developed according to applicable regulations, including trade union agreements and site hosting capacity)

Our Calamba site (the Philippines) implemented specific measures and amenities: protective barriers in the canteen, food sanitary protocols, touchless thermal scanning, COVID-19 safety communication to employees' family members, and a campsite for volunteer employees who chose to stay 24/7 on site during the peak of the pandemic, when authorities restricted local movement (see quote).



Elvira Oclarino

Technician Specialist, Assembly Process Control, Calamba (the Philippines)

As one of the campers at ST Calamba (the Philippines), I believe the effort and the generosity of the Company was commendable in meeting the needs of volunteers and providing a comfortable, safe and convenient workplace during their stay inside the plant. As well as implementing stringent measures to protect employees against COVID-19, ST provided tents, hygiene kits, mattresses, bed linen, shower rooms, free wi-fi, free meals and a free laundry service. In addition, ST provided transportation for the other workers who were still able to commute. It was a truly safe and comfortable workplace."



24/7 Psychological support for employees

Employee well-being is a key focus at ST and promoting high-quality working conditions was even more important in 2020. At the onset of the global health crisis, we partnered with Eutelmed to provide all employees and their families around the world with 24/7 access to a dedicated, confidential support platform, including an online network of over 100 clinical psychologists, to provide psychological support and advice in coping with the pandemic. With more than 5,000 connections from ST employees and their families in 2020, Eutelmed organized awareness sessions on subjects such as stress, quality of sleep and anxiety, as well as online self-assessments to evaluate employees' feelings and moods. They also provided an assistance hotline and dedicated services such as training for managers or coaching to help them manage the constraints of working remotely.

Thinking beyond the pandemic, in December 2020 we extended the Eutelmed platform into a full employee assistance program named 'STCare', giving all our employees permanent access to immediate, anonymous and confidential care, 24/7. We believe that supporting our people and their families in any worrying or stressful situation is essential. STCare, with the support of Eutelmed, gives all ST employees a helping hand whenever they feel that difficulties at work or at home are affecting their well-being.

We also communicated these health and safety practices and risk management measures to the European Semiconductor Industry Association (ESIA), to share our practices with other members (see Our approach to the environment on [page 59](#)).

Thanks to all the measures taken, all ST manufacturing sites were operational in 2020, while also ensuring the safety of employees on site. | [103-21](#)

Safety

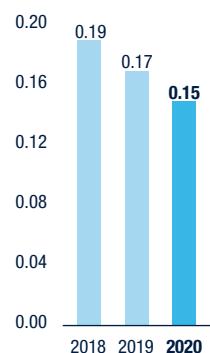
In 2020, we further improved our recordable case rate (injuries) reaching 0.14 (down 11% vs 2019) better than our target of 0.16. However, our severity rate increased due to several prolongations that accounted for 60% of days lost. 40% of these prolongation days concerned falls or slips.

Recordable cases rate – injuries⁽¹⁾
| [403-9](#) |



⁽¹⁾ Per 100 employees per year as defined by OSHA-US regulation.

Recordable cases rate – injuries and illnesses⁽¹⁾
| [403-9](#) | [403-10](#) |



⁽¹⁾ Per 100 employees per year as defined by OSHA-US regulation.

Severity rate⁽¹⁾



⁽¹⁾ Number of days lost per 100 employees per year as defined by OSHA-US regulation.

0.24

subcontractor
Lost Workday Case
incidence rate

We continue to align our safety programs with industry risks, with a priority on preventing employees' potential exposure to hazards such as chemicals (see Chemicals on page 70), fire, radiation and nanomaterials; and mechanical, handling and ergonomic risks.

Due to COVID-19 restrictions, we organized fewer field safety visits by managers (28,400 visits vs 31,400 in 2019) but we maintained our focus on safe behaviors and on preventing unsafe acts and conditions, in line with SDG target 8.8 on the promotion of a safe and secure working environment for employees.

For example, our Ang Mo Kio site (Singapore) published a video showing the right behaviors to adopt when moving from one place to another, when and where to use (or not) mobile devices, and the correct use of the handrail when using stairs. They also communicated about wearing proper footwear to prevent falls or slips and used visual aids such as posters to remind people about the golden rules of safety.

At our Crolles site (France), undertaking multiple building and retrofit projects in a short timeframe meant safety was vital. To ensure a safe and secure working environment, a dedicated working group was established to develop a robust management process. This included a safety prevention approach, training support and immediate actions to correct possible safety discrepancies.

Our Rousset site (France) created a 'Safety First' escape game for new employees, which involved finding hazards in an unsafe environment within a limited time.

Subcontractors

The Lost Workday Case (LWDC) incident rate for subcontractors was on target in 2020, reaching 0.24.

In 2021, we will report all recordable injury cases and occupational diseases for our on-site subcontractors. We updated our internal reporting tool, 'Safetrack', to enable us to do this effectively. Thanks to this new functionality, we can better monitor our progress towards our 2025 safety target for both employees and subcontractors. [I 103-3 I](#)

Lost Workday Case incidence rate (LWDC rate) – subcontractors [I 403-9 I](#)

	2016	2017 ⁽¹⁾	2018	2019	2020
Lost Workday Cases per 100 subcontractor employees	0.35	0.24	0.29	0.26	0.24

⁽¹⁾ Up until end 2016, we covered only independent subcontractors working on-site for more than 3 months. From 2017 onwards, we cover all independent subcontractors.

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:



SDG target 3.8 – Achieve universal health coverage, including access to quality essential healthcare services and access to safe, effective, quality, and affordable essential medicines and vaccines for all.

SDG target 8.8 – Protect labor rights and promote safe and secure working environments for all workers.



2020 OBJECTIVES	Status	Comments
Employee severity rate ≤2.0.	✗	3.1 Objective 2021: ≤2.0.
Subcontractors Lost WorkDay Case rate (LWDC) ≤0.24.	✓	0.24 Objective 2021: subcontractors recordable case rate (injuries) ≤0.24.
Recordable case rate (injuries) for employees ≤0.16.	✓	0.14 Objective 2021: ≤0.15.

Labor and Human Rights



Worker, ST Shenzhen, China

Labor & Human Rights

OUR AMBITION

Be recognized as a leader in labor and human rights and apply a zero tolerance approach to forced labor.

2025 GOAL

100%
of ST manufacturing sites
recognized by external
international bodies

2020

18%
2/11 sites with RBA Platinum recognition.

We are convinced that companies play a vital role in implementing and respecting labor and human rights. Our programs, therefore, aim to ensure all our employees are treated with respect and dignity. | [103-1](#)

The main management systems and programs we use to monitor, control and improve labor conditions in our operations are:

- a corporate Labor and Human Rights policy deployed throughout our operations (available on www.st.com)
- an internal audit program on labor and human rights, targeting our 11 main manufacturing sites
- Responsible Business Alliance (RBA) human rights self-assessments at all major ST sites, and third-party RBA audits at all our manufacturing sites
- multiple initiatives to uphold human rights and mitigate risks in regions where we operate (see Focus)

Integrating human rights into our business

As a member of the RBA since 2005, we enforce the most advanced standards and have a comprehensive due diligence process that covers nine core principles.

Comprehensive due diligence process



Freely chosen employment



Prevention of underage labor and protection of young workers



Fair organization of working time



Fair wages and benefits



Fair treatment, anti-harassment



Non-discrimination



Freedom of association



Fair working conditions and employee well-being



Privacy of personal information



Sara Tedeschi

Sustainability Champion, Senior Specialist, ADG Quality and Reliability, Catania (Italy)

To continue our socially responsible journey, despite the pandemic, we used the opportunity of the labor and human rights internal audit program to capitalize on our strengths and transparently share our weaknesses in order to improve our performance. The feedback and results we received will help us to continue moving forward in line with our new slogan: #noinoncifermiamo, or #nothingcanstopus!"

81%
of employees covered
by audits

Labor and human
rights risk
identification
and mitigation

Our approach

We apply a process based on RBA methodology to continually improve our management system.

- We commit to the RBA code of conduct and integrate its principles into our internal policies.
- We conduct regular risk assessments.
 - Our external risk assessment is based on inherent risks of activity and location.
 - The RBA self-assessment questionnaires, which our sites complete each year, cover 89% of our employees. In 2020, our sites scored from 90 to 96/100, which is better than the industry average of 88/100.
- We run audit programs covering our 11 main manufacturing sites (81% of our employees).
 - Our internal audits monitor compliance with our Labor and Human Rights policy and are followed up with timely and adequate corrective actions.
 - RBA (VAP 6.0) third-party audits are conducted on each manufacturing site every two years with appropriate audit follow-up, including corrective action plans and closure audits. Our average RBA audit score is above the industry average: +44 points in initial audits and +23 points in closure audits.

Our risks and actions

In 2020, the main risks we identified and the preventive and corrective actions we implemented are described in the table below. | 103-2 |

Description	Actions implemented
Control and monitoring of working hours (including rest days) during the COVID-19 pandemic	<ul style="list-style-type: none">• Reinforced monitoring of working hours and rest days. Recruitment and training of additional workers.
Supplier responsibility	<ul style="list-style-type: none">• Reduction and monitoring of working hours for security guards.
Management of student allowances	<ul style="list-style-type: none">• Training suppliers on the RBA code of conduct. (For further explanation, see Responsible Supply Chain on page 76.)• Preparation of detailed corporate guidelines for student allowances to be deployed in 2021.

Our main third-party audit results

In 2020, our Agrate (Italy) and Ang Mo Kio (Singapore) sites scored 194/200 and 187/200 respectively in their initial audits, well above the industry average of 142/200, highlighting the low level of risk. In an initial audit at Calamba (the Philippines), no priority or major non-conformances were identified, and the audit score was 184/200.

Regarding closure audits, our Tours and Rousset sites (France) were the best performers with full compliance, for which they received RBA platinum recognition. Our other sites Crolles (France) and Catania (Italy) received RBA silver and gold recognitions respectively, and improvement plans have been implemented to reinforce existing social management systems. | 103-3 |

RBA audit results above industry average



RBA audit results for ST operations in 2020 SDG 8.7

Number of audits: 9

Labor, Ethics and Management systems		Environment, Health and Safety	
Total of major non-conformances		Total of major non-conformances	
Working hours	3	Emergency preparedness	2
Supplier responsibility	2	Occupational safety	2

Machine safeguarding	1
Food, sanitation and housing	1

Figures from 2016 onwards can be found in the table on [page 56](#).

Monitoring our performance

Due to the COVID-19 pandemic, a significant number of third-party audits were postponed to the end of 2020 or beginning of 2021.

However, our internal audit program, related to labor and human rights, has been strengthened and standardized to help our sites improve their performance. All major sites will be audited at least every two or three years.

In 2020, we conducted four labor and human rights internal audits, all of them remotely. These audits highlighted any gaps at the sites, helped to identify areas that required improvement, and strengthened the local social responsibility culture. For 2021, we aim to audit all our other manufacturing sites.

In March 2020, we launched STCare (see Health and Safety on [page 41](#)), a new employee assistance program that aims to address psychosocial risks and improve well-being. All employees have direct access to the platform and can anonymously use the services offered, including a psychological assistance hotline, a self-assessment center, an awareness page, and e-consultations.

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:

SDG target 8.7 – Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking, and secure the prohibition and elimination of the worst forms of child labor.

SDG target 8.8 – Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.

SDG target 17.16 – Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.



2020 OBJECTIVES

	Status	Comments
100% of priority, major and minor non-conformities closed during the RBA closure audit.	✗	93% of findings closed (26/28). Objective maintained in 2021.
100% of all manufacturing sites audited every 2 years for compliance with the RBA standard.	✗	73%. 8/11 manufacturing sites audited. Objective maintained in 2021.

FOCUS



Supporting our employees during the pandemic

In the context of the pandemic, we stepped up our efforts to protect employees whose living conditions may have been affected by directives from local authorities. As such, we implemented many initiatives to support our most vulnerable employees, and we increased our focus on maintaining salaries, holidays and benefits.

Some of our sites went further and implemented additional exceptional measures. For example, at our Muar site (Malaysia), we granted salary advances to the most economically vulnerable categories of employees, in particular migrant workers, to anticipate their basic needs and enable them to better prepare for lockdown measures. We also made sure that similar protection measures were put in place by our direct suppliers in Malaysia, for whom we introduced a training program to increase awareness of our social standards.

Our Ang Mo Kio site (Singapore) supported migrant workers from Malaysia who decided to stay in Singapore when the border closed by providing free hotel accommodation, together with a cost of living allowance (\$S200) to cover the increased cost of living in Singapore. For Malaysian workers who couldn't cross the border to work, the site provided financial assistance of \$S350 per month.

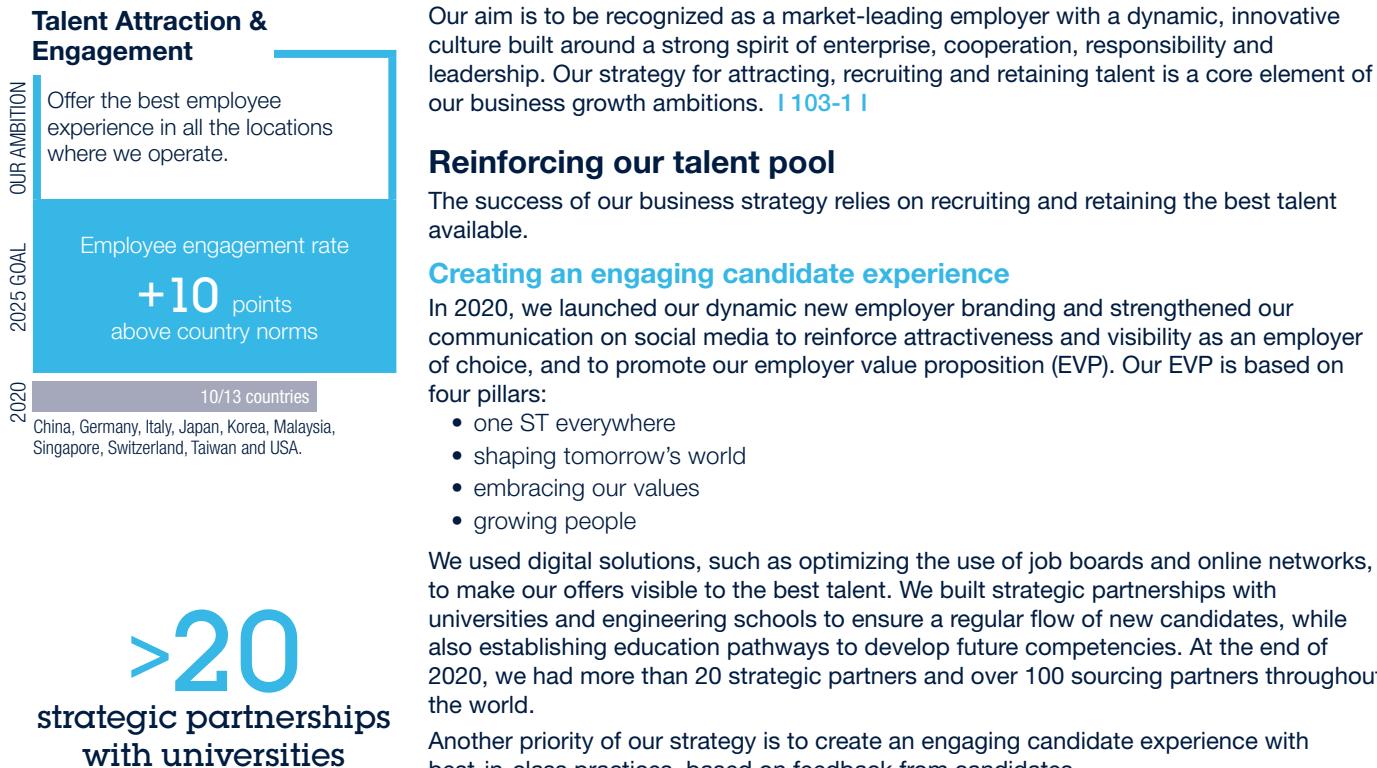
Talent Attraction and Engagement



Smart home
by Rita and her team

Our technology starts with you

Employer branding visual



Our aim is to be recognized as a market-leading employer with a dynamic, innovative culture built around a strong spirit of enterprise, cooperation, responsibility and leadership. Our strategy for attracting, recruiting and retaining talent is a core element of our business growth ambitions. [I 103-1 I](#)

Reinforcing our talent pool

The success of our business strategy relies on recruiting and retaining the best talent available.

Creating an engaging candidate experience

In 2020, we launched our dynamic new employer branding and strengthened our communication on social media to reinforce attractiveness and visibility as an employer of choice, and to promote our employer value proposition (EVP). Our EVP is based on four pillars:

- one ST everywhere
- shaping tomorrow's world
- embracing our values
- growing people

We used digital solutions, such as optimizing the use of job boards and online networks, to make our offers visible to the best talent. We built strategic partnerships with universities and engineering schools to ensure a regular flow of new candidates, while also establishing education pathways to develop future competencies. At the end of 2020, we had more than 20 strategic partners and over 100 sourcing partners throughout the world.

Another priority of our strategy is to create an engaging candidate experience with best-in-class practices, based on feedback from candidates.

In 2020, we hired more than 2,100 exempt¹ employees, covering replacements and new hires, and adapted our practices to a digital format, enabling us to continue to deliver a great hiring experience despite the COVID-19 pandemic. One example is the innovative digital onboarding at our Greater Noida site (India) (see Focus).



How ST India welcomed new hires during the lockdown

When India went into lockdown in March 2020, our local talent acquisition teams had to quickly adapt the recruitment process to create a 100% digital welcome program.

We had to find new solutions to provide a great onboarding experience to new hires. The challenge was to keep the human touch: the hiring managers shared a virtual coffee break with the newcomers, and we provided a welcome kit including digital posters on the Company's culture, work environment, ethics, and values. We also took care to dispatch laptops to them in advance.

"Although our digital process works very well, nothing can replace face-to-face integration. We need human contact, exchanges, smiles, moments of life together at ST! Yet, we've learned that some onboarding practices are more efficient digitally and must start before day one," says Parminder Singh Walia, head of the ST talent acquisition team in India.

ST recognized as a top employer in France and in Italy

81%
of employees
recommend ST as a
great place to work

Enhancing the employee experience

We aim to deliver the best employee experience. Our ambition is to offer a quality working life and employee well-being, including a safe, creative, collaborative, diverse and inclusive culture and environment.

The associated programs and measures we put in place allowed ST to be certified 'Top Employer 2021' in France, and ST Italy to be among the winners of 'Top Job – Best Employers 2021' and be ranked as one of the 10 most attractive companies in the electronics sector.

In 2020, we enhanced our agile and flexible working arrangements, maintaining full employment and working time for all our employees, either on site or at home. We communicated frequently with all our employees, and successfully rolled out digital business applications and knowledge sharing platforms to more than 15,000 employees working remotely.

Our 2020 employee engagement survey shows a very positive perception of our initiatives:

- 81% of employees recommend ST as a great place to work, 4 points up on 2019
- 89% of employees consider they received relevant information about the COVID-19 situation
- 81% of employees believe they had the required flexibility to do their job
- 82% of employees feel safe in their working environment

Employee survey – engagement rate (%)

	2016	2017 ⁽¹⁾	2018	2019	2020
Overall participation rate	82	NA	87	90	89
Individual engagement index	72	NA	77	79	82
Organizational agility index	63	NA	66	68	73
Goal alignment index	73	NA	77	80	82

⁽¹⁾No survey conducted in 2017.

Average of
44
hours of training
per person

Developing and supporting our talent pool

In our very high-tech and growing business context, strengthening and continuously developing all talents is crucial to our sustainable success.

In 2020, we continued to reinforce a culture of continuous feedback and pursued all our programs that support employee career development and help to maintain a high level of organizational performance. We particularly focused on a top management talent review to ensure proactive and effective succession plans were in place. **I 103-21**

The provision of learning opportunities was unavoidably reduced. We focused on mandatory courses such as health and safety, and courses covering strategic business needs and business continuity. Nevertheless, we still managed to deliver an average of 44 hours of learning per person in 2020, compared to 50 hours in 2019.

In this exceptional year, we made available a set of tailor-made initiatives under a new program called 'Practice Remotely Our Unique Determination', or PROUD.

One of these initiatives was a webinar called 'Communicative Leaders: framing the future'. It provided site directors, managers and executive management the opportunity to benefit from coaching on how to communicate a vision for the future using digital communication channels. More than 190 leaders participated in the virtual sessions in less than six weeks.



Yves Moulart

Director, Development & Innovation, SMD Zaventem (Belgium)

At ST Zaventem, a small site of engineers skilled in secure embedded software and cryptography, we like to regularly keep in touch with colleagues located at other sites. Even during the pandemic, thanks to the collaborative tools that were made available, especially the Teams video calls, the ‘coffee break’ sessions and the ‘Framing the future’ training, we managed to maintain – and even improve – our engagement and quality contacts with local and remote teams.”

>300
online coaching
coffee breaks

85%
of employees are
proud to work for ST



We also set up two daily one-hour coaching ‘coffee breaks’, led by an internal coach, to explore issues around managing people remotely, including teamworking, loneliness and productivity. By the end of 2020, we had run 272 individual coffee breaks and 32 team coffee breaks. We received very positive feedback from people who took part in these sessions (see quote).

We also diversified our learning offer with webinars and short e-learning sessions to help managers manage their teams remotely.

We redesigned long-standing classroom training to be delivered live online, including four of the six modules of our ‘Leadership Augmented’ program (Leadership in Practice, Communicative Leaders, Leading Innovation and Leading Change).

