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2019 Sustainability Report

2018 Performance

TOGETHER,
WE SHAPE
THE FUTURE

About this report

Scope

This annual sustainability report outlines STMicroelectronics' (ST) sustainability strategy, programs and performance during the calendar year 2018. 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 I 102-50 I 102-52 I**

Report content and significant changes

The report focuses on the 14 material topics (see page 16) of our sustainability strategy, which are aligned with our business priorities. We identified these topics in 2017 through a materiality exercise that considered the sustainability context and involved a review of stakeholder concerns. The topics are unchanged in this year's report as they are still relevant for ST in 2018 (see page 17). For each material topic we defined ambitions, goals, and 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 I 102-49 I**

In May 2018, the Annual General Meeting of Shareholders approved the appointment of Jean-Marc Chery as ST's new President and CEO (see page 11). **I 102-10 I**

There is no significant restatement of information given in previous reports. **I 102-48 I**

Use of symbols

The symbols used to report our progress towards our objectives are as follows:

✓ Target achieved In progress ✗ No progress/not achieved

Global Reporting Initiative (GRI)

This report has been prepared in accordance with the GRI Standards: Core option. Throughout the report, we use labels to disclose GRI Standards. We list all references to GRI Standards and the corresponding page numbers in the GRI Content Index on pages 82 and 83.

For the GRI Content Index Service, GRI Services reviewed that the GRI content index is clearly presented and the references for all disclosures included align with the appropriate section in the body of the report. **I 102-54 I**

Supporting the UN Global Compact

We have been a signatory of the United Nations Global Compact (UNGC) since 2000 and we follow its 10 principles. This report describes the actions we have taken during 2018 to implement these principles. It therefore serves as our 2018 Communication on Progress (COP) (see page 81). **I 102-12 I**

ST supports the United Nations Sustainable Development Goals (SDGs). Our contribution to 10 of the 17 SDGs is highlighted throughout the report, including indicators to measure our performance against these goals: **SDG**.

External verification

ST's Sustainability Group Vice President has appointed DNV GL Business Assurance France (DNV GL) to provide us with assurance services. DNV GL has verified the content and data in this report, and confirmed it has been prepared in line with GRI Standards: Core option. DNV GL interviewed all relevant corporate departments and five categories of stakeholders. In addition, DNV GL auditors visited three manufacturing sites – Agrate (Italy), Muar (Malaysia), and Tours (France) – 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 GL's external verification exercise. DNV GL's assurance statement can be found on pages 86 and 87. **I 102-56 I**

Availability

This sustainability report is available in PDF format at www.st.com/company-reports, along with last year's report (May 21, 2018) and those from previous years. Printed copies are available on request. **I 102-51 I**

Feedback

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. **I 102-3 I 102-53 I**

Corporate Sustainable Development
STMicroelectronics International NV
39, Chemin du Champ-des-Filles
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CH-1228 Geneva – Plan-Les-Ouates
Switzerland

This report has been prepared according to GRI Standards and 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

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2019 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 Agrate, Muar and Tours for their availability

Foreword by our President and CEO

I 102-14 I

ST's mission is to provide the semiconductor solutions that help our customers make a positive contribution to people's lives, today and tomorrow. We are proud to do so by living our values, which have guided our behavior and ways of working for over 30 years: Integrity in conducting our business; People always at the center; Excellence in whatever we do.

Sustainability is fully embedded in our values, which is reflected in how we enable innovation for our customers and consumers, as well as in the way we operate as one team of 46,000 engaged employees around the world.

Our approach to sustainability contributes to addressing challenges presented by ever-denser urban environments, complex mobility systems, safety, increasing energy demands, security of data, smart manufacturing and more. ST's products allow our customers to build solutions such as smart city infrastructure, advanced assisted, automated and electric vehicles, next-generation industrial systems and related new workplaces, leading-edge personal electronics devices and high-speed connections. We believe this is the path forward for a sustainable growth for ST, for our stakeholders and for society at large.

Providing innovative solutions to our customers means developing new materials, technologies, designs, and manufacturing processes. In 2018, we made significant progress in many areas, including in strategic programs for ST such as silicon carbide, imaging sensors or low power microcontrollers.

This led to ST being recognized as a Top 100 Global Technology Leader by Thomson Reuters – a tribute to our substantial investments in R&D, the 550 new patents generated, our 160 partnerships in R&D, and our support of local technology ecosystems everywhere ST is present.

Innovation for sustainability is also key for us. We have now crossed the bar of 50% new products recognized as 'Sustainable Technology'. These are products that deliver significant sustainable impacts such as environmental or social benefits, and have gone through a specific eco-design process.

More broadly, ST's updated sustainability strategy for 2025 allows us to minimize risks and seize opportunities to create value for all our stakeholders. This includes reducing the environmental impact of our manufacturing operations by minimizing emissions, switching to renewable energy sources and reusing water. We have already achieved significant results here and we are committed to doing more, especially in the area of the reduction of perfluorinated compounds and Greenhouse Gas emissions, where we have set challenging targets.

Our longstanding commitment and achievements over the past 20+ years have brought us a number of accolades in 2018. These included ST's entry into key responsible business indexes such as Dow Jones Sustainability Indices (DJSI) World and Europe.

Finally, ST is a company built on its employees, whose diversity (105 nationalities), advanced expertise and long-term commitment combine to build a successful company and shape a responsible future. In our latest survey, 75% of ST staff recommended ST as a great place to work. This is encouraging and we are committed to doing more in all fields, including improving employee experience and increasing diversity in leadership positions.

I have been actively involved in ST's sustainability journey throughout my career. As new President and CEO I am honored to drive ST into the next phase and I am fully committed to ensuring that we remain a leader in conducting our business responsibly, leveraging our values and working with our customers to make a positive contribution to everyone's life.

Jean-Marc Chery
President and CEO

ST at a glance I 102-2 I 102-4 I 102-7 I

As of December 31, 2018

Focus on a site

Muar, Johor (Malaysia)

Established in 1974, ST Muar hosts back-end manufacturing and test.

The site embraces ST's values and is committed to acting responsibly, minimizing risks and creating value for all stakeholders. Firmly integrated in the local community, ST Muar is an active supporter of ST Foundation's Digital Unify program.

The site promotes ethical recruitment and was one of the first semiconductor factories in Malaysia to take the decision to eradicate all recruitment fees for workers in both its operations and supply chain.

MANUFACTURING ACTIVITIES

- Back-end manufacturing and test
- 10 production lines
- 37,395 m^2 production area

PRODUCTION CAPACITY

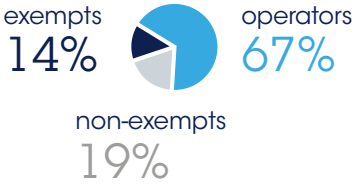
- Assembly: 5.6 Mu/day
- Test: 7.9 Mu/day

CERTIFICATIONS

- Quality: ISO 9001, IATF 16949
- Health & Safety: OHSAS 18001
- Business continuity: ISO 22301
- Environment: EMAS, ISO 14001

OUR EMPLOYEES

- Headcount: 4,371
- Split by gender:
  - 70% women
  - 30% men
- Average age: 33 years
- Split by job category:



ST Products and Solutions

Our solutions address four end-markets:

- Automotive
- Industrial
- Personal Electronics
- Communications Equipment, Computers & Peripherals

Some of our products and solutions are specific to the markets and applications we address, such as our dedicated solutions for Automotive and our application-specific analog solutions for Industrial, but others can be used in a wide range of applications - our general purpose microcontrollers or power discrete devices, for example.

ST is a global semiconductor leader delivering intelligent and energy-efficient products and solutions that power the electronics at the heart of everyday life. Our products and solutions are found everywhere. Working closely with our customers, we help to enable smarter driving; smarter factories, cities and homes; and the next generation of mobile and Internet of Things devices. I 102-2 I 102-6 I

Single-chip NFC/eSE/eSIM for worldwide mobile market

ST provides solutions that cover the needs of the security market, ranging from software solutions embedded in general purpose microcontrollers, to dedicated hardware that meets the highest security standards. Our **secure microcontrollers** can be found in an increasing number of devices. We are in smartcards used for ID, transport, banking and SIM cards, as well as pay TV applications. ST offers a range of authentication solutions for brand protection and Trusted Platform Modules (TPM) designed to secure hardware. Our Secure Element and NFC controller solutions ensure the security of mobile transactions on smartphones, wearables and smart gear.

Connected-car automotive MCU for secure communication

To serve our global customer base, ST provides products and solutions that are making driving safer, greener and more connected. Our **automotive MCU families** meet developer requirements ranging from cost-sensitive to highly-advanced automotive applications. As critical vehicle powertrain, body, chassis, and infotainment features become increasingly defined by software, we create solutions to securely deliver updates, such as fixes and option packs over the air (OTA). Our automotive microcontrollers incorporate state-of-the-art security and generous on-chip code storage to efficiently and conveniently enable this.

- Secure FOTA updates
- Gigabit connectivity
- EVITA fully compliant

15W Qi®-compliant transmitter for fast and stable multi-coil wireless charging

To meet the demand for advanced, intuitive user interfaces in modern electronic devices, ST's industry-proven FingerTip® touch-screen controllers and highly-integrated multi-function display controllers are an innovative solution for the latest technologies.

Low-voltage BLDC motor driver boosts battery runtime in IoT/ portables

Electric motors are key components in many types of equipment in factories, buildings, homes and personal devices. ST provides a comprehensive array of **motor control solutions** covering the requirements of brushed DC motors, stepper motors and brushless DC motors, over a wide range of voltage and current ratings. Our portfolio of STSPIN motor drivers embeds all the functions needed to drive motors efficiently and with the highest accuracy, and includes many advanced features, including a low-voltage series designed for battery-powered smart devices.

Accelerating electrification Silicon-carbide power devices

We make driving greener with our **silicon-carbide technology** for vehicle drivetrain electrification and for electric vehicle charging stations. Silicon-carbide enables a longer range for electric vehicles, as well as faster charging, and lower weight. With the overall increase in electronic components per car, it is important that all the components used to power, control and monitor the different car subsystems consume less energy. ST's high-efficiency smart power solutions and power-efficient processors do just that.

ST offers a range of discrete devices to meet the needs of our customers across the end markets we serve.

Neural networks on STM32 MCUs
Simple, fast, optimized

The objects around us in our daily lives are becoming increasingly smart thanks to embedded processing capabilities. ST offers a complete range of **general-purpose microcontrollers**, such as our STM32 microcontrollers. With 14 product families and over 1000 part numbers, we ensure designers can find the best solution for their application - whether they require ultra-low power consumption, very high performance, advanced security features or a high level of wireless and wired connectivity. Engineers also appreciate our comprehensive development ecosystem that helps to significantly reduce design costs and time to market. One recent addition to our ecosystem is a toolkit for Artificial Intelligence (AI). It works with popular deep learning libraries to convert any artificial neural network to code optimized for our STM32 microcontrollers. With this tool, we help developers bring AI to microcontroller-powered intelligent devices at the leading edge.

STM32 discovery packs for
cellular-to-cloud connectivity

We provide a variety of **wireless connectivity solutions** for today's ever more connected world. These include MCUs with embedded wireless capabilities, RF transceivers, network processors and fully certified modules for Bluetooth, Bluetooth Low Energy, and sub-1GHz long-range networks, such as 6LowPan, WMBUS, SigFox and LoRaWAN.

We also work with partners to make it easier for our customers to use the full spectrum of connectivity services, offering pre-integrated Cloud connectivity software for our microcontrollers, and evaluation and prototyping tools for fast connection of IoT devices to Cloud services over cellular networks.

Galvanic isolated smart power switch
Safety and robustness for Industry 4.0

The wide variety of industrial applications we address requires a range of **application-specific analog solutions**. ST's advanced Bipolar-CMOS-DMOS (BCD) technology provides highly integrated system-on-chip (SoC) solutions that can meet diverse needs. It provides increased digital processing capability for analog designs and an evolution path for solutions in power and high-voltage applications.

Our offering includes galvanic isolated smart power devices that provide maximum safety and robustness in demanding applications, such as factory control and automation PCs or peripherals.

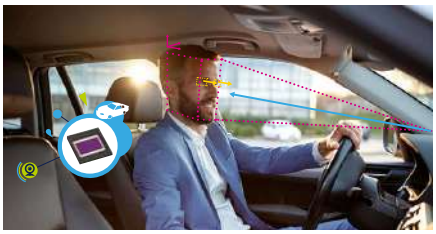
Fully digital amplifiers
for a powerful audio experience

Our **in-vehicle infotainment systems** cover everything from high-end integrated platforms, to digital radio and outstanding Class-AB and Class-D audio power amplifiers. Our ADAS safety solutions make driving safer by helping to drastically reduce road accidents and associated casualties thanks to our cutting-edge RF and vision systems. ST also offers a complete portfolio of ASIC and ASSP solutions for engine control, as well as a complete range of ICs dedicated to body and convenience solutions, including body control modules and car lighting systems.

Global shutter image sensors
for automotive in-cabin camera

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

We also offer advanced **image sensors** that can be used to increase driving safety by enhanced monitoring of vehicle occupants. These sensors capture the scene as illuminated from the camera, eliminating unpredictable external effects, such as sunlight or street lighting.



Compact power modules
High configuration flexibility

Our silicon-carbide and gallium-nitride power devices are appreciated for their efficiency and enhanced performance in automotive inverters and charging, industrial automation and communications infrastructure applications. Other products in our power discrete offer are first-choice solutions for high-end power conversion, home appliance, and motor control.

We develop **power modules** that provide cost-effective and highly-integrated power conversion for applications such as industrial motor drives, air conditioners, solar generators, and electric vehicles. Our space-efficient, low-profile technology combines high power density with reliability in an economic plastic package.

Ultra-low-power
6-axis industrial-grade IMU

ST makes motion and environmental MEMS and sensors that offer engineers increased accuracy and sensitivity, as well as improved performance and ultra-low power consumption. We design products for applications that require high reliability and small sizes, especially in the harsh environments of factories and cars. Our high volume production and testing capabilities allow us to serve the personal electronics markets while also meeting the needs of the industrial and automotive industries.

Our innovative **thin-film piezoelectric microactuators** ensure higher efficiency and lower cost for inkjet printing, camera autofocus, MEMS speakers and infrared scanners.

2018 Highlights

+15.8%
net revenues vs 2017

by ST
SUSTAINABLE TECHNOLOGY

50%
of new products are responsible products

100%
of our products are conflict-mineral free

549
new patents filed

47
average training hours per employee

41%
of water recycled and reused

93%
of waste reused, recovered or recycled

MEMBER OF
Dow Jones Sustainability Indices
In Collaboration with RobecoSAM

90%
of our employees covered by annual human rights assessments

Recordable case rate
0.17
Among the best-in-class

77%
employee engagement score 8 points above the industry norm

2018 Bloomberg Gender-Equality Index

374
voluntary initiatives from 33 sites worldwide

87%
of indirect services suppliers at risk received a social audit

Our ambitions and goals

WE LIVE OUR VALUES: People, Integrity, Excellence

WE PUT PEOPLE FIRST

OUR AMBITIONS

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

Labor & Human Rights
Be recognized as a leader in labor and human rights and accept zero tolerance on forced labor.

Development & Engagement
Offer the best employee experience in all the locations where we operate.

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

2025 GOALS

<0.15%
recordable cases* for employees and contractors
* injuries and illnesses

100%
of ST manufacturing sites recognized by external international bodies

Employee engagement rate
+10 points
above country norms

>20%
women in all management levels

WE IMPROVE EVERYBODY'S LIFE

OUR AMBITIONS

Innovation & Profits
Sustain profitable growth, being the world leader in Industrial, Internet of Things and Automotive applications and markets.

Quality
Lead our market in terms of product quality, with no severe quality incidents, while meeting the most stringent customer expectations.

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

2025 GOALS

>20%
of revenues generated by new product lines

-75%
severe quality incidents*
*2016 baseline

x3
% revenues generated by responsible products*
* vs 2016

WE PROTECT THE ENVIRONMENT

OUR AMBITIONS

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

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

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

2025 GOALS

-20%
energy consumption and GHG emissions*
* Normalized values vs 2016

-20%
water consumption*
* Normalized values vs 2016

95%
of our waste reused and recycled

TOGETHER, WE SHAPE THE FUTURE

OUR AMBITIONS

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

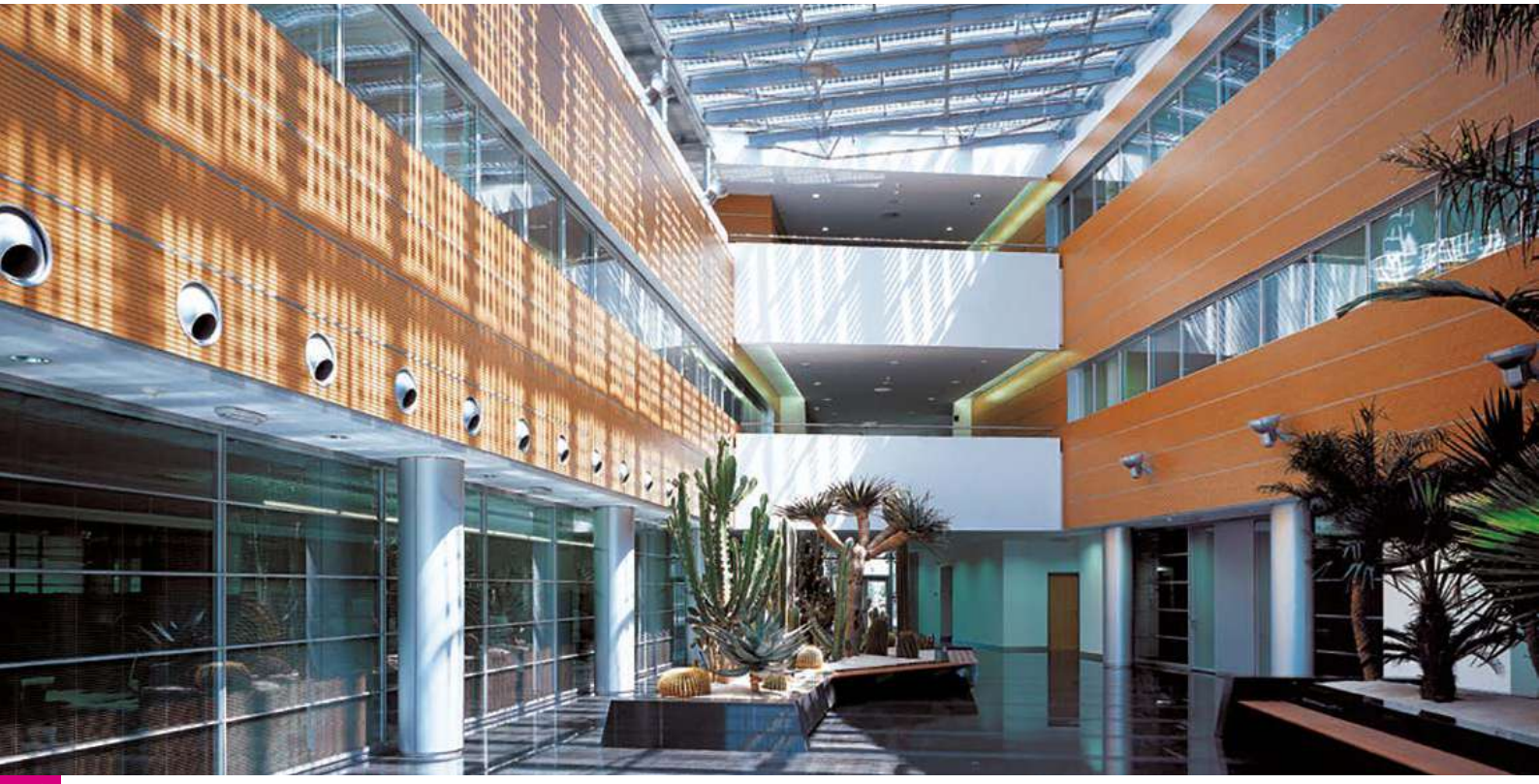
Education & Volunteering
Prepare the future by supporting education in schools in all the countries where we operate.