In addition to individual coaching and coffee breaks, the Corporate Coaching organization complemented its offer with a new team coaching program called ‘Team-up’, also available remotely. It aims to release the full potential of individuals to energize and strengthen teams and boost empowerment and effectiveness.

Getting the best from all our people

Getting the best from our people is essential to anticipate evolving customer needs, meet new market demands and successfully face business challenges.

Sustaining a high level of engagement

Employee engagement is a critical driver of organizational performance to achieve our business objectives.

The 2020 engagement survey again focused on individual engagement, goal alignment and organizational agility, but also included additional questions on how employees perceived the way ST has managed the COVID-19 pandemic, as well as open questions on overall employee experience.

The participation rate was 89%, one point below the 2019 survey.

The overall engagement index stood at 82%, three points higher than 2019 and 12 points above the global industry norm².

85% of employees said that they were proud to work for ST, which is two points above 2019 and 19 points above the global norm². | 103-3 |

Recognition

Our Corporate recognition scheme – the ‘STAR Awards’ – continued as usual, despite the pandemic. We successfully organized the corporate ceremony in a digital format, allowing us to recognize more than 1,400 employees from 68 sites. After this event, the celebrations continued as each ST site found innovative ways to applaud all the winners locally.

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:

SDG target 4.3 – Ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.

⁽¹⁾ Employees who hold positions normally requiring graduate or post-graduate education and who are not eligible for overtime compensation.

⁽²⁾ Electronics Equipment/Instrument Manufacturing norm.

Diversity and Inclusion



Unconscious bias workshop, ST Catania, Italy

Diversity & Inclusion

OUR AMBITION

Achieve full gender equality and be a leader in cultural and disability inclusion.

2025 GOAL

>20%

women in all management levels

2020

Experienced	19%
Senior	13%
Executive	10%

As a global company present in more than 35 countries, we offer a diverse working environment with 46,000 people and more than 100 nationalities working together as one team.

We firmly believe the diversity and inclusiveness of our culture enhances our innovation, engagement, attractiveness and agility, strengthening our performance and adding value to our business. | 103-1 |

Developing an inclusive culture

Our aim is to overcome stereotypes by continuously reinforcing an inclusive mindset that recognizes the value and richness of a diverse workforce.

To help us achieve this, we provide diversity and inclusion training for ST employees. By the end of 2020, more than 3,500 managers and human resources (HR) leaders had taken our Diversity and Inclusion awareness e-learning. | 103-2 | 103-3 |

We also delivered 45 unconscious bias workshops for more than 500 ST employees from all regions where we operate. Due to the challenges of the COVID-19 pandemic, we revised the workshops to be delivered remotely, supported by a team of more than 40 internal trainers to accelerate deployment. During these workshops, participants experience how their own unconscious bias and micro-behaviors can impact other people and learn how to be more attentive and mindful when interacting with others.



LC Koh

Process Engineering Manager, Ang Mo Kio (Singapore)

We often find ourselves multi-tasking or working under time pressures in today's fast-paced environment. This can sometimes activate unconscious attitudes and beliefs that need to be overcome as we strive towards respect, engagement, and productivity in the workplace. The unconscious bias workshop helps us to refocus on self-awareness, reminding us to carefully consider every aspect of our decision-making and, most importantly, our interactions with people."

FOCUS



Going beyond stereotypes to inspire technical careers

In mid 2020, ST France signed a partnership with 'Elles Bougent', a French non-profit organization created in 2005 to tackle the lack of girls in science and engineering in higher education. Its goal is to promote exciting scientific and technical jobs to girls by sharing the experiences of female engineers working in different industries.

We organized a number of online sessions across all our French sites to introduce the organization and its aims. Subsequently, 67 female ST employees volunteered to become ambassadors for the organization.

When participating in Elles Bougent events, such as job fairs, innovation contests, site visits, rallies, conferences, and school visits, the ambassadors' role is to share their experiences, demonstrate their passion for microelectronics, encourage young girls to consider STEM subjects in their studies, and help them to learn more about the exciting career opportunities in science and engineering.

45
unconscious bias
workshops

34%
of women in our
workforce

Striving for a diverse workforce

Our ambition is to recruit and retain a diverse workforce, particularly in terms of gender, culture, age and disability.

Diversity is an important message of our employer value proposition. It is prominent in all our employer branding campaigns and is a tracked indicator in all our recruitment worldwide.

Increasing the number of women at all management levels

At the end of 2020, women represented 34% of our global workforce, 24% of our exempts¹ and 18% of our technical jobs.

During the year, 27% of the exempts we hired were women, two percentage points above 2019 but below our target of 30%.

To address the shortage of women in technical functions and encourage girls to choose technical studies at an early stage of their education, we continued our STEM program launched in 2018 (see Community and Education on [page 80](#)). We also participated in dedicated programs for girls, such as 'Elles Bougent' in France (see Focus).

Our goal for 2025 is to increase the percentage of women at all management levels to 20%. As shown by the data in the table below, we are making progress, but we are still far from the target for senior and executive management.

Women in management | 405-1 | SDG 5.5

	2016	2017	2018	2019	2020
Women in experienced management ⁽¹⁾ (%)	16%	16%	16%	18%	19%
Women in senior management ⁽²⁾ (%)	11%	12%	12%	13%	13%
Women in executive management ⁽³⁾ (%)	9%	9%	9%	9%	10%
Number of women on the Board	3	3	3	4	4

⁽¹⁾ Job grade 15 to 16. ⁽²⁾ Job grade 17 to 18. ⁽³⁾ Job grade 19 and above.

Studies show that, generally speaking women are less likely to be promoted than men. Therefore, to achieve our 2025 goal and accelerate the progression of women in management at ST, we introduced specific objectives for the percentage of women nominated for promotion: 30% of women candidates for experienced and senior management and 20% for executive management and directors. In 2020, we were very close to the target for senior management and directors with 19%, but we missed the target for middle management with 24%.

Although these figures are an improvement, they are not sufficient for us to stay on track for our 2025 goal. To accelerate our progress, therefore, we organized a brainstorming session at the end of 2020 to collect ideas from over 100 HR leaders. The results will help us adapt our strategy and programs to ensure we achieve our long-term goals.

Attracting young talent

Our workforce is highly skilled and experienced, with staff turnover in our engineering and management population of just 4%. To continue to build our capacity for long-term success, however, we also need to attract young talent.

Our objective is to recruit more than 60% of new non-manufacturing employees with less than five years' experience. In 2020, we achieved 53%, six percentage points above 2019, but three below 2018.

In line with this objective, we revised our talent acquisition strategy to reinforce our external image and better attract younger candidates (see Talent Attraction and Engagement on [page 47](#)).

2%
disabled employees
worldwide



88/100
in French Gender
Equality Index



Enhancing hiring and inclusion of disabled people

We increased our employment of disabled people by 11% in 2020, reaching 2% worldwide. In France, thanks to longstanding, innovative and dynamic disability inclusion programs, such as our 'Adapted Training for Trades Apprenticeship' program (FIAM), the percentage of workers with disabilities increased from 1.2% in 2006 to 5.4% in 2020².

In Italy, where the percentage of workers with disabilities we employ is 2.6%, we continued to integrate workers with disabilities through programs such as Isola Formativa³ and partnerships with associations providing cleaning and gardening services, despite the pandemic. These initiatives created opportunities for an additional 13 workers with disabilities to be employed at our Italian sites in 2020.

Supporting women's career development

Strengthening the role of women in building ST's future is another of our priorities.

Women in Leadership

Our 'Women in Leadership' (WIL) program, targeted at junior and middle management, aims to prepare the next generation of female leaders. Launched in 2015, it has already trained over 300 women.

Extended in 2019 into a full career path, it also includes coaching, mentoring and co-development sessions for women. To support this, we aimed to dedicate 30% of coaching to women. We exceeded this target, achieving 37%. In 2021, we will increase the target to 40%.

In 2020, we went a step further by adding an advanced module for senior managers and directors to help them increase their self-confidence and become more visible and recognized within ST. It is a five-step blended learning program, including individual coaching, self-awareness, a two-day workshop and a personal development plan. A pilot session was successfully run in January 2021 and three sessions are planned by the end of 2021.

Local initiatives are also in place to reinforce women's soft skills and support their further growth. One example is a seven-module course in Italy called 'Lavorare al femminile' ('Working from a female perspective'), targeting women in managerial roles. In 2020, 92 women registered for this program.

Gender equality

We are committed to providing equal opportunities and equal pay, regardless of gender. In 2020, ST France scored 88/100 in the Gender Equality Index introduced in 2019 by the French government, one point above our 2019 score.

The index, covering salaries and promotion rates, was extended to other European sites in 2020. The worldwide roll-out will be completed in 2021 and we will develop an action plan to address any gaps identified.

At the end of 2020, we launched a worldwide survey of social benefits to get an exhaustive view of practices in the different countries where we operate. The aim is to help us define corporate policies that foster a work-life balance and support a diverse workforce.

ST is included in the 2021 Bloomberg Gender Equality Index, which recognizes companies committed to gender equality in the workforce and transparency in gender reporting. It rewards our 2020 performance as well as the success of our ongoing programs in this area.

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:

SDG target 5.5 – Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.

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

⁽¹⁾ Employees who hold positions normally requiring graduate or post-graduate education and who are not eligible for overtime compensation.

⁽²⁾ This figure may be subject to change, as it is based on the DOETH (Mandatory Declaration of Employment of Disabled Workers) calculation which is currently under review.

⁽³⁾ An initiative at our Agrate site (Italy) to employ people with disabilities and train them in professional bicycle maintenance techniques, equipping them with knowledge and skills to help them enter the world of work.



2020 OBJECTIVES

Recruit at least 30% women in exempt positions.

Status Comments



27%
Objective maintained in 2021.

People indicators

This section includes indicators and GRI Standard disclosures.

LEGEND

-	Data not available or not required.
NA	Not applicable.
Operator	Employees working in production operations.
Non-exempt	Employees who hold positions normally requiring higher education and who are eligible for overtime compensation.
Exempt	Employees who hold positions normally requiring graduate or post-graduate education and who are not eligible for overtime compensation.

Headcount evolution by region⁽¹⁾ | 102-8 |

	2016	2017	2018	2019	2020
Americas	741	743	744	761	766
Female	185	190	183	192	188
Male	556	553	561	569	578
Asia Pacific	17,518	18,820	18,828	18,398	18,276
Female	7,472	7,947	7,848	7,484	7,432
Male	10,046	10,873	10,980	10,914	10,844
Europe	20,497	21,266	21,464	21,633	22,594
Female	4,950	5,188	5,296	5,320	5,616
Male	15,547	16,078	16,168	16,313	16,978
Mediterranean	4,724	4,638	4,917	4,762	4,380
Female	2,614	2,491	2,741	2,667	2,396
Male	2,110	2,147	2,176	2,095	1,984
Total	43,480	45,467	45,953	45,554	46,016
Female	15,221	15,816	16,068	15,663	15,632
Male	28,259	29,651	29,885	29,891	30,384

⁽¹⁾ Includes direct and indirect workers.

Employees by gender and by category | 405-1 |

	2016	2017	2018	2019	2020
Number of operators				15,794	15,894
Female (%)	56%	55%	55%	56%	54%
Male (%)	44%	45%	45%	44%	46%
Number of non-exempts				10,024	9,598
Female (%)	23%	23%	22%	22%	22%
Male (%)	77%	77%	78%	78%	78%
Number of exempts				19,736	20,524
Female (%)	22%	22%	23%	23%	24%
Male (%)	78%	78%	77%	77%	76%

External hires in manufacturing (%)

	2016	2017	2018	2019	2020
Jobs filled externally vs overall jobs filled	97	97	98	96	97

Hires by job type | 401-1 |

	2016	2017	2018	2019	2020
Operator	7,904	10,769	11,379	6,687	6,345
Female	3,463	3,984	3,938	2,114	1,870
Male	4,441	6,785	7,441	4,573	4,475
Non-exempt	2,192	2,503	2,760	3,033	2,473
Female	437	515	557	635	523
Male	1,755	1,988	2,203	2,398	1,950
Exempt	1,328	1,797	2,385	2,603	2,121
Female	388	445	733	713	573
Male	940	1,352	1,652	1,890	1,548
Total	11,424	15,069	16,524	12,323	10,939
Female	4,288	4,944	5,228	3,462	2,966
Male	7,136	10,125	11,296	8,861	7,973

Newcomers induction program (%)

	2016	2017	2018	2019	2020
Newcomers who participated in a formal induction session (e.g. newcomers seminar) during their first year of employment	85	78	72	71	72

Workforce by employment type (% of workers) | 102-8 |

	2016	2017	2018	2019	2020
Full-time contract	97	97	97	97	97
Female	94	94	94	94	94
Male	99	99	99	99	99
Part-time contract	3	3	3	3	3
Female	6	6	6	6	6
Male	1	1	1	1	1

Workforce by employment contract (% of workers) | 102-8 |

	2016	2017	2018	2019	2020
Permanent contract	96	95	95	97	97
Female	95	94	94	96	96
Male	97	96	96	98	97
Temporary contract ⁽¹⁾	4	5	5	3	3
Female	5	6	6	4	4
Male	3	4	4	2	3

⁽¹⁾ Includes direct and indirect workers.

Workforce by employment contract by region (% of workers) | 102-8 |

	2017	2018	2019	2020
Permanent contract				
Americas	99.2	99.6	99.3	99.7
Asia Pacific	99.6	98.8	99.4	98.8
Europe	93.8	94.7	97.1	95.8
Mediterranean	84.7	82.2	89.2	92.6
Temporary contract ⁽¹⁾				
Americas	0.8	0.4	0.7	0.3
Asia Pacific	0.4	1.2	0.6	1.2
Europe	6.2	5.3	2.9	4.2
Mediterranean	15.3	17.8	10.8	7.4

⁽¹⁾ Includes direct and indirect workers.

Workforce by employment relation (% of workers) | 102-8 |

	2017	2018	2019	2020
Direct relation ⁽¹⁾	98	97	99	98
Indirect relation ⁽²⁾	2	3	1	2

⁽¹⁾ Workers employed directly by ST.

⁽²⁾ Workers employed by a third-party, such as interim agencies.

Remuneration (%)

	2016	2017	2018	2019	2020
Employees below the ST minimum salary scale in their job grade (exempt)	17	14	14	13	13
Employees with individual salary increase	75	86	84	83	30

Benefits, bonus & Unvested Stock Awards | 201-1 |

	2016	2017	2018	2019	2020
Eligible (exempt >JG 11) employees receiving unvested stock awards (%)	27%	29%	29%	30%	27%
Number of employees rewarded	4,750	5,050	5,140	5,590	5,070

Number of nationalities in the headcount by region⁽¹⁾ | 405-1 |

	2016	2017	2018	2019	2020
Americas	21	20	21	21	21
Asia Pacific	35	34	35	34	35
Europe	80	83	87	87	87
Mediterranean	32	40	47	50	46
Total	-	97	105	105	103

⁽¹⁾ Expatriates and assignees are counted in host country.

Number of nationalities in corporate staff | 405-1 |

	2016	2017	2018	2019	2020
Different nationalities represented in the corporate staff	6	6	6	6	6

Employees by gender and by region (%) | 405-1 |

	2016	2017	2018	2019	2020
Americas	Male	75	74	75	75
	Female	25	26	25	25
Asia Pacific	Male	57	58	58	59
	Female	43	42	42	41
Europe	Male	76	76	75	75
	Female	24	24	25	25
Mediterranean	Male	45	46	44	44
	Female	55	54	56	56

Average⁽¹⁾ overall turnover rate⁽²⁾ by age group (%) | 401-1 |

	2016	2017	2018	2019	2020
Under 30 years old	62	60	56	49	40
30–50 years old	7	8	9	9	8
Over 50 years old	6	9	6	6	7

⁽¹⁾ Turnover rate calculated on average headcount in activity throughout the year.

⁽²⁾ Resignations, retirements and dismissals.

Average⁽¹⁾ turnover rate (%) | 401-1 |

	2016	2017	2018	2019	2020
Average voluntary turnover rate ⁽²⁾	16.8	18.5	18.3	16.1	12.6
Average overall turnover rate ⁽³⁾	19.2	20.5	20.1	17.7	14.0

⁽¹⁾ Turnover rate calculated on average headcount in activity throughout the year.

⁽²⁾ Resignations.

⁽³⁾ Resignations, retirements and dismissals.

Average⁽¹⁾ overall turnover rate⁽²⁾ by gender, by category and by region in 2020 (%) | 401-1 |

	Operator		Non-exempt		Exempt	
	Female	Male	Female	Male	Female	Male
Americas ⁽³⁾	NA	NA	42.1	146.0 ⁽⁴⁾	9.9	7.3
Asia Pacific	16.4	95.2	14.6	32.8	6.8	6.2
Europe	4.1	2.1	3.0	2.7	2.4	3.2
Mediterranean	11.2	18.5	9.1	6.3	7.3	7.4

⁽¹⁾ Turnover rate calculated on average headcount in activity throughout the year.

⁽²⁾ Resignations, retirements and dismissals.

⁽³⁾ The Company has no manufacturing sites in these regions.

⁽⁴⁾ Needs to be considered in a context of extremely low headcount.

Average employee age by category

	2016	2017	2018	2019	2020
Operator	34	34	34	35	36
Non-exempt	38	38	39	39	40
Exempt	43	44	44	44	44
Average employee age (years)	39	39	39	40	40

Employees by category and by age group in 2020⁽¹⁾ (%) | 405-1 |

	Under 30 years old	30–50 years old	Over 50 years old
	Operator	Non-exempt	Exempt
Operator	37	52	10
Non-exempt	23	61	16
Exempt	10	61	29

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

Promotion ratio female/male by category and by region in 2020 (%) | 405-1 |

 SDG 5.5

	Operator		Non-exempt		Exempt	
	Female	Male	Female	Male	Female	Male
Americas ⁽¹⁾	NA	NA	0	0	7	6
Asia Pacific	4	5	6	8	11	12
Europe	5	4	7	6	12	11
Mediterranean	0	1	2	1	17	10

⁽¹⁾ The Company has no manufacturing sites in these regions.

Disabled employees (%) | 405-1 |

	2016	2017	2018	2019	2020
Disabled people employed as % of total workforce	1.5	1.5	1.6	1.8	2.0

Career development (%)

	2016	2017	2018	2019	2020
Employees with a promotion in the year	8	9	11	10	8
Employees with a job function change in the year	4	3	2	2	2

Employee yearly Individual Performance Management (%)

| 404-3 |

	2016	2017	2018	2019	2020
	Operator	Female	Male	Female	Male
Operator	77	75	81	84	70
Female	73	70	72	77	54
Male	82	82	92	94	90
Non-exempt	84	81	91	90	92
Female	81	80	89	87	89
Male	85	82	92	92	93
Exempt	94	93	97	95	97
Female	92	91	96	95	96
Male	94	94	97	96	97
Total	86	90	89	90	85
Female	79	88	80	82	70
Male	89	91	95	95	97

Employees with a formal individual development plan⁽¹⁾ (%)

| 404-3 |

	2016	2017	2018	2019	2020
Non-exempt	38	31	39	47	50
Female	40	35	44	51	55
Male	37	29	36	45	48
Exempt	53	50	57	64	66
Female	55	52	60	66	68
Male	52	49	56	63	66

⁽¹⁾ Operators are managed through a different process.

ST population recognized through the technical ladder⁽¹⁾ (%)

	2016	2017	2018	2019	2020
Asia Pacific	3.0	3.3	3.7	3.5	3.5
Europe & Mediterranean	6.4	6.8	6.7	6.7	6.9
Worldwide	5.2	5.8	5.8	5.7	5.8

⁽¹⁾ The specified path starts from job grade 14.

Internal mobility for exempt positions (%)

	2016	2017	2018	2019	2020
Jobs filled internally	33	33	25	20	27

Average number of training hours per year⁽¹⁾ | 404-1 | SDG 4.3

	2016	2017	2018	2019	2020
Operator	66	66	60	65	64
Female	60	56	56	62	55
Male	73	75	64	68	72
Non-exempt	34	38	40	46	35
Female	30	29	30	40	27
Male	36	40	42	47	37
Exempt	27	28	30	33	29
Female	29	31	32	37	31
Male	26	27	29	32	28
Total	46	48	47	50	44
Female	50	48	48	53	44
Male	44	48	46	47	44
Total number of employees trained	42,989 ⁽²⁾				

⁽¹⁾ Based on the total headcount including turnover. Includes training on equipment and outside training.

⁽²⁾ Based on the total headcount on December 31, 2020, excluding turnover.

Employees enrolled in ST supported external education programs (%)

	2016	2017	2018	2019	2020
Operator	1.1	0.8	0.6	1.1	1.0
Non-exempt	1.2	2.2	1.9	2.1	2.0
Exempt	1.6	1.8	1.9	3.6	2.2

Formal recognition and suggestion scheme

	2016	2017	2018	2019	2020
Number of people recognized⁽¹⁾	17,952	17,110	18,879	20,837	23,892
Accepted suggestions which were implemented (%)	58%	54%	52%	30%	40%

⁽¹⁾ Can include more than one recognition per employee over the year.

Unplanned absenteeism (%)

	2016	2017	2018	2019	2020
Unplanned absenteeism	3.14	2.59	2.92	2.77	3.32
% by region					
Americas	0.11	0.17	0.24	0.03	0.01
Asia Pacific	3.04	1.99	2.82	2.83	2.62
Europe	3.16	2.90	2.84	2.89	3.68
Mediterranean	3.91	3.91	3.99	2.45	5.03
% by gender					
Female	2.75	3.40	3.54	3.19	3.87
Male	3.87	2.14	2.57	2.54	3.02

Collective bargaining | 102-41 |

	2016	2017	2018	2019	2020
Number of collective agreements signed in the year	52	49	55	30	62
People covered by collective bargaining agreements (%)	75%	74%	74%	78%	78%
People covered by representatives (%)	71%	71%	71%	71%	71%

Fair wages (%) | SDG 10.2

	2016	2017	2018	2019	2020
Employees paid above 105% of the legal or conventional minimum wage	90.8	89.2	90.8	93.2	90.1

Working time and overtime hours

	2016	2017	2018	2019	2020
Employees with regular worktime less than 48 hours per week (%)	86%	84%	85%	85%	85%
Average weekly overtime (hours per employee)	3.7	5.0	5.2	4.3	5.4

Average weekly working time, including overtime, in selected countries⁽¹⁾ (hours)

	2016	2017	2018	2019	2020
China	ST standard working time	40	40	40	40
	Overtime	6.3	8.2	9.0	8.9
France	ST standard working time⁽²⁾	38.5	38.5	38.5	38.5
	Overtime	0.1	0.1	0.2	0.1
Italy	ST standard working time	40	40	40	40
	Overtime	0.3	0.4	0.4	0.3
Malaysia	ST standard working time	48	48	48	48
	Overtime	11.4	12.0	12.2	11.7
Malta	ST standard working time	40	40	40	40
	Overtime	6.5	8.2	8.1	7.3
Morocco	ST standard working time	44	44	44	44
	Overtime	0.2	0.4	0.6	1.7
Singapore	ST standard working time	44	44	44	44
	Overtime	1.9	7.2	8.3	4.7
The Philippines	ST standard working time	48	48	48	48
	Overtime	5.1	7.9	7.0	0.9

⁽¹⁾ For non-exempts and operators.

⁽²⁾ French standard legal working time is 35 hours, but ST has a collective agreement for 38.5 hours.

ST sites subject to regular human rights SAQ & audits (RBA)

| 412-1 | SDG 8.8

Country	Major site ⁽¹⁾	% Workforce	Self-assessment	Audit
High Risk				
China	Shenzhen	9.6%	✓	✓
Malaysia	Muar	8.8%	✓	✓
Singapore	Ang Mo Kio	9.5%	✓	✓
The Philippines	Calamba	6.6%	✓	✓
Medium Risk				
Malta	Kirkop	3.6%	✓	✓
Morocco	Bouskoura	5.5%	✓	✓
Low Risk				
France	Crolles	9.1%	✓	✓
	Grenoble ⁽²⁾	4.1%	✓	✗
	Rousset	5.7%	✓	✓
	Tours	2.7%	✓	✓
India	Greater Noida ⁽²⁾	1.8%	✓	✗
Italy	Agrate	10.0%	✓	✓
	Castelletto ⁽²⁾	2.3%	✓	✗
	Catania	9.7%	✓	✓
	Marcianise	0.5%	✓	✗
Percentage coverage of total workforce		89%	89%	81%
Number of sites subject to regular human rights SAQ and audits		15	11	

⁽¹⁾ Sites with >700 employees and all manufacturing sites.

⁽²⁾ Design centers. Other sites are manufacturing.

RBA audit results for ST operations

SDG 8.7

		2016	2017	2018	2019	2020
	Number of audits	4	4	7	8	9
Priority non-conformances						
Labor, Ethics and Management Systems	Child labor avoidance (young workers)	1 ⁽¹⁾	0	0	0	0
	Major non-conformances					
	Working hours	2	1	4	1	3
	Wages and benefits	1	2	1	0	0
	Freely chosen employment	0	1	1	2	0
	Non-discrimination	0	0	0	1	0
	Supplier responsibility	1	0	1	1	2
Environment, Health and Safety	Training	0	0	1	0	0
	Audits and assessments	0	0	1	1	0
	Total of major/priority non-conformances	5	4	9	6	5
	Average major/priority NC/audit	1.3	1.0	1.3	0.8	0.6
	Major non-conformances					
	Hazardous substances	0	2	2	0	0
	Industrial hygiene	0	0	0	1	0
	Occupational injury and illness	0	0	3	1	0
	Emergency preparedness	0	1	3	2	2
	Storm water management	1	1	0	0	0

⁽¹⁾ 17-year-old workers working overtime in Shenzhen site (China).

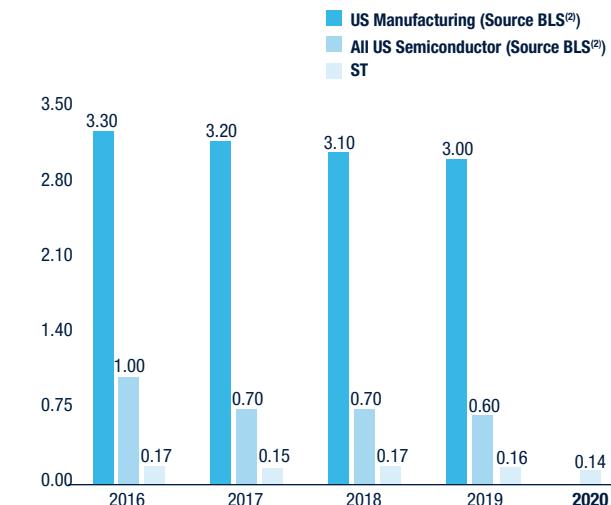
Employees with healthcare coverage provided by ST⁽¹⁾ (%)

SDG 3.8

	2018	2019	2020
Work-related health issues	78	79	88
Personal health issues	89	89	98
Direct family members health issues	72	68	83

⁽¹⁾ In addition to national healthcare schemes.

Recordable case rate benchmarks⁽¹⁾



⁽¹⁾ Including injuries only. 2020 benchmark data not available at time of publishing.

⁽²⁾ Bureau of Labor Statistics (United States Department of Labor).

Recordable case rate⁽¹⁾ by gender and by region

SDG 8.8

	2016	2017	2018	2019	2020
Gender					
Female	0.23	0.23	0.18	0.21	0.15
Male	0.14	0.10	0.16	0.13	0.13
Region					
Americas	0.00	0.00	0.00	0.00	0.00
Asia Pacific	0.14	0.16	0.11	0.11	0.12
Europe & Mediterranean	0.18	0.14	0.23	0.21	0.16

⁽¹⁾ Work-related injuries per 100 employees per year as defined by OSHA-US regulation.

Recordable case rate⁽¹⁾ – on-site industrial/domestic⁽²⁾

SDG 8.8

	2016	2017	2018	2019	2020
Recordable case industrial rate					
Recordable case industrial rate	0.11	0.07	0.13	0.09	0.07
Recordable case domestic rate	0.06	0.08	0.04	0.07	0.07

⁽¹⁾ Work-related injuries per 100 employees per year as defined by OSHA-US regulation.

⁽²⁾ Industrial recordable cases are directly linked with industrial activity. Domestic recordable cases are on-site cases such as fall or slip on stairs or struck by or against door/chair/building and structures etc.

Recordable cases by type of event, accident or exposure (%)

SDG 8.8

	2016	2017	2018	2019	2020
Fall or slip					
Fall or slip	37	48	30	45	47
Struck by or against					
Struck by or against	38	27	35	32	24
Overexertion					
Overexertion	4	4	3	1	3
Caught in, under or between					
Caught in, under or between	5	8	10	7	8
Contact with chemicals					
Contact with chemicals	8	2	4	1	8
Bodily reaction from slip or motion					
Bodily reaction from slip or motion	4	2	9	6	6
Others					
Others	4	9	9	8	4

Severity rate⁽¹⁾ by gender and by region

	2016	2017	2018	2019	2020
Gender					
Female	4.2	2.4	2.1	3.3	2.8
Male	2.1	1.9	1.6	2.0	3.2
Region					
Americas	0.0	0.0	0.0	0.0	0.0
Asia Pacific	0.9	0.9	0.4	0.7	1.3
Europe & Mediterranean	4.1	3.1	3.1	4.1	4.7

⁽¹⁾ Number of days lost per 100 employees per year as defined by OSHA-US regulation.

Occupational diseases rate⁽¹⁾ by gender and by region | 403-10 |

	2016	2017	2018	2019	2020
Occupational diseases rate	0.05	0.01	0.02	0.01	0.01
Gender					
Female	0.10	0.03	0.06	0.03	0.07
Male	0.02	0.00	0.00	0.00	0.07
Region					
Americas	0.12	0.13	0.00	0.00	0.00
Asia Pacific	0.00	0.00	0.00	0.00	0.00
Europe & Mediterranean	0.09	0.03	0.04	0.02	0.01

⁽¹⁾ Work-related illnesses per 100 employees per year as defined by OSHA-US regulation.

Occupational diseases severity rate⁽¹⁾ by gender and by region

	2016	2017	2018	2019	2020
Occupational diseases severity rate	2.94	1.05	1.92	0.93	0.72
Gender					
Female	4.42	2.70	5.50	2.70	0.13
Male	2.13	0.00	0.00	0.00	1.00
Region					
Americas	0.84	0.65	0.00	0.00	0.00
Asia Pacific	0.00	0.00	0.00	0.00	0.00
Europe & Mediterranean	5.70	2.00	3.70	1.78	1.35

⁽¹⁾ Number of days lost per 100 employees per year as defined by OSHA-US regulation.

Lost Workday incidence rate – subcontractors | 403-9 |

	2016	2017 ⁽¹⁾	2018	2019	2020
Lost workdays per 100 subcontractor employees	6.6	5.1	5.2	4.1	5.3

⁽¹⁾ Up until end 2016, we covered only independent subcontractors working on-site for more than 3 months. From 2017 onwards, we cover all independent subcontractors.

Lost Workday incidence rate⁽¹⁾ – subcontractors

by region | 403-9 |

	2016	2017 ⁽²⁾	2018	2019	2020
Americas	0.00	0.00	0.00	0.00	0.00
Asia Pacific	0.90	5.98	1.62	0.00	1.06
Europe & Mediterranean	9.60	4.50	7.55	6.85	8.17

⁽¹⁾ Number of days lost per 100 employees per year as defined by OSHA-US regulation.

⁽²⁾ Up until end 2016, we covered only independent subcontractors working on-site for more than 3 months. From 2017 onwards, we cover all independent subcontractors.

Lost Workday – subcontractors by gender (%) | 403-9 |

	2016	2017 ⁽¹⁾	2018	2019	2020
Female	29	13	26	26	18
Male	71	87	74	74	82

⁽¹⁾ Up until end 2016, we covered only independent subcontractors working on-site for more than 3 months. From 2017 onwards, we cover all independent subcontractors.

Lost Workday Case⁽¹⁾ incidence rate – subcontractors

by region | 403-9 |

	2016	2017 ⁽²⁾	2018	2019	2020
Americas	0.00	0.00	0.00	0.00	0.00
Asia Pacific	0.26	0.17	0.14	0.00	0.04
Europe & Mediterranean	0.40	0.30	0.40	0.44	0.39

⁽¹⁾ Number of cases with days lost per 100 employees per year as defined by OSHA-US regulation.

⁽²⁾ Up until end 2016, we covered only independent subcontractors working on-site for more than 3 months. From 2017 onwards, we cover all independent subcontractors.

Lost Workday Cases – subcontractors by gender (%) | 403-9 |

	2016	2017 ⁽¹⁾	2018	2019	2020
Female	25	24	14	30	18
Male	75	76	86	70	82

⁽¹⁾ Up until end 2016, we covered only independent subcontractors working on-site for more than 3 months. From 2017 onwards, we cover all independent subcontractors.

Injuries costs and savings (US\$m)

	2016	2017	2018	2019	2020
Injuries costs	1.9	1.4	1.4	1.9	2.4
Results without action	8.4	8.9	9.8	10.1	10.5
Savings ⁽¹⁾	6.5	7.4	8.4	8.2	8.1

⁽¹⁾ Around US\$108m savings in 18 years.

Fines and total number of non-monetary sanctions in 2020

Marcianise (Italy) fined 1,965€ (~US\$2,400) following an inspection from the Italian safety competent body (ASL) related to an injury that occurred in September 2020.

Loyang (Singapore) fined SGD\$1,000 (~US\$760) for missing COVID-19 social distance demarcation in cloakrooms.

Number of fatalities | 403-9 | 403-10 |

	2016	2017	2018	2019	2020
Employees	0	1 ⁽¹⁾	0	0	0
Subcontractors	0	1 ⁽²⁾	0	0	0
Total	0	2	0	0	0

⁽¹⁾ One ST employee died from medical complications after coming into contact with a chemical (tetramethylammonium hydroxide) in Ang Mo Kio site (Singapore). In 2018, the Singapore Ministry of Manpower Investigation concluded that the accident was work-related.

⁽²⁾ One subcontractor victim of a fatal accident in an electrical area at our Bouskoura site (Morocco).

Protecting the environment



-19%
GHG emissions
vs 2019
(absolute value)



40%
renewable
energy



88%
of waste reused,
recycled or sent
for recycling



Our approach to the environment



by 2027

13
EHS legal compliance
audits

President
of ACSIEL
environmental
committee

Accelerating sustainability, together

Over the last 25 years, ST has achieved positive results in managing the environmental impact of its activities. Since 1994, we have reduced our energy consumption by 50% per unit of production, reduced our overall water footprint by 72% per unit of production and improved our waste reused and recycled from 22% to 88%.

In 2020, ST decided to go beyond what we have already achieved by accelerating our sustainability initiatives and announcing our commitment to become carbon neutral by 2027 (see Energy and Climate Change on [page 60](#)).

Convinced that achievements will be greater if they are collective, we aim to increase our cooperation with strategic partners, customers, suppliers, employees and leading organizations, to advance our progress towards sustainability.

A robust management system

Our environmental policy (available on www.st.com), in place since 1993, will be supported by our new Sustainability Charter in 2021. The Charter outlines our commitments for the next seven years and replaces our 2014-2020 Decalogue (see Decalogue results on [page 85](#)). Dedicated corporate and site teams define and implement environmental programs and procedures, carry out projects, share knowledge and monitor performance. Our environmental management is aligned with international standards such as ISO 14001, ISO 50001, ISO 14064 and EMAS. Our performance and management systems are regularly evaluated and certified through internal and third-party audits. | [103-2](#) | [103-3](#) |

Environmental risks are reviewed annually through our enterprise risk management and business continuity processes (see Risk Management on [page 19](#)). To prevent any potential negative impact on the environment, we take a precautionary approach when assessing new processes, chemicals and products, as set out in Principle 15 of the Rio Declaration. | [102-11](#) |

Moreover, to limit any risks related to our license to operate, we have a three-year program to conduct third-party environment, health and safety (EHS) legal compliance audits. This program covers all our manufacturing sites, all our warehouses and all our sites with more than 150 employees. In 2020, 13 EHS legal compliance audits were performed.

Working together

Participating in industry and trade associations

In 2020, we continued our collaboration with the European Semiconductor Industry Association (ESIA), the European arm of the World Semiconductor Council, which takes a leading and proactive approach to EHS responsibilities. Our experts participated in working groups on resource conservation, air emissions, and chemicals. They also shared the health and safety practices and risk management measures we have implemented to protect people during the pandemic (see Health and Safety on [page 41](#)).

We are members of numerous trade associations, working alongside other semiconductor companies to define the future, and consider the environmental impact of the electronics industry. These include ACSIEL Alliance Electronique, which in 2020 nominated Adeline Oliva, ST's Corporate Environment Program Manager, as president of the environmental committee; Fédération des Industries Electriques, Electroniques et de Communication in France; Federazione Nazionale Imprese Elettrotecniche ed Elettroniche in Italy; and SEMI Europe. | [102-12](#) |

Engaging employees in environmental initiatives

Our employees play a leading role in helping to make the change to a greener world. All our sites undertake initiatives to encourage people to respect the environment in everything we do. Some of the many awareness and communication campaigns and initiatives implemented by ST sites in 2020 included student visits to our facilities in Kirkop (Malta), beach cleaning near Catania (Italy), elimination of plastic cups and a zero food waste project in Ang Mo Kio (Singapore), biodiversity projects with an insect hotel in Tours (France) and installation of beehives in Rennes and Croles (France).

Energy and Climate Change



Energy & Climate Change

OUR AMBITION

Continuously reduce our carbon footprint and our impact on climate change by decreasing our GHG emissions and improving energy efficiency.

2025 GOAL

-20%

energy consumption and GHG emissions*

* Normalized values vs 2016

2020

GHG emissions

-30%

Energy consumption -1.5%

Five years after the COP21 Paris Agreement, climate change remains one of the biggest threats facing society. At ST, we recognize the urgency of this global issue and, as a multinational company, we take action to mitigate the impact of our activities and engage all our stakeholders. In 2020, we committed to go beyond what we've already achieved, by amplifying the positive impact of our technology and accelerating our sustainability initiatives. | 103-1 |

Becoming carbon neutral by 2027

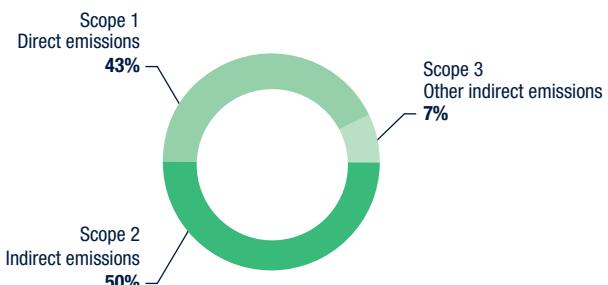
Having in 2019 achieved our 2025 goal regarding greenhouse gas (GHG) emissions (a reduction of 20% per production unit vs 2016), we stepped up our ambition in 2020 and committed to become carbon neutral by 2027. (Discover our video on our commitment on [st.com](#).)

Our roadmap to carbon neutrality includes two additional targets:

- compliance with the Paris Agreement's 1.5°C scenario by 2025, implying a 50% reduction in direct and indirect GHG emissions vs 2018
- sourcing 100% renewable energy by 2027

We are already on our way to achieving these targets. In 2020, we decreased our greenhouse gas (GHG) emissions by 19% in absolute terms compared to 2019.

Summary of net CO₂ equivalent emissions | 305-1 | 305-2 | 305-3 |



Scopes 1, 2, 3 according to Greenhouse Gas (GHG) protocol.

-19%
GHG emissions
vs 2019



Orio Bellezza

President, Technology, Manufacturing and Quality

We believe that sustainability is not only important for the world, but that it also provides a strong competitive advantage. Our commitment to be carbon neutral by 2027 is supported by ST management at all levels. We have a robust roadmap sustained by financial investments and important partnerships. On top of that, we can count on our dedicated and engaged teams of experts to find innovative solutions to the technical challenges. Until now, very few semiconductor companies have made such a commitment. We hope it will pave the way for accelerating sustainability together."

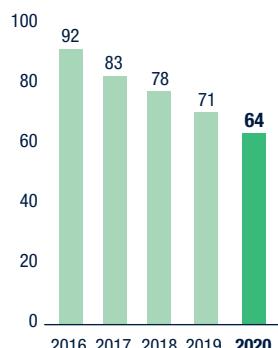
A comprehensive roadmap

Reducing our direct emissions

The use of perfluorinated compounds (PFCs) in the manufacture of semiconductors accounts for a significant share of our direct air emissions, as defined by scope 1 of the GHG protocol. It is therefore a central part of our environmental strategy to reduce their use and ensure they are treated appropriately before being released into the atmosphere. Our manufacturing sites are equipped with PFC abatement systems to reduce air emissions, and we systematically integrate them into all new equipment. Our Rousset facility (France), which integrated the abatement systems when it was built in 2000, treats 100% of its PFC emissions. In 2020, we pursued our efforts by installing new systems and implementing changes in the manufacturing processes that delivered a 13% reduction in absolute air emissions. The most significant decreases were achieved at our Ang Mo Kio site (Singapore), thanks to investments in abatement systems, and our Catania site (Italy), where a new chiller was installed that operates with a fourth-generation refrigerant gas, which has a global warming potential close to zero.

CO₂ emissions equivalent | 305-4 | SDG 13.1

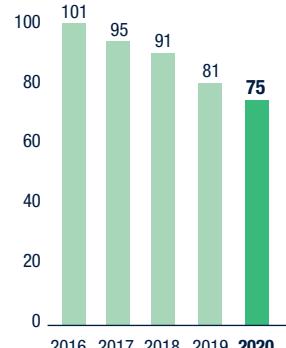
Per unit of production – normalized values



Baseline 100 in 2010.

PFC emissions | 305-4 |

Per unit of production – normalized values



Baseline 100 in 2010.

Saving energy

We increased our energy consumption by 6% in 2020 vs 2019 (in absolute terms), mainly due to the integration of one new manufacturing facility and an extension in another. Although the impact was largely offset by a significant increase in our use of renewable energy (see below), we continue to focus on our energy saving programs.

All our manufacturing sites develop initiatives to better manage and reduce their energy consumption. During 2020, EHS teams at all our sites worked on 48 improvement projects, saving 14.2GWh of energy. Examples include:

- replacing LED lighting in Bouskoura (Morocco) for an annual saving of 2.5GWh
- free cooling of all electrical rooms and heat recovery in Crolles (France)
- improving water flows and reducing the use of pumps at our Rennes site (France), reducing overall electricity consumption by 20% compared to 2019

ISO 50001 certification helps us to improve energy efficiency and so reduce GHG emissions and energy costs. In 2020, our Calamba site (the Philippines) joined the 10 ST sites already certified (see ST certifications on [page 39](#)).