2025 GOALS

100%
suppliers at risk audited

STEM*
education partnerships
in **20** countries
* Science, Technology, Engineering, Mathematics

Governance



ST headquarters, Geneva, Switzerland

95.1% average attendance rate at our Supervisory Board meetings

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. Our headquarters and operational offices are managed through our wholly-owned subsidiary, STMicroelectronics International NV, located in Plan-les-Ouates, near Geneva. 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 I 102-45 I

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, at http://investors.st.com.

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 102-18 I

Our Supervisory Board comprises nine members, each appointed by 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 at http://investors.st.com.

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

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

Jean-Marc Chery appointed **new President and CEO** in 2018

Independent audit function

Sustainability Council comprises 12 Vice Presidents

Member of the **Responsible Business Alliance** since 2005

Our Supervisory Board met nine times in 2018, with an average attendance of 95.1%. Full details of the 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 at http://investors.st.com.

Managing Board

At our 2018 Annual General Meeting of Shareholders, in May 2018, Jean-Marc Chery was appointed as sole member of the Managing Board for a three-year term expiring at our 2021 AGM. Jean-Marc Chery had been designated by our Supervisory Board, in January 2018, as ST's new President and CEO. He replaced Carlo Bozotti, who retired in May 2018 after 13 years as President and CEO.

Upon the proposal of ST's new President and CEO, Jean-Marc Chery, our Supervisory Board approved the establishment of a newly formed Executive Committee, entrusted with the management of the Company and led by Mr. Chery as its Chairman.

The other members of the Executive Committee are:

- Orio Bellezza, President, Technology, Manufacturing and Quality
- Philippe Brun, President, Human Resources and Corporate Social Responsibility
- Marco Cassis, President, Sales, Marketing, Communications and Strategy Development
- Claude Dardanne, President, Microcontrollers and Digital ICs Group
- 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, at www.st.com.

Corporate Audit

Corporate Audit is strictly independent of 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, Franck Freymond, is head of Corporate Audit. 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 an 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 Philippe Brun, President, Human Resources and Corporate Social Responsibility, and member of the Executive Committee. He chairs our Sustainability Council and updates our President and CEO at quarterly Executive Committee meetings.

Our Sustainability Council validates our sustainability strategy and ensures the means are in place for each organization and site to deploy its corporate programs. The Council comprises 12 Vice Presidents, representing Human Resources, Compliance and Ethics, Sales and Marketing, Purchasing, Investor Relations, Front and Back-end Manufacturing, Product Groups, 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 (formerly the EICC) since 2005. **I 102-13 I**

Ethics and Compliance

As one of the world's leaders in semiconductors, we have a responsibility to lead by example. Our vision speaks for itself: we want to be everywhere microelectronics brings a positive contribution to people's lives. This must be reflected in everything we do. We believe that conducting our business with the highest standard of integrity is essential to our long-term success. At ST, compliance and ethics are everyone's job and responsibility. I 102-16 I

Code of Conduct

Our Code of Conduct is all about our values, which are shared throughout the Company. The principles it contains are the top level reference for guiding our behavior, decision making and activities.

- Integrity: we conduct our business with the highest ethical standards, honor our commitments, deliver on our promises, 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; each 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 competences, seek responsibility and are accountable for our actions; we act with discipline, base our decisions on facts, and focus on the priorities.

In 2018, we refreshed our Compliance & Ethics awareness and communication campaign (branded 'Building Trust Together'), focusing on the importance of integrity and ethical conduct. This initiative establishes clear expectations throughout our Company and invites all employees to speak up without fear of retaliation.

We use a variety of tools to engage with employees, managers and third parties. These include face-to-face and town-hall meetings, e-learning modules, dedicated intranet, articles, posters, targeted emails and short videos (available in 10 languages).

We have also developed a dedicated mobile application, our 'ST Integrity App' (available on the Apple, Google Play and Wandoujia stores), which we use to provide our employees with quick and easy access to important and useful information. There are also notifications, fun quizzes, and training materials. The App also includes a link to our misconduct reporting hotline and other useful contact information.

'Building Trust Together' campaign

E-signature of Code of Conduct[1] (%)

2014	2015	2016	2017	2018
91	95	94	97	97

[1] Percentage of exempts. Scope was extended to all exempts in 2016.
From 2015 onwards the Business Conduct and Ethics Policy was replaced by our Code of Conduct.

Bribery and corruption

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

Our Code of Conduct and Anti-Bribery and Corruption policy, which are available in the corporate governance section of our website at http://investors.st.com, provide clear definitions regarding instances of bribery and corruption, and include detailed descriptions of the Company's rules for engaging with third-parties. They also explain how to report actual or suspected violations and outline the potential disciplinary actions and legal consequences of any non-compliance.

Speak up and misconduct reporting

We encourage everyone, including external business partners, to express, in good faith, 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.

Our misconduct reporting process is communicated to all employees through, amongst 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.

The Company applies the highest standard of confidentiality in the handling of all reports received (either through local management or through the hotline) and ensures that no employee who reports a concern in good faith suffers retaliation in the form of harassment, adverse employment or career consequences.

Misconduct reporting

	2018
Number of incidents under review as of January 1st	2
Number of incidents reported or identified during the year(1)	21
Actual misconduct cases identified through audit or management review	0
Incidents closed by a formal investigation report	3
Number of confirmed external misconduct cases	0
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	14
Incidents still open at year end	6
Number of public legal cases regarding corruption brought against ST or its employees	0

(1) Relates to cases managed at corporate level.

Speak up!

'Speak up' culture

Ethics committees

Our Corporate Ethics Committee is chaired by our Chief Compliance Officer, Philippe Dereeper, and provides support to the Company's management in its efforts to foster a business ethics culture that is consistent across regions, functions, and organizations. This committee meets at least quarterly and comprises nine senior managers appointed for a three-year mandate by our President and Chief Executive Officer.

The committee's role and responsibilities include:

- discussing and evaluating desired amendments to our Code of Conduct, as well as ethical breaches, allegations, and related investigations
- issuing guidance or recommendations on ethical dilemmas
- coordinating a network of Local Ethics Committees in France, Italy, Asia Pacific and the Americas

These Local Ethics Committees, covering individual countries or regions, meet regularly. Their roles, responsibilities, and organizations are defined locally, based on guidelines issued by the Corporate Ethics Committee.

Risk Management

Throughout all functions, organizations and sites, we take appropriate steps to identify, manage and monitor risks, in pursuit of our objectives as a listed semiconductor company operating across the globe.

Enterprise Risk Management (ERM)

ERM is an embedded process that enables us to set our Company strategy, manage our performance, and capitalize on opportunities. It also ensures a systemic identification, evaluation and treatment of risks.

Following an independent audit of our ERM process in 2017, ST increased its investment in risk management. In particular, a three-year improvement roadmap has been agreed, and an ERM framework has been defined, which is now being deployed.

ERM framework aligned with ISO 31000

ST's ERM framework	
Governance, organisation and culture	• ERM oversight and governance
	• Risk culture
	• Risk appetite
	• ERM function and community
Managing risk	• Risk in strategy and performance management
	• Risk monitoring
	• ERM interactions with other risk functions
ERM Enablers	• ERM policy framework and methodology
	• ERM process
	• ERM tools

The inter-related components of this framework enable us to take appropriate steps to identify, manage and monitor our key opportunities and risks, in particular through the associated ERM process.

Franck Freymond
Group Vice President,
Chief Audit & Risk Executive

"The ERM framework and its associated process are key enablers to setting and executing our Company strategy. In a dynamic and ever-changing risk environment, it protects our business and enhances value creation."

ERM process

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

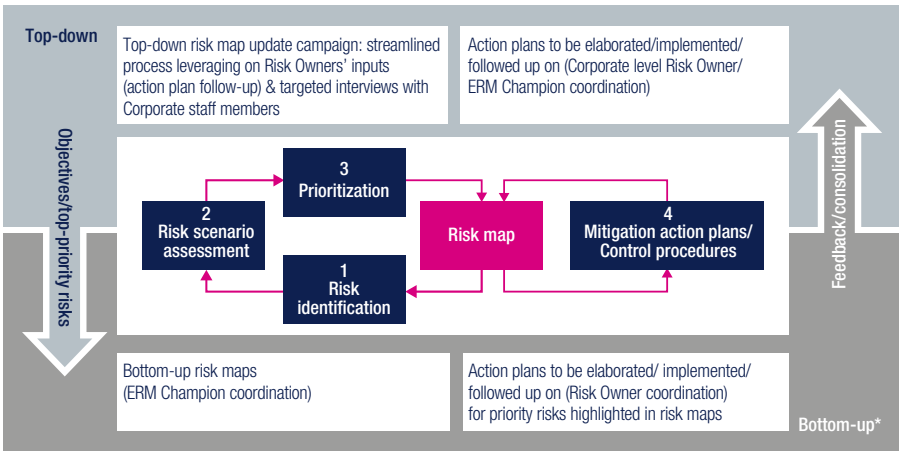
The ERM process is formalized in a specific policy and is enabled by a risk management tool. It is aligned with the ISO 31000 standard and is fully embedded in all organizations and Company key processes. It applies a holistic approach, combining both top-down and bottom-up perspectives, to ensure that risk identification, evaluation, and management is embedded at the most effective level.

In 2018, we carried out the annual review of our top-down risk assessment with executive management. The output from this exercise was a risk map linked to our strategic objectives, including ten 'priority 1' risk areas.

Risk owners (members of senior management) were appointed for each of these areas to develop risk-mitigation action plans and enhanced monitoring and reporting capabilities. These plans are regularly reviewed by senior management and periodically discussed with the Supervisory Board and Audit Committee.

We also completed the bottom-up risk assessment in organizations throughout the Company, including Marketing and Sales, Product Groups, Manufacturing and Technology, and corporate functions.

Risk factors inherent to our industry and operations are described in our annual financial report. In addition, further information on mitigation activities for specific risks can be found in the relevant sections of this report.



* ST organizations

Business Continuity

As our business environment is complex and variable, a structured Business Continuity Management System (BCMS) is essential. It provides a consistent and structured methodology to address potential business disruptions that may affect our supply chain. Potential disruptions include suppliers and logistics services, quality and manufacturing performance failures, unavailability of people, and IT system failures.

In terms of business continuity, the types of risks we face include disasters due to natural hazards (such as earthquakes, floods, snowstorms, volcanic eruptions, tsunamis), industrial accidents (fire, explosion, pollution), and major impacts related to human activities (terrorism, strikes, pandemics).

Sixteen of our sites (see ST site certifications table on page 34) are certified ISO 22301.

Our sites are re-certified every three years, with a third-party surveillance audit conducted in the interim to ensure we are on track. We also run internal audits between sites, to share knowledge and best practices. In 2018, all certified sites completed their interim third-party surveillance audit.

Each site also runs an annual crisis simulation exercise covering multiple scenarios.

Following preparation work in 2017, in 2018 we conducted the third-party audits and received certification for both our front-end and back-end manufacturing outsourcing organizations.

We also expanded the BCMS to other entities, doing preparation work and pre-audits for our Castelletto site (Italy) and the Information and Communication Technology Group. The final audits and certification will be conducted in 2019.

16 sites
ISO 22301 certified

Sustainability risks

Sustainability risk management is integrated into our Company ERM program. It is part of the bottom-up process, where each organization is responsible for identifying and managing its risks.

In addition, we identify our overall sustainability risks (and opportunities) through a regular materiality exercise; for more information, see page 16.

For each topic covered by our sustainability strategy, we identify the risks and then define and deploy programs to manage these risks. This includes defining policies, deploying certified management systems, such as OHSAS 18001 and ISO 14001, and implementing industry standards, such as the Responsible Business Alliance (RBA) code of conduct and supporting evaluation and auditing tools.

In 2018 we conducted a 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 the Supply Chain Responsibility section on page 71 for more details.

Sustainability Strategy

WE LIVE OUR VALUES: People, Integrity, Excellence

WE PUT PEOPLE FIRST

WE IMPROVE EVERYBODY'S LIFE

WE PROTECT THE ENVIRONMENT

TOGETHER, WE SHAPE THE FUTURE

Three-step materiality exercise

Our approach

Embedded in our culture

Sustainability has been part of our core values for more than 25 years, as we strive to act responsibly for all our stakeholders. It is fully integrated in our business, allowing us to maximize opportunities in areas such as eco-design, innovation, and employee engagement. It also helps us to predict and mitigate risks in our operations and business performance.

Staying focused on material topics

Staying focused on what really matters for our business and for our stakeholders is the cornerstone of our sustainability strategy. In 2017, we identified our priority material topics through our third, three-step materiality exercise:

- Topic identification
- Stakeholder consultation
- Sustainability strategy validation

Our material topics are shown in the 'Materiality matrix' (on page 17). For each material topic, we defined specific ambitions and long-term goals. The programs and performance indicators relating to these are presented throughout this report.

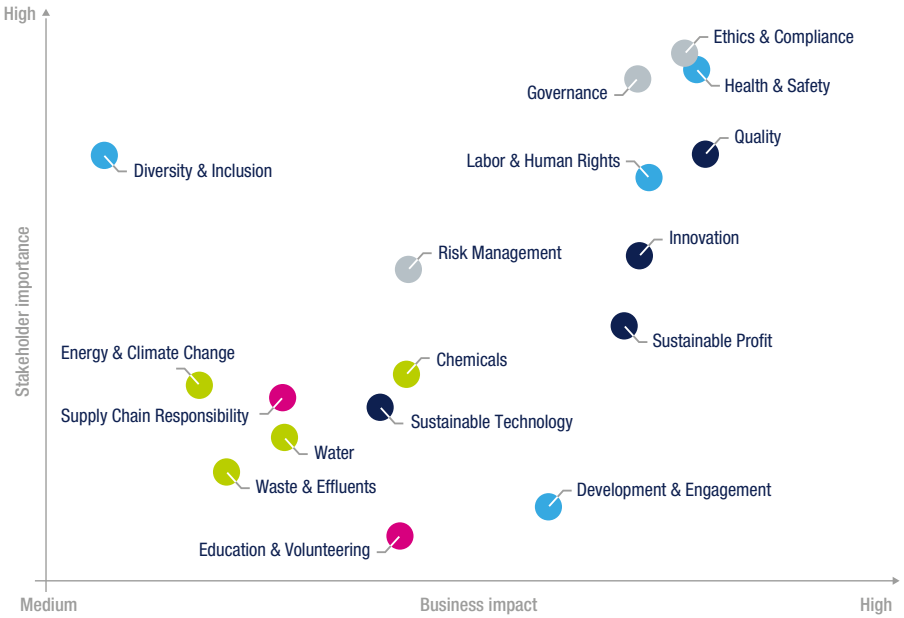
As sustainability challenges and opportunities are constantly evolving, we continually monitor external trends, emerging issues and changing perspectives. We assess their relevance and importance in terms of the risk and opportunities for ST.

In 2018, we did not identify any new material topics, but we raised the importance of two existing topics – Chemicals and Energy & Climate Change – following the Responsible Business Alliance's analysis in its 'sensing assessment'.

I 102-47 I 102-46 I 103-1 I

Top material topics

Materiality matrix



Philippe Brun
President,
Human Resources and Corporate Social Responsibility

Interview with Philippe Brun

In May 2018 you were appointed as President Human Resources and Corporate Social Responsibility (CSR), what does this mean for sustainability in ST?

Our sustainability values and culture have been embedded in our business practices for more than 25 years, this now brings the topic to the highest level, confirming its importance for ST. It demonstrates our strong commitment towards sustainability and I am honored to have the opportunity to serve this purpose.

How do you see the role of a multinational company like ST, in terms of CSR?

Our vision, being everywhere microelectronics makes a positive contribution to people's lives, reflects our role and is totally aligned with the CSR concept. ST, like other companies, strives to do business while always taking into account the impact on people and the environment in our whole ecosystem and beyond. Indeed we believe that sustainability creates huge opportunities to deliver long-term success and value for all our stakeholders. As a large company, we have to set the example, leading the way for our whole eco-system.

What challenges do you foresee in the future, and how does ST address them?

The world is changing faster than ever. Expectations on corporate responsibility are increasing. At ST we anticipate our stakeholders' requirements, keep ahead of regulations, and develop our ecosystems while focusing on our top business priorities. We develop new responsible products and applications, and create a great employee experience while using efficiently natural resources. Our sustainability culture gives us the means to shape the future. It also gives us the means to recruit, retain and engage the talents necessary to do it.

Managing our impacts all along our value chain I 102-9 I

MAIN STEPS IN OUR VALUE CHAIN

Suppliers

We purchase silicon ingots, 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 (FE) manufacturing

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

Electrical wafer sorting

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

Back-end (BE) 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 for a wide range of applications, which are developed by our customers.

MANAGEMENT OF OUR IMPACTS

We implement the RBA (formerly EICC) standards in our supply chain and encourage ISO and OHSAS certifications to address ethics, social, environmental, health and safety risks.
We participate in the conflict-free initiative.

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

FE manufacturing requires large quantities of water and some ST sites are located in water scarce regions. Through our water management programs we are continually reducing our water footprint through reuse and recycling.

We implement our Code of Conduct and the RBA (formerly EICC) standards in all our sites to mitigate our ethics and labor and human rights risks.

We carry out regular assessments and audits in all our production sites.

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

We manage 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. Consequently, even if our consumption of PFCs is relatively low, their impact is significant and requires actions to reduce the CO_2-equivalent emissions that they produce.

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.

Our products are designed to minimize the carbon footprint and consume as little energy as possible in the end-application.

We also develop innovative products to help our customers develop new energy-saving applications.

Our management of hazardous substances minimizes the impact of disposal and facilitates recycling.

Outside ST Inside ST

Contributing to the Sustainable Development Goals (SDGs)

The SDGs set by the United Nations define global sustainable development priorities and aspirations for 2030, highlighting the world's biggest social and environmental issues. As a multinational company, we believe we have a responsibility to help achieve these goals.

We mapped the 17 SDGs to our material topics and business strategy. We then identified the 10 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 accept zero tolerance on 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.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

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

13 CLIMATE ACTION

- We deploy programs to reduce our GHG emissions.
- We actively participate in industry initiatives for action on climate change.

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 understanding their interests and expectations. Every ST site performs specific actions depending on its activity, size, location and culture, and all sites have regular exchanges with local stakeholders, such as local authorities, schools and universities. I 102-40 I 102-42 I 102-43 I 102-44 I

During the verification process for this report, the DNV GL auditor interviewed five external stakeholders about their relations with ST. All of them expressed the positive impact of their collaboration with ST, stating that they feel engaged by ST in defining and developing common goals and projects.

Employees

Key expectations
- Quality
- Health & Safety
- Ethics & Compliance

Engagement channels
- Seminars, conferences, forums
- VP communication meetings
- Recognition, awards, contests
- Intranet, internet, news, emails, videos
- Training, workshops
- Employee surveys
- Application week, EHS week

Customers

Key expectations
- Ethics & Compliance
- Governance
- Quality

Engagement channels
- Trade shows
- Conventions, technical seminars
- Audits and sites visits
- Joint seminars, conferences, technodays, workshops
- Meetings

Investors & analysts

Key expectations
- Health & Safety
- Governance
- Innovation

Engagement channels
- Investors and analysts day
- Annual reports
- Extra-financial questionnaires

Suppliers

Key expectations
- Health & Safety
- Ethics & Compliance
- Labor & Human Rights

Engagement channels
- Meetings
- Audits
- Supplier training
- Surveys
- EHS week
- Technical roadshows

Media

Key expectations
- Waste & Effluents
- Innovation
- Chemicals

Engagement channels
- Conferences, conventions, meetings
- Press releases

Local partners

Key expectations
- Ethics & Compliance
- Labor & Human Rights
- Waste & Effluents

Engagement channels
- Partnerships
- Conferences, conventions, meetings
- Site visits
- Donations, training, volunteering, local initiatives

Industry associations

Key expectations
- Governance
- Ethics & Compliance
- Diversity & Inclusion

Engagement channels
- Memberships in public-private partnerships, international and European associations
- Participation in consortiums, in working groups of electronic industry associations
- Meeting, conferences, seminars

Academic & laboratories

Key expectations
- Labor & Human Rights
- Ethics & Compliance
- Diversity & Inclusion

Engagement channels
- Internships, scholarships, PhDs
- Joint R&D projects, joint labs
- Conferences, technical seminars
- Site visits

National & local authorities

Key expectations
- Quality
- Ethics & Compliance
- Health & Safety

Engagement channels
- Partnerships with municipalities
- Meetings, conferences, seminars
- Annual reports
- Site visits

Key expectations are the top three issues retained by each group of stakeholders in our 2017 materiality exercise.

Mobile World Congress, Barcelona, Spain

We improve everybody's life

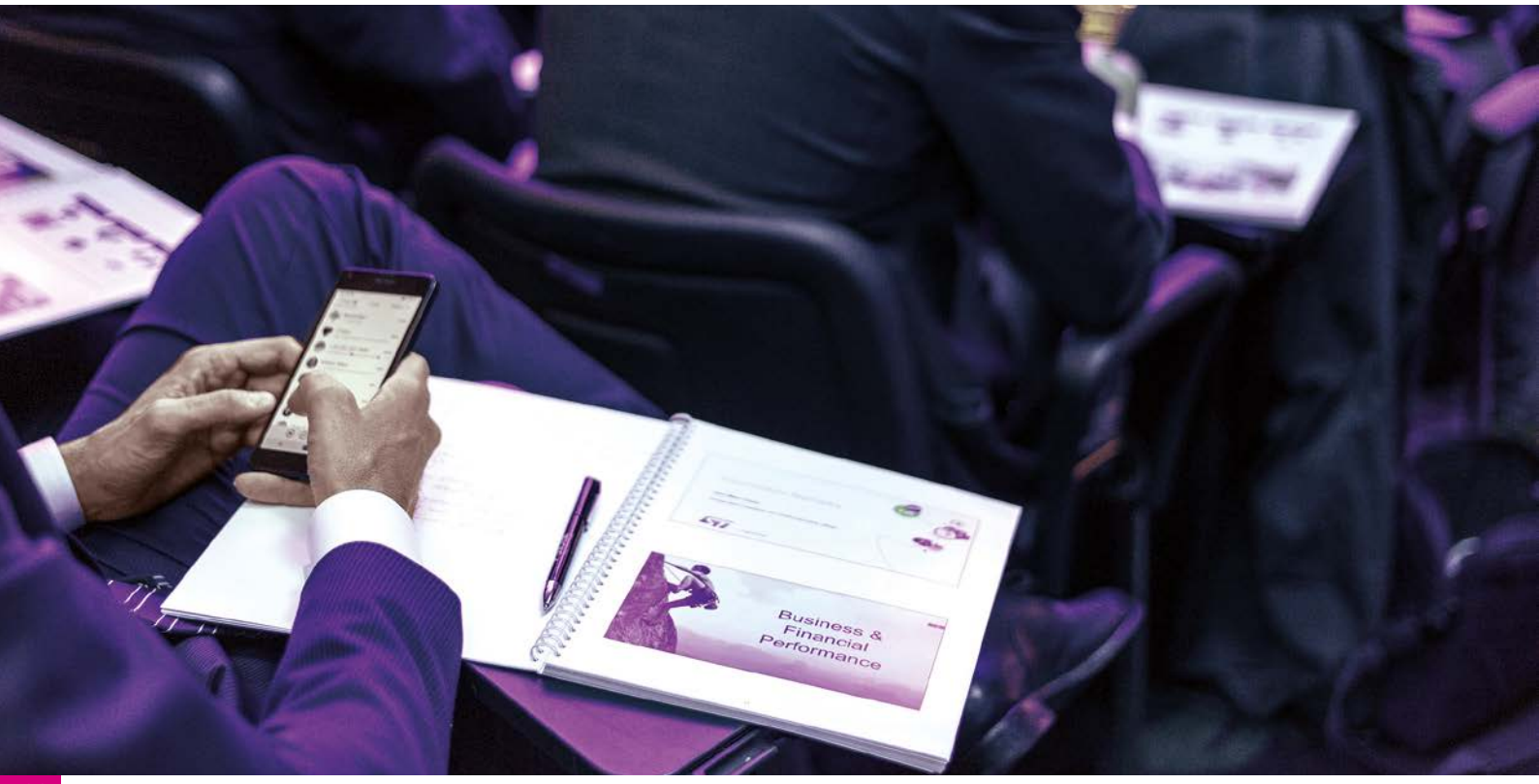
Inclusion in
DJSI
World and Europe

+15.8%
net revenues vs 2017

549
new patents filed

- Around 7,400 employees dedicated to R&D
- Thomson Reuters Top 100 Global Technology Leader
- IATF & ISO 9001 certified
- 50% of new products are responsible products

Sustainable Profit



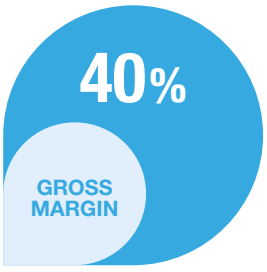
Capital Markets Day, London, UK

Our commitment to sustainability is critical to our long-term business success. Our actions to drive sustainable progress are designed to improve our financial performance, decrease risk, and support our reputation among stakeholders as a long-time pioneer in our industry. I 103-1 I

Financial performance

2018 was an important year for ST. In line with our objectives, we achieved significant revenue growth across our product groups, as well as increased profitability and strong operating cash flow. We also continued to invest to drive growth opportunities and operating efficiency over the mid-term. I 103-2 I 103-3 I

+15.8% vs 2017



+0.8 percentage points vs 2017

+2.5 percentage points vs 2017

Solid capital structure supported by US$686 million net cash

We achieved our objective to outpace the growth of the markets we serve, with net revenues up 15.8% compared to 2017, reaching US$9.66 billion. Gross margin was 40%, 0.8 percentage points higher than in the previous year. Operating margin increased by 2.5 percentage points to reach 14.5% in 2018, driven by sales growth and operating efficiency.

Double-digit growth for all product groups

In 2018, our financial performance allowed us to achieve a 10% increase in net cash from operations for the year, reaching US$1.85 billion. Our free cash flow increased 73% to US$533 million, more than covering our cash dividends of US$216 million, as well as a US$62 million share buyback, under the program launched during the 2018 fourth quarter.

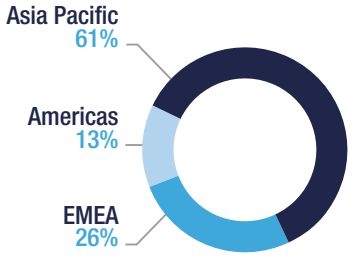
As anticipated, we ended 2018 with a higher net cash position - US$686 million compared to US$489 million at December 31, 2017.

The growth in revenues was well balanced, with all product groups increasing their revenues, operating income and operating margin.

- Automotive and Discrete Group revenues increased 16.2%, with double-digit growth for both Automotive and Power Discrete.
- Analog, MEMS and Sensors Group revenues increased 19.9%, on sharply higher Imaging sales and double-digit growth in Analog.
- Microcontroller and Digital ICs Group revenues increased 11.1%, with double-digit growth for Microcontrollers and Memories, and Digital ICs. **| 102-2 |**

The full details of our financial results are available in our Form 20-F and IFRS annual reports, which can be found on our website at http://investors.st.com.

Net revenues by location of order shipment (%)
| 102-6 | 102-7 | 201-1 |



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

	2014	2015	2016	2017	2018
Net revenues (US$m)	7,404	6,897	6,973	8,347	9,664
Gross profit (US$m)	2,498	2,332	2,459[1]	3,272[1]	3,861
Gross profit as a percentage of sales (%)	33.7%	33.8%	35.3%[1]	39.2%	40.0%
Net earnings (US$m)	128	104	165	802	1,287
Earnings per share (diluted) in (US$)	0.14	0.12	0.19	0.89	1.41
Market share versus TAM (%) (Total Available Market)	2.20%	2.06%	2.06%	2.02%	2.06%

[1] Data corrected versus 2018 sustainability report. Data in line with 2018 annual report Form-20F: gross profits have been adjusted to reflect the January 1, 2018 adoption of ASU 2017-07 related to the reclassification of certain pension costs.

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

	2014	2015	2016	2017	2018
Operating income	168	109	227[1]	1,005[1]	1,400
Net operating cash flow	197	327	316[2]	308[2]	533

[1] Data corrected versus 2018 sustainability report. Data in line with 2018 annual report Form-20F: operating incomes have been adjusted to reflect the January 1, 2018 adoption of ASU 2017-07 related to the reclassification of certain pension costs.
[2] Data corrected versus 2018 sustainability report. Data in line with 2018 annual report Form-20F: net operating cash flow has been adjusted in Q318 to reflect the impact of new 2018 accounting guidance, which requires, on comparative periods, the reclassification as operating cash flows of the implied interest paid in the settlement of our convertible bonds.

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

"ST's fundamentals continued to improve in 2018. Our innovative and broad product portfolio, together with healthy demand, boosted growth across all product groups and geographies - with revenues increasing 15.8% over 2017. Our focus on industry megatrends and development of new and innovative programs enabled us to grow faster than our served markets. Profitability grew both at the operating and net income level, up 39% and 60%, respectively. Also our capital structure was further strengthened, while maintaining our investment in innovation and future growth: R&D expenses reached US$1.39 billion in 2018, while capital expenditure totaled US$1.26 billion.

Finally, as I have been at ST since 1987 in various business and financial roles, it is a great pleasure and privilege for me to have been appointed as President, Finance, Infrastructure and Services and CFO on 31 May, 2018. I am very encouraged by the progress we have made and the prospects for further strengthening our business."

Looking forward

For 2019, our primary objectives are to continue outperforming our markets and balance our end-market and application focus, delivering sustainable profitability and returning value to shareholders. To support these goals and to implement our strategic technology, R&D and manufacturing programs, we expect to invest between US$1.1 billion and US$1.2 billion in capital expenditure.

In addition to maintenance and R&D required by our manufacturing operations, and expanding our capacity in some of our existing technologies, these investments will also allow us to develop three key strategic initiatives:

- A new 300mm manufacturing facility at our Agrate site (Italy) supporting BCD, IGBT and power technologies.
- The expansion of our installed silicon carbide capacity and the production ramp-up of gallium nitride technology for radio frequency devices.
- The next generation of imaging sensor technologies. These will enable us to maintain our leadership in technologies for personal electronics, and to address industrial and automotive applications.

Investment and strategic initiatives to support growth continue in 2019

Extra-financial reporting

Socially responsible investment rating agencies, analysts and investors regularly request detailed feedback on a wide range of environmental, social and governance (ESG) topics to evaluate our corporate behavior and performance. This sustainability report, combined with the information posted on our website, is designed to give stakeholders a transparent view of our programs and performance, and to provide the relevant information analysts and investors need to evaluate us.

In 2018, we were included in the Dow Jones Sustainability Indices World and Europe. With a total score of 81 points out of 100, ST was ranked in the top 10% of the global semiconductor companies that were invited to participate in the indices. This achievement acknowledges our long-standing commitment to conducting our business responsibly and recognizes our performance in many domains, ranging from business ethics, innovation, and quality, to environment and labor practices.

We were also included in the Bloomberg Gender Equality Index and maintained a strong presence in other sustainability indices, such as the Financial Times Stock Exchange's index FTSE4Good, Ethibel, and Euronext Vigeo.

MEMBER OF
Dow Jones Sustainability Indices
In Collaboration with RobecoSAM

Manjit Jus
Head of ESG Ratings, RobecoSAM:

"I congratulate STMicroelectronics for being included in the DJSI World and Europe. Companies that compete for a coveted place in the DJSI challenge themselves to continuously improve their sustainability practices and we are pleased to see that the number of companies that commit to achieving measurable positive impacts continues to rise."

ST inclusion in the main sustainability indices in 2018

ECPI Sense in sustainability
Included in ETHIBEL SUSTAINABILITY INDEX EXCELLENCE Europe
EURONEXT vigeo eiris INDICES
2018 Bloomberg Gender-Equality Index
FTSE4Good

In addition, at the beginning of 2019 we received a Bronze Class and Industry Mover distinction from SAM (the RobecoSAM business unit that specializes in ESG ratings) for our excellent performance. As one of the top scoring companies in our industry, we were also included in their Sustainability Yearbook.

Participating in these evaluations gives us an opportunity to assess our performance within a wider context, benchmark us against our peers, measure our progress, and identify areas for further improvement. It also enables us to monitor investment trends and identify new risks and opportunities.

Innovation

COOLab, ST Rousset, France

Innovation & Profits

OUR AMBITION

Sustain profitable growth, being the world leader in Industrial, Internet of Things and Automotive applications and markets.

2025 GOAL

>20%

of revenues generated by new product lines

2018

15.5%

US$1.39 billion
invested in R&D

We are - above all - an innovation driven company. Our technology developments are market-driven, 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 a total of US$1.39 billion in R&D in 2018, an increase of almost 8% compared to 2017, representing 14.5% of our net revenues.

This year ST was ranked in Thomson Reuters' 'Top 100 Global Technology Leader'. This recognition is given only to a select group of companies; those organizations poised to deliver the future of technology. The ranking resulted from our commitment to leadership across eight pillars of performance, including innovation.

Technology innovation

Thanks to a strong innovation pipeline creating a large patent portfolio, ST is one of the few semiconductor companies mastering many different chip fabrication technologies. These include advanced very low power and RF CMOS (Complementary Metal Oxide Semiconductor) including SOI (Silicon-On-Insulator), Bi-CMOS, BCD (Bipolar, CMOS, DMOS), specialized imaging technologies, MEMS, including piezo MEMS, e-NVM (embedded non-volatile memory) technologies, VIPower (Vertical Intelligent Power), silicon-carbide and gallium-nitride. Two leading-edge varieties of our e-NVM technologies were presented at the 2018 International Electron Device Meeting (IEDM), the leading conference in semiconductor technology.

Thomson Reuters
Top 100 Global Tech Leader 2018

European project
IPCEI launch

Open innovation

Strong R&D partnerships

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 160 active R&D partnerships in 2018.

For instance, our cooperation with Sigfox, a world leading IoT service provider, has led to the launch of the ultra-low-power Sigfox Monarch solution for industrial asset management, enabling seamless IoT worldwide connectivity. This makes ST the one-stop-shop for creating innovative devices for real-time and always-connected remote monitoring and asset-tracking applications.

We participate in cooperative research programs across Europe to help sustain a lively microelectronics ecosystem and maintain our leadership in technology. ST coordinates several Electronic Component and Systems for European Leadership (ECSEL) projects. One of these projects, Pilot Optical Line for Imaging and Sensing (POLIS), was awarded one of the 2018 'European Star Innovation Awards' from the French Ministry of Higher Education, Research and Innovation.

The Important Project of Common European Interest (IPCEI) on microelectronics was initiated in 2018 (see press release on www.europa.eu). This program gathers the most important European players in microelectronics to cooperate and innovate to serve the IoT, space, smart driving, and security markets. It will support both research, development and innovation, and the launch of the industrialization phase. In addition to working with the direct partners, ST France and ST Italy will also collaborate with academic laboratories and small enterprises.

Developing the local ecosystem

We seek to boost innovation in our ecosystem through a comprehensive approach, contributing in a variety of ways.

We implement advanced partnerships with start-ups, and host some of them on our sites (we currently have 30 partnerships with start-ups in France). In 2018, we also launched a hardware start-up accelerator program in Israel, called ST-Up.

We engage ST employees through creativity and prototype labs to develop 'open intrapreneurs', such as the Proof of Concept lab in Naples (Italy). We also organize challenges for start-ups, such as the STM32 Open Innovation Challenge.

Furthermore, we support specific transversal innovative initiatives, such as the CleanTech tour, with the objective of creating a worldwide network of entrepreneurs in CleanTech and new markets (see www.st.com/cleantechtour).

Innovation activity

	2014	2015	2016	2017	2018
Median age of immature projects (months)	15	20	20	15	18
Immature projects[1] younger than 1 year (%)	37	27	23	38	24
Projects[1] maturing within year (%)	25	17	21	30	17

[1] Projects: product development projects, defined in accordance with IFRS criteria, measured in asset value, not yet at Maturity 30 at the end of the year.

ECSEL Joint Undertaking

Bert De Colvenaer
Executive Director, ECSEL Joint Undertaking

"At ECSEL JU, we contribute to electronic components and systems leadership in Europe through cooperation, and we bridge the gap between research and exploitation. I'm delighted with the success of POLIS, whose results will enable various optical sensors to serve vital applications such as robotics, car safety and consumer electronics. Congratulations!"

European Star Innovation Award

FOCUS

POLIS European project

This outstanding example of European cooperation brought together the ST sites of Edinburgh (Scotland), Crolles (France), and Grenoble (France) with 21 world-class partners from seven countries over four-and-a-half years.
The project members pooled their skills to build pilot lines dedicated to differentiating technologies that will enable a large range of innovative sensors and breakthrough micro-displays, covering a wide wavelength range, from infra-red to gamma rays.
The project has created new business opportunities, while enhancing our technology and product offer. For example, our renowned Flightsense® time-of-flight sensor is now adopted in more than 100 smartphones for fast auto-focus and is suitable for many more applications. POLIS has also strengthened our partnership with many semiconductor players, such as ULIS, MicroOled, and Horiba Jobin Yvon IBH Ltd.

Technical expertise

ST develops advanced technological and technical expertise, especially in artificial intelligence, optics and photonics, factory automation, car electrification, and complex systems integration.

In 2018 we engaged around 7,400 dedicated employees in research, development and design. Among them are 658 technical staff members involved in the technical ladder career program focused on technical guidance, cross-fertilization, knowledge-sharing, and disruptive innovation.

Several practices ensure that innovation is embedded at every level of our business.

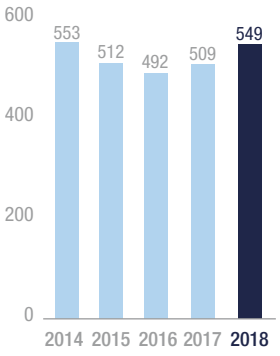
This year, one of the two gold CEO awards in our internal employee recognition awards scheme was in the innovation category. This rewarded a multi-disciplinary team for designing and manufacturing the first power module in silicon-carbide technology for the electric vehicle market.