In 2021, in the framework of our carbon neutrality program, we will conduct external audits of all our manufacturing sites to identify actions to improve our energy efficiency.

11
sites certified
ISO 50001

40%
renewable energy

-40%
in scope 3 emissions
due to the pandemic

**Strategic partnership
with Schneider
Electric**



Increasing our use of renewable energy

40% of the total energy we purchased in 2020 came from renewable sources. This represents an increase of 50% compared to 2019, helping to reduce our absolute indirect emissions (scope 2 of GHG) by 20%.

Renewable electricity makes up 70% of the electricity used by our sites in France and Italy. Green sourcing helped us reduce our emissions by the equivalent of 222,563 tons of CO₂, enough for 222,563 individual return flights from Paris to New York.

In 2020, as part of our move towards more renewable energy sourcing, our sites at Ang Mo Kio (Singapore), Calamba (the Philippines), Kirkop (Malta), Muar (Malaysia) and Shenzhen (China) purchased green certificates for a total of 95.5GWh.

In 2020, the 1GWh of green electricity produced by the photovoltaic carport at our Bouskoura site (Morocco), among the biggest private installation in the country, partially powered the clean room. Similarly, the solar power installations at our sites in Catania (Italy) and Grenoble (France) produced 2.1GWh of green electricity.

In 2019, we joined the Apple clean energy initiative, reaffirming our low carbon commitment. As part of this program, we agreed to supply products to Apple that are manufactured with 100% renewable energy. By the end of 2020, we were on track to achieve this target.

In 2021, we will continue our efforts to reach our goal of using 100% renewable energy by 2027. This includes renewable energy power purchase agreements (PPAs), on-site solar electricity generation, and purchasing green electricity certificates. In addition, our Bouskoura site (Morocco) has started developing a wind farm that will supply at least 90% of the power needs of the site starting from the second half of 2021.

Minimizing our indirect emissions from transportation

Reducing CO₂ emissions from the transportation of our people and products has been part of our sustainability strategy for 25 years. We report on employee commuting, business travel and transportation of our goods – the three most material categories for us out of the 15 categories defined in scope 3 of the GHG protocol.

In 2020, due to the COVID-19 pandemic, we reduced business travel and encouraged eligible employees to work from home. This resulted in a decrease in our scope 3 absolute emissions of 40% compared to 2019. This was mainly due to an 86% decrease in emissions related to business travel.

Reforestation program

We have developed CO₂ sequestration programs based on reforestation. Around 6,200 hectares of forests were planted on our behalf between 2002 and 2005. These trees sequestered 211,000 tons of CO₂ in 2020, equivalent to almost 43% of our annual direct emissions¹, but not yet taken into account in our emissions reported.

To become carbon neutral by 2027, we will develop further reforestation and innovative carbon avoidance and sequestration programs.

Acting collectively

We firmly believe our achievements will be greater if we act collectively. Our carbon neutrality program therefore aims to engage customers, employees, investors, candidates, and all our partners. We want to implement collaborative programs and partnerships in all our ecosystems, to promote carbon neutrality among all stakeholders, and to encourage environmental innovations.

Strategic partnerships

In 2020, we initiated a strategic partnership with Schneider Electric on carbon neutrality and the co-development of energy-efficient solutions. Both companies will collaborate on:

- reducing overall energy consumption at ST manufacturing and design sites
- applying a renewable energy sourcing strategy across all ST locations
- identifying and implementing the most relevant carbon avoidance and carbon sequestration programs

Transparency towards our stakeholders

By reporting to CDP, we demonstrate to our customers and investors that we are ahead of regulatory and policy changes, we proactively identify and tackle growing risks, and we continually seek new opportunities for action. Our effective performance and management approach were recognized with an A score in the 2020 CDP Climate Change list, positioning ST among the leaders in climate transparency and actions to cut emissions, mitigate climate risks and develop the low-carbon economy.

FOCUS



SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

BUSINESS 1.5°C ➤

Joining the Science Based Targets initiative

As part of our ambitious program to become carbon neutral by 2027, ST has joined the Science Based Targets initiative (SBTi), which provides a clearly defined pathway for companies to reduce greenhouse gas (GHG) emissions. Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement – limiting global warming to well below 2°C above pre-industrial levels and pursuing efforts to limit warming to 1.5°C.

By the end of 2020, we were the only semiconductor company with approved targets to limit warmings to no more than 1.5°C, representing the highest level of ambition. By reporting annually on our progress, the SBTi will help us monitor progress towards our target of reducing our direct and indirect emissions (scopes 1 and 2) by at least 50% compared to 2018, and sourcing 80% of our electricity from renewable sources by 2025.

Third-party audits

In 2020, we initiated ISO 14064 certifications across all our sites. ISO 14064 is an international standard for quantifying and reporting GHG direct and indirect emissions at the organizational level. This gives our sites tools and guidance to select the appropriate GHG sources, data and methodologies, and enhance our reporting. By the end of 2020, our Agrate (Italy), Kirkop (Malta) and Shenzhen (China) sites were audited. All other manufacturing sites will be audited and certified during 2021.

Addressing climate-related risks

Through our Enterprise Risk Management (ERM) program, we identify and assess climate-related risks. The business continuity plans we implement at each site help prevent and protect our operations against climate change and natural disasters (see Risk Management, [page 19](#)). We adopt a bottom-up approach to assessing risks, allowing us to zoom in on a specific site or to zoom out at Company level. Benchmarking helps us identify the sites most at risk and the risk drivers.

For climate-related risks, we use a framework inspired by the 'Water Risk Filter', a tool developed by WWF adapted for carbon risk assessment. We assess:

- physical risks, such as dependence on weather and temperature
- regulatory risks, such as legislation and fines
- reputational risks, such as media exposure and involvement in compensation measures

We also identify risks that are driven by changes in other climate-related developments, such as changing consumer behavior. We are actively involved in researching new products to help our customers develop new energy saving applications, transforming risk into opportunity (see Sustainable Technology on [page 33](#)).

In 2020, we publicly declared our commitment to the Taskforce on Climate-related Financial Disclosure (TCFD). This means we are working towards implementing TCFD recommendations and reporting how we take actions on climate-related risks and opportunities (see TCFD index on [page 91](#)).

Contributing to the Sustainable Development Goals

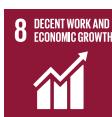
Our commitments and programs related to Energy and Climate Change as described above contribute to:

SDG target 7.3 – By 2030, double the global rate of improvement in energy efficiency.

SDG target 8.4 – Improve progressively, through 2030, global resource efficiency in consumption and production.

SDG target 13.1 – Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

⁽¹⁾ Internal calculation method.



2020 OBJECTIVES

2020 OBJECTIVES	Status	Comments
-30% PFCs emissions (tons CO ₂ per production unit) by 2020 from 2010 baseline.	✗	-25% compared to 2010. Objective discontinued.
+10% green energy each year.	✓	+50% compared to 2019. Objective discontinued.
80% renewable electricity by 2025 and 100% by 2027.	NEW	Science Based Targets.
-50% absolute scope 1 and scope 2 GHG emissions by 2025 from 2018 baseline.	NEW	Science Based Targets.

Water



Wastewater treatment plant, ST Tours, France

Water

OUR AMBITION

2025 GOAL

2020

Maintain our leadership in water efficiency by reducing consumption, recycling more, and reinforcing our efforts in water scarcity areas.

-20%

water consumption*

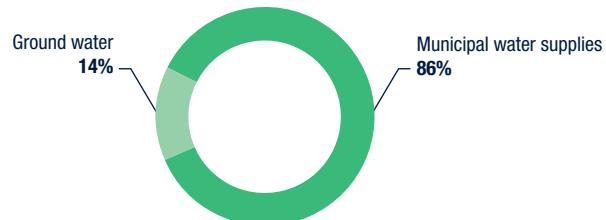
* Normalized values vs 2016

Water is a limited natural resource that is essential to people, ecosystems and life. Manufacturing semiconductors requires a large volume of water. It also generates wastewater that can be harmful for the environment and local communities if not treated. Tackling the challenges of water scarcity and wastewater treatment has been part of our strategy since 1993. We have adopted a comprehensive approach to this, including water stress assessment, conservation programs, and wastewater treatment.

A limited and shared resource

The reliability of the water supply for the semiconductor manufacturing process is essential, but water is a shared resource, and it is our responsibility to ensure our water use does not impact local ecosystems. All ST sites manage their water-related risks, according to their needs and water availability. Each site monitors the volume of water it uses and complies with local permits. One of our 11 manufacturing sites uses groundwater for their operations. In 2020, 14% of the water used throughout our operations came from groundwater and 86% from municipal water supplies.

Water withdrawal by source | 303-3 | SDG 6.4



As most of our primary water supply is local municipal water, it is fundamental to ensure the continuity of water supplies in the areas where we operate. We therefore engage in regular discussions with local stakeholders and implement solutions to reduce water extraction and consumption. In 2021, we will conduct a water assessment with an external partner, as we did in 2014, to assess our global water footprint and identify water stress areas, water-related risks of our operations, and our impact on local communities.

I 303-1 I

Reducing our water use

2020 performance

In 2020, thanks to the continuous efforts of all our sites and teams, our water recycling rate remained stable compared to 2019, although our water consumption increased by 7% in absolute terms. This is mainly due to the integration of a new manufacturing facility and an extension to an existing one. Our Catania (Italy) and Ang Mo Kio (Singapore) sites, where water consumption is highest, identified specific actions to improve their water efficiency. Some of these actions have already started to be implemented; others will be deployed from 2021 onwards (see Focus).

We achieved an A- score in the 2020 CDP questionnaire on water security, confirming that our policies, management systems and programs are aligned with managing water sustainably.

Conservation initiatives

Our facilities and environmental teams are fully engaged in implementing new projects to reduce the water footprint of our operations and minimize the impact on water availability.

Through our continuous efforts, we have succeeded in reducing our overall water footprint by 72% (per unit of production) since 1994.

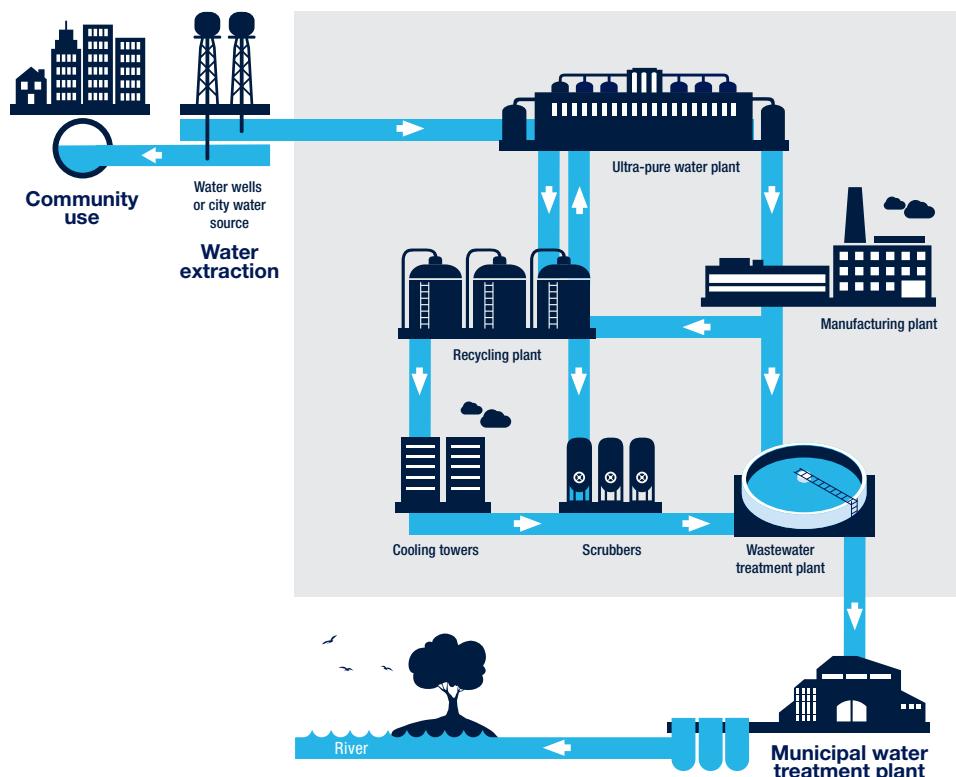
In Morocco, where water is a scarce resource, our Bouskoura site has, for a number of years, initiated various action plans to reduce its water consumption. In 2020, a redesign of the site's wastewater treatment plant made it easier to classify distinct types of wastewater and treat them accordingly. This enabled the site to increase the wastewater recycling rate from 35% to 60%. By improving the scale and efficiency of its water recycling, the site reduced not only the amount of water it needed to draw from local supplies, but also the impact on the local ecosystem.

Our Calamba site (the Philippines) initiated a project in 2020 to recover and treat water from manufacturing processes for use in the cooling towers. In one year, the project almost doubled the amount of recycled water used for the power plant and cooling towers.

At our Shenzhen site (China), as part of our efforts to increase water recycling, teams improved the system for recycling wastewater from the ultrafiltration system, including better monitoring.

72%
reduction in our water footprint since 1994

Typical ST water cycle



41%
of water recycled and reused



Carles Crespo

Global Business Development Leader, Isle

ST initiated a partnership with the Isle Group to reduce water consumption at its Catania site (Italy). After a comprehensive update of the site's water balance, we have identified different scenarios using innovative water technologies that could achieve water savings up to an astonishing 35%, with a payback period of less than three years. An essential part of the study's success was the immense commitment and technical support from local staff."

Efficient wastewater treatment to reduce impact

Wastewater from our manufacturing processes contains pollutants that need to be treated to eliminate any risk of pollution. Wastewater is treated on site or externally in dedicated treatment plants. [I 303-21](#)

Our manufacturing sites are continually looking for ways to improve wastewater treatment and water discharge quality to minimize our impact on the environment.

For example, by changing the process parameters of the wastewater treatment plant, our Tours site (France) reduced the amount of lime required to treat the wastewater by more than 200 tons and the amount of CO₂ by more than 40 tons. This decreased the transportation impact by the equivalent of 30 tons of CO₂ and reduced the waste generated (sludge) by 30%.

Our Ang Mo Kio site (Singapore) upgraded its fluoride wastewater treatment plant to improve its performance and simplify maintenance, while addressing potential environmental and safety concerns related to the handling of chemicals and hazardous waste. Processes were changed so that instead of generating large volumes of waste sludge that require further treatment before sending to landfill, it produces dense pellets that can be recycled (see Waste on [page 67](#)). This project not only reduces operational and disposal costs, but also helps to minimize our impact on the environment and reduce the risks for people. The site has already seen an improvement and is on track to achieve a 100% recycling rate for fluoride wastewater in 2021, compared to 30% before the upgrade.

Contributing to the Sustainable Development Goals

Our commitments and programs related to Water as described above contribute to:

SDG target 6.4 – Substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity.

SDG target 8.4 – Improve progressively, through 2030, global resource efficiency in consumption and production.



2020 OBJECTIVES

Water recycle rate ≥45%.

Status Comments

X 41%
Objective 2021: ≥42%.

FOCUS



Cooperating with external experts to reduce water footprint

ST is committed to reducing its water footprint to minimize the impact on water availability. Our Catania site (Italy) is one of our largest users of water. To address this issue, the site commissioned a specialist water management consultancy to advise on the best technological solutions to reduce water consumption and achieve our 2025 corporate goal of reducing water consumption by 20% vs 2016. Various solutions were suggested, such as recycling and reusing water from facilities and manufacturing areas. Based on this in-depth analysis, the site will define a detailed action plan and prioritize actions to develop concrete projects in the coming years.

Waste



Cardboard collection, ST Kirkop, Malta

Waste & Chemicals

OUR AMBITION

Strive for zero waste in landfill, reduce our consumption of chemicals and eliminate hazardous materials.

2025 GOAL

95%
of our waste reused
and recycled

2020

88%

88%

of our waste reused,
recovered or sent for
recycling

Managing our waste

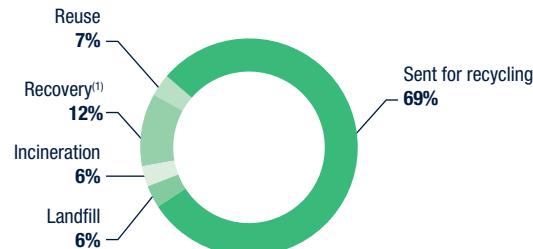
A Company-wide approach

Our waste management program covers all the waste streams generated by our operations and activities. This waste includes hazardous substances, metals, packing, plastics, and other non-biodegradable materials. Our waste management strategy is based on reduction, reuse, recycling, elimination and treatment. It is driven by both local regulations and Company policy, with our sites being asked to respect the most stringent of these requirements. | 103-2 |

2020 performance

In 2020, 88% of the waste generated by our operations was reused, recovered or sent for recycling. The waste sent to landfill increased from 3.4% to 6.0% compared to 2019, missing our target of sending ≤3% of waste to landfill. This lower performance is a consequence of the COVID-19 pandemic, as waste disposal suppliers at some of our sites suspended their activities during lockdown.

Waste split | 306-2 |



⁽¹⁾ Waste burnt with recovery of energy (combustion).



Hc Chew
EHS Manager Ang Mo Kio (Singapore)

It is important to optimize all waste treatment – from hazardous to organic – so one of our actions in 2020, called ‘Zero food waste’, focused on segregating organic waste and treating it on site. This reduced the associated carbon emissions from transporting and treating it at an off-site facility, reduced odors from storage and limited potential pest problems at the site. It has also been a great way to involve our employees and make them aware of the need to sort their waste.”

Controlling hazardous substances

Our various manufacturing processes can generate hazardous or potentially hazardous waste, such as chemical substances and contaminated plastics. We pay particular attention to each type of hazardous waste (liquid or solid) that can impact the environment or people’s health and safety (see Chemicals on page 70). We seek to identify the best solution from all available treatment technologies. In 2020, we identified 40% of our waste as hazardous, 95% of which was reused, recovered, or sent for recycling. The remaining waste was disposed of and treated locally by authorized companies.

Reducing waste at the source

The best waste is the waste we avoid. We apply this approach at all our manufacturing sites.

In 2020, our Ang Mo Kio site (Singapore) developed a comprehensive strategy to reduce solid waste. It includes reviewing and analyzing waste flows, refurbishing and relocating waste storage areas, labelling, communication and training on waste collection points and storage, and an innovative program called ‘Zero food waste’. By implementing all these actions, the site expects to achieve 85% of waste recycled or reused by the end of 2021 vs 72% in 2020.

Our Shenzhen site (China) started a project in 2019 to introduce a phosphorous-free compound in a manufacturing process, leading to a reduction of 40,000kg of hazardous waste per year.

FOCUS



Fluoride wastewater transformed into pellets for use in other industries

At ST, we always seek to understand if a waste product can become a resource for another type of usage, inside or outside our industry. Our rinsing and cleaning operations generate wastewater containing fluoride. This wastewater must be treated to remove the polluting substance and meet stringent local regulatory limits, helping to reduce the impact of our activities on the environment.

In 2020, our Ang Mo Kio site (Singapore) collaborated with a waste disposal supplier to introduce a new way to process the sludge generated by the treatment of the fluoride wastewater. The change involves transforming the fluoride sludge into pellets that can be used in the metallurgy, cement or ceramic industries. It saves operation and disposal costs and, above all, it offers a new use for a waste which was previously sent to landfill, thus moving towards a circular economy.



2020 OBJECTIVES

≤3% waste in landfill.

Status

Comments
6%
Objective maintained in 2021.

Valorize our waste

Examples of circular economy initiatives

Towards a circular economy

Using waste to create value benefits the environment, people, and ST. Therefore, where possible, we look for opportunities to valorize the waste we generate.

For several years, we have been implementing various initiatives to find new uses for our waste.

- Fluoride sludge is transformed into pellets for the metallurgy industry (see Focus).
- Sulfuric acids are used for recycling batteries.
- Spent resin and sludge are used in the cement and brick industry.
- Deflashing waste powder and waste sludge are sent for precious metal recovery.
- Electronic waste is dismantled; some parts are reused, and precious metals are recovered.
- Solvents are sent for distillation and reuse.
- Solvents are burned and the energy recovered.
- Ammonia in wastewater is treated and used in agricultural fertilizers.
- Landfill industrial waste is transformed into solid combustible material and used in cement factory furnaces.
- Silicon wafer scraps are used for aluminum production used in the automotive, aviation and photovoltaic industries.
- Paper, cardboard, plastics and wood are recycled.
- Organic waste is transformed into compost.



Contributing to the Sustainable Development Goals

Our commitments and programs related to Waste as described above contribute to:

SDG target 3.9 – Substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution, and contamination.

SDG target 6.3 – 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.

SDG target 12.4 – Achieve the environmentally sound management of chemicals and all wastes throughout their lifecycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.



Chemicals



VOC burner, ST Crolles, France

Waste & Chemicals

OUR AMBITION

Strive for zero waste in landfill, reduce our consumption of chemicals and eliminate hazardous materials.

2025 GOAL

95%
of our waste reused
and recycled

2020

88%

Responsibly managing the chemical substances and materials used in our operations is critical for protecting people, preserving the environment, and complying with legal and customer requirements.