To promote and reward innovation across ST, the award process for inventors was also revised in 2018, with 911 inventions submitted and 549 new patents filed.
| 103-2 | 103-3 |

~7,400 employees dedicated to R&D and product design

658 technical staff

ST new patents filed SDG 9.5

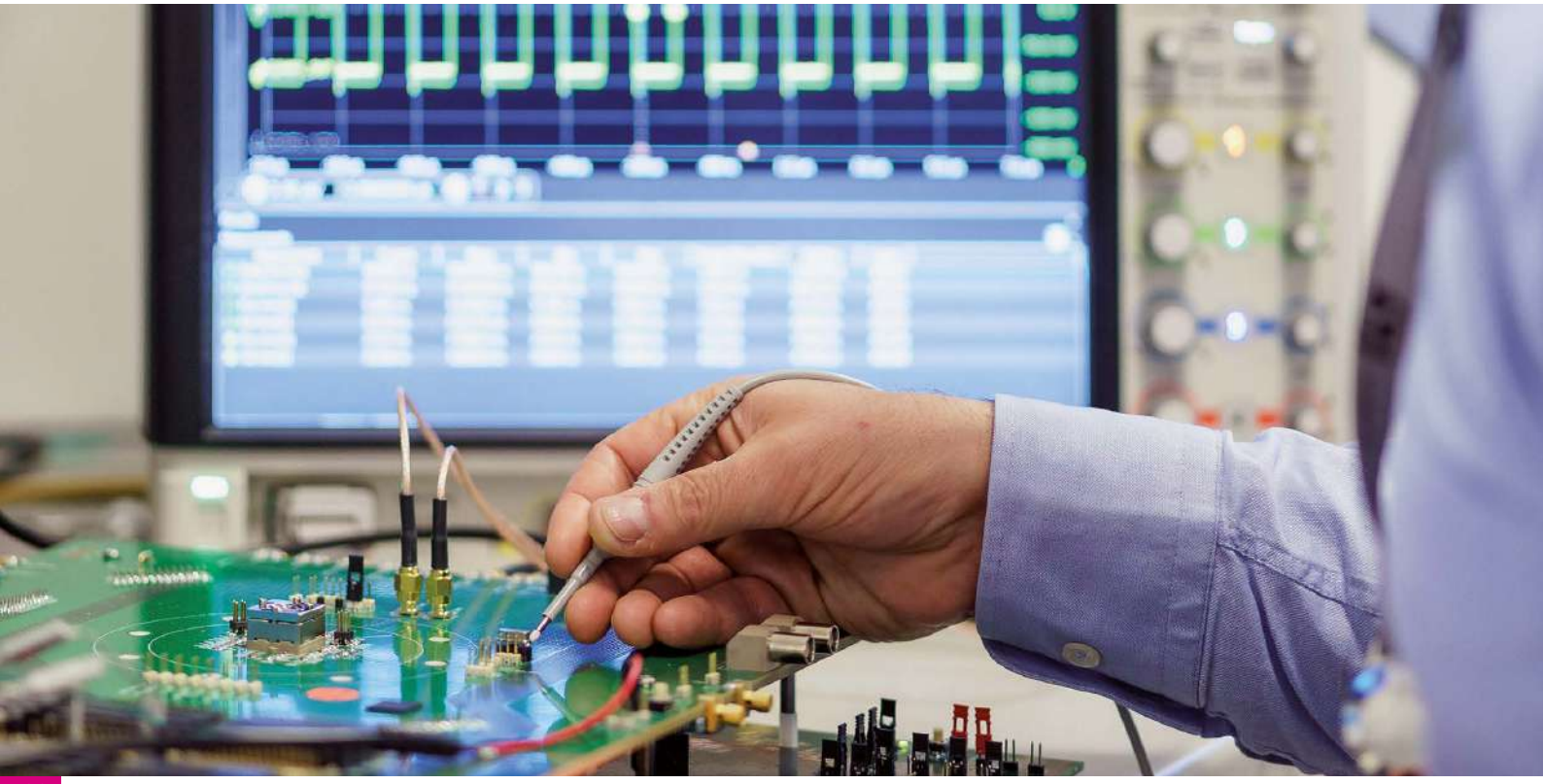


Contributing to the Sustainable Development Goals

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.

Quality



Product qualification in validation lab, ST Grenoble, France

82% of employees stated they understand how quality fits into their job

Management approach

Quality is our priority in ST. We work hard every day to ensure all ST products meet the highest quality and reliability requirements in all our end markets. I 103-1 I

Product Quality & Reliability is organized at a company level, but it is also embedded in all ST organizations. The leadership team brings together quality directors from across our entire business operations: front-end and back-end manufacturing, product groups, sales regions and corporate organizations. This makes the deployment of our quality strategy and quality programs throughout the company much more efficient.

Our prominent quality culture is reflected in our 2018 employee engagement survey results, where 82% of employees stated they clearly understand how quality expectations fit into their job requirements, and 76% said the day-to-day decisions in their team demonstrate that quality is a top priority for ST.

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

In 2018, ST successfully transitioned from ISO-TS 16949 to IATF 16949, demonstrating our robust quality governance, effective QMS and quality compliance across the company. ST is now certified IATF 16949:2016 and ISO 9001:2015. I 103-3 I

Our vision is to 'win a quality leadership position with all our customers'. This is based on three drivers: customer focus, built-in quality and Lean leadership. In 2018, we introduced the Quality Booster program to help us achieve our vision.

Quality Booster program

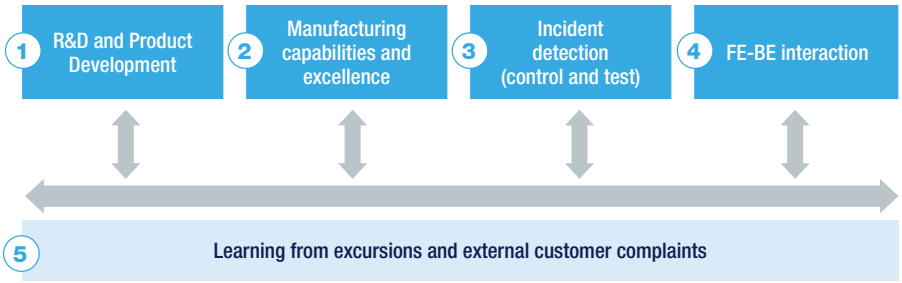
To accelerate our quality performance, incident prevention and better respond to customer expectations, we initiated a specific internal booster program to challenge and improve our quality practices in the context of market expectations.

The goal is to generate long term, structural quality improvements and prevent incidents occurring.

The program is based on a holistic approach:

- Cross-organizational working groups
  - Clear accountabilities, targets and ambitious deadlines
  - Identification of priority initiatives
- Governance
  - Top management, CEO, Presidents and Executive Vice-Presidents
  - Full commitment to ensure effective roll-out
- Program management and infrastructure
  - Program Management Office (PMO) to monitor progress
  - Central tracking infrastructure to monitor activities and KPIs

IATF & ISO 9001 certified



FE: front-end - BE: back-end

40 quality booster initiatives

We created five groups: research and development, manufacturing, incident detection (control and test), interaction between front-end and back-end, as well as one specific to lessons learnt. Around 40 initiatives have started, and key performance indicators have been identified to monitor and measure the impact of each one.

At the end of 2018, the program was progressing on schedule, with significant ongoing effort to deploy the initiatives across the board.

The Quality Booster program is already having a visible impact on improving customer satisfaction.

Marco Cassis
President
Sales, Marketing,
Communications and Strategy Development

"The Quality performance of our products helps us stand out from our competitors and delights our customers. We see a continuous increase in the expectations of the quality of our products from customers. Quality is a real business concern and, at the same time, a differentiator in the challenging markets we serve."

Quality

	2014	2015	2016	2017	2018
Customer complaints	98	103	85	71	65
Cycle time to process failure analysis	99	91	99	96	87
Customer Quality returns	68	71	71	29	25

Baseline 100 in 2013.

IATF transition

FOCUS

Meeting automotive customers' expectations

ST successfully transitioned from ISO-TS 16949 to IATF 16949:2016 (International Automotive Task Force standards) in 2018. This is mandatory to do business in the industries we serve. ST's Quality Management System and network, project management approach, and employee mobilization, were vital to achieving certification. Internal audits are programmed throughout the year to monitor our compliance.

Future focus

As we look ahead, the Quality Booster program will concentrate on three specific areas to strengthen our focus on quality:

- quality tools and processes
- incident prevention
- data analytics

The results of the Quality Booster program and its associated initiatives are being integrated into the quality processes of each ST organization during 2019, with robust accountability to maintain long-term sustainability.

We will adopt the same approach with our priority topics, to keep quality performance improvement and customer satisfaction at the forefront of all levels of the organization.

We will continue to elevate ST to the highest level of quality for our customers, based on strong quality governance, a robust and effective QMS and the successful nurturing of a quality culture of at every level of the company.

Focus on 3 specific areas

On-time delivery

	2014	2015	2016	2017	2018
Delivery date in line with customer request	97	103	84	71	74
Delivery date in line with ST commitment	95	98	89	79	82

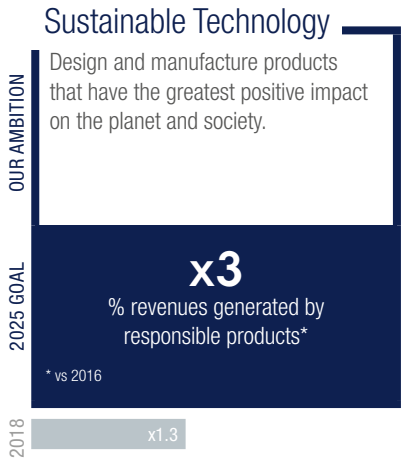
Baseline 100 in 2011.

2018 OBJECTIVES

	Status	Comments
Reduce customer complaints per million units by 6% compared with 2017.	✓	8.5% decrease in customer complaints in 2018. See Quality table.

Sustainable Technology

Mobile World Congress, Barcelona, Spain



More than 85% of our products are ECOPACK® 2

Product stewardship, or what we call Sustainable Technology, is one of the cornerstones of our sustainability strategy, reflecting our focus on promoting the environmental and societal benefits of new ST products. It addresses the growing demand from consumers, customers, investors and authorities for more transparency on substances used in products and their responsible sourcing, production, processing, use, and ultimately, the disposal or recycling of the used product. | 103-1 |

Sustainable Technology program

In our Sustainable Technology program, we design, identify and promote innovative responsible products that deliver environmental and social benefits, such as reducing energy consumption, saving resources, protecting the environment, and improving people's quality of life. | 103-2 |

The program consists of three main components.

Product compliance

Complying with legislation and the requirements of our customers and other stakeholders regarding the environment, health and safety, and the social and ethical impacts of our products, is a fundamental component of our Sustainable Technology program. We continually develop solutions that eliminate hazardous chemical compounds from our manufacturing lines and products (see Chemicals on page 65 and the ECOPACK® products table on page 34).

Eco-design

Eco-design aims to identify and integrate technical innovations that minimize the environmental impact of a product during its life cycle. Eco-designed products go through an impact assessment and must demonstrate an improvement over the previous generation or the competition. There are two categories.

Power-efficient products characterized by their low power consumption, minimal power loss, or by other key features that reduce the electrical consumption of the application in which they are integrated.

Low-carbon products characterized by the removal of hazardous substances from the product and by-products, or by design innovations and technology choices that extend the product lifetime or reduce the environmental impact of raw material sourcing, product manufacturing and product end of life.

50% of new products are responsible products

Responsible applications

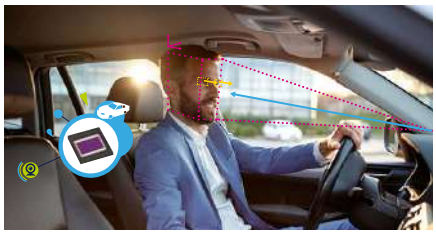
We undertake a market assessment to identify applications within our strategic focus that bring sustainable benefits for human welfare or the environment. We identify two kinds of applications.

Planet-friendly applications that enable green solutions, such as automotive powertrain electrification, solar panels, LED lighting and smart grid management, or solutions that reduce energy consumption or the emission of pollutants.

Human-welfare applications that contribute to people's wellbeing. This includes products in medical, health, safety and security applications. It also covers products that provide the functionality for applications that grant access to basic needs, such as energy or information, in developing countries.

Responsible human-welfare application

Global shutter image sensors for automotive in-cabin camera



FOCUS

Advanced image sensors for driver monitoring make driving safer

Safety organizations worldwide agree that driver fatigue is a contributory factor in up to 25% of road accidents, and the European NCAP's 2025 Roadmap suggests that driver monitoring is the highest priority primary-safety feature. It is also a prerequisite for automated driving, to ease transitions between manual and autonomous driving modes.

ST has unveiled two new automotive global shutter image sensors for driver monitoring, the VG5661 and VG5761. Both were demonstrated at Electronica 2018 with CoDriver, the driver-monitoring solution by Jungo, an automotive software company.

These advanced image sensors enhance the monitoring of vehicle occupants by capturing the scene as illuminated from the camera, eliminating unpredictable external effects such as sunlight or street lighting. Their superior image quality sharpens the responses of driver-monitoring systems, and their power consumption is minimized, even in High Dynamic Range mode, thanks to ST's automotive global shutter technology.

See more details in the press release on www.st.com.

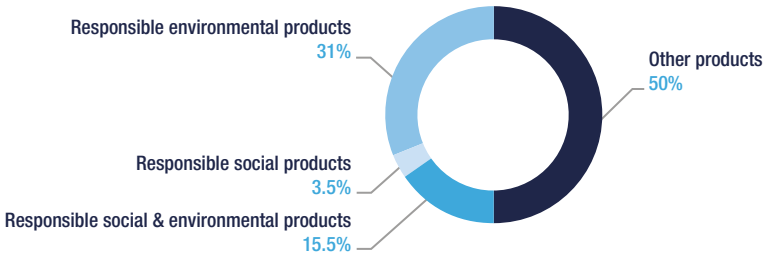
Classifying our responsible products

We evaluate our responsible products and then award one, two, or three stars to indicate their value to society and level of innovation. These responsible indicators are recorded in our project management system, which our product R&D teams use to track and report information throughout the product development phase.

| 103-3 |

The percentage of new products that are classified as responsible increased from 43% in 2017 to 50% in 2018. We awarded two-star classification to 22% of new products and 5% were classified three-star.

ST new products in 2018 | 417-1 |



STAR classification for new products in 2018 (%) | 417-1 |

	Social products[1]	Environmental products[2]
★ Incremental improvement to existing offer	26	43
★★ Significant improvement to existing offer	7	41
★★★ New or dramatic improvement to existing offer	5	10

[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.

5% of new products are three-star

In line with our 2025 goal, each year we estimate how much responsible products contribute to our revenue. In 2018, we estimated that responsible products contributed to 13% of our revenues, which is on target for achieving our goal of 30% of revenues by 2025 (x3 2016 baseline of 10%).

Sustainable Technology label

Our Sustainable Technology label identifies and promotes the products in our recent portfolio that bring the most benefits to people or the environment. The label is applied to the most innovative responsible products, typically those awarded two or three stars.

In 2018, we published the first Sustainable Technology labelled datasheets (product specifications) and we trained sales and product managers from all regions to promote our Sustainable Technology label with customers.

Luca Fontanella
Product Marketing Manager
MeMS Sensor Division, Castelletto (Italy)

"Reducing our environmental footprint is not only important for ST, our customers and our stakeholders, but it is also vital for humankind. I am proud to participate in the initiative to label our responsible products, as it continuously pushes us to develop better, ever more sustainable products."

Indicators

This section includes indicators and GRI Standards disclosures.

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

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

	2014	2015	2016	2017	2018
Americas	15	16	15	13	13
Asia Pacific	59	58	58	61	61
EMEA	26	26	27	26	26

[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 U.S.-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.

ST sales by market channel[1] (%) | 102-6 |

	2014	2015	2016	2017	2018
OEM	69	68	67	66	65
Distribution	31	32	33	34	35

[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 |

	2014	2015	2016	2017	2018
Dividends	354	350	251	214	216

Taxes (US$m) | 201-1 |

	2014	2015	2016	2017	2018
Tax expense for the year	67	75	74	86	95

Research partnerships SDG 9.5

	2016	2017	2018
Contracts with higher education institutions or research labs	228	234	160

ECOPACK® products (%) | 417-1 |

	2014	2015	2016	2017	2018
Non ECOPACK®	-	0.3	0.3	0.2	0.2
ECOPACK® 1: Compliant with the RoHS/ELV directives, second level interconnect lead-free[1]	-	8.7	7.8	6.7	6.8
ECOPACK® 2: as ECOPACK® 1, plus free of brominated, chlorinated and antimony oxide flame retardants	-	83.0	84.0	86.0	85.1
ECOPACK® 3: as ECOPACK® 2, plus free of halogens with no RoHS exemptions	-	8.0	7.9	7.1	8.0

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

ST site certifications

ST is ISO 9001 certified company-wide

	OHSAS 18001 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	9	16	20

[1] Rennes Space & High-Reliability Products.

Human resources workshop, France

We put people first

Average of
47 **hours**
of training per person

105
different nationalities

+5%
in employment of disabled people

- 77% employee engagement score (+ 8 points above global industry norm)
- More than 87,000 medical acts conducted worldwide as part of ST's Health Plan
- 90% of employees covered by annual human rights assessments

Health and Safety

Evacuation drill exercise, ST Shenzhen, China

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*
for employees and contractors

* injuries and illnesses

2018

RC for employees	0.17%

RC for employees includes injuries only.
RC for contractors not yet available.

Protecting people from harm and safeguarding their health is key for our success. We maintain and continuously develop health, safety and welfare at work, by evaluating and analyzing the risks that can affect our employees and subcontractors, and managing them responsibly: at ST, we act to make work a better place to be. | 103-1 |

Health

2018 highlights

We aim to expand and promote employees' health and well-being through the ST Health Plan and local initiatives. This helps us to anticipate risks and take preventive action. Thanks to this approach, each site designs its own health program tailored to local needs and requirements. In 2018, all our sites increased engagement in their wellness campaigns, undertaking more than 87,000 medical acts. | 103-2 | 103-3 |

For example, our Muar site (Malaysia) organized a 'health week' on the theme of 'Better Health, Better Life' to improve awareness and promote a healthy lifestyle for employees. The event included health talks and screenings, sporting challenges and exercise, discounted health products and healthy food and drink tasting.

At our Agrate site (Italy), more than 2,200 employees took part in voluntary health prevention assessments, which included cardiovascular screenings, liver and thyroid exams, abdominal ultrasounds, pap tests and breast ultrasound scans.

More than 87,000 medical acts conducted worldwide

Health Plan - medical acts[1]

Exam type	2014	2015	2016	2017	2018
Medical examinations	49,310	47,278	57,871	62,008	64,938
Screening tests	13,564	13,693	15,209	12,348	19,280
Immunizations	1,721	1,606	1,428	1,861	3,524
Total services provided[2]	64,595	62,577	74,508	76,217	87,742

[1] All sites represented, except USA. Tours site (France) data missing for H2 2016.
[2] Employees may undergo multiple examinations in the year.

2018 OBJECTIVES	Status	Comments
Employee severity rate ≤2.2.	✓	1.8
Main on-site subcontractors Lost WorkDay Case rate (LWDC) ≤0.3.	✓	0.29
Recordable case rate for employees ≤0.17.	✓	0.17

Riccardo Vaneiro

Physician
Medico del Lavoro
Agrate (Italy)

"In Agrate (Italy), the infirmary is open 24 hours a day, 365 days a year. It plays an important role in the health of workers, both during emergencies and to ensure prevention. Every year, 4,000 people visit the infirmary. This is only possible thanks to the commitment of the entire medical and nursing team, and effective collaboration with other ST departments, such as EHS and security."

Health care coverage

All our employees have access to health insurance, either from local government insurance schemes or from ST. In line with SDG target 3.8, we monitor the extent of the health care insurance we provide. Even in countries with no legal requirement to provide health care insurance, we offer health care benefits to our employees. We encourage our sites to exceed their local/national requirements if we deem the level of coverage to be insufficient, and we provide enhanced coverage for around 89% of our employees.

Employees with health care coverage provided by ST[1] (%) SDG 3.8

	2018
Work-related health issues	78
Personal health issues	89
Direct family members health issues	72

[1] In addition to national health care schemes.