At each manufacturing site, we take a precautionary approach to guide all decisions related to chemical usage and handling. The site chemical committees regularly meet to evaluate the composition, the hazards and the use conditions of chemical substances and materials. This includes risk management measures, personal protective equipment, waste management and administrative controls. Following this process enables us to identify critical substances as soon as they are introduced or reclassified. | 103-2 |

In 2020, we recorded 5,919 chemicals in use, and we conducted 587 new risk assessments, reaching a total of 30,702 validated risk assessments by the end of the year. | 103-3 |

Caring for our people

Reducing people's exposure to hazardous chemicals underpins our actions and initiatives at all our manufacturing sites. In 2020, our Ang Mo Kio site (Singapore) worked on a project to reduce handling of small bottles of liquid chemicals by installing a chemical distribution system, while our Crolles site (France) secured the transfer of hazardous reusable liquid by installing new pipelines. Both projects will continue in 2021.

We can reduce people's exposure to chemicals not only through equipment upgrades or system changes, but also by redesigning processes. For example, the R&D teams at our Agrate site (Italy) introduced solid substances instead of hazardous liquid chemicals when creating a new generation of piezoelectric material, thereby reducing the risks for people and the environment.

In 2020, the 18,781 industrial hygiene measurements we performed were all below the applicable limits, proving the effectiveness of our preventive actions and continuous attention.

Workers exposed to chemical risks are regularly trained on chemical hazard classification, potential health consequences, emergency and preventive procedures, and risk management measures.

>18,700
industrial hygiene
measurements



Frankie Agius

Director of Quality, Global Key Accounts, Coppell (USA)

ST, our customers and our suppliers are all stakeholders in the future of our planet, and we have many challenges in front of us. Being able to make a difference is a shared goal for all. We have worked extensively with our supply chain to enhance reporting and tackle the removal of hazardous substances. ST's hard work and commitment enabled us to successfully meet the objectives of China's 'Blue Sky' VOC program."

95%
PFOA-free

Preserving the environment

Volatile organic compounds (VOCs) are compounds that easily become gases or vapors, some of which may have adverse effects on human health. Reducing VOC air emissions from our operations is therefore essential. We do this by collecting exhaust fumes from equipment that uses chemicals and by treating air emissions in appropriate abatement systems.

In 2020, our Crolles site (France) reduced its VOC emissions by 12% vs 2019 by installing new burners.

In the meantime, our teams in Asia focused their efforts on complying with a Chinese government initiative called 'Blue Sky', which aimed to improve air quality by reducing total VOC emissions in 2020 by at least 10% compared to 2015. The project included remediation plans for certain industries and a ban on VOC-containing solvents in several applications and industry sectors. These include the semiconductor industry, which uses adhesives containing hazardous substances in the assembly process. During the year, our Shenzhen site (China) implemented the relevant standards, including compliance test reports, document verification and increased control of VOC emissions (see Focus and quote).

Aligning with expectations

Replacing hazardous substances

ST's phase-out of perfluorooctanoic acid (PFOA) related substances achieved a major step forward in 2020, reaching 95%. The Rousset and Crolles sites (France) participated by successfully replacing PFOA-related substances used in their manufacturing process. By the end of the year, only a few process flows remained to be modified and we are on target to reach our objective of being 100% PFOA-free by 2025.

FOCUS



Supporting China's ambition for a blue sky

To facilitate its 'Blue Sky' program, aimed at improving air quality, the Chinese government published a new standard on VOC emissions in March 2020, which would come into force in December. It sought to classify all adhesives used in assembly manufacturing according to the standard, perform specific tests, and collect compliance documents. This impacted not only ST activities, but also all ST's subcontracted activities in China.

Haiyan Zeng, HSPM Program Manager at our Shenzhen site (China), and Hui Lin Koh, Global Outsourcing Business Management at our Ang Mo Kio site (Singapore), played a decisive role in the rapid success of ST's implementation by coordinating actions and checking and centrally archiving compliance documents to provide easy access for our customers and internal teams.

Haiyan also worked in close cooperation with the environment and facility teams at the Shenzhen site to ensure VOC-containing gaseous streams were treated before release into the environment. An audit performed mid-December by a major customer confirmed that our good teamwork was helping to win the battle for a blue sky.

Lab certified ISO 17025



Compliance and reporting

We comply with applicable environmental regulations and requirements, including European chemical policies and directives, such as REACH¹, RoHS², and ELV³.

To effectively recycle raw materials from waste, it is necessary to know if the waste contains hazardous substances. One of the objectives of the European Waste Framework Directive (WFD) is to improve the material recycling ratio from collected waste. In line with this aim, ST declares substances of very high concern, as listed by REACH, contained in any product sold in Europe. In 2020, we adapted data from our existing database to enable us to meet REACH and WFD data reporting requirements. Starting in 2021, all relevant ST products are now declared through a dedicated web portal managed by the European Chemicals Agency.

To provide our customers with information on the chemical composition of our products, we also report and publish our material declarations (available on www.st.com) in accordance with the IPC1752⁴ standard.

Meeting customer expectations

ST has been working for more than five years on the deployment of Hazardous Substance Process Management (HSPM) to identify, control, quantify and report any hazardous elements in components, according to the CQ080000 standard. The goal is to ensure that the end products comply with customer requirements. In 2020, we strengthened our ability to perform non-disruptive analytical controls on raw materials. At our Shenzhen site (China), we took advantage of a refurbished lab, which achieved ISO 17025 certification during the year, to deploy several methods to detect regulated substances. The results of a site audit conducted by a major customer in 2020 confirmed ST's compliance with requirements on the presence of hazardous substances in products.

Monitoring our suppliers

We require our suppliers to respect our EHS-regulated substances list, which contains more than 3,000 substances and is regularly reviewed. We also require them to confirm their compliance through analytical certificates, safety datasheets and commitments.

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:

SDG target 3.9 – Substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

SDG target 6.3 – 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.

SDG target 12.4 – Achieve the environmentally sound management of chemicals and all wastes throughout their lifecycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.

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

⁽²⁾ RoHS: Restriction of Hazardous Substances.

⁽³⁾ ELV: End of Life of Vehicles.

⁽⁴⁾ IPC1752: Association connecting electronics industries.



2020 OBJECTIVES

In line with World Semiconductor Council (WSC) statement, remove PFOA and PFOA-related substances in all manufacturing chemicals by 2025.

Status

Comments



Removed 95% PFOA and PFOA-related substances in 2020 compared to 2014 when the program started.

Environmental indicators

This section includes indicators and GRI Standard disclosures.

Our environmental data covers our 11 main manufacturing sites, representing more than 95% of the overall environmental impact of the Company.

The methodologies used to calculate data are detailed in internal Company procedures, which are regularly reviewed during third-party environmental audits (EMAS, ISO 14001, ISO 50001).

See ST site certifications table on [page 39](#).

ST follows the Greenhouse Gas (GHG) Protocol for managing its GHG emissions. The resulting CO₂ emissions are reported according to recognized international standards (Reference – World Resources Institute (2004) GHG Protocol – A Corporate Accounting and Reporting Standard).

Scope 1 – Direct emissions resulting from operations

- Combustion emissions: World Resources Institute (2008) – GHG Protocol Calculation tool for stationary combustion v.4.1
- PFC emissions: 2007 IPCC fourth Assessment Report Climate Change. Table 2.14. Lifetimes, radiative efficiencies and direct GWPs relative to CO₂ www.ipcc.ch

Scope 2 – Indirect emissions resulting from purchased electricity

- World Resources Institute (2014). GHG Protocol tool for stationary combustion. Version 4.8, GHG Protocol Scope 2 Guidance

Scope 3 – Emissions resulting from travel and transportation

- Mobile Combustion GHG Protocol tool v.2.6
- Supplement to the Corporate Value Chain (Scope 3) accounting and reporting standard

Environmental investments (%)

	2016	2017	2018	2019	2020
% of total Company investments	0.33	0.47	0.17	0.35	3.06

Consumption – absolute values | 302-1 | 302-4 |

	2016	2017	2018	2019	2020
Electricity (TJ ⁽¹⁾)	7,536	7,812	8,094	8,208	8,716
Water (1,000m ³)	16,406	17,064	18,204	18,843	20,223
Chemicals (tons)	17,615	20,118	23,127	21,780	20,641
Natural gas (TJ ⁽¹⁾)	690	695	666	696	706

⁽¹⁾ Terajoule.

Summary of net CO₂ emissions (KTons)

| 305-1 | 305-2 | 305-3 |  SDG 13.1

	2016	2017	2018	2019	2020
Direct emissions Scope 1	552	605	644	557	486
Indirect emissions (purchased electricity) Scope 2 ⁽¹⁾	739	756	791	702	564
Other indirect emissions (transportation ⁽²⁾) Scope 3	113	132	137	143	86
Total emissions	1,404	1,493	1,573	1,402	1,137

⁽¹⁾ Market-based method calculation according to GHG Protocol standard.

⁽²⁾ The transportation emissions value is a global estimate of employee transportation and transportation of goods.

Environmental burden – net values SDG 3.9 - 6.3

	2016	2017	2018	2019	2020
Emissions to air					
Global warming ⁽¹⁾ (MTCE)	382,909	407,290	428,912	382,277	310,041
Ozone depletion (kg R11 Eq)	0.14	0.00	0.00	0.00	0.00
VOCs (Tons)	231	287	297	139	148
Atmospheric acidification (Kg SO ₂ Eq)	32,283	36,084	43,856	46,018	51,207
Photochemical oxidant creation (Kg ethylene Eq)	46,186	49,166	43,749	35,799	38,295
Air emission toxicity ⁽²⁾ Kg PH ₃ Eq	2,529	1,595	2,240	1,414	3,192
Emissions to water⁽³⁾					
Eutrophication (Kg (P+N))	160,155	176,555	164,027	169,575	126,286
Aquatic oxygen demand (Kg COD ⁽⁴⁾)	508,468	595,257	605,100	632,625	656,045
Heavy metals to water (Kg heavy metals)	8,217	11,560	14,222	9,233	6,880
Aquatic ecotoxicity (Kg Cu Eq)	5,114	6,208	5,764	5,211	4,290

⁽¹⁾ Includes direct Greenhouse Gas (GHG) emissions from our manufacturing plants and indirect emissions from energy consumption and transport, reported in Metric Tons of Carbon Equivalent (MTCE). Does not include GHG emissions from subcontractors and foundries.

⁽²⁾ Emissions of substances are considered only if they exceed the minimum threshold of 3ppm, expressed in phosphine equivalent. For Volatile Organic Compounds, Atmospheric Acidification, Photochemical Oxidant Creation and Air Emission Toxicity the Particulate Matter is not covered.

⁽³⁾ Domestic wastewater is included.

⁽⁴⁾ Total Chemical Oxygen Demand (COD).

Direct and indirect energy consumption by primary sources⁽¹⁾ (%) | 302-1 | 302-4 |

	2016	2017	2018	2019	2020
Green electricity purchased	23.6	25.8	21.2	26.4	39.6
Photovoltaic and thermal solar electricity produced by ST	0.1	0.1	0.1	0.1	0.1
Electricity purchased from nuclear (CO ₂ free)	12.6	12.1	9.2	6.9	6.1
Electricity purchased from fossil fuel sources	55.1	53.7	61.8	58.6	46.6
Natural gas	8.4	8.1	7.6	7.8	7.5
Other fuels	0.2	0.3	0.3	0.3	0.2

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

Energy consumption by source | 302-1 | 302-4 |

	2016	2017	2018	2019	2020
Electricity (TJ ⁽¹⁾)	7,536	7,812	8,094	8,208	8,716
Natural gas (TJ ⁽¹⁾)	690	695	666	696	706
Others (TJ ⁽¹⁾)	17	24	22	22	31
Total energy (TJ ⁽¹⁾)	8,244	8,531	8,782	8,926	9,453
Energy from electricity (%)	91.4%	91.6%	92.2%	92.0%	92.2%

⁽¹⁾ Terajoule.

Consumption of energy | 302-3 | SDG 7.3

Per unit of production – normalized values

	2016	2017	2018	2019	2020
Consumption of energy	109	97	89	94	108
Baseline 100 in 2010.					
Consumption of electricity 302-3					
Per unit of production – normalized values					
Consumption of electricity	109	97	89	94	109
Baseline 100 in 2010.					

Consumption of natural gas | 302-3 |

Per unit of production – normalized values

	2016	2017	2018	2019	2020
Consumption of natural gas	118	101	86	94	104

Baseline 100 in 2010.

Carbon footprint of ST's products per mode of transportation⁽¹⁾ (%)

	2016	2017	2018	2019	2020
Air <2,000km	16	19	19	22	1
Air >2,000km	82	79	80	76	98
Road	2	2	2	2	1
Ocean	0	0	0	0	0

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

Consumption of water

Per unit of production – normalized values

	2016	2017	2018	2019	2020
Consumption of water	99	88	84	90	105

Baseline 100 in 2010.

Water withdrawal by source (1000m³)⁽¹⁾ | 303-3 | SDG 6.4

	2017	2018	2019	2020
Ground water	3,055	4,236	3,029	2,880
Surface water	-	0	0	0
Municipal water supplies	14,009	13,967	15,814	17,342
Total withdrawal	17,064	18,204	18,843	20,223

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

Recycled and reused total water | 303-5 | SDG 6.3 - SDG 6.4

	2016	2017	2018	2019	2020
Total water used (1,000m ³)	29,219	29,920	30,654	31,708	34,055
Total volume of water recycled and reused (1,000m ³)	12,798	12,857	12,450	12,870	13,833
Water recycled and reused (%)	43.8%	43.0%	40.6%	40.6%	40.6%

Total water discharge

	2016	2017	2018	2019	2020
Water discharge (1,000m ³)	13,794	14,406	14,926	15,621	15,912
Treated in ST wastewater treatment plant (%)	78%	78%	68%	69%	85%
Treated in external wastewater treatment plant ⁽¹⁾ (%)	59%	58%	57%	55%	56%

⁽¹⁾ Part of this water has already been treated in ST wastewater treatment plants, meaning that 100% of water discharged is treated either internally, externally, or both.

Waste in tons | 306-2 | SDG 12.4

	2016	2017	2018	2019	2020
Total hazardous waste	11,291	14,361	16,483 ⁽¹⁾	16,877 ⁽¹⁾	19,605
Total waste	32,979 ⁽¹⁾	39,615 ⁽¹⁾	44,828 ⁽¹⁾	43,593	49,012

⁽¹⁾ Data corrected due to duplicated entries for recovery.

Waste split in tons | 306-2 |

	2016	2017	2018	2019	2020
Reuse	3,696	1,543	2,097	1,614	3,628
Sent for recycling	24,088 ⁽¹⁾	32,182 ⁽¹⁾	34,434 ⁽¹⁾	33,607 ⁽¹⁾	33,653
Recovery ⁽²⁾	2,229	2,244	4,642	5,224	5,944
Incineration	1,341	2,128	1,671	1,497	2,809
Landfill	1,625	1,519	1,983	1,651	2,977
Total Waste	32,979 ⁽¹⁾	39,615 ⁽¹⁾	44,828 ⁽¹⁾	43,593	49,012

⁽¹⁾ Data corrected due to duplicated entries for recovery.

⁽²⁾ Waste burnt with recovery of energy (combustion).

Non-hazardous waste split⁽¹⁾ (%) | 306-2 |

	2016	2017	2018	2019	2020
Reuse	6.7	3.7	5.0	3.5	10.0
Sent for recycling	81.2	88.9	83.9	86.1	69.1
Recovery ⁽²⁾	2.2	1.7	3.3	3.6	4.4
Incineration	3.5	1.4	2.4	2.4	7.8
Landfill	6.3	4.5	5.4	4.4	8.8

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

⁽²⁾Waste burnt with recovery of energy (combustion).

Hazardous waste split⁽¹⁾ (%) | 306-2 | SDG 12.4

	2016	2017	2018	2019	2020
Reuse	19.1	4.1	3.1	3.1	3.5
Sent for recycling	49.7	62.7	71.8	70.9	68.0
Recovery ⁽²⁾	24.6	18.5	18.3	20.0	23.8
Incineration	4.7	12.2	4.8	3.9	2.7
Landfill	1.8	2.5	2.0	2.1	2.0

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

⁽²⁾Waste burnt with recovery of energy (combustion).

WEEE

As a supplier of components to the electronics industry (and not a manufacturer of electronic equipment), our silicon products are not directly affected by the European Directive 2012/19/ EU Waste of Electrical and Electronic Equipment (WEEE). However, since 2018, demonstration and evaluation boards supplied by ST are subject to the Directive.

Consumption of chemicals | SDG 12.4

Per unit of production – normalized values

	2016	2017	2018	2019	2020
Consumption of chemicals	108	105	108	106	109

Baseline 100 in 2010.

Elimination of Substances of Very High Concern (SVHC)

SDG 12.4

Total number of action plans ⁽¹⁾ completed since 2008	2016	2017	2018	2019	2020
23	23	23	23	23	23

⁽¹⁾ One substance can be subject to several action plans to be eliminated from different ST processes.

ST exposure to Substances of Very High Concern (SVHC)

	2016	2017	2018	2019	2020
SVHC total list	169	176	191	201	209
SVHC used in ST	22	23	26	27	30
SVHC Annex XIV used in ST	1	1	1	3	4
Total SVHC used in ST replaced since 2008	7	7	7	7	7

Deployment of ST substances specification to key suppliers and subcontractors (%)

	2016	2017	2018	2019	2020
Response rate from key partners	100	100	100	97	100
Commitment from key partners to ST substances specification	98	80	89	72	91

Spills in 2020 | 306-3 |

None

Fines and non-monetary sanctions in 2020

None

Acting together



95%
of eligible tier 1
suppliers have signed
a commitment letter



US\$3.7m
donated to support
communities during
the pandemic



340
community
initiatives
worldwide



Mask donation, Georges Pompidou Hospital, Paris, France

Responsible Supply Chain



Security agents, ST Bouskoura, Morocco

Responsible Supply Chain

OUR AMBITION

Systematically assess and mitigate social, environmental, health & safety, and ethical risks in our extended supply chain.

2025 GOAL

100%
suppliers at risk audited

2020

17%
133/800 suppliers audited.

Supply chain responsibility in challenging times

In complex supply chains such as those within the electronics industry, the COVID-19 pandemic poses a greater risk to vulnerable workers. We have therefore been extra vigilant in maintaining robust control of our supply chains. We also re-emphasized our pledge to partner only with suppliers who share the same values of respecting people and acting ethically.

We adapted our main Responsible Supply Chain program, which addresses labor, human rights, safety, ethics and environmental risks in our tier 1 supply chain, to reflect national restrictive measures. This included conducting audits remotely.

Our program is based on the Responsible Business Alliance (RBA) methodology, adopted in 2005 and deployed progressively in our supply chain since then. It comprises three main steps:



RBA standard and tools deployed in our supply chain

Commitment letter

Suppliers declare their commitment to ST's RBA-based standards.

Self-Assessment Questionnaire (SAQ)

Suppliers complete an RBA self-assessment. The results enable us to identify areas that require attention.

RBA Audit & follow-up (VAP)

Suppliers receive an RBA audit to monitor and control compliance and address areas of non-compliance.

28
preliminary risk
assessments analyzed
on CSR criteria

In 2020, we reinforced our preliminary risk assessment process for new material suppliers. We focused on environmental and safety certifications and detecting forced labor, with specific actions for poor performance.

In addition to the program for our tier 1 suppliers, we also manage our sub-tier raw material suppliers (see Responsible mineral sourcing on page 79). I 103-1 I 103-2 I

Actions for all categories of suppliers

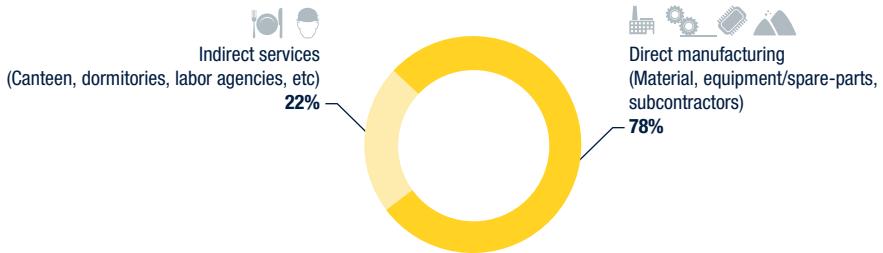
As a company with more than 6,000 tier 1 suppliers, it is important for us to identify and prioritize suppliers at risk to include them in our due diligence process. Our annual risk assessment considers the type of supplier, the location of their operations (or a specific factory) and the volume of business they do with us.

We adapt our level of due diligence to the two different categories of suppliers we manage:

- Direct manufacturing suppliers including manufacturing subcontractors, material suppliers and equipment and spare-parts suppliers. This segment represents the highest percentage of ST's procurement volume (78%).
 - Indirect services including local suppliers such as catering, security, labor agencies and facilities management, which represent 22% of our procurement volume.

Our suppliers | 102-9 |

Procurement volume



**265 RBA-based
supplier audits
since 2015,**

+49%
vs 2019

37% of our procurement volume is managed locally. The rest is managed centrally at corporate level. | 204-1 |

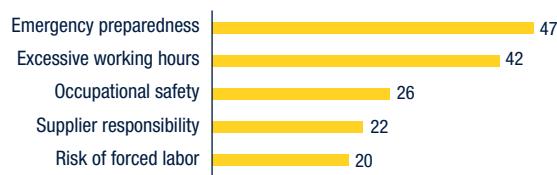
We monitor each category through the three-step process of our Responsible Supply Chain program. We define which suppliers are eligible for each step based on their level of risk and adapt the level of due diligence accordingly.

Overall, for both direct and indirect suppliers, 95% of eligible tier 1 suppliers have signed a commitment letter (step 1). In total, since the start of the program in 2015, our suppliers have undergone 265 RBA-based audits (step 3), +49% compared to 2019.