Safety

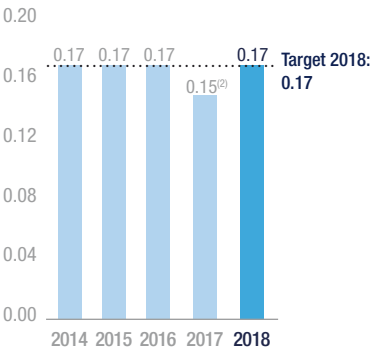
After over 20 years of progress, we remain just as committed to safety at ST. We constantly strive to strengthen our safety culture by re-enforcing safe behaviors and working conditions through visits, training, audits, best practice sharing and communication. We prioritize the prevention of potential employee exposure to chemicals, fire and radiation, and we work to minimize the risks around ergonomics, machinery, handling and nanomaterials (see Focus on page 38 and Chemicals on page 67). | 103-2 |

Our recordable case rate for employees is in line with our 0.17 target, and we reduced the incident severity rate from 2.10 in 2017 to 1.80 in 2018. Both results are in line with our roadmap to reach our 2025 goals. | 103-3 |

Despite our strong commitment to Health and Safety, it was confirmed this year that the death of an ST employee at our Ang Mo Kio site (Singapore) in 2017 was work-related, due to complications arising from exposure to a chemical substance. Following the incident, we took immediate action (see Chemicals on page 66) and we are more focused than ever on enforcing our safety practices and procedures.

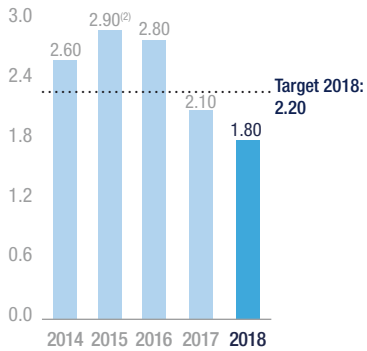
0.17 recordable injury case rate

Recordable cases rate[1] | 403-2 |



[1] Work-related injuries per 100 employees per year as defined by OSHA-US regulation.
[2] Rate has been updated due to the confirmation of the death of one ST employee in Ang Mo Kio site (Singapore) after the closure of the previous reporting period.

Severity rate[1] | 403-2 |



[1] Number of days lost per 100 employees per year as defined by OSHA-US regulation.
[2] Rate has been updated due to sick leave prolongation after the closure of the previous reporting period.

Reducing repetitive strain

FOCUS

Robotization makes wafer handling more human

At our Rousset site (France), we successfully eliminated a cause of repetitive strain injuries and improved the working conditions of at least 60 people in the Wet Etching cluster. This area is kept ultra-clean for photoresist stripping and removing chemical residues from wafers. A multi-disciplinary and multi-site ST team developed an innovative, fully robotized solution that loads and unloads the 11 etching tools. This makes much more efficient use of the capital already invested in tools, with a solution designed and engineered in-house. Teamwork and good communication were vital to the success of this project and people from multiple organizations were involved. The project has made Rousset a showcase for Industry 4.0.

Eight rules for reinforcement

In line with SDG target 8.8 regarding the promotion of a safe and secure working environment for employees, we took steps to strengthen eight critical safety rules in 2018, covering:

- Evacuation drills
- Field safety visits by managers
- Use of safety instructions at meetings
- Use of safety glasses
- Reverse parking
- Safety recognition based on prevention
- Visual safety supports and management
- Road users

This initiative will continue in 2019.

Safeguarding our subcontractors

We take care to inform and train subcontractors at all ST sites on the safety requirements they are expected to meet, including prevention measures and safety plans. We plan to include subcontractors in our recordable cases rate. Until now, we have only monitored the Lost Workday Case (LWDC) incident rate, which only records accidents with days lost. However, we plan to put in place a full recordable case reporting process for our subcontractors using SafeTrack, our safety incident reporting and monitoring system.

In 2018, the LWDC rate for subcontractors once again remained under our target of 0.30, reaching 0.29.

0.29 Lost Workday Case incidence rate

Lost Workday Case incidence rate (LWDC rate) - subcontractors | 403-2 |

	2014	2015	2016	2017[1]	2018
Lost workdays cases per 100 subcontractors employees	0.54	0.40	0.35	0.24	0.29

[1] Up until end 2016, we covered only independent subcontractors working on-site for more than 3 months. From 2017 onwards, we are covering 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 health care 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.

Labor and Human Rights

ST employees, Agrate, Italy

Labor & Human Rights

OUR AMBITION

Be recognized as a leader in labor and human rights and accept zero tolerance on forced labor.

2025 GOAL

100%
of ST manufacturing sites recognized by external international bodies

2018

46%

5/11 sites: 2 sites with Platinium, 1 site with Gold, and 2 sites with Silver recognition.

A business priority

Human rights are deeply rooted in our history and culture. Our programs are established to ensure that all of our employees are treated with respect and dignity.

We follow the most advanced standards and make regular progress on nine core principles: freely-chosen employment, prevention of underage labor and protection of young workers, fair organization of working time, fair wages and benefits, fair treatment and anti-harassment, non-discrimination, freedom of association, fair working conditions and employee well-being, and privacy of personal information.

Our approach to labor and human rights is based on a comprehensive due diligence process. We regularly identify and assess any risks in our operations and supply chain, and take appropriate action to mitigate them. I 103-1 I 103-2 I

Participating in initiatives such as Responsible Business Alliance (RBA) and 'Entreprises pour les Droits de l'Homme', enables us to work with customers and suppliers to take the lead on understanding and addressing our risks in regions where we operate.

In 2018, we took our first steps towards our 2025 goal by extending our third-party RBA audit program, already in place in four Asian manufacturing sites and two back-end manufacturing sites in Morocco and Malta, to all our European manufacturing sites.

2018 OBJECTIVES

2018 OBJECTIVES	Status	Comments
100% of priority, major and minor non-conformities closed during the RBA closure audit.	✓	9/9 findings closed.
100% of ST Asian and back-end sites audited every 2 years for compliance with the RBA standard.	✓	Objective extended to all manufacturing sites for 2019.

Marietta Axisa
Field Quality Service

"Over the past years, quality support teams have received increasing pressure from customers on CSR performance. It has been particularly true this year when major accounts required ST to extend its CSR audit program to European sites where the risk is considered lower than in some other parts of the world. Driven by a Sustainability Council decision, ST has taken the commitment to answer customer's need."

Identifying and mitigating our risks

Consistent with the RBA methodology, our labor and human rights due diligence process is based on a three-step approach:

- Commitment to the ST and RBA codes of conduct
- Risk assessment
  - External risk assessment based on inherent risks of activity and location.
  - Annual self-assessment questionnaire (SAQ). Sites scored from 90 to 95/100, which is better than the industry average of 89/100. SAQs cover 90% of our employees.
- Third-party audits every two years with appropriate audit follow-up, including corrective action plans and closure audits, for all 11 manufacturing sites

By the end of 2018, the audits had covered 64% of our employees and will cover over 80% by April 2019. We audited two additional sites for the first time in 2018: Agrate (Italy) and Crolles (France).

The main risks we identified in 2018 were the control of working hours (including rest days) and employee training on labor and human rights.

Due diligence
a three-step process

64% of employees covered by audits

200/200 audit score in Calamba site

RBA audit program results - major/priority non-conformances SDG 8.7

		2014	2015	2016	2017	2018
	Number of audits	4	7	4	4	7
Labor, Ethics and Management systems	**Priority non-conformances**					
	Child labor avoidance (young workers)	0	0	1[1]	0	0
	Major non-conformances					
	Working hours	2	2	2	1	4
	Wages and benefits	2	0	1	2	1
	Freely chosen employment	1	0	0	1	1
	Child labor avoidance (young workers)	1	0	0	0	0
	Freedom of association	0	1	0	0	0
	Supplier responsibility	0	0	1	0	1
	Training	0	0	0	0	1
	Audits & Assessments	0	0	0	0	1
	Total of major/priority non-conformances	6	3	5	4	9
	Average major/priority NC/audit	1.5	0.4	1.3	1.0	1.3
Environment, Health & Safety	**Major non-conformances**					
	Hazardous substances	0	0	0	2	2
	Occupational injury and illness	1	0	0	0	3
	Emergency preparedness	0	1	0	1	3
	Storm water management	0	0	1	1	0
	Occupational safety	1	0	0	0	3
	Wastewater and solid waste	1	0	0	0	0
	Energy consumption and GHG emissions	0	0	0	0	1
	Total of major non-conformances	3	1	1	4	12
	Average major NC/audit	0.8	0.1	0.3	1.0	1.7

[1] 17 years-old workers working overtime in Shenzhen site (China).

We have implemented corrective action plans to reduce all the risks identified.

Our Calamba site (the Philippines) was the best performer in its initial audit, with full compliance, for which it received RBA platinum recognition. In Crolles (France), in its very first initial audit, the audit score was 5.6 points above the industry average, highlighting the low level of risk. For our Agrate site (Italy), another first time audit, no core violations were identified, but we will put some improvement plans in place to reinforce existing social management systems. | 103-3 |

In addition to covering our own operations, we also manage the labor and human rights risks in our supply chain. See the Supply Chain Responsibility section on page 71 for further information.

Addressing working hours and day of rest risks

We made significant improvements at our Shenzhen site (China), by changing our shift pattern to secure a day of rest after six consecutive working days for all employees. We also increased compliance on the daily overtime limit from 44% of employees to 96%. The site's final audit score increased by 27 points over the previous initial audit, achieving RBA silver recognition for the first time.

Other actions ST implemented included:

- developing training for managers and workers at manufacturing sites
- reinforcing the remediation mechanism if child labor is discovered
- strengthening supplier management and following-up on labor topics, such as forced labor and working hours

Responsible
Workplace

Becoming leaders in our industry

One of our most successful initiatives to uphold labor and human rights is our action to improve recruitment processes and working conditions in Malaysia, where our production site employs around 10% foreign workers. We launched the RBA Workplace of Choice program at the site in 2017, which included anonymous interviews conducted with 168 workers. This enabled us to assess recruitment practices and employee satisfaction. We were ranked 1st out of 22 factories in the eradication of recruitment fees and were finalists in the RBA Compass Awards (see Focus).

In 2018, the site joined the RBA Responsible Workplace program, which aims to include workers in the local governance process. The site's performance in the program will be assessed every year for the duration of the five-year project.

ST is also part of a panel to develop a pre-departure orientation pack for foreign workers, in partnership with the International Organization on Migration (IOM).

RBA Compass
Award Finalist

FOCUS

Eradicating recruitment fees for foreign workers at Muar (Malaysia)

The Compass Awards recognize the efforts of RBA members, their factories and suppliers, which lead to positive change, in line with RBA's mission. ST entered the Implementation category for our Muar site (Malaysia) and was shortlisted as one of 15 finalists out of 55 entries.

We described our program to eradicate recruitment fees based on eliminating outsourcing agents and working directly with source country agents. Other elements included implementing grievance mechanisms and reimbursements for workers, a robust audit program for local suppliers, and training and educating foreign workers through pre-departure orientation in the source country. We measured the effectiveness of the initiative through anonymous worker interviews conducted as part of the Workplace of Choice program.

In 2019, RBA plans to include the initiative in a compendium of best practice examples to guide other companies as they develop their own programs.

Contributing to the Sustainable Development Goals

ST's commitments and programs 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.

Development and Engagement

Workshop, ST Muar, Malaysia

Development & Engagement

OUR AMBITION

Offer the best employee experience in all the locations where we operate.

2025 GOAL

Employee engagement rate

+10 points above country norms

2018

6/11 countries

China, Japan, Malaysia, Singapore, Switzerland and the Philippines.

Our learning and development strategy aims to provide timely answers to business needs and establish ST as a leading, innovative company where entrepreneurial spirit, feedback, co-operation and leadership are the norm. I 103-2 I

Getting the best from all our talents

Enabling a high level of engagement

Employee engagement is a critical driver of organizational performance as we seek to achieve our business objectives. I 103-1 I

We regularly carry out employee surveys to monitor 'individual engagement', 'goal alignment' and 'organization agility'. In 2018, the survey results showed an average increase of 4 points over the 2016 survey. The overall engagement index stood at 77%, 5 points higher than 2016 and 8 points above the global industry norm[1]. I 103-3 I

This improvement is consistent with the strategic investments we have made over the past two years in areas such as leadership skills, quality, Lean and feedback culture, strategic alignment, talent recognition and differentiation.

[1] CultureiQ global norm: calculated from surveys of a random sample of workers in 40 countries worldwide across all the electronic manufacturing industries.

Employee survey - engagement rate (%)

	2014	2015[1]	2016	2017[1]	2018
Overall participation rate	84	NA	82	NA	87
Individual engagement index	66	NA	72	NA	77
Organizational agility index	58	NA	63	NA	66
Goal alignment index	68	NA	73	NA	77

[1] No survey conducted in 2015 and 2017.

Enhancing employee experience

75% of employees recommend ST as a great place to work

Delivering the best employee experience is crucial to attracting and retaining the best talent.

In our employee survey, 75% of employees recommended ST as a great place to work. This is nine points above the global norm but we want to do better.

So in 2018, we launched several initiatives to modernize our processes and our workplace from an employee experience perspective. The aim is to strengthen efficiency, innovation, cross-fertilization and knowledge sharing across teams. One example is the layout implemented in our new Edinburgh premises.

New Edinburgh workplace

FOCUS

A modern workplace that enhances employee engagement and effectiveness

The move from ST's previous Edinburgh premises to a new building was a great opportunity to involve employees in the design of their workplace.
The first objective was to create an environment that would meet employees' vision of what a high-tech firm should be. The second objective was to encourage communication, creativity and knowledge sharing across teams.
Taking advantage of the fact that the new space is all on one floor, a number of informal and formal meeting spaces were integrated into the design, each with a different purpose, position and style.
The move was also an opportunity to improve individual working environments. For example, employees now work at automatically adjustable sit/stand workstations and benefit from the flexibility this provides.
The advantages of the new workplace were quickly endorsed by employees, who are proud of their new environment.

Another example is the many Lean principles and methodologies we have introduced to help improve workplace effectiveness and foster collective intelligence and innovation. Since starting at our Rousset site (France) 10 years ago, we have put in place hundreds of visual management boards and more than 50 Obeya[2] rooms across 14 sites, covering more than 75% of all ST organizations.

Building a strong talent pool

6,600 employees trained on leadership skills in 2018

In a high-tech, fast changing environment, it is vital to strengthen and continuously develop our talent pool to anticipate evolving customer needs and meet new market demands.

Leadership skills for all

Annual qualitative performance feedback for >90% eligible employees

In 2018, we sought to develop leadership skills at every level of the Company. By the end of the year, 977 people had participated in our 'Leadership Augmented' program, with modules covering topics such as strategy and innovation, change, leadership and Lean.

We also successfully piloted two new modules that will be deployed in 2019:

- Communicative leaders - to help managers connect employees with ST's vision and improve engagement
- Managing personal energy - to strengthen people's energy and their ability to manage pressure

[2] Obeya : lean methodology based on visual management for efficient project management.

24 internal coaches spread across 7 major sites in 5 countries

Feedback and assessment

Feedback is a fundamental pillar of our culture. It enables us to maximize our ability to change and to sustain growth.

Our annual Individual Performance Management (IPM) process and our People Review process are essential elements of this culture of qualitative feedback.

In 2018, we strengthened our people management process with collective and individual assessments. We aim to assess all our employees at appropriate career stages using tools such as 360° feedback, psychometric tests, roleplays and interviews. Assessments are performed by internal and external assessors and are formalized by an agreed development plan.

Used since 2014, we have now embedded coaching into our managerial culture to:

- Strengthen manager-employee collaboration
- Trigger behavioral changes
- Encourage feedback
- Support our Lean culture
- Meet organization and business needs

We have developed a full coaching framework that we plan to roll out in 2019. It includes principles, process and roles, for both internal and external coaching.

Rajamohan Varambally
Director, Technology & Design Platforms Greater Noïda (India)

"I am good, can I be better? The power of coaching is to focus on strengths and progress, rather than on problems or weaknesses, as in a traditional management approach. I improved at my pace and experienced immense satisfaction, without feeling any performance pressure. I developed real trust with my coach. I recommend coaching as an effective tool to enhance performance at all levels in ST."

Performance and competence management

To motivate and retain our people, we pursue a differentiated salary policy, rewarding people individually for their competence and contribution to business results.

We also continue to promote our long-standing talent development 'booster' program, internal mobility initiative and advanced career paths.

To better support managers in managing performance and competence, we developed a more flexible competence management framework in 2018. The new framework will be introduced in 2019. It will enable managers to define and assess the competencies they require to meet business needs.

Looking forward

We digitalized our internal communication channels in 2018 and will continue to modernize our processes during 2019, with the implementation of leading edge digital solutions in recruitment and learning. Our goal is to take another step on our journey to becoming an attractive and effective learning organization, to support our sustainable growth.

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.

2018 OBJECTIVES	Status	Comments
Annual qualitative performance feedback for >90% eligible employees (exempts and non exempts).	✓	95.9%
≥35% of exempt jobs filled internally in 2018.	✗	25% **Objective discontinued.**
Keep voluntary turnover at or below 10% worldwide (excluding operators).	✓	7.4%

Diversity and Inclusion

Corporate Social Responsibility workshop, France

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

2018

Experienced	16%
Senior	12%
Executive	9%

Diversity has been part of our corporate DNA for 30 years and remains one of our strategic priorities. We are present in more than 35 countries and employ 105 different nationalities (the highest proportion nationality represents just 23% of our workforce).

We are convinced that diversity and inclusion bring value to our business through effective innovation, attractiveness, engagement and agility. It fuels our sustainable growth and performance. | 103-1 |

Our strategy, strongly supported by our management team, is to:

- foster an inclusive culture
- provide equal opportunities for career development and advancement, regardless of gender, ethnicity, age and culture
- diversify our workforce by attracting diverse talent

| 103-2 |

Fostering an inclusive culture

Our first objective is to continuously reinforce a pro-active and inclusive mindset.

We develop awareness through digital learning and sensitize mindsets through advanced unconscious bias workshops.

In 2018, we increased our employment of disabled people by 5%, reaching 1.6% worldwide. In France and Italy, where we have long-standing disability inclusion programs, we have reached 4.4% and 2.5% respectively.

To defuse fears, eradicate bias, and engage management and employees more in the integration of our disabled employees, we plan to extend existing local initiatives to other areas of our business. Examples include an initiative at our Tokyo site (Japan), where ST employees were able to meet a visually impaired person to see how they live with their disability.

Promoting women and equal opportunities

At the end of 2018, we employed 16,068 women - representing 35% of our global workforce and 23% of exempts.

Strengthening the role of women in building ST's future is one of our ongoing objectives. Our target is for 20% of all managerial positions to be held by women.

To achieve this, we aim to promote more than 15% of women exempts per year. In 2018, we achieved 24%. | 103-3 |

23% of exempts are women

The percentage of women at all levels of exempt positions is increasing, while the remaining challenge is the percentage of women in executive management which remains low and is slightly decreasing, down from 9.8% in 2011 to 8.7% in 2018. We are already taking steps to address this with new assessment and development criteria at corporate level, to improve career progression for women and increase diversity at the highest levels of the business.

We also continued to deploy our flagship 'Women in Leadership' program. This started in 2015 with the aim of preparing the next generation of women leaders. Since then, more than 200 women have participated.

>200 women have participated in our Women in Leadership program since 2015

To extend this program to a wider audience, our Shenzhen site (China) ran a dedicated workshop called 'Meeting the Best of Yourself' (see Focus below).