Direct manufacturing suppliers

- 93% of 181 eligible suppliers have signed a commitment letter and 97% of new direct suppliers have undergone a screening process, including social, environmental, and health and safety criteria.
 - 90% of 369 eligible supplier facilities have completed a self-assessment questionnaire (SAQ). 92% are rated low risk and 8% are medium risk.
 - 9% of 369 eligible supplier facilities have undergone a third-party RBA VAP audit over the past two years, up from 7% in 2019.

Top 5 audit findings in our direct manufacturing supply chain⁽¹⁾ | 308-2 | 414-2 |



⁽¹⁾ Based on results of 34 key direct suppliers' RBA audits.



2020 OBJECTIVES

≥90% of eligible suppliers signed an agreement to comply with the RBA code of conduct. ✓ 95% Objective maintained in 2021.

Indirect service suppliers

- 98% of 154 eligible suppliers have signed a commitment letter and 99% of new indirect suppliers have undergone a screening process, including social, environmental, and health and safety criteria.
- 79% of 126 eligible suppliers have completed an SAQ, up from 44% in 2019 (with a smaller number of eligible suppliers).
- 79% of 126 eligible suppliers have undergone a second-party RBA audit (conducted by ST) over the past two years, up from 31% in 2019. In 2020, we integrated more environmental and health and safety criteria for local audits and we also verified protection measures against COVID-19.

Top 5 audit findings in our indirect services supply chain⁽¹⁾ | 308-2 | 414-2 |



⁽¹⁾ Based on results of 99 indirect suppliers' 2nd party RBA audits.

In addition, we regularly evaluate our suppliers' performance on social, environmental, and health and safety criteria, and we deploy specific programs to address environmental and safety topics (see Health and Safety on [page 41](#) and Chemicals on [page 70](#)).

In 2020, 82% of our key suppliers were ISO 14001 certified or EMAS validated, up from 76% in 2019. [| 103-3 |](#)

FOCUS



Protecting vulnerable workers

In every action we instigate in our supply chain, our priority is to detect and address the most severe impacts for vulnerable workers. We have a zero-tolerance policy towards forced labor and we maintain strict control of working hours and wages to ensure decent living conditions and avoid any risk of coercion.

In 2020, we focused on addressing some of the most impactful risks we had detected:

- **Impact of lockdowns on foreign migrant workers in Malaysia** due to the pandemic. We communicated with direct manufacturing suppliers to verify that salaries were maintained to ensure basic needs and that annual leave entitlements were not affected.
- **Recruitment fees for foreign migrant workers in Taiwan.** We launched a zero-recruitment fees campaign with five suppliers to accelerate their adoption of a zero-fee recruitment policy.
- **Supplier corrective actions for priority findings on forced labor.** We closely monitored the corrective actions for priority findings involving foreign migrant workers, such as reimbursing fees, payment of incomplete wages and contract substitution, requiring suppliers to complete their closure audits within the year.

Addressing such systemic and complex issues may be challenging, but we have noticed an increasing willingness to collaborate and improve the overall situation from our suppliers.



Khmessi Said

Security agent, Alomra – security supplier in ST Bouskoura (Morocco)

This change has had a very significant and positive impact on my personal life. Previously, I left the house while my children slept (5 a.m.) and by the time I got home (10 p.m.), my children were already in bed. Now, I have time to see my children grow up, and to play with them. I have a life!



Benaamar Jamal

Security agent, Alomra – security supplier in ST Bouskoura (Morocco)

The moment ST did the audit and we understood that among the RBA requirements there was a 60-hour working week restriction, we said to ourselves, it will be a miracle if ST manages to change this, as it is general practice for the security sector in Morocco. Now, we are very confident in this system and we are very grateful that ST has been able to change this unfair practice. It has led to numerous positive changes in our personal and professional lives. It was a dream that came true.

Customized learning paths for suppliers

Supporting our suppliers towards compliance

We are not only committed to controlling our suppliers, but also to supporting them in raising their awareness and capability to comply with required standards.

Our aim is to help our suppliers improve their performance sustainably, through dedicated e-learning on risks in areas such as labor (including working hours and forced labor), ethics, health and safety, environment and management systems.

As well as the customized supplier e-learning paths we launched in 2019 through the RBA platform; our worldwide community of experts supports suppliers' continuous improvement through ongoing dialog and sharing best practices.

For example, at ST Bouskoura (Morocco), after encountering difficulties in reducing the working hours of security services below 72 hours per week, we launched a new bidding process that included criteria for working hours compliance. In 2020, we chose a new service provider and, by working closely together, we were able to reduce working hours to 60 hours per week, with a strong positive impact on workers' lives (see quotes).

We also organized online meetings to share best practices between our sites in Malaysia and China and some major manufacturing suppliers. Topics included how to better manage working hours and how to organize supply chain controls.

Responsible mineral sourcing

Our approach to supply chain responsibility goes beyond our tier 1 suppliers. It also covers the responsible sourcing of raw materials in our upstream supply chain.

In 2020, we had 239 smelters in our tin, tungsten, tantalum and gold (3TGs) supply chain. For the fourth consecutive year, we successfully validated all of them through the Responsible Minerals Assurance Process.

We usually eliminate smelters when they cease operation, although in 2020 we also had some cases where non-compliance led to their certification not being renewed.

As an active participant in the Responsible Minerals Initiative (RMI), we also began to monitor our cobalt supply chain in 2019, as concerns have been raised globally over the social and environmental impacts of cobalt extraction, including child labor and unsafe working conditions in artisanal cobalt mining. However, due to a lack of existing regulations on cobalt, progress on smelter certification is relatively slow.

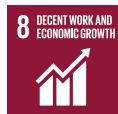
For more detailed information on our progress, see www.st.com/conflict-free_minerals.

Contributing to the Sustainable Development Goals

Our commitments and programs related to Responsible Supply Chain as described above contribute to:

SDG target 8.7 – Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking, and secure the prohibition and elimination of the worst forms of child labor.

SDG target 8.8 – Protect labor rights and promote safe and secure working environments for all workers.



Community and Education



Fundraising at Asia Pacific Distribution Sales Convention

Community & Education

OUR AMBITION

Prepare the future by supporting education in schools in all the countries where we operate.

2025 GOAL

STEM* education partnerships in

20
countries

* Science, Technology, Engineering and Mathematics

2020

7/20 countries

China, Czech Republic, France, Germany, India, Italy and Singapore

We have a longstanding commitment to investing in the communities where we operate. We encourage our employees to engage in local community programs aligned with our sustainability strategy and with the local, operational and cultural context.

In addition to our general engagement, we also invest in the future of the communities we support, sharing with young people our passion for science and electronics in our 'STEM your way' program (see www.st.com/STEMyourway and discover our video). | 103-1 |

This year, facing the COVID-19 pandemic, we have contributed and donated to protect local communities, while continuing our efforts to engage and support young people.

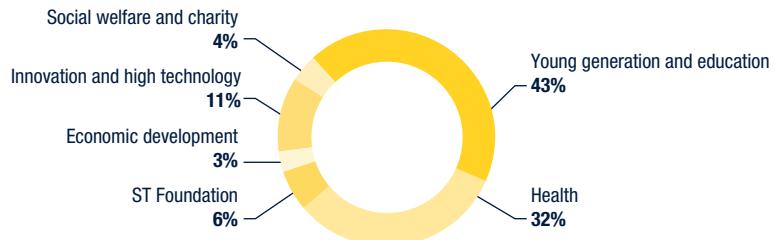
Since 2012, we have measured our community involvement following the Business for Social Impact methodology (formerly London Benchmarking Group), a global standard to measure and manage corporate community investment. | 103-3 |

2020 achievements

In 2020, we implemented 340 community initiatives worldwide. These included:

- 35 sites in 20 different countries
- 114,324 hours of Company time (43% of the total contribution)
- US\$2,141,500 in cash donations
- US\$3,535,500 in in-kind donations

Domains of involvement⁽¹⁾ (%)



⁽¹⁾ Among initiatives classified as young generation and education, some are also related to economic development, and innovation and high technology. The sums may not add up to 100% due to rounding of the figures.

US\$3.7m
donated to
communities during
the pandemic

STEM
initiatives go virtual



FOCUS



NeaPolis Summer Campus moves online

NeaPolis Innovation Summer Campus is an annual challenge for university engineering students to encourage them to use ST's 32-bit microcontrollers. Due to the pandemic, the seventh edition of the event in 2020 took a new approach. Held from August 27 to September 06, the campus took place entirely online, including the annual HackFest.

A record 180 students from 16 universities, mainly in Italy, were mixed into randomly formed teams of four to six students. ST tutors organized and led the event, including defining and ordering the component kit in advance and ensuring it was sent to participants' homes by courier.

The tutors, who were all located at the ST Naples site (Italy), gave students continual support. There were also many competitions, with prizes awarded daily.

It was a productive experience for all, not only in terms of the training, but also for the opportunity it gave students to experience team working. Despite the difficulties of remote learning, everything was managed successfully, with both students and tutors working together in a virtual environment.

This year, the global breakdown has been very different to previous years due to the pandemic, with 32% of initiatives supporting healthcare.

Despite many events being cancelled due to lockdowns around the world, supporting education continued to be an important focus, accounting for 43% of our overall contribution.

Donations linked to the pandemic

Most of our sites contributed to help local communities respond to the challenges of the pandemic. Overall, ST donations reached a value of US\$3.7 million (36% of our total contribution). This comprised:

- 3,126 volunteer hours
- US\$926,500 cash
- US\$2,645,500 in-kind donations

Our in-kind donations included surgical and FFP2 masks, protective clothing, hand sanitizer (produced at our manufacturing sites), face shields and protective glasses (see Facing the pandemic, on page 10).

We launched many fundraising initiatives across all our sites, particularly in Italy, which was severely affected by the pandemic. The aim was to help raise funds for local hospitals and support people in need. Employees raised over US\$275,000.

Our Asia Pacific sites, along with distribution partners across the region, launched a fundraising initiative during the Asia Pacific Distribution Sales Convention 2020 that raised more than US\$260,000 from our distributors and US\$70,000 from ST Asia Pacific. The money has been distributed to associations and hospitals across Asia to help combat the pandemic.

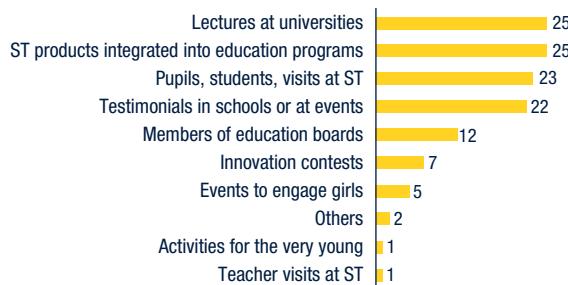
In addition, our Singapore sites sponsored two initiatives, the SeniorsConnect Digital Skills Program and the Social Prescribing Program of SingHealth Community Hospitals. These programs help seniors to stay in contact with their families and friends while at home through the use of digital tools. Both programs will continue in 2021.

STEM your way

Our 'STEM your way' program is about raising awareness in young people about the importance of science, technology, engineering and mathematics (STEM) subjects and inspiring them to explore STEM-related careers.

Although the pandemic stopped most on-site programs and school visits, many sites transformed their initiatives into digital events, which provided an opportunity to reach more students in the area. **I 103-2 I**

Number of STEM initiatives





Hélène Chahine

Chief Delegate, Fondation CGénial (France)

The program Yes We Code!, created by the CGénial Foundation, helps pupils create digital projects based on ST's STM32 microcontroller family and connect them with industrial applications. One of the main factors in the success of the program is the commitment of ST's engineers, who provide training and technical support to teachers. Thanks to this partnership, we are strengthening the digital skills of secondary level students and opening their eyes, particularly for girls, to the diverse job opportunities in the electronics industry."

For example, our Catania and Agrate sites (Italy) and Greater Noida site (India), which are involved in partnerships with universities, developed a number of virtual technical seminars for university students, while our Napoli site (Italy) transformed its 'Neapolis' Summer Campus into a virtual event (see Focus).

In France, we went one step further in engaging with the education sector to encourage the use of our products in the curriculum by establishing a partnership with the CGénial Foundation. We jointly developed a pilot project around electronics boards based on STM32 microcontrollers to strengthen digital learning and coding in schools (see quote).

In line with our strong focus on developing activities to engage girls in science, we launched several activities in 2020. ST France cooperated with Elles Bougent, a voluntary organization which aims to encourage and support girls to pursue careers in technical fields (see Diversity and Inclusion Focus on page 51). In addition, our Ang Mo Kio site (Singapore) sponsored a three-year STEM outreach program named 'Girls2Pioneers', led by the United Women Singapore organization, with the aim of increasing the future representation of women in STEM fields.

As well as these programs, each year we welcome over 1,000 students for apprenticeships, internships and PhDs. This continued in 2020 despite the pandemic situation.

ST Foundation

The ST Foundation (see www.stfoundation.org) continues to bridge the digital divide between those who have access to modern technologies and those who do not. The Digital Unify program, started in 2003, has trained over 770,000 people in 26 countries since its inception. SDG 4.3

>770,000
people trained by ST
Foundation since 2003

In 2020, our Foundation trained around 45,000 people, less than half of the usual number trained. This was due to the pandemic that stopped activities in most locations except for countries in Africa.

2020 was a challenging year, but it also provided an opportunity to evolve and rethink the Foundation's activities. The pandemic has reshaped lives everywhere with everything turning digital as remote work and distance learning skyrocketed. To quickly adapt to this new need, the Foundation boosted its collaboration with partners who could help it interact with the neediest beneficiaries. The resulting actions included:

- donating equipment to underprivileged families for access to education
- creating new courses and content for school teachers
- creating an e-learning platform with new online courses, including video courses for seniors and computer basics for visually impaired people

To achieve this, ST provided a wide range of support to the Foundation, including:

- cash donation of US\$500,000
- electronic and IT equipment
- time donated by employees to develop new courses, especially by Italian and Indian volunteers
- support from Corporate External Communications to maintain the Foundation's website and produce its annual report

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:

SDG target 4.3 – Ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.

SDG target 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.



Communities indicators

This section includes indicators and GRI Standard disclosures.

Suppliers' and subcontractors' Environmental, Health & Safety performance

	2016	2017	2018	2019	2020
Number of eligible suppliers/subcontractors					
Material suppliers	81	95	96	88	89
Equipment/spare-parts suppliers	80	80	74	81	58
Back-end subcontractors	31	29	28	27	28
Front-end subcontractors	12	13	12	9	10
Total	204	217	210	205	185
ISO 14001 certified/EMAS validated (%)					
Material suppliers	78	93	82	97	97
Equipment/spare-parts suppliers	75	80	5 ⁽¹⁾	44	50
Back-end subcontractors	100	96	96	96	96
Front-end subcontractors	100	100	100	100	100
Overall %	81%	89%	58%	76%	82%
OHSAS validated (%)					
Material suppliers	46	50	48	56	58
Equipment/spare-parts suppliers	35	23	1 ⁽¹⁾	14	10
Back-end subcontractors	70	67	72	75	61
Front-end subcontractors	75	70	67	78	80
Overall %	47%	44%	36%	43%	45%

⁽¹⁾ Issue with data consolidation in 2018.

New suppliers screened using social and environmental criteria in 2020 (%) | 308-1 | 414-1 |

	2020
Direct manufacturing	97
Indirect services	99
Total	98

Step 1 – supplier agreement to comply with RBA code

Direct manufacturing	Eligible suppliers ⁽¹⁾	% signed ⁽²⁾
Material suppliers	89	92%
Equipment/spare-parts suppliers	58	93%
Back-end subcontractors	28	96%
Front-end subcontractors	6	100%
Total	181	93%
Indirect services		
Local suppliers	138	98%
Local labor agencies	16	100%
Total	154	98%

⁽¹⁾ Suppliers identified at risk for 2019-2020 roadmap.

⁽²⁾ Suppliers who have signed a commitment to the current version of the RBA code of conduct (V6).

Step 2 – supplier CSR self-assessment questionnaires⁽¹⁾ (SAQ) | 308-2 | 414-2 |

Direct manufacturing	Eligible facilities ^(2,3)	% completed ⁽⁴⁾
Material suppliers	240	89%
Equipment/spare-parts suppliers	75	93%
Back-end subcontractors	40	85%
Front-end subcontractors	14	100%
Total	369	90%
Indirect services		
Local suppliers	118	77%
Local labor agencies	8	100%
Total	126	79%

⁽¹⁾ Either official RBA SAQ or ST SAQ based on RBA SAQ.

⁽²⁾ For direct manufacturing suppliers SAQs are completed at facility level.

⁽³⁾ Suppliers identified at risk for 2019-2020 roadmap.

⁽⁴⁾ All suppliers who have completed an SAQ are required to have a corrective action plan.

Step 3 – supplier CSR audits | 308-2 | 414-2 | SDG 8.8

Direct manufacturing	Eligible facilities ^(1,2)	% verified ⁽³⁾
Material suppliers	240	5%
Equipment/spare-parts suppliers	75	5%
Back-end subcontractors	40	33%
Front-end subcontractors	14	29%
Total	369	9%
Indirect services		
Local suppliers	118	78%
Local labor agencies	8	88%
Total	126	79%

⁽¹⁾ Suppliers identified at risk for 2019-2020 roadmap.

⁽²⁾ For direct manufacturing suppliers audits are completed at facility level.

⁽³⁾ Percentage of valid audits (audits took place over a two-year period - Q1 2019 to Q4 2020, either official 3rd party RBA audit or ST verification based on RBA audit protocol).

Supplier facilities average RBA SAQ score⁽¹⁾ (%)

	2016	2017	2018	2019	2020
Health and Safety section	92.1	90.7	90.7	90.3	89.6
Environment section	90.6	88.4	88.0	88.6	85.8
Labor section	91.4	92.2	91.1	91.7	91.7
Ethics section	93.8	93.6	93.1	94.0	93.4
Overall average	92.0	91.2	90.5	91.0	90.1

⁽¹⁾ Direct manufacturing suppliers' facilities.

Suppliers terminated as a result of a negative social or environmental impact | 308-2 | 414-2 | SDG 8.7

Number of suppliers	2016	2017	2018	2019	2020
2 ⁽¹⁾	1 ⁽²⁾	2 ⁽³⁾	1 ⁽⁴⁾	1 ⁽⁵⁾	

⁽¹⁾ Working conditions with a security service supplier in Calamba site (the Philippines) and recruitment fees with a labor agency in Muar site (Malaysia).

⁽²⁾ Recruiting conditions in cleaning services in Kirkop site (Malta).

⁽³⁾ Recruitment fees and detention of employee passports in a cleaning service supplier; and recruitment fees and levy deduction with a security service supplier in Muar site (Malaysia).

⁽⁴⁾ Legal requirement concerning social contributions not respected by a cleaning services company in Tunis site (Tunisia).

⁽⁵⁾ Contract not renewed with a security service supplier in Bouskoura (Morocco) due to excessive working hours.

Suppliers engaged in reporting EHS and social KPIs

	2016	2017	2018	2019	2020
Number of front-end material suppliers	42	41	46	42	- ⁽¹⁾
Number of back-end material suppliers	42	48	47	50	- ⁽¹⁾

⁽¹⁾ We changed our reporting methodology in 2020. Data not yet available.

Conflict minerals – suppliers/subcontractors and smelters

	2016	2017	2018	2019	2020
Number of suppliers and subcontractors associated with at least one 3TG metal	118	126	128	124	124
3TG suppliers and subcontractors that have completed the RBA-RMI ⁽¹⁾ due diligence survey (%)	100%	100%	100%	100%	100%
Number of smelters identified in ST's raw materials supply chain	119	143	182	167	168
Number of smelters identified in ST subcontractors' supply chain	174	191	251	253	238
Total number of smelters identified in ST supply chains	177	197	251	253	239

⁽¹⁾ Responsible Minerals Initiative.

Conflict minerals inquiry results 2020 SDG 8.7

	2020			
	Gold	Tantalum	Tin	Tungsten
Number of smelters	107	37	53	42
Smelters which are RMAP ⁽¹⁾ validated (%)	100%	100%	100%	100%
Smelters which are active in the RMAP ⁽¹⁾ but were not RMAP validated as of December 31, 2020 (active smelters) (%)	0%	0%	0%	0%
Active smelters which have declared sourcing from L1/L2 ⁽²⁾ countries or recycled or scrap sources ⁽³⁾ (%)	0%	0%	0%	0%
Active smelters which have not provided a declaration regarding country or origin of recycled or scrap sources (%)	0%	0%	0%	0%

⁽¹⁾ Responsible Minerals Assurance Process (formerly Conflict Free Smelter Program).

⁽²⁾ Level 1 countries are not identified as conflict regions or plausible areas of smuggling or export from the Democratic Republic of Congo and its nine adjoining countries.

Level 2 countries are known or plausible countries for smuggling, export out of region or transit of materials containing tantalum, tin, tungsten or gold.

⁽³⁾ Based on information presented by suppliers and subcontractors.

Community involvement – inputs | 201-1 |

	2016	2017	2018	2019	2020
Number of community involvement initiatives	307 ⁽¹⁾	335	374	389	340
Total contribution (evaluated in US\$m)	6.6	8.2	8.0	7.9	10.4

⁽¹⁾ From 2016 onwards, multiple activities linked to the same program count as one initiative.