In terms of gender equality, company-wide data shows there is no difference between men and women in performance management evaluations (rating and competencies) and training hours.

Overall, our data reveals no significant difference in the level of compensation between men and women at all job grades. However, to monitor this over the long-term, we plan to deploy a 'compensation comparison' tool similar to that used in ST France since 2011. This tool compares an employee's salary to a reference profile, based on position, seniority, and performance for a given job level.

We are still far from our diversity and inclusion ambitions. However, our transparent approach was recognized in 2018 with ST's inclusion in the 2019 Bloomberg Gender-Equality Index, for the second year.

Developing women leaders

FOCUS

ST women meet the best of themselves in Shenzhen

In October 2018, Catherine Tong, Human Resources Director at our Shenzhen site (China), held a workshop named 'Meeting the Best of Yourself' with more than 40 female managerial staff. It was the kick-off meeting for the Women in Leadership program in China. "Women have historically faced stereotypes in the workplace, but we have numerous advantages to benefit companies and we need to learn how to develop and carry them forward," she said. This workshop aimed at making women aware of gender diversity advantages in the workplace, helping them become and promote themselves as authentic female leaders. It was also an opportunity to encourage them to share their experience and build a network to support each other in the future. Mrs Tong added: "In this fast-changing society, women need to be ready and must constantly improve themselves to fully grasp new opportunities."

2018 OBJECTIVES	Status	Comments
Recruit at least 20% women in management positions.	NEW	
>15% women in exempt positions.	✓	23%

Strengthening diversity

To deploy our strategy and support our business plan, we strive for a diverse workforce in terms of skills, age and gender.

Attracting and retaining young talent

In 2018, we started to revise our employer brand to promote ST as an innovative, high-tech company, including diversity and inclusion in our external company image. This will be completed in 2019.

Our objective was to recruit more than 50% of new non-manufacturing employees with less than five years' experience. We achieved a final figure of 56%. | 103-3 |

We continued our graduate program, which started in 2017 and targets high-potential students from the world's best universities.

To increase the retention of young talents, and help them to connect regardless of their organization or location, we are also designing a corporate onboarding program, in addition to our local induction processes.

Increasing the number of women in STEM functions

19% of women in our STEM functions

We intend to increase the number of women in ST, in particular in STEM functions (Science, Technology, Engineering and Mathematics). Today, our STEM functions are 19% female, which is very close to the average (18%) of female STEM graduates in the locations we source from.

To address the shortage of women in technical functions, we continued in 2018 to promote diversity in STEM functions through long-established local initiatives that encourage girls to choose technical studies at an early stage in their education. This is the aim of the initiative launched at our Catania site (Italy) (see quote below) and of the corporate STEM task-force initiated at the end of 2018 (see Education and Volunteering on page 74).

Maria Eloïsa Castagna
Technology Development Staff Engineer
Member of Technical Staff Catania (Italy)

"I have the fantastic opportunity to represent ST in the Catania STEM program for female high school and university students.

The program aims to involve and encourage more young girls to take up scientific studies. I am proud to be able to share my personal passion and professional choice in the technological field."

Looking forward

In 2019, we are rolling-out our program roadmap, in particular around disability in the workplace, unconscious bias, and diversity enforcement in staffing and career steps. This will include raising awareness of our diversity and inclusion ambitions, more training of human resources professionals, and involvement of all site managers in instilling a sustainable mindset change on diversity.

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, sex, disability, race, ethnicity, origin, religion or economic or other status.

Indicators

This section includes indicators and GRI Standards 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 |

	2014	2015	2016	2017	2018
Americas	870	839	741	743	744
Female	202	190	185	190	183
Male	668	649	556	553	561
Asia Pacific	17,699	17,115	17,329	18,629	18,636
Female	7,129	7,132	7,428	7,903	7,806
Male	10,570	9,983	9,901	10,726	10,830
Europe	20,308	20,327	20,497	21,266	21,464
Female	4,932	4,925	4,950	5,188	5,296
Male	15,376	15,402	15,547	16,078	16,168
Japan	204	205	189	191	192
Female	51	50	44	44	42
Male	153	155	145	147	150
Mediterranean	4,550	4,697	4,724	4,638	4,917
Female	2,478	2,563	2,614	2,491	2,741
Male	2,072	2,134	2,110	2,147	2,176
Total	43,631	43,183	43,480	45,467	45,953
Female	14,792	14,860	15,221	15,816	16,068
Male	28,839	28,323	28,259	29,651	29,885

[1] Includes direct and indirect workers.

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

	2014	2015	2016	2017	2018
Operator					
Female	58	56	56	55	55
Male	42	44	44	45	45
Non-exempt					
Female	23	23	23	23	22
Male	77	77	77	77	78
Exempt					
Female	21	22	22	22	23
Male	79	78	78	78	77

External hires in manufacturing (%)

	2014	2015	2016	2017	2018
Jobs filled externally vs overall jobs filled	97	96	97	97	98

Hires by job type | 401-1 |

	2014	2015	2016	2017	2018
Operator	7,748	6,906	7,904	10,769	11,379
Female	2,723	3,073	3,463	3,984	3,938
Male	5,025	3,833	4,441	6,785	7,441
Non-exempt	2,094	2,297	2,192	2,503	2,760
Female	411	525	437	515	557
Male	1,683	1,772	1,755	1,988	2,203
Exempt	1,578	1,397	1,328	1,797	2,385
Female	356	374	388	445	733
Male	1,222	1,023	940	1,352	1,652
Total	11,420	10,600	11,424	15,069	16,524
Female	3,490	3,972	4,288	4,944	5,228
Male	7,930	6,628	7,136	10,125	11,296

Newcomers induction program (%)

	2014	2015	2016	2017	2018
Newcomers who participated in a formal induction session (e.g. newcomers' seminar) during their first year of employment	93	78	85	78	72

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

	2014	2015	2016	2017	2018
Full-time contract	97	97	97	97	97
Female	93	93	94	94	94
Male	99	99	99	99	99
Part-time contract	3	3	3	3	3
Female	7	7	6	6	6
Male	1	1	1	1	1

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

	2014	2015	2016	2017	2018
Permanent contract	95	96	96	95	95
Female	95	96	95	94	94
Male	95	97	97	96	96
Temporary contract[1]	5	4	4	5	5
Female	5	4	5	6	6
Male	5	3	3	4	4

[1] Includes direct and indirect workers.

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

	2017	2018
Permanent contract		
Americas	99.2	99.6
Asia Pacific	99.6	98.8
Europe	93.8	94.7
Japan	99.5	94.8
Mediterranean	84.7	82.2
Temporary contract[1]		
Americas	0.8	0.4
Asia Pacific	0.4	1.2
Europe	6.2	5.3
Japan	0.5	5.2
Mediterranean	15.3	17.8

[1] Includes direct and indirect workers.

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

	2017	2018
Direct relation[1]	98	97
Indirect relation[2]	2	3

[1] Workers employed directly by ST.
[2] Workers employed by a third-party, such as interim agencies.

Remuneration (%)

	2014	2015	2016	2017	2018
Employees below the ST minimum salary scale in their job grade (exempt)	15	14	17	14	14
Employees with individual salary increase	89	81	75	86	84

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

	2014	2015	2016	2017	2018
Eligible (exempt >JG 11) employees receiving unvested stock awards (%)	26	26	27	29	29
Number of employees rewarded	4,620	4,730	4,750	5,050	5,140

Number of nationalities in the headcount by region[1] | 405-1 |

	2014	2015	2016	2017	2018
Americas	23	19	21	20	21
Asia Pacific	37	38	35	34	35
Europe	74	76	80	83	87
Japan	5	4	4	4	10
Mediterranean	21	25	32	40	47
Total	-	-	-	97	105

[1] Expatriates and assignees are counted in host country.

Number of nationalities in Corporate staff | 405-1 |

	2014	2015	2016	2017	2018
Different nationalities represented in the Corporate staff	8	8	6	6	6

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

		2014	2015	2016	2017	2018
Americas	Male	77	77	75	74	75
	Female	23	23	25	26	25
Asia Pacific	Male	60	58	57	58	58
	Female	40	42	43	42	42
Europe	Male	76	76	76	76	75
	Female	24	24	24	24	25
Japan	Male	75	76	77	77	78
	Female	25	24	23	23	22
Mediterranean	Male	46	45	45	46	44
	Female	54	55	55	54	56

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

	2014	2015	2016	2017	2018
Under 30 years old	63	54	62	60	56
30-50 years old	6	6	7	8	9
Over 50 years old	8	6	6	9	6

[1] Turnover rate calculated on average headcount in activity throughout the year.
[2] Resignations, retirements and dismissals.

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

	2014	2015	2016	2017	2018
Average voluntary turnover rate[2]	14.0	14.2	16.8	18.5	18.3
Average overall turnover rate[3]	19.3	16.5	19.2	20.5	20.1

[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 2018 (%) | 401-1 |

	Operator		Non-exempt		Exempt	
	Female	Male	Female	Male	Female	Male
Americas[3]	NA	NA	13.2	16.6	4.6	5.1
Asia-Pacific	29.5	124.2	18.1	35.8	10.5	10.7
Europe	4.1	2.2	4.1	2.4	3.0	3.3
Japan[3]	NA	NA	NA	NA	2.9	6.8
Mediterranean	11.9	26.7	2.6	9.0	22.7	22.8

[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.

Average employee age by category

	2014	2015	2016	2017	2018
Operator	33	34	34	34	34
Non-exempt	38	38	38	38	39
Exempt	42	42	43	44	44
Average employee age (years)	38	38	39	39	39

Employees by category and by age group in 2018 (%) | 405-1 |

	Under 30 years old	30-50 years old	Over 50 years old
Operator	43	48	8
Non-exempt	25	62	12
Exempt	10	66	25

Promotion ratio female/male by category and by region in 2018 (%) | 405-1 | SDG 5.5

	Operator		Non-exempt		Exempt	
	Female	Male	Female	Male	Female	Male
Americas[1]	NA	NA	10	0	11	12
Asia-Pacific	8	12	15	9	11	10
Europe	6	4	9	8	14	12
Japan[1]	NA	NA	NA	NA	5	16
Mediterranean	14	9	33	22	18	20

[1] The Company has no manufacturing sites in these regions.

Disabled employees | 405-1 | SDG 10.2

	2014	2015	2016	2017	2018
Disabled people employed as % of total workforce	1.5	1.5	1.5	1.5	1.6

Women in management | 405-1 | SDG 5.5

	2014	2015	2016	2017	2018
Women in experienced management (% JG15 and above)	15	15	16	16	16
Women in senior management (% JG17 and above)	11	11	11	12	12
Women in executive management (% JG19 and above)	9	8	9	9	9
Number of women on the Board	3	3	3	3	3

Career development (%)

	2014	2015	2016	2017	2018
Employees with a promotion in the year	11	10	8	9	11
Employees with a job function change in the year	6	4	4	3	2

Employee yearly Individual Performance Management (%) | 404-3 |

	2014	2015	2016	2017	2018
Operator	-	71	77	75	81
Female	-	76	73	70	72
Male	-	68	82	82	92
Non-exempt	91	83	84	81	91
Female	89	80	81	80	89
Male	91	84	85	82	92
Exempt	97	93	94	93	97
Female	97	91	92	91	96
Male	97	93	94	94	97
Total	93	90	86	90	89
Female	93	87	79	88	80
Male	93	91	89	91	95

Employees with a formal individual development plan (%) | 404-3 |

	2014	2015[1]	2016	2017	2018
Non-exempt	16	41	38	31	39
Female	20	44	40	35	44
Male	15	40	37	29	36
Exempt	23	55	53	50	57
Female	25	56	55	52	60
Male	22	54	52	49	56

[1] Figures increased in 2015 due to a new performance management system with an integrated development plan. Operators are managed through a different process.

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

	2014	2015	2016	2017	2018
Asia Pacific	1.2	1.2	3.0	3.3	3.7
Europe & Mediterranean	3.8	4.1	6.4	6.8	6.7
Worldwide	2.8	3.0	5.2	5.8	5.8

[1] The specified path starts from job grade 14.

Internal mobility for exempt positions (%)

	2014	2015	2016	2017	2018
Jobs filled internally	25	29	33	33	25

Average number of training hours per year[1] | 404-1 | SDG 4.3

	2014	2015	2016	2017	2018
Operator	79	65	66	66	60
Female	75	57	60	56	56
Male	84	75	73	75	64
Non-exempt	38	35	34	38	40
Female	45	27	30	29	30
Male	36	37	36	40	42
Exempt	22	22	27	28	30
Female	23	24	29	31	32
Male	22	22	26	27	29
Total	47	42	46	48	47
Female	57	45	50	48	48
Male	41	41	44	48	46

[1] Based on the total headcount including turnover. Includes training on equipment and outside training.

Employees enrolled in ST supported external education programs (%)

	2014	2015	2016	2017	2018
Operator	0.8	0.9	1.1	0.8	0.6
Non-exempt	1.7	1.6	1.2	2.2	1.9
Exempt	2.2	1.5	1.6	1.8	1.9

Formal recognition and suggestion scheme

	2014	2015	2016	2017	2018
Number of people recognized[1]	25,178	15,899	17,952	17,110	18,879
Accepted suggestions which were implemented (%)	61%	60%	58%	54%	52%

[1] Can include more than one recognition per employee over the year.

Unplanned absenteeism | 403-2 |

	2014	2015	2016	2017	2018
Unplanned absenteeism	2.45	2.95	3.14	2.59	2.92
% by region					
Americas	NA[1]	0.00	0.11	0.17	0.24
Asia-Pacific	1.27	2.96	3.07	2.01	2.84
Europe	3.45	3.53	3.16	2.90	2.84
Japan	0.21	0.00	0.05	0.01	0.78
Mediterranean	3.47	1.30	3.91	3.91	3.99
% by gender					
Female	3.28	2.74	2.75	3.40	3.54
Male	2.00	3.34	3.87	2.14	2.57

[1] Not tracked in 2014.

Collective bargaining | 102-41 |

	2014	2015	2016	2017	2018
Number of collective agreements signed in the year	39	39	52	49	55
People covered by collective bargaining agreements (%)	67%	75%	75%	74%	74%
Number of people covered by representatives	32,694	31,049	30,783	32,145	32,619
People covered by representatives (%)	75%	72%	71%	71%	71%

Fair wages (%) SDG 10.2

	2014	2015	2016	2017	2018
Employees paid above 105% of the legal or conventional minimum wage	88.2	90.1	90.8	89.2	90.8

Working time and overtime hours

	2014	2015	2016	2017	2018
Employees with regular worktime less than 48 hours per week (%)	88%[1]	87%[1]	86%	84%	85%
Average weekly overtime (hours per employee)	2.3	3.8	3.7	5.0[2]	5.2

[1] Figures have been corrected due an error concerning the standard working time in Calamba site, the Philippines (48 hours/week instead of 44 hours/week).
[2] Data corrected versus 2018 sustainability report: number of overtime hours has been adjusted for Ang Mo Kio site (Singapore).

Average weekly working time in selected countries[1] (hours)

		2014	2015	2016	2017	2018
China	ST standard working time	40	40	40	40	40
	Overtime	3.7	5.5	6.3	8.2	9.0
France	ST standard working time[2]	38.5	38.5	38.5	38.5	38.5
	Overtime	0.0	0.1	0.1	0.1	0.2
Italy	ST standard working time	40	40	40	40	40
	Overtime	0.2	0.3	0.3	0.4	0.4
Malaysia	ST standard working time	48	48	48	48	48
	Overtime	9.3	11.5	11.4	12.0	12.2
Malta	ST standard working time	40	40	40	40	40
	Overtime	5.4	6.4	6.5	8.2	8.1
Morocco	ST standard working time	44	44	44	44	44
	Overtime	1.7	0.3	0.2	0.4	0.6
Singapore	ST standard working time	44	44	44	44	44
	Overtime	4.7	4.8	1.9	7.2[3]	8.3
The Philippines	ST standard working time	48	48	48	48	48
	Overtime	4.0	6.3	5.1	7.9	7.0

[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.
[3] Data corrected versus 2018 sustainability report: number of overtime hours has been adjusted for Ang Mo Kio site (Singapore).

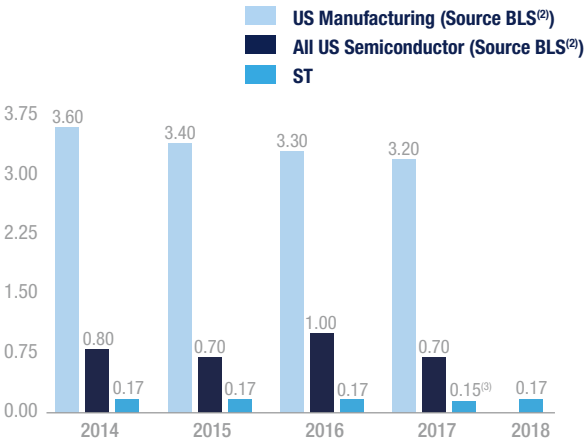
ST sites subject to regular human rights SAQ & audits (RBA)

| 412-1 | SDG 8.8

Country	Major site[1]	Self-assessment	Audit	% Workforce
High Risk				
China	Shenzhen	✓	✓	10.9%
Malaysia	Muar	✓	✓	9.5%
Singapore	Ang Mo Kio	✓	✓	8.8%
The Philippines	Calamba	✓	✓	5.6%
Medium Risk				
Malta	Kirkop	✓	✓	3.8%
Morocco	Bouskoura	✓	✓	6.5%
Low Risk				
France	Crolles	✓	✓	8.6%
	Grenoble[2]	✓	✗	3.8%
	Rousset	✓	✗	5.6%
	Tours	✓	✗	2.7%
India	Greater Noida[2]	✓	✗	1.7%
Italy	Agrate	✓	✓	10.2%
	Castelletto[2]	✓	✗	2.3%
	Catania	✓	✗	9.0%
	Marcianise	✓	✗	0.5%
Percentage coverage		100% major sites[1]	64%	90%
Number of sites that have been subject to human rights assessments and audits		15	8	

[1] Sites with >700 employees and all manufacturing sites.
[2] Design centers. Other sites are manufacturing.

Recordable cases rate benchmarks[1] | 403-2 |



[1] Including injuries only. 2018 Benchmark data not available at time of publishing.
[2] Bureau of Labor Statistics (United States Department of Labor).
[3] Rate has been updated due to the confirmation of the death of one ST employee in Ang Mo Kio site (Singapore) after the closure of the previous reporting period.

Recordable case rate[1] by gender and by region

| 403-2 | SDG 8.8

	2014	2015	2016	2017	2018
Gender					
Female	0.19	0.15	0.23	0.23	0.18
Male	0.16	0.18	0.14	0.10	0.16
Region					
Americas	0.00	0.00	0.00	0.00	0.00
Asia Pacific	0.10	0.12	0.14	0.16[2]	0.11
Europe & Mediterranean	0.24	0.21	0.20	0.14	0.23

[1] Work-related injuries per 100 employees per year as defined by OSHA-US regulation.
[2] Rate has been updated due to the confirmation of the death of one ST employee in Ang Mo Kio site (Singapore) after the closure of the previous reporting period.

Recordable case rate[1] - on-site industrial/domestic[2] | 403-2 |

	2014	2015	2016	2017	2018
Recordable case industrial rate	0.11	0.12	0.11	0.07	0.13
Recordable case domestic rate	0.06	0.05	0.06	0.08	0.04

[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.