Geographical spread of community contributions in 2020 (%)

	2020
Africa	1
Americas	0
Asia	11
Europe	76
Worldwide	12

Community contribution⁽¹⁾

	2016	2017	2018	2019	2020
Cash donations (%)	4%	10%	15%	23%	21%
Staff time volunteering (%)	84%	84%	75%	66%	43%
In-kind (%)	4%	5%	7%	9%	34%
Management costs (%)	7%	1% ⁽²⁾	2%	2%	2%
Number of employees engaged in volunteering ⁽³⁾	6,182	6,712	5,663	6,065	4,231
Number of hours contributed inside Company time	125,616	139,003	124,154	145,498	114,324

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

⁽²⁾ Including time spent on awareness and reporting. From 2017 onwards, management costs related to the logistics of events are included in cash donations and staff time volunteering.

⁽³⁾ Employees are counted for each initiative, so the same employee may be counted several times.

Reason for community contribution⁽¹⁾ (%)

	2016	2017	2018	2019	2020
Community investment	91	95	97	97	64
Charitable donation (gift)	8	4	3	3	36
Commercial initiative	1	1	0	1	0

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

Community involvement – outcomes

	2016	2017	2018	2019	2020
Number of beneficiary organizations	1,487	1,722	1,384	1,856	2,938
Number of direct beneficiaries	57,702	105,117	103,703	117,136	163,497

Direct beneficiary groups in 2020⁽¹⁾ (%)

	2020
Children/Teenagers	3
Students/Scientific communities	53
Affected by natural/man made disaster (Mainly linked to COVID-19 pandemic.)	32
Local population	7
Senior/Elderly people	4
Others (Includes people on low incomes/unemployed, people with poor health, migrants and disabled people)	2

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

Decalogue results

Here are the results of our 5th Decalogue, published in 2014 with ambitions and targets for 2020. It is now replaced by our Sustainability Charter.

	2014 commitments	2020 status
Products & Processes		
1.1	Design products continuously decreasing energy consumption and enabling more energy efficient applications that create value for all stakeholders, with a focus on healthcare, safety/security, society and environment	✓ Achieved through our Sustainable Technology, 63% of new products are responsible (page 34).
1.2	Strive towards a 'product greening strategy' through Ecopack® program deployment and 100% recyclable packing materials free of hazardous substances	✓ 99.9% products are Ecopack® (page 39).
1.3	Continuously apply the eco-design process for new products with a company-wide approach	✓ All new products systematically go through an eco-design step during product development.
People and Community		
2.1	Support local initiatives for sponsoring EHS projects, local EHS events at each of our sites, encourage our people to lead or participate in EHS committees, conferences	✓ Each site defines and runs EHS initiatives according to local context and needs.
2.2	Strengthen our EHS culture through dedicated trainings and communications	✓ Done through our Safety First program and ST certification process.
2.3	Promote volunteer activities and philanthropic contributions through dedicated programs	✓ Done through our Community and Education and STEM your way programs (page 80).
2.4	Develop, coordinate and sponsor projects, that employ the use of high technology to promote human progress and sustainable development of less privileged communities around the world	✓ Done through our ST Foundation Digital Unify program. www.stfoundation.org .
2.5	Support and promote equal opportunities and global diversity through dedicated policies and programs	✓ Done through our Diversity and Inclusion programs (page 50).

	2014 commitments	2020 status
Health and Safety		
3.1	Number of work-related injuries and illnesses: remain among the best in class companies and with a medium term target Recordable Cases Rate (OSHA – Occupational Safety and Health Administration – USA model) at 0.2 or less	✓ Recordable Case Rate (injuries only) 0.14. Recordable Case Rate (injuries and illnesses) 0.15.
3.2	Severity of work-related injuries and illnesses: remain among the best in class companies and with a medium term target Severity Rate at 2 or less	✳️ Achieved 1.8 in 2018, but increased to 3.1 in 2020.
3.3	Subcontractors: improve the main on-site subcontractors Lost Work Days Cases Rate until 0.2 and then remain at 0.2 or less	✗ Lost Work Days Cases Rate 0.24.
3.4	Expand and promote employees' health and well-being with programs such as 'Health Plan', local initiatives and campaigns	✓ ST Health Plan has conducted on average >30,000 medical examinations per year.
3.5	Ensure high ergonomics standards for our working environment	✓ Ergonomics program in place.
Risk Management		
4.1	Adopt an approach based on precautionary principles when assessing the EHS impacts of new operational processes, chemicals and materials	✓ Approach systematically based on the principle 15 of the Rio declaration.
4.2	Strive towards continuous control, reduction or elimination of risks and of substances of concern in our processes and activities for an environmentally friendlier, safer and healthier working place	✓ Done through our Chemicals program (page 70)
4.3	Align material management with Hazardous Substances Process Management System Requirements (HSPM standard IECQ 080000) and responsible sources initiatives (GeSI: Global e-Sustainability Initiative)	✓ HSPM and responsible sourcing in place.
4.4	Within our Loss Prevention Program (Program to ensure our sites have an appropriate level of protection against fire, associated perils (smoke, corrosion, heat and water) and other risks), rate all our manufacturing and largest non-manufacturing sites HPR (Highly Protected Risk) or APR (Adequately Protected Risk)	✳️ In progress, 50% APR, 15% HPR and 35% not yet rated.
4.5	Continuously improve the management of the Supply Chain requesting our suppliers to meet the Social, Environmental, Health and Safety ST requirements, including ISO 14001 and OHSAS 18001 or equivalent certifications	✓ Done through our Responsible Supply Chain program (page 76). ISO 14001: 82% vs 76% in 2014. OHSAS 18001: 45% vs 44% in 2014.
Energy Management		
5.1	Continuously improve energy efficiency at equivalent production level (kWh per production unit) through process and facilities optimization, conservation and building design	✳️ Reduction of 6% average vs 2014 up to 2019, but an increase of 2% in 2020 (vs 2014) due to production loading impacted by COVID-19 pandemic.
5.2	Adopt, whenever possible, renewable energy sources through energy procurement and/or green energy installations	✓ Our use of renewable energy increased from 19.7% in 2014 to 39.6% in 2020.
5.3	Design and assess all new building and manufacturing sites according to 'LEEDTM' (Leadership in Energy and Environmental Design) or equivalent standard	✳️ Best-in-class environmental standards used in the design of new manufacturing facility in Agrate, Italy, but not LEEDTM certified.
5.4	Integrate energy efficiency performance as a key criteria for design and execution of new facility projects	✓ Old equipment systematically replaced with new energy-efficient technology for all facilities projects.
Water Management		
6.1	Continuously improve water efficiency at equivalent production level through water saving programs and water recycling projects (cubic meters per production unit)	✗ 41% of water reused in 2020 vs 43% in 2014. 4% increase in water consumption per unit of production since 2014.
6.2	Control any risks of pollution before discharging wastewater into the natural environment	✓ All wastewater is treated on-site or externally in dedicated treatment plants (page 66).
6.3	Assess and evaluate the water stress assessment of all our manufacturing sites considering local constraints	✓ Done. External assessment in 2014, to be reconducted in 2021. Regular internal assessments.
GHG and Air Emissions		
7.1	Direct emissions (Scope 1 is defined in the GHG Protocol): reduce PFCs emissions (tons CO ₂ per production unit) by 30% in 2020 from 2010 baseline	✗ -25% vs 2010.
7.2	Indirect emissions (Scope 2 is defined in the GHG Protocol) : decrease CO ₂ indirect emissions (tons CO ₂ per production unit) through our energy management programs (see section 5)	✓ -35% vs 2014, due to renewable energies.
7.3	Transportation emissions (Scope 3 is defined in the GHG Protocol): reduce CO ₂ emissions (tons CO ₂ per production unit) from transportation and logistics for our products, materials and employees	✳️ -36% vs 2014, largely due to the impact of the COVID-19 pandemic (-2% in 2019 vs 2014).
7.4	Continue to compensate our direct emissions through reforestation programs and/or compensation voluntary projects	✓ Done through our reforestation program (page 62).
7.5	Treat air emissions in appropriate abatement systems to control risks of pollution before discharging them into the natural environment	✓ Improved our abatement systems at Agrate (Italy), Catania (Italy), Croles (France) and Ang Mo Kio (Singapore) sites for Perfluorinated Compounds and Volatile Organic Compounds.
Waste Management		
8.1	Strive to reduce to zero the quantity of hazardous waste in landfill (except where legally required)	✓ 2.0% of hazardous waste sent to landfill vs 4.2% in 2014.
8.2	Remain among the best in class companies with a reuse and recycle waste rate at 90% or more	✗ Reached 94% in 2019, decreased to 88.1% in 2020 due to pandemic situation (page 67).
8.3	Remain among the best in class companies with landfilled waste rate at 3% or less	✗ Reached 3.4% in 2019, increased to 6% in 2020 due to pandemic situation.
8.4	Strive to minimize our product packing waste generation	✳️ Punctual actions implemented on some sites.
Measurement and Validation		
9.1	Continuously monitor our progress, including periodic audits of all our largest sites worldwide and cooperation with external stakeholders	✓ Done see ST Site certifications (page 39).
9.2	Maintain EHS certifications and validations (ISO 14001, ISO 14064 for scope 1 and 2 GHG emissions (as defined in the GHG Protocol), ISO 50001, OHSAS 18001 and EMAS) of all our sites	✳️ Certified for ISO 14001, OHSAS 18001/ ISO 45001, EMAS, ISO 50001 but did not maintain ISO 14064 certification (ST site certifications page 39).
9.3	Certify and validate new manufacturing sites within 18 months of their operational start-up	✳️ Not applicable, no new manufacturing sites.
Regulation and Compliance		
10.1	Comply at all of our locations (including housing services provided) with all applicable national, regional and local Environment, Health and Safety (EHS) regulations	✓ Monitored through third party audits, with corrective actions where necessary.
10.2	Meet at all of our locations, the most stringent of, either their national/local EHS regulations, or the Company EHS policies and procedures	✓ Monitored through internal audits, with corrective actions where necessary.
10.3	Ensure compliance to EHS legal requirements for all products delivered worldwide	✓ Done.
10.4	Strive towards 'green procurement' and purchase Eco-LabelTM or other 'green label' (when available) materials and products	✗ Environmental questionnaire sent to key suppliers, policy not yet in place.
10.5	Establish long standing partnerships with our customers to comply to their sustainability and EHS requirements	✓ Done.

Awards 2020 overview

Each year, we receive external recognition for our sustainability practices. Here are some examples.

Top Business Leader award

The French magazine 'Challenges' ranked ST President and CEO Jean-Marc Chery Top Business Leader for his commitment to gender equality and climate change issues. The award was made in conjunction with ODDO BHF bank and the Statista Institute, using data from the French Ministry of Labor, based on corporate performance criteria such as growth, profitability, greenhouse gas emissions, gender equality and resilience.



ST women win in industry

Hélène Wehbe-Alause, Director of R&D at our Crolles site (France), won the R&D Woman of 2020 award from the French magazine 'Usine Nouvelle'. The award recognizes her problem-solving skills, her technical expertise in integrated circuits and micro-sensors, and her operational excellence.



Woman Engineer of the Year

The Conference of Deans of French schools of Engineering (CDEFI) awarded Cécile Charrel, engineer at our Grenoble site (France) Woman Engineer of the Year. The award recognizes women's commitment to their profession and to society. It also highlights the strong engagement of Cécile, who is the co-founder of an association that introduces girls and boys to science through hands-on workshops.



Environmental award

Our Agrate and Castelletto sites (Italy) were recognized, by the Italian Ministry of the Environment, for the best EMAS promotion initiative for stakeholders, for creating an environmental statement to raise awareness among young people. Aimed at children between 9 and 10 years old and distributed in schools, it provides certified data and information on ST's environmental commitments and performance.



Most honest and socially responsible enterprise

Our Shenzhen site (China) participated in a corporate social responsibility evaluation by the local authority, which consisted of a comprehensive review of the company's social responsibility development and implementation. The experts who conducted the on-site review and interviews rated the site as a four-star enterprise and as the 'most honest and socially responsible enterprise' in 2020.



Top Employer Certification for France

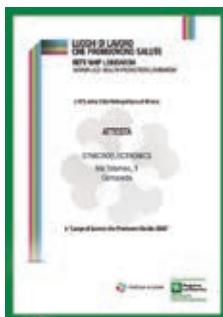
The Top Employers Institute has recognized ST as a Top Employer 2021 in France. This certification, based on an evaluation in 2020, recognizes our programs for professional integration and inclusion, equal opportunities, employability, and quality of life at work.



Top Job – Best Employers

ST Italy is among the 300 winners of Top Job – Best Employers 2021 and has been ranked as one of the 10 most attractive companies in the electronics sector. The award comes from a study in 2020 based on social listening, an innovative methodology that analyzes fragments of online texts on topics such as training, work atmosphere, personal and professional development, career progression and sustainability.

Workplace Health Promotion award



Our Agrate and Castelletto sites (Italy) also received the Workplace Health Promotion award. This award from the Lombardy region and Confindustria recognizes

the application of European Network for Workplace Health Promotion standards, as well as our commitment to improving health and well-being in the workplace.

Double reward from Logitech for sustainability leadership

Logitech rewarded ST for sustainability leadership, recognizing us as a leading company in the semiconductor industry with an outstanding commitment to sustainability. ST also received a special award for support during COVID-19, highlighting our exemplary response to their demand despite supply and value chain disruptions caused by the pandemic.

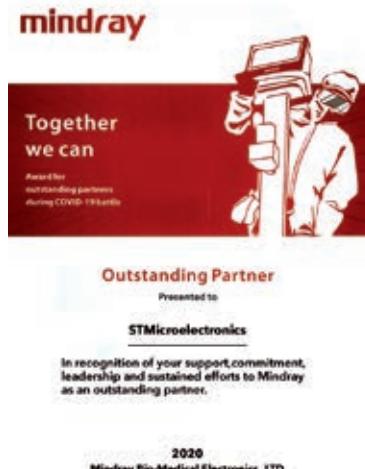
May Day award

Jit Lee Lim, Human Resources Director at our Ang Mo Kio site (Singapore) received the Medal of Commendation (May Day Awards 2020) during the National Trade Union Congress of the United Workers of Electronics & Electrical Industries of Singapore. This award recognizes Jit Lee's commitment to the fair remuneration of employees and for developing structured training programs.



Outstanding Partner award

In July 2020, ST received an Outstanding Partner award from Mindray for its partnership and support during the COVID-19 pandemic. We partnered with Mindray to address the lack of medical equipment, including medical ventilators and blood infusion pumps, by supplying semiconductors such as microcontrollers, EEPROMs and discrete devices, which are fundamental components of medical applications.



Green commuting trophy

Our Grenoble site (France) was awarded first prize in its category (more than 1,000 employees) in the 10th edition of a mobility challenge organized by the Auvergne-Rhône-Alpes region. The award demonstrates the site's commitment and actions to encourage green commuting.

CSR regional award



Our Rousset site (France) tied for first prize at the 2020 Corporate Social Responsibility Awards organized by the Provence-Alpes-Côte d'Azur region. This award recognizes the site's efforts and results in protecting the environment, developing the skills of its employees and supporting the ecosystem through economic development and solidarity initiatives.

Equality trophy for Bouskoura

Our Bouskoura site (Morocco) received a certificate of excellence at the fourth edition of the Professional Equality Trophy, organized by the Ministry of Employment and Professional Integration. This recognizes the site's commitment to professional equality and equal opportunities across a broad range of areas, including promotion and career development, recruitment of female engineers, and women in management positions, as well as our Women in Leadership program.



GRI Content Index | 102-55 |

This report has been prepared in accordance with the GRI Standards, Core option.

GRI 101: Foundation 2016

General Disclosures	Disclosure	Page number(s)/URL(s)
Organization profile		
102-1	Name of the organization	About this report (page 2)
102-2	Activities, brands, products, and services	ST at a glance (page 4) / Business model (page 7) / ST Products and Solutions (page 8) / 2020 Annual Report (Form-20F) at http://investors.st.com (page 20)
102-3	Location of headquarters	About this report (page 2)
102-4	Location of operations	ST at a glance (page 4)
102-5	Ownership and legal form	Governance (page 14)
102-6	Markets served	ST Products and Solutions (page 8) / Business indicators (page 39) / 2020 Annual Report (Form-20F) at http://investors.st.com (pages 20 to 24)
102-7	Scale of the organization	ST at a glance (page 4) / Business indicators (page 39) / 2020 Annual Report (Form-20F) at http://investors.st.com (pages 20 to 24)
102-8	Information on employees and other workers	People indicators (page 53)
102-9	Supply chain	Business model (page 7) / Responsible Supply Chain (page 77)
102-10	Significant changes to the organization and its supply chain	About this report (page 2)
102-11	Precautionary Principle and approach	Our approach to the environment (page 59)
102-12	External initiatives	About this report (page 2) / Innovation (page 31) / Our approach to the environment (page 59) / International Standards (page 90)
102-13	Membership of associations	Governance (page 15) / International Standards (page 90) / Involvement in Industrial and International Organizations at www.st.com
Strategy		
102-14	Statement from senior decision-maker	Foreword by our President and CEO (page 5)
Ethics and integrity		
102-16	Values, principles, standards, and norms of behavior	Ethics and Compliance (page 16) / ST's Code of Conduct on www.st.com
Governance		
102-18	Governance structure	Governance (pages 14 and 15)
Stakeholder engagement		
102-40	List of stakeholder groups	Stakeholder engagement (page 24)
102-41	Collective bargaining agreements	People indicators (page 55)
102-42	Identifying and selecting stakeholders	Stakeholder engagement (page 24)
102-43	Approach to stakeholder engagement	Stakeholder engagement (page 24)
102-44	Key topics and concerns raised	Stakeholder engagement (page 24)
Reporting practices		
102-45	Entities included in the consolidated financial statements	Governance (page 14)
102-46	Defining report content and topic boundaries	About this report (page 2) / Sustainability strategy (page 22)
102-47	List of material topics	Sustainability strategy (page 23)
102-48	Restatements of information	About this report (page 2)
102-49	Changes in reporting	About this report (page 2)
102-50	Reporting period	About this report (page 2)
102-51	Date of most recent report	About this report (page 2)
102-52	Reporting cycle	About this report (page 2)
102-53	Contact point for questions regarding the report	About this report (page 2)
102-54	Claims of reporting in accordance with the GRI Standards	About this report (page 2)
102-55	GRI content index	GRI Content Index (pages 88 and 89)
102-56	External assurance	About this report (page 2) / Assurance statement (pages 94 and 95)

Material topics	Disclosure	Page number(s)/URL(s)	Omission
Sustainable Profit			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundaries	Sustainability strategy (page 23)	
	103-2 The management approach and its components	Sustainable Financial Performance (page 28)	
	103-3 Evaluation of the management approach	Sustainable Financial Performance (page 28)	
GRI 201: Economic performance 2016	201-1 Direct economic value generated and distributed	Our business model (page 7) / Business indicators (page 39) / People indicators (page 54) / Communities indicators (page 84) / 2020 Annual Report (20F) at http://investors.st.com (pages 39, 45, 49)	Payment to government by country not applicable as considered not relevant
Energy & Climate Change			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundaries	Sustainability strategy (page 23) / Energy and Climate Change (page 60)	
	103-2 The management approach and its components	Our approach to the environment (page 59)	
	103-3 Evaluation of the management approach	Our approach to the environment (page 59)	
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Environmental indicators (page 73)	
	302-3 Energy intensity	Environmental indicators (pages 73 and 74)	
	302-4 Reduction of energy consumption	Environmental indicators (page 73)	
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Energy and Climate Change (page 60) / Environmental indicators (page 73)	
	305-2 Energy indirect (Scope 2) GHG emissions	Energy and Climate Change (page 60) / Environmental indicators (page 73)	
	305-3 Other indirect (Scope 3) GHG emissions	Energy and Climate Change (page 60) / Environmental indicators (page 73)	
	305-4 GHG emissions intensity	Energy and Climate Change (page 61)	

Material topics	Disclosure			Page number(s)/URL(s)
Water				
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	Water	(page 64)
	303-2	Management of water discharge-related impacts	Water	(page 66)
	303-3	Water withdrawal	Water (page 64) / Environmental indicators (page 74)	
Waste				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability strategy (page 23)	
	103-2	The management approach and its components	Waste (page 67)	
	103-3	Evaluation of the management approach	Our approach to the environment (page 59)	
GRI 306: Effluents and Waste 201s	306-2	Waste by type and disposal method	Waste (page 67) / Environmental indicators (page 74)	
	306-3	Significant spills	Environmental indicators (page 74)	
Chemicals				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability strategy (page 23)	
	103-2	The management approach and its components	Our approach to the environment (page 59) / Chemicals (page 70)	
	103-3	Evaluation of the management approach	Our approach to the environment (page 59) / Chemicals (page 70)	
Responsible Supply Chain				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability strategy (page 23) / Responsible Supply Chain (page 77)	
	103-2	The management approach and its components	Responsible Supply Chain (page 77)	
	103-3	Evaluation of the management approach	Responsible Supply Chain (page 78)	
GRI 204: Procurement-Practices 2016	204-1	Proportion of spending on local suppliers	Responsible Supply Chain (page 77)	
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	Communities indicators (page 83)	
	308-2	Negative environmental impacts in the supply chain and actions taken	Responsible Supply Chain (pages 77 and 78) / Communities indicators (page 83)	
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	Communities indicators (page 83)	
	414-2	Negative social impacts in the supply chain and actions taken	Responsible Supply Chain (pages 77 and 78) / Communities indicators (page 83)	
Talent Attraction and Engagement				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability strategy (page 23) / Talent Attraction and Engagement (page 47)	
	103-2	The management approach and its components	Talent Attraction and Engagement (page 48)	
	103-3	Evaluation of the management approach	Talent Attraction and Engagement (page 49)	
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	People indicators (pages 53 and 54)	
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	People indicators (page 55)	
	404-3	Percentage of employees receiving regular performance and career development reviews	People indicators (pages 54 and 55)	
Health & Safety				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability strategy (page 23) / Health and Safety (page 41)	
	103-2	The management approach and its components	Health and Safety (page 42)	
	103-3	Evaluation of the management approach	Health and Safety (page 43)	
GRI 403: Occupational Health and Safety 2018	403-9	Work-related injuries	Health and Safety (pages 42 and 43) / People indicators (pages 56 and 57)	
	403-10	Work-related ill health	Health and Safety (page 42) / People indicators (page 57)	
Diversity & Inclusion				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability strategy (page 23) / Diversity and Inclusion (page 50)	
	103-2	The management approach and its components	Diversity and Inclusion (page 50)	
	103-3	Evaluation of the management approach	Diversity and Inclusion (page 50)	
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	Diversity and Inclusion (page 51) / People indicators (pages 53 and 54)	
Labor & Human Rights				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability Strategy (page 23) / Labor and Human Rights (page 44)	
	103-2	The management approach and its components	Labor and Human Rights (page 45)	
	103-3	Evaluation of the management approach	Labor and Human Rights (page 45)	
GRI 412: Human Rights Assessment 2016	412-1	Operations that have been subject to human rights reviews or impact assessments	People indicators (page 56)	
Sustainable Technology				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability strategy (page 23) / Sustainable Technology (page 33)	
	103-2	The management approach and its components	Sustainable Technology (page 33)	
	103-3	Evaluation of the management approach	Sustainable Technology (page 33)	
GRI 417: Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	Sustainable Technology (page 34) / Business Indicators (page 39)	
Innovation				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability strategy (page 23) / Innovation (page 30)	
	103-2	The management approach and its components	Innovation (page 30)	
	103-3	Evaluation of the management approach	Innovation (pages 31 and 32)	
Customer Satisfaction				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability strategy (page 23)	
	103-2	The management approach and its components	Customer Satisfaction (page 37) / Customer Satisfaction (page 36)	
	103-3	Evaluation of the management approach	Customer Satisfaction (page 37)	
Community and Education				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability strategy (page 23) / Community and Education (page 80)	
	103-2	The management approach and its components	Community and Education (page 81)	
	103-3	Evaluation of the management approach	Community and Education (page 80)	

International standards

| 102-12 | 102-13 |



This is our **Communication on Progress** in implementing the principles of the United Nations Global Compact and supporting broader UN goals.