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

| 403-2 |

	2014	2015	2016	2017	2018
Fall or slip	32	31	37	48	30
Struck by or against	36	30	38	27	35
Overexertion	5	6	4	4	3
Caught in, under or between	5	7	5	8	10
Contact with chemicals	8	9	8	2	4
Bodily reaction from slip or motion	7	7	4	2	9
Others	7	10	4	9	9

Severity rate[1] by gender and by region | 403-2 |

	2014	2015	2016	2017	2018
Gender					
Female	3.2	3.3	4.2	2.4	**2.1**
Male	2.4	2.8[2]	2.1	1.9	**1.6**
Region					
Americas	0.0	0.0	0.0	0.0	**0.0**
Asia Pacific	0.6	0.7	0.9	0.9	**0.2**
Europe & Mediterranean	4.5	4.8[2]	4.6	3.1	**3.1**

[1] Number of days lost per 100 employees per year as defined by OSHA-US regulation.
[2] Rate has been updated due to sick leave prolongation after the closure of the previous reporting period.

Occupational diseases rate[1] by gender and by region | 403-2 |

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

[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 | 403-2 |

	2016	2017	2018
Occupational diseases severity rate	2.94	1.10	**0.91**
Gender			
Female	4.42	3.16	**2.60**
Male	2.13	0.00	**0.00**
Region			
Americas	0.84	0.65	**0.00**
Asia Pacific	0.00	0.00	**0.00**
Europe & Mediterranean	5.70	2.10	**1.75**

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

Lost Workday incidence rate - subcontractors | 403-2 |

	2014	2015	2016	2017[1]	2018
Lost workdays per 100 subcontractor employees	8.50	6.80	6.60	5.10	**5.21**

[1] Up until end 2016, we covered only independent subcontractors working on-site for more than 3 months. From 2017 onwards, we are covering all independent subcontractors.

Lost Workday incidence rate[1] - subcontractors by region | 403-2 |

	2014	2015	2016	2017[2]	2018
Americas	0.00	0.00	0.00	0.00	**0.00**
Asia Pacific	1.00	1.90	0.90	5.98	**1.62**
Europe & Mediterranean	12.60	10.40	9.60	4.50	**7.55**

[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 are covering all independent subcontractors.

Lost Workday - subcontractors by gender (%) | 403-2 |

	2014	2015	2016	2017[1]	2018
Female	19	54	29	13	**26**
Male	81	46	71	87	**74**

[1] Up until end 2016, we covered only independent subcontractors working on-site for more than 3 months. From 2017 onwards, we are covering all independent subcontractors.

Lost Workday Case[1] incidence rate - subcontractors by region | 403-2 |

	2014	2015	2016	2017[2]	2018
Americas	0.00	0.00	0.00	0.00	**0.00**
Asia Pacific	0.19	0.09	0.26	0.17	**0.14**
Europe & Mediterranean	0.73	0.64	0.40	0.30	**0.40**

[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 are covering all independent subcontractors.

Lost Workday Cases - subcontractors by gender (%) | 403-2 |

	2014	2015	2016	2017[1]	2018
Female	21	30	25	24	**14**
Male	79	70	75	76	**86**

[1] Up until end 2016, we covered only independent subcontractors working on-site for more than 3 months. From 2017 onwards, we are covering all independent subcontractors.

Health Plan - medical acts[1]

	2014	2015	2016	2017	2018
Medical examinations	49,310	47,278	57,871	62,008	**64,938**
Check-up with a physician	22,042	21,978	25,476	26,574	**28,225**
Blood analyses (including biomonitoring tests[2])	13,150	11,981	16,027	16,774	**16,392**
Chest X-rays	6,380	6,906	6,544	9,478	**10,872**
Colorectal cancer immuno cult tests	412	436	861	1,023	**608**
Electrocardiograms	5,489	4,194	6,644	5,592	**7,165**
Mammography	573	626	406	561	**318**
Pap smear tests	890	766	1,169	742	**846**
Prostate cancer screenings	374	391	744	1,264	**512**
Screening tests	13,564	13,693	15,209	12,348	**19,280**
Immunizations	1,721	1,606	1,428	1,861	**3,524**
Total services provided[3]	**64,595**	**62,577**	**74,508**	**76,217**	**87,742**

[1] All sites represented, except USA. Tours site (France) data missing for H2 2016.
[2] These tests are dedicated to employees working in manufacturing areas and on some specific maintenance operations.
[3] Employees may undergo multiple examinations in the year.

Injuries costs and savings (US$m)

	2014	2015	2016	2017	2018
Injuries costs	1.9	1.8	1.9	1.4	**1.4**
Results without action	9.2	8.2	8.4	8.9	**9.2**
Savings[1]	7.3	6.4	6.5	7.4	**7.8**

[1] Around US$91m savings in 15 years.

Fines and total number of non-monetary sanctions in 2018

Shanghai (China): RMB10K penalty (~US$1,480) issued by Minhang Safety Production bureau for missing accident prevention documents and associated information records.

Number of fatalities

	2014	2015	2016	2017	2018
Employees	0	0	0	1[2]	**0**
Subcontractors	0	1[1]	0	1[3]	**0**
Total	**0**	**1**	**0**	**2**	**0**

[1] One subcontractor was fatally injured following the accidental explosion of a portable cryogenic liquid nitrogen container at our Muar site (Malaysia).
[2] 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.
[3] One subcontractor was victim of a fatal accident in an electrical area at our Bouskoura site (Morocco).

Photovoltaic carpark, ST Catania, Italy

We protect the environment

42% **of direct emissions offset by reforestation projects**

93% **of waste is reused, recovered or sent for recycling**

891
chemical risk assessments conducted in 2018

- All our manufacturing sites are ISO14001: 2015 certified
- 5% decrease in CO_2 emissions related to energy consumption
  (vs. 2017, normalized values)
- Overall water intensity improved by 5%
  (vs. 2017)

Our approach to the environment

ST Crolles, France

A comprehensive approach

At ST, we strive to minimize the impact of our activities on the environment and to develop products which contribute to a greener world (see Sustainable Technology on page 31).

Long-standing commitment

ST's Environmental Policy (available on www.st.com) has been in place for 25 years. It outlines our strategy and commitment to decreasing our use of natural resources, reducing waste and emissions, and preventing pollution, while complying with applicable regulations and standards. We have defined operational targets, which are described in our 5th Environmental Health and Safety (EHS) Decalogue (2014-2020) and monitored regularly. To prevent environmental degradation, we take a precautionary approach when assessing the impacts of new operational processes, chemicals and materials, as set out in Principle 15 of the Rio Declaration.
I 103-1 I 102-11 I

Well-structured governance

Our environmental approach applies to all our manufacturing sites and major non-manufacturing sites. Corporate and site dedicated teams collaborate to implement environmental programs and define operational procedures, develop innovative solutions and evaluate our performance. The Corporate team organizes quarterly meetings with the site environmental managers to assess yearly targets, review projects in progress, share best practices among sites and monitor performance.

Robust management system

The management of our environmental programs is in line with international standards, such as EMAS, ISO 14001 and ISO 50001. Our environmental performance and management systems are regularly evaluated through external certifications and internal audits. I 103-2 I

Successful transition to ISO14001:2015

In 2018, all our manufacturing sites, together with several R&D sites, (see certifications table on page 34), achieved a successful transition to the new ISO 14001:2015 standard, which has an increased focus on environmental performance and integrates the product lifecycle approach. In addition, the Corporate EHS team carried out 12 internal audits to assess sites' performance against EHS objectives, programs, and procedures.

Environmental risks are annually reviewed through our Enterprise Risk Management and business continuity processes (see Risk Management on page 15).

Monitoring our performance

To analyze and compare the environmental impact of each ST site, we use an internal tool called 'Eco-footprint' to gather inputs and outputs related to manufacturing activities, such as resource consumption, waste and air emissions. The smaller the footprint, the better the performance, with a score of 1.0 or below considered good. In 2018, we maintained our target score of 0.80. I 103-3 I

Shaping the future

Our rigorous and systematic approach to managing our activities in an environmentally responsible way is also demonstrated in the construction of the new manufacturing infrastructure at our Agrate site (Italy). Designed with the best available technologies, this new 300mm wafer fab will contribute to ST's competitiveness and our sustainable growth, while respecting the environment.

An eco-friendly new fab

FOCUS

Adopting a responsible approach to build the future

As soon as the building of a new manufacturing facility was confirmed, the EHS team at our Agrate site (Italy) took steps to reduce the environmental burden of the construction phase. The team conducted preliminary noise assessments, and began researching solutions for reusing and recycling the excavation materials and other waste. This new fab has been designed using innovative solutions and equipment to reduce noise, air emissions, effluents and reduce consumption of natural resources, in collaboration with the local authorities and respecting the local ecosystem. The new fab will help drive ST's sustainable growth.

Addressing the challenges together

ST actively participates in the European Semiconductor Industry Association (ESIA), the European arm of the World Semiconductor Council (WSC) whose goal is to facilitate the long-term, sustainable growth of the semiconductor industry across the globe. ST experts coordinate several working groups on resource conservation, air emissions, chemicals, and health and safety. In 2018, ESIA nominated ST's environmental program senior manager as its chair, for a three-year term. I 102-13 I

Pascal Roquet
Corporate Environment & Health Programs
Senior Manager

"As part of ST's long-standing commitment to excellence in EHS, leading the ESIA EHS Committee is a great honor. It is a fantastic opportunity to help spread the word of the European semiconductor industry, coordinating improvement programs and sharing best practices to make this industry ever more efficient and responsible towards society and the planet.

As part of WSC, ESIA works with the five other global associations (USA, China, Japan, Korea and Taiwan) to define long-term strategies, such as reducing PFC emissions or phasing out certain hazardous substances (see Chemicals on page 66). Being part of this expert community strengthens our reputation as a trusted industry leader in EHS. It is also an opportunity to benchmark our performance against our peers as we continually strive for excellence."

Energy and Climate Change

ST Catania, Italy

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

2018

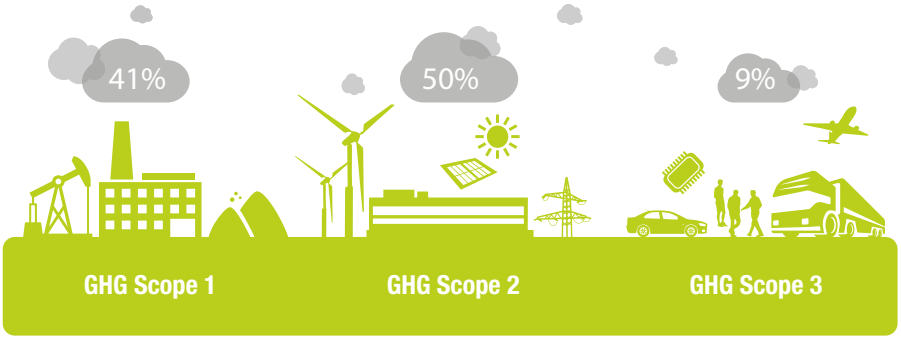
Energy consumption	-19%
GHG emissions	-15%

Managing climate change

Since 1993, ST has been working to reduce its carbon footprint and has set challenging targets to conserve energy and minimize direct and indirect air emissions.

Our 2025 goals include a commitment to reducing our energy consumption and greenhouse gas (GHG) emissions by 20% per unit of production compared to 2016. By the end of 2018, we had reduced our GHG emissions by almost 15% and our energy consumption by more than 19% compared to the 2016 normalized baseline.

Through our Enterprise Risk Management (ERM) program, we identify and assess climate-related risks. The Business Continuity Plans (BCP) we implement at each site help to prevent and protect our operations against climate change and natural disasters.



Scopes 1, 2, 3 according to Green House Gas (GHG) protocol

Mitigating our direct air emissions

Certain substances used in the semiconductor industry impact global warming and ozone depletion. Limiting the direct air emissions (scope 1) related to our operations is therefore an essential part of our environmental strategy.

2018 performance

5% decrease in direct emissions

Thanks to the actions implemented at our manufacturing sites to properly treat substances before their release into the air, our direct emissions per unit of production decreased by 5% compared to 2017. However, as the volume of production increased, our absolute direct emissions increased by 6%, underlining the importance of maintaining our efforts and developing new projects to reduce emissions.

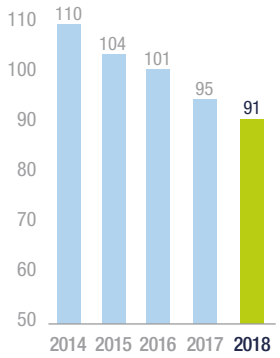
Reducing PFC emissions

Most of our direct emissions result from the use of perfluorinated compounds (PFCs). We are committed to reducing these emissions due to their impact on the environment. This also helps us minimize our exposure to carbon tax.

In 2018, we aligned our PFC reduction roadmap with the challenging target of the World Semiconductor Council to reduce PFC emissions by 30% by 2020, from a 2010 baseline. During the year, we reached 9% reduction per unit of production compared to 2010, four percentage points better than 2017. We recognize, however, that we must continue to do more. Our new roadmap specifically targets three of our manufacturing sites with the highest PFC emissions. The program of actions includes the purchase of new equipment and gas replacement projects over the next three years.

PFC emissions | 305-4 |

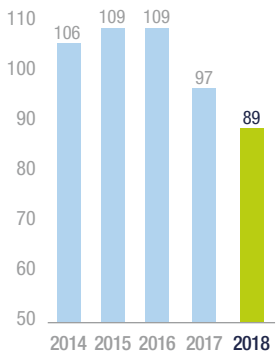
Per unit of production - normalized values



Baseline 100 in 2010.

Consumption of energy | 302-3 | SDG 7.3

Per unit of production - normalized values



Baseline 100 in 2010.

Offsetting our carbon emissions

42% of direct emissions offset by reforestation projects

To offset our remaining direct emissions, we have developed a number of CO_2 sequestration programs based on reforestation. We planted 9,000 hectares of forests in Australia, Italy, Morocco and the United States between 2002 and 2005. These trees sequestrated 271,400 tons of CO_2 in 2018, offsetting 42% of our annual direct emissions.

Reducing our indirect emissions

The semiconductor industry requires a lot of energy, mainly due to the cleanroom environment and diffusion processes. Reducing our energy consumption and its related carbon footprint (scope 2) is one of our 2025 goals. To achieve it, we have a number of energy efficiency and conservation programs in place. Where possible, we also procure renewable energy.

Energy efficiency and conservation programs

ST manufacturing sites continuously innovate to develop energy saving solutions. As an example, in 2018 the energy team at our Singapore site implemented an innovative pilot project to reduce the energy consumption of chillers. By injecting an oil additive in the chillers, their efficiency improved by more than 8% and energy consumption decreased by 8%. This initiative will also be rolled out across some of our back-end sites.

46 projects to save energy in back-end sites

Another way we reduce our energy consumption is by replacing equipment. For example, by introducing an eco-designed transformer in its substation in 2018, our Crolles site (France) plans to save approximatively 513 MWh per year.

Energy conservation brings both environmental and financial benefits, and our EHS experts are always exploring new solutions. During 2018, engineers from our back-end sites collaborated to exchange experiences, discuss projects and share best practices. In total, this working group implemented 46 improvement projects, resulting in savings of more than 13.5 GWh.

Xiang Yun Meng
Facilities Manager, Shenzhen (China)

"People often talk about reducing the carbon footprint to save the earth, but ST puts these words into action, with tangible results. ST's back-end sites set increasingly ambitious goals to reduce energy consumption and harmful emissions, and we work together to achieve them. At a corporate level, we continuously monitor our carbon footprint and I am confident we will do even better in the future."

Green sourcing

Electricity accounts for more than 90% of the energy used by ST. As part of our strategy to reduce energy-related CO_2 emissions, we have been working since 2012 to increase the proportion of renewable energy we use. In 2018, 21% of the total volume of energy we purchased came from green electricity, compared to 26% in 2017. The decrease is due to a one-off issue with an electricity supplier in Italy.

In France, green sourcing helped us reduce our emissions by the equivalent of 31,560 tons of CO_2, enough for 31,560 individual return flights from Paris to New York.

In addition, our own photovoltaic installations at Ang Mo Kio (Singapore), Catania (Italy) and Grenoble (France) produced 2.15 GWh of green energy.

ISO 50001 certification

ISO 50001 certification is a catalyst for improving energy performance and process efficiency. All our front-end sites have been certified since 2013 and our R&D site at Le Mans-Rennes (France) since 2015. In 2018, all our back-end sites initiated the certification process, following the example of our back-end site at Shenzhen (China), which achieved certification in 2017.

6% decrease in direct and indirect emissions (scopes 1,2,3)

2018 performance

Although our absolute energy consumption in 2018 increased by almost 3% compared to 2017 due to increased production levels, our normalized energy consumption decreased by 8%, confirming the effectiveness of our energy efficiency programs.

CO_2 emissions related to our energy consumption (scope 2) per unit of production decreased by almost 5% compared to 2017. This represents 50% of our total CO_2 emissions (scopes 1, 2 and 3).

2018 OBJECTIVES	Status	Comments
-30% PFCs emissions (tons CO_2 per production unit) by 2020 from 2010 baseline.		-9% compared to 2010.
+10% green energy each year.	✕	-18% compared to 2017. See article.

Reducing gas consumption

FOCUS

A sustainable step towards zero carbon emissions

To reduce its carbon footprint and guarantee a sufficient supply of chilled water, which is essential for maintaining cleanroom conditions, our Tours site (France) replaced an ageing chiller with innovative dual-function equipment that combines both chilling and heating. Designed to optimize performance, the equipment maintains chilled water capacity in summer when needs are greatest, but automatically switches to a heat pump when the demand for chilled water falls and heating needs rise, thereby reducing gas consumption. This project delivers both environmental and financial benefits:

- We estimate gas consumption will be halved, as will related CO_2 emissions.
- The equipment uses less refrigerant, further reducing the potential impact on global warming.
- Project costs were offset by a subsidy from the French environment agency (ADEME), as part of a European energy saving plan.

Our approach to transport-related emissions

Other GHG emissions (scope 3) resulting from our activities are mainly due to goods transportation, business travel and employee commuting. This represents 9% of our total CO_2 emissions (scopes 1, 2 and 3).

Goods transportation

Emissions related to goods transportation represent about 47% of our scope 3 emissions. In 2018, thanks to our efforts to optimize loadings and routes, we decreased our goods transportation carbon footprint per unit of production by almost 5%.

Employee commuting and business travel

Our sites work with local stakeholders to develop greener commuting solutions and to promote local mobility plans. In 2018, all our sites continued their efforts to promote eco-friendly commuting alternatives, successfully reducing our CO_2 emissions related to employee commuting.

- In 2018, our Tours site (France) installed four electric car charging stations, joining Crolles, Le Mans, Grenoble and Rousset (all France), and Catania and Agrate (both Italy) in the journey to green commuting.
- During European Mobility Week in September 2018, our Rousset site (France), organized activities to raise awareness of green mobility solutions. Almost 600 employees learned more about car-pooling, electric cars and public transport solutions.

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.

Water

Water management, ST Agrate, Italy

Water

OUR AMBITION

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

2025 GOAL

-20%

water consumption*

* Normalized values vs 2016

2018

-16%

Improving water efficiency

Semiconductor manufacturing processes use a lot of water. Water availability is a global challenge and we continually strive to reduce our water consumption and consider its impact on local ecosystems.

We introduced our water conservation strategy in 1994 to help us improve water efficiency through water saving programs and recycling projects, contributing to SDG targets 6.4 and 8.4.

2018 performance

Our water management is based on reuse, recycling, conservation and process optimization. In 2018, we improved our water efficiency and achieved a 5% reduction in our water consumption per unit of production compared to 2017 – reaching our lowest level ever. During the year, we recycled 41% of our water, re-using it for a variety of different purposes, such as scrubbers and cooling towers. This is two percentage points lower than 2017, mainly due to increasingly complex products that require more ultra-pure water in the assembly processes.