We welcome feedback on its contents.

ST has been a signatory to the Global Compact since 2000 and a member of the Responsible Business Alliance since 2005. In addition to following these standards, we also adhere to the following international guidelines and standards: International Labor Organization Conventions; United Nations Global Compact Principles; United Nations Guiding Principles on Business and Human Rights; Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises; International Organization for Standardization (ISO) 26000; Occupational Health and Safety Assessment Series (OHSAS) 18001; ISO 14001; Eco-Management and Audit Scheme (EMAS); ISO 50001; ISO 31000; ISO 22301 and International Electrotechnical Commission Quality Assessment System for Electronic Systems (IECQ) QC 080000 Hazardous Substance Process Management (HSPM).

Alignment of ST sustainability programs with the United Nations Global Compact (UNGC) 10 principles

United Nations Global Compact 10 principles		ST Sustainability programs
Human rights	Principle 1 Businesses should support and respect the protection of internationally proclaimed human rights; and	<ul style="list-style-type: none"> • Labor and Human Rights • Responsible Supply Chain • Community and Education
	Principle 2 make sure that they are not complicit in human rights abuses.	<ul style="list-style-type: none"> • Labor and Human Rights • Responsible Supply Chain
Labor	Principle 3 Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	<ul style="list-style-type: none"> • Labor and Human Rights • Responsible Supply Chain
	Principle 4 the elimination of all forms of forced and compulsory labor;	<ul style="list-style-type: none"> • Labor and Human Rights
Environment	Principle 5 the effective abolition of child labor; and	<ul style="list-style-type: none"> • Labor and Human Rights
	Principle 6 the elimination of discrimination in respect of employment and occupation.	<ul style="list-style-type: none"> • Labor and Human Rights • Talent Attraction and Engagement • Diversity and Inclusion
Anti-corruption	Principle 7 Businesses should support a precautionary approach to environmental challenges;	<ul style="list-style-type: none"> • Sustainable Technology
	Principle 8 undertake initiatives to promote greater environmental responsibility; and	<ul style="list-style-type: none"> • Energy and Climate Change • Water • Waste • Chemicals • Sustainable Technology
	Principle 9 encourage the development and diffusion of environmentally friendly technologies.	<ul style="list-style-type: none"> • Innovation • Sustainable Technology
	Principle 10 Businesses should work against corruption in all its forms, including extortion and bribery.	<ul style="list-style-type: none"> • Ethics and Compliance

Alignment of ST Sustainability programs with the ISO 26000 guidelines

ISO 26000: 2010 standards	ST Sustainability programs
6.2 Organizational governance	<ul style="list-style-type: none"> • Governance
6.3 Human rights	<ul style="list-style-type: none"> • Labor and Human Rights • Responsible Supply Chain • Diversity and Inclusion • Community and Education
6.4 Labor practices	<ul style="list-style-type: none"> • Talent Attraction and Engagement • Health and Safety
6.5 The environment	<ul style="list-style-type: none"> • Energy and Climate Change • Water • Waste • Chemicals • Sustainable Technology • Responsible Supply Chain
6.6 Fair operating practices	<ul style="list-style-type: none"> • Ethics and Compliance • Responsible Supply Chain
6.7 Consumer issues	<ul style="list-style-type: none"> • Customer Satisfaction • Sustainable Technology
6.8 Community involvement and development	<ul style="list-style-type: none"> • Community and Education • Innovation • Sustainable Financial Performance

SASB and TCFD indexes

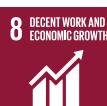
Our disclosures are aligned with the Sustainability Accounting Standards Board (SASB) and the Task Force on Climate-related Financial Disclosures (TCFD) frameworks.

SASB disclosure indicators			
Code	Topic	Accounting metric	ST 2020 data and/or disclosure location
TC-SC-110a.1	GHG emissions	(1) Gross global Scope 1 emissions and (2) amount of total emissions from perfluorinated compounds	(1) 486,304 Metric tons (2) 431,576 Metric tons CO ₂ eq
TC-SC-110a.2	GHG emissions	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Energy and Climate Change (page 60)
TC-SC-130a.1	Energy management in manufacturing	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	(1) 9,452,633 GJ (2) 92.3% (3) 39.6%
TC-SC-140a.1	Water management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High baseline water stress	(1) 20,222 thousand m ³ (2) 34,055 thousand m ³ 4% of water withdrawn in water stress region
TC-SC-150a.1	Waste management	Amount of hazardous waste from manufacturing, percentage recycled	(1) 19,605 tons of hazardous waste from manufacturing (2) 95.3% of hazardous waste recycled
TC-SC-320a.1	Employee health and safety	Description of efforts to assess, monitor, and reduce exposure of employees to human health hazards	Health and Safety (page 41) Chemicals (page 70)
TC-SC-320a.2	Employee health and safety	Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations	~US\$3,160 Fines in 2020 (page 57)
TC-SC-330a.1	Recruiting & Managing a Global & Skilled Workforce	Percentage of employees that are (1) foreign nationals and (2) located offshore	ST's sustainability report includes headcount by region, by gender, by category (page 53). Percentage of foreign nationals is not disclosed.
TC-SC-410a.1	Product lifecycle management	Percentage of products by revenue that contain IEC 62474 declarable substances	We do not disclose this information. Our approach to product hazardous substances is available in Sustainable Technology (page 34) and Chemicals (page 70).
TC-SC-410a.2	Product lifecycle management	Processor energy efficiency at a system-level for: (1) servers, (2) desktops and (3) laptops	We do not track this information. This is not applicable to our business.
TC-SC-440a.1	Materials sourcing	Description of the management of risks associated with the use of critical materials	Responsible mineral sourcing (page 79). Conflict minerals reports on www.st.com/conflict-free_minerals .
TC-SC-520a.1	Intellectual property protection and competitive behavior	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations	2020 Annual Report (Form-20F) at http://investors.st.com (page F-56)

TCFD			
Disclosure	TCFD recommended disclosure	ST description	Disclosure location
Governance	Disclose the organization's governance around climate-related risks and opportunities.	Overall responsibility for sustainability lies our President, Human Resources and Corporate Social Responsibility, who chairs our Sustainability Council and updates our President and CEO at quarterly Executive Committee meetings. Our President and CEO regularly updates our Supervisory Board on our sustainability risks and opportunities, including climate-related risks, as well as our sustainability strategy and performance.	Governance (page 15)
Strategy	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	In December 2020, we announced our goal to become carbon neutral by 2027. Our Sustainable Technology program aims to design and manufacture innovative products that provide society with environmental benefits. Our 2027 goal is to generate 33% of ST's revenues from our responsible products.	Risk management (page 21) Sustainability strategy (page 22) Sustainable Technology (page 34) Energy and Climate Change (page 60) 2020 Annual Report (Form-20F) at http://investors.st.com (page 16)
Risk Management	Disclose how the organization identifies, assesses, and manages climate-related risks.	Our overall approach to risk management is aligned with ISO 31000 and described in our sustainability and financial reports. Company-level sustainability risks are fully integrated into our Enterprise Risk Management program. It enables us to perform systemic identification, evaluation and treatment of risk scenarios, allowing us to set our Company strategy, manage our performance, and capitalize on opportunities.	Risk management (page 21) Sustainability strategy (page 22) Sustainable Technology (page 34) Energy and Climate Change (page 60) 2020 Annual Report (Form-20F) at http://investors.st.com (page 16)
Metrics and targets	Disclosure of the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	ST follows the GHG protocol for managing and reporting its GHG emissions. Our roadmap to carbon neutrality includes two specific targets validated by the Science Based Targets initiative and in compliance with the 1.5°C scenario defined at the Paris COP21: 50% reduction of direct and indirect emissions compared to 2018 by 2025, and the sourcing of 100% renewable energy by 2027.	Sustainable Technology (page 34) Energy and Climate Change (page 60) Environmental indicators (page 73)

ST supports the SDG



SDG	Target	ST Sustainability program	Indicators page
 3 GOOD HEALTH AND WELL-BEING	Good health and well-being 3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Health and Safety Waste Chemicals	56 73
 4 QUALITY EDUCATION	Ensure inclusive and quality education for all and promote lifelong learning 4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university	Talent Attraction and Engagement Community and Education	55 82
 5 GENDER EQUALITY	Achieve gender equality and empower all women and girls 5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life	Diversity and Inclusion	51 and 54
 6 CLEAN WATER AND SANITATION	Clean water and sanitation 6.3 By 2030, 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 6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	Waste Chemicals Water	73 and 74 64 and 74
 7 AFFORDABLE AND CLEAN ENERGY	Ensure access to affordable, reliable, sustainable and modern energy for all 7.3 By 2030, double the global rate of improvement in energy efficiency	Energy and Climate Change	73
 8 DECENT WORK AND ECONOMIC GROWTH	Promote inclusive and sustainable economic growth, employment and decent work for all 8.7 Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labor, including recruitment and use of child soldiers, and by 2025 end child labor in all its forms 8.8 Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	Labor and Human Rights Responsible Supply Chain Health and Safety Labor and Human Rights Responsible Supply Chain	46 and 56 83 and 84 56 and 83
 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	Build resilient infrastructure, promote sustainable industrialization and foster innovation 9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending	Innovation	39
 10 REDUCED INEQUALITIES	Reduce inequality within and among countries 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	Diversity and Inclusion Community and Education	54 and 55
 12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Ensure sustainable consumption and production patterns 12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	Chemicals	71 and 74
 13 CLIMATE ACTION	Take urgent action to combat climate change and its impacts 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	Energy and Climate Change	61 and 73
 17 PARTNERSHIPS FOR THE GOALS	Revitalize the global partnership for sustainable development – Multi-stakeholder partnerships 17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries	Labor and Human rights	46

Glossary

20-F	Annual report filed with the United States Securities and Exchange Commission (SEC)	KPI	Key Performance Indicator
3TG	Tantalum, tin, tungsten and gold	LCA	Lifecycle Assessment
AC	Alternative Current	LWDC	Lost Workdays Cases
ADAS	Advanced Driver Assistance System	MEMS	Micro-Electro-Mechanical Systems
AI	Artificial Intelligence	MOSFET	Metal Oxide Semiconductor Field Effect Transistor
ASSP	Application Specific Standard Products	MTCE	Metric Tons of Carbon Equivalent
Back-end (BE)	Second phase of manufacturing during which the silicon chip is mounted in a package	NYSE	New York Stock Exchange
BCMS	Business Continuity Management System	OECD	Organization for Economic Cooperation and Development
CCT	Corporate Crisis Team	OEM	Original Equipment Manufacturer
CDP	Carbon Disclosure Project	OHSAS	Occupational Health & Safety Assessment Series (OHSAS 18001)
CSR	Corporate Social Responsibility	PFCs	Perfluorinated Compounds
DC	Direct Current	PFOA	Perfluorooctanic Acid
DJSI	Dow Jones Sustainability Indices	POC	Proof Of Concept
EHS	Environmental, Health & Safety	PPA	Power Purchase Agreements
ELV	End of Life Vehicles	PROUD	Practice Remotely Our Unique Determination
EMAS	Eco-Management and Audit Scheme	RBA	Responsible Business Alliance
EMEA	Europe, Middle East & Africa	RC	Recordable Case
ERM	Enterprise Risk Management	REACH	Registration, Evaluation and Authorization of Chemicals
ESG	Environmental, Social and Governance	RF	Radio Frequency
ESIA	European Semiconductor Industry Association	RMI	Responsible Mineral Initiative
EVP	Employer Value Proposition	RoHS	Restriction of Hazardous Substances
FD-SOI	Fully Depleted Silicon-On-Insulator	SAQ	Self-Assessment Questionnaires
FIAM	Adapted Training For Trades Apprenticeship	SASB	Sustainability Accounting Standards Board
Front-end (FE)	First phase of the production cycle involving the manufacturing of circuits on a silicon wafer	SDGs	Sustainable Development Goals
FTSE4GOOD	Financial Times and Stock Exchange responsible index	SiC	Silicon Carbide
GaN	Gallium Nitride	STEM	Science, Technology, Engineering, Mathematics
GWP	Global Warming Potential	SVHC	Substances of Very High Concern
GHG	Greenhouse Gases	TCFD	Task Force on Climate-Related Financial Disclosures
GRI	Global Reporting Initiative	UNGC	United Nations Global Compact
HSPM	Hazardous Substance Process Management	VOC	Volatile Organic Compounds
IECQ	International Electrotechnical Commission Quality	WEEE	Waste Electrical and Electronic Equipment
IGBT	Insulated Gate Bipolar Transistor	WFD	Waste Framework Directive
IoT	Internet of Things	WIL	Women In Leadership
IPCC	Intergovernmental Panel on Climate Change	WSC	World Semiconductor Council
ISS	Institutional Shareholder Services	WWF	World Wildlife Fund

STMicroelectronics NV – 2021 Sustainability Report – 2020 Performance Independent Assurance Statement

Introduction

DNV GL Business Assurance France Sarl ('DNV GL') was commissioned by the Management of STMicroelectronics NV ('ST') to undertake an independent assurance of the Company's 2021 Sustainability Report - 2020 Performance ('Report') including the Global Reporting Initiative (GRI) - Sustainability Reporting Standards.

ST is responsible for the collection, analysis, aggregation and presentation of information contained in the Report. The assurance engagement assumes that the data and information provided in good faith by ST are complete, sufficient and authentic.

Our responsibility in performing the work commissioned, in accordance with the terms of reference agreed on with ST, is solely towards ST's Management.

This Independent Assurance Statement is intended solely for the information and use of ST's stakeholders and is not intended to be and should not be used by anyone other than these specified parties.

Scope of Assurance

The scope of work agreed on with ST includes the following aspects:

- Analysis, in accordance with a *Moderate level* of Assurance, of data and activities related to sustainability between January and December 2020, as contained in the Report.
- Evaluation of GRI Sustainability Reporting Standards principles and requirements.
- Evaluation of specific sustainability performance with regards to indicators defined by the GRI Sustainability Reporting Standards, for the "Core" option.

We understand that the financial data and information reported, are based on data from the "2020 Statutory Annual Report including IFRS Financial Statements", available on ST's website (<http://investors.st.com>). The review of financial data from the Annual Report and Accounts was not within the scope of our work.

Verification methodology

Our assurance engagement was conducted in accordance with the DNV GL protocol for verification 'VeriSustain', which is based on our professional experience and international assurance best practice. These documents require, *inter alia*, that the assurance team possesses the specific knowledge, skills and professional competencies needed for an assurance engagement regarding sustainability information, and that the team complies with ethical requirements to ensure its independence.

In accordance with the Protocol, available on demand on our website*, the Report was evaluated by considering the following criteria:

- Adherence to the principles of GRI Sustainability Reporting Standards.
- ISAE 3000, for the assessment of non-financial information.

Our verification was carried out from 10th February to 4th March 2021. As part of this engagement we audited selected sites based on their contribution which represents 37,5% of the Group's consolidated environmental data and 22,4% of consolidated social data:

- The Corporate Functions
- The Back-end manufacturing in Kirkop (Malta)
- The Front-end manufacturing in Ang Mo Kio (Singapore)
- The Front-end manufacturing in Catania (Italy)

Site audits in Kirkop and Catania were conducted remotely, in light of the COVID-19 pandemic and in consideration of the welfare of all individuals participating in this verification program. Site audit in Ang Mo Kio was conducted partially on-site, by a local Auditor, and partially remotely by the Lead Auditor.

We reviewed the sustainability-related statements and claims as part of the verification made in the Report as well as assessing the strength of the underlying data management system, information flows and controls.

We performed sample-based audits of the following:

- Mechanisms for the implementation of its sustainability policies, as described in the Report.
- Processes for determining the materiality of the contents to be included in the Report.
- Processes for generating, gathering and managing the quantitative and qualitative data included in the Report.

We interviewed the Corporate Sustainability Team and more than 50 company representatives (including data owners and decision-makers from various divisions and functions) who were involved in the operational management of matters covered in the 2021 Report.

In addition, we interviewed three different stakeholders on their relations with the Company.

We evaluated the performance data using the materiality, stakeholder inclusiveness, responsiveness, completeness, accuracy, reliability, neutrality & balance and sustainability context principles, together with ST protocols for how the

Statement n. STAT-14943-2021-CSR-FRA-DNV

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data is measured, recorded and reported. The performance data within the scope was in the form of Key Performance Indicators.

Conclusions

It is the opinion of DNV GL that the 2021 ST Sustainability Report is an accurate and impartial representation of the Company's sustainability-related strategies, management systems and performance.

Based on the work undertaken, nothing came to our attention to suggest that the Report does not properly describe ST's adherence to the Principles. Considering Key Performance Indicators, nothing came to our attention to suggest that this data has not been properly collated from information reported at operational level, nor that the assumptions used were inappropriate.

DNV GL believes that the report is in line with the "Core" option of the GRI Sustainability Reporting Standards. Further conclusions and observations on the adoption of reporting principles and specified performance information are made below, without affecting our assurance opinion.

Stakeholder Inclusiveness: The stakeholder engagement activities are well structured and shared within the Organization, with remarkable adherence of programs deployed at local levels with the CSR strategy.

Sustainability Context: The information and data shown in the Report adequately reflect the strategy, the commitments and the activities carried out by ST in relation to the sustainability context within which the Organization operates at global and local level.

Materiality: The Report includes the major material aspects concerning the Company's performance and stakeholders' concerns and adheres to the principle. The contents of the Report are the result of a consolidated mapping of stakeholders and a structured process for identifying the topics they considered relevant.

Completeness: The Report covers material impacts satisfactorily to enable stakeholders to assess ST's sustainability performance in 2020. The information contained in the report refers to the structure defined in the boundary; in the case of data attributed to a more limited boundary, the document identifies such restriction precisely by means of proper notes.

Accuracy: Based on our data analysis and on the business processes that generate them, the data reported in the Report appears to be the result of stable and repeatable activities. The information contained in the Report is therefore accurate and detailed.

Balance: The Report is an impartial description of ST's sustainability impacts. The document reflects the Organization's will to represent the activities and results for the reporting year in a way that is balanced and consistent with business strategies.

Clarity: The information presented in the report is understandable, accessible and usable by ST's stakeholders.

Comparability: The information reported enables stakeholders to analyse changes in the organization's current economic, environmental, and social performance against the organization's past performance.

Reliability: ST has developed an effective methodology for collecting information to be used in the Report. The data included in the Report subjected to our verification, was found to be identifiable and traceable.

Timeliness: ST reports regularly once a year making information available in a timely manner, to allow stakeholders to make informed decisions. No restatements were needed for previous disclosures.

DNV GL's Competence and Independence

DNV GL is a leading provider of sustainability services, including the verification of sustainability reports. Our environmental and social assurance specialists operate in over 100 countries.

DNV GL was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. DNV GL maintains complete impartiality toward stakeholders interviewed during the verification process.

DNV GL expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Assurance Statement.

For and on behalf of DNV GL Business Assurance France

8th, March 2021

Chiara Murano
Lead Verifier

Zeno Beltrami
Reviewer

Statement n. STAT-14943-2021-CSR-FRA-DNV

DNV GL Business Assurance France – Parc Technoland, ZI Champ Dolin, 1 allée du Lazio – 69800 Saint Priest - FR – www.dnvgf.fr



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