Conserving water

Our water efficiency programs help us reduce our water footprint, with each manufacturing site undertaking continuous improvement initiatives. We consider all opportunities for optimization, at both front-end sites, which use the most water, and back-end sites. For example, our Bouskoura site (Morocco) took action to address an increase in water consumption over the past three years. The site used root cause analysis to identify the reasons behind the increase. It then introduced changes to the production lines to optimize water use. It also initiated two recycling projects. One of these re-uses water from the cooling towers to supply the vacuum pumps, instead of supplying them with city water, reducing overall water consumption.

2018 OBJECTIVES	Status	Comments
Water recycle rate ≥ 45%.	✕	40.6%

Julien Magnan
Process Engineering,
Ovivo Switzerland AG

"Ovivo has been working with ST for many years to manage the production of ultra-pure water. Through this close partnership, we help ST to implement innovative technologies and solutions, such as OvivUP resin, glass beads filtration, and water re-use, to reduce water consumption, improve energy efficiency and manage obsolescence. The collaboration and knowledge sharing between Ovivo and ST enables us both to learn and benefit from each other's experience and insights".

Assessing risks

The reliability of the water supply for the manufacturing process is a major risk for semiconductor manufacturers. All our sites have to manage this risk, according to their needs and water availability. With our local stakeholders, we carefully manage our impact on local water sources. Each site monitors the volume of water it uses and complies with local permits.

Water withdrawal by source (%) | 303-1 | SDG 6.4

Finding the best way to produce ultra-pure water

Ultra-pure water is used for rinsing semiconductor wafers. It is produced by a stringent purification process that is both energy and water intensive. In 2018, in line with our objective to reduce our impact on the environment, ST worked closely with suppliers to apply the best available techniques for producing ultra-pure water that meets the required purity levels (see quote), while minimizing water use.

Our participation in the Carbon Disclosure Project (CDP)

We have participated in the CDP since 2004. By contributing to the CDP, we are transparently sharing our water management performance with all our stakeholders, including the associated risks and opportunities. It also allows us to compare our progress with peers in the semiconductor industry and identify areas of improvement. In 2018, we received a 'B' rating. This is lower than the previous year, but still higher than the sector average of C. The analysis suggested we should focus more on water-related risk assessment and reinforce our water policy.

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 fresh water to address water scarcity.

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

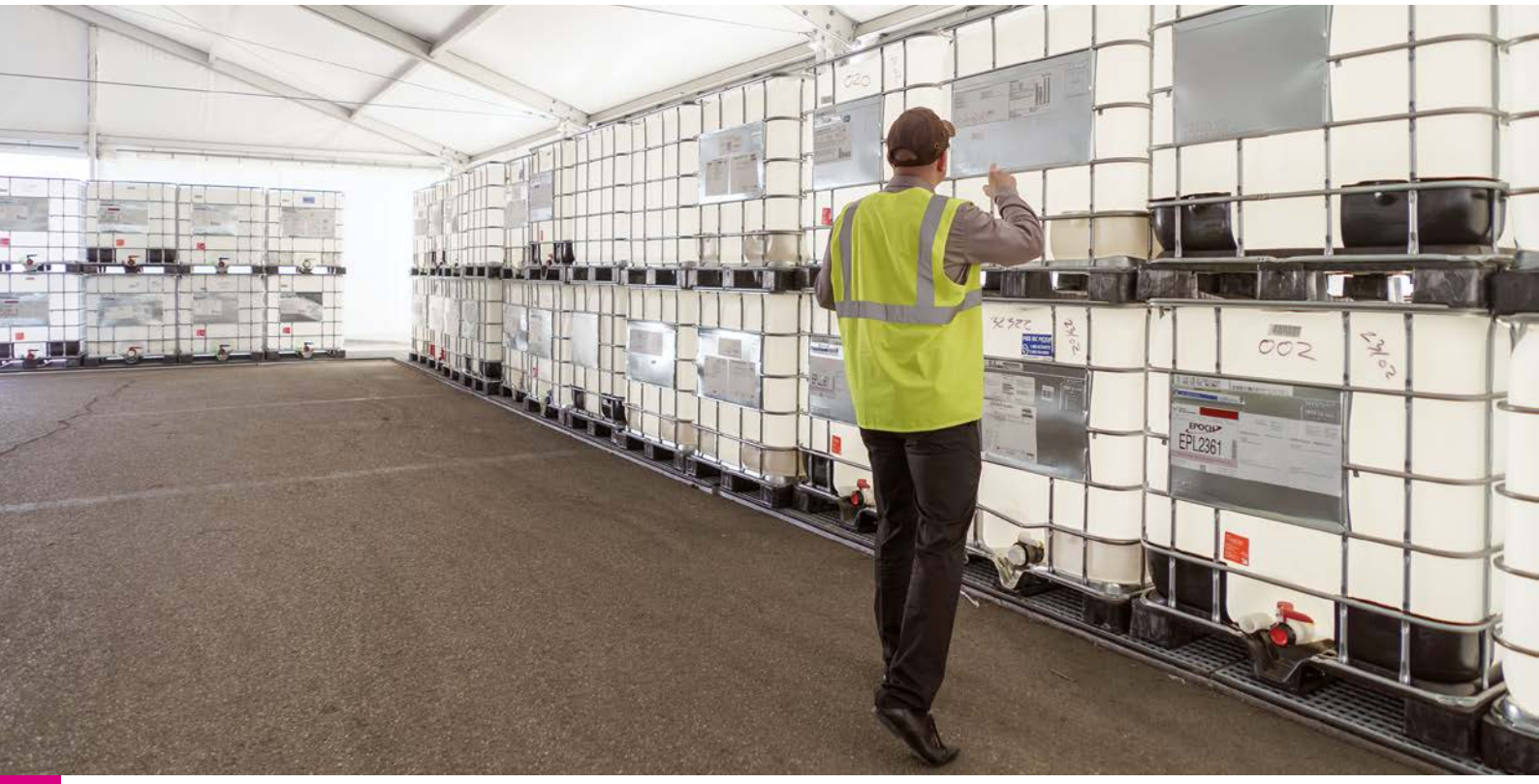
Blue energy

FOCUS

Groundwater for free cooling

Data centers consume a lot of electricity in their operations, including for cooling the servers. Cooling the equivalent of 4kWh of electricity consumption requires 1kWh. In 2018, our Grenoble site (France) introduced an initiative to cool its 5,000-server data center and reduce the flood risk in the basement. A pumping system draws in groundwater (approximatively 100m³/h). The groundwater is then used to cool the center's HVAC (Heating, Ventilation and Air-Conditioning) systems, before being discharged back into the natural environment. This free cooling system is environmentally friendly, minimizes risks, and reduces costs, while saving 1.7GWh of energy per year.

Waste and Effluents



Waste storage, 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

2018

93%

Managing the whole waste chain

We aim to reduce, reuse, recycle or recover as much of our waste as possible, rather than sending it to incineration or landfill. Our waste management is based on proper classification, separation and safe disposal. All our sites are required to respect the most stringent requirements of ST policy and local regulations.

2018 performance

Thanks to the efforts of our sites, 93% of our waste was reused, recovered or sent for recycling in 2018. This exceeds our annual target of 90% and was two points better than in 2017. We remain on track to reach our goal of 95% by 2025.

In 2018, 4% of our total waste was sent to landfill, above our target of 3% or less. This was mainly due to some one-off maintenance operations at one site that generated an increase of building-related waste, and a temporary change to the sludge recycling process at another site.

Waste split (%) | 306-2 |

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

We carefully monitor the hazardous waste generated by our production processes. In 2018, we identified 41% of waste as hazardous. Most of this (93%) was reused, recovered or sent for recycling.

Treating all waste streams

Most of the waste we generate comes from our manufacturing operations, but we are careful to consider all waste streams in our waste management strategy, from operations and products, to ancillary activities such as offices and canteen. For example, our Rousset site (France) looked beyond its manufacturing waste with an initiative to reuse organic canteen waste. In 2018, a local partner, a certified recycling center, processed almost 36 tons of organic canteen waste to produce compost for use in local agriculture. This has enabled Rousset to reduce the percentage of household waste sent to landfill from 60% to 38%.

93% of waste reused, recovered, or sent for recycling

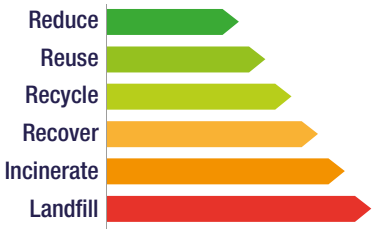
Innovate for a circular economy

The canteen waste initiative at our Rousset site is a good example of a circular economy, where one person's waste product becomes a useful resource for somebody else. For a number of years, our sites have sought innovative solutions to valorize the waste they generate.

New initiatives and techniques emerge each year:

- Sulfuric acids are used for recycling batteries.
- Spent resin and sludge are used in the cement and brick industry.
- Deflashing waste powder is sent for precious metal recovery.
- Electronic waste is dismantled; some parts are reused and precious metals are recovered.
- Solvents are burned and the energy recovered.
- Paper, cardboard, plastics and wood are recycled.
- Organic waste is transformed into compost.
- Ammonia in wastewater is treated and used in agricultural fertilizers.
- Silicon wafer scraps are used for aluminum production (see Focus below).

Waste hierarchy



Recycling silicon

FOCUS

Turning wafer scraps into wheel rims

ST is always looking for innovations to valorize the waste we generate. Our Crolles site (France) partnered with a waste disposal company to reuse waste silicon wafer scraps. Silicon can be used as an additive in aluminum production, as it lowers the melting point and improves its structural characteristics. Instead of destroying our silicon wafer scraps, the waste disposal company burns and integrates them into the aluminum production process. The aluminum ingots are then used by the automotive industry for manufacturing wheel rims and crankcases. To meet customer requirements, ST maintains the highest security measures throughout the transformation process, from storage on site and transportation, right through to filming the burning process.

Waste disposal suppliers

All our manufacturing sites work with recognized waste disposal companies. In line with our internal specifications, local EHS teams inspected 19 waste disposal suppliers in 2018. On-site visits provide an opportunity to assess compliance with ST's requirements by verifying permits, certifications, EHS practices, means of storage and treatment techniques.

19 waste disposal suppliers audited

Treating wastewater

Semiconductor manufacturing generates wastewater that contains hazardous substances, such as heavy metals or toxic solvents. To mitigate any risk of pollution, wastewater is treated on site or in municipal treatment plants before being discharged into the environment. Wastewater treatment involves physical, chemical or biological processes. The quality of the discharged water is carefully controlled.

Stéphane Lebas
General Manager
ES Services France
Suez Water Technologies & Solutions

"Suez and ST share a common goal: to improve the environmental footprint of the wastewater treatment plant at Crolles (France). We helped to achieve this by implementing a new disposal solution that replaces isopropanol, a reactant used for biological treatment, with a non-hazardous by-product of the wood industry. This solution exemplifies ST's efforts to develop circular economies in its waste management strategy, valorizing waste streams and improving resource efficiency."

Controlling effluents

In 2018, as part of the NanoStreeM project (see Chemicals, page 67), we participated in qualifying equipment and a measurement protocol to assess and monitor nanoparticles in industrial wastewater streams. Water sampling was performed in different locations (manufacturing operations, wastewater treatment plants and the natural environment where the water is discharged). These tests enabled NanoStreeM members to validate a simple and effective wastewater monitoring system.

For more transparency

As a large manufacturer in the region, our Shenzhen site (China) was selected by the government for close monitoring of its water discharge. In 2018, the site installed four new online monitoring machines to help improve daily wastewater treatment operations. The equipment can detect if a parameter is outside the designated range and take immediate action to avoid the discharge of unacceptable wastewater. The equipment is also connected to the Environmental Protection Bureau (EPB), so the government can closely and transparently monitor the site's wastewater discharge performance.

Online monitoring for wastewater treatment

Contributing to the Sustainable Development Goals

Our commitments and programs related to Waste and Effluents 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 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.

2018 OBJECTIVES	Status	Comments
≤3% waste in landfill by 2018.	✗	4%

Chemicals

Photolithography process equipment, ST Crolles, France (specific lighting conditions required)

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

2018

93%

5,412

chemicals in use

Managing hazardous substances

The semiconductor manufacturing process uses substances and materials that can present health, safety and environmental risks.

At ST, we are committed to mitigating the risks related to our activities. We therefore focus our efforts on reducing usage, substituting chemicals and ensuring proper handling, while complying with legal and customer requirements.

All our manufacturing sites, as defined in our EHS Decalogue, identify and assess risks, and define appropriate usage and handling of chemicals based on precautionary principles, while also ensuring compliance. | 103-2 |

We make sure that all the chemicals used in our operations are evaluated for each location and condition of use. In 2018, we recorded 5,412 chemicals in use and we conducted 891 risk assessments, reaching a total of 26,864 validated risk assessments by the end of the year. | 103-3 |

Our regularly reviewed, EHS-regulated substances list contains more than 2,900 substances. The 23,067 industrial hygiene measurements we performed during the year were all below applicable limits.

To enhance our approach, we implemented the Hazardous Substances Process Management (HSPM) program to track, reduce or eliminate the hazardous substances we use in our products and processes, according to the CQ080000 standard. ST experts met in October 2018 to agree on the next steps for the deployment of the HSPM program on our sites.

Caring for people

We aim to make sure workers are protected, consider the risks linked to hazardous substances and respect safety measures. We also ensure that first aiders and emergency response teams are well prepared in case of any incidents.

Following a fatal accident that took place in 2017 and was classified as work-related by local authorities in 2018, we immediately reinforced measures related to substance classification, equipment safety and workplace environment controls. We have updated accordingly labeling, training, availability of personal protective equipment and emergency preparedness. We have appointed third-party experts to conduct audits at all our manufacturing sites where TMAH (tetramethylammonium hydroxide) is used. We also asked our suppliers to take stringent measures related to the safety classification of the substance.

PFOA-related substances reduced by 53%

Replacing chemicals

We strive to reduce and eliminate the use of very hazardous substances in our processes.

Phasing out PFOA (Perfluorooctanoic acid)-related substances

Having already removed perfluorooctyl sulfonates (PFOS) in 2013, we then introduced a voluntary program to reduce PFOA-related substances in photolithography process chemicals. Since its inception in 2014, we have achieved a 53% reduction. In 2018, in close collaboration with our chemical suppliers, we rolled out a plan to phase out any remaining PFOAs used in lithography processes across all our sites.

The main challenge is the high number of process steps involved in photolithography. However, we have optimized engineering resources for replacing the remaining PFOAs by identifying common tasks and defining the role of each site. The whole project is managed with a Lean approach, with inter-site coordination through regular Obeya (see Development & Engagement on page 43) and extensive visual management.

We aim to completely phase out PFOA-related substances in our lithography processes by the end of 2021, in line with customer expectations and ahead of the World Semiconductor Council (WSC) commitment to eliminating the use of PFOA-related substances by 2025.

Emmanuel Boisseau
Lithography Program Manager
Front-end Central Functions

"As a Central Function program manager, leading projects is always challenging and exciting. This is not only due to their size and potential impact on the business, but also because of the different approaches, perspectives and ideas that come when you collaborate with people from so many different nationalities and cultures. It is a very enriching and stimulating experience."

Avoiding DEHP

In 2018, we continued to work on replacing DEHP (Di-ethylhexyl phthalate), a substance of very high concern present in the plastic tape used to secure the wafer (output from front-end) during cutting and assembly (back-end manufacturing). Our sites performed tests to identify the most suitable replacement tape without comprising quality and use. Several alternative products were tested. Effective coordination between sites was vital to standardize operating conditions and obtain maximum cost benefits. By the end of 2018, the task was almost finished, apart from some test data still to collect. We expect to complete the replacement during 2019.

Removing lead

Beyond product compliance, we work to anticipate future changes to regulations. To help reduce employee and environmental exposure to hazardous substances, we focused on the use of lead in high melting temperature solders. Where possible, we adapted our new product development to use other material conductive solders. We also participated in the DA5 industry working group to identify and qualify alternative materials.

2018 OBJECTIVES	Status	Comments
In line with WSC statement, remove PFOA and PFOA related substances in all manufacturing chemicals by 2025.	NEW	

Meeting requirements

Regulatory compliance

Our products are manufactured in compliance with applicable environmental regulations. We meet the requirements of European policies and Directives such as REACH[1], RoHS[2] , and ELV[3]. We expect our suppliers to respect our EHS-regulated substances list and certify their compliance through certificates, safety datasheets and commitments.

Customer expectations

To meet customer expectations regarding the presence of chemicals in our products, we publish our material declarations on www.st.com, as set out in the IPC1752[4] standard.

In 2018, growing customer interest in the way we manage hazardous substances led to several HSPM audits at our Shenzhen site (China). The overall results were positive, with several strong points identified, such as the systematic assessment of all new substances, robust procedures, proper labelling, compliance with regulations, and an engaged team. Some opportunities for improvement were also identified, such as the purchase of specific instruments and the use of analytical methods. We are currently implementing these improvements.

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 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.

[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.

Assessing nanomaterials

NANOSTREEM

FOCUS

NanoStreeM

ST has been an active member of NanoStreeM since its creation in 2015. NanoStreeM is a European group of semiconductor companies and R&D laboratories working to better understand and manage the occupational hazards linked to nanomaterials. The last project meeting was co-hosted in October 2018 by ST in Crolles (France) and CEA in Grenoble (France).

Over the past three years, NanoStreeM members have assessed the use of nanomaterials in the semiconductor production process (mainly in specialty chemicals) and defined risk assessment criteria. Monitoring exercises have confirmed that overall employee exposure to nanomaterials is under control, and that nearly all nano-size elements are captured by treatment plants before they are released into the natural environment (see Waste & Effluents on page 64). To date, the two main NanoStreeM outputs are a unique risk assessment methodology and a training package for EHS professionals and maintenance teams.

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 34.

ST follows the Green House Gas (GHG) Protocol for managing its GHG emissions. The resulting CO_2 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 CO_2 https://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

	2014	2015	2016	2017	2018
% of total company investments	0.73	0.70	0.33	0.47	0.17

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

	2014	2015	2016	2017	2018
Electricity (TJ[1])	7,649	7,517	7,536	7,812	8,094
Water (1,000m^3)	17,386	15,940	16,406	17,064	18,204
Chemicals (tons)	19,170	19,125	17,615	20,118	23,127
Natural gas (TJ[1])	650	661	690	695	666

[1] Tera Joule.

Summary of net CO_2 emissions (KTons)

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

	2014	2015	2016	2017	2018
Direct emissions Scope 1	626	575	552	605	644
Indirect emissions (purchased electricity) Scope 2[1]	778	748	739	756	791
Other indirect emissions (transportation[2]) Scope 3	121	135	113	132	137
Total emissions	1,525	1,459	1,404	1,493	1,573

[1] Green electricy is not included.
[2] The transportation emissions value is a global estimate of employee transportation and transportation of goods.

CO_2 emissions | 305-4 | SDG 13.1

Per unit of production - normalized values

	2014	2015	2016	2017	2018
CO_2 emissions	95	94	92	83	78

Baseline 100 in 2010.

Environmental burden - net values SDG 3.9 - 6.3

	2014	2015	2016	2017	2018
Emissions to air					
Global warming[1] (MTCE)	415,960	397,832	382,909	407,290	428,912
Ozone depletion (kg R11 Eq)	0.00	0.25	0.14	0.00	0.00
VOCs (Tons)	221	224	231	287	297
Atmospheric acidification (Kg SO2 Eq)	45,610	34,170	32,283	36,084	43,856
Photochemical oxidant creation (Kg ethylene Eq)	16,946	31,498	46,186	49,166	43,749
Air emission toxicity[2] Kg PH3 Eq	2,598	2,063	2,529	1,595[5]	2,240
Emissions to water[3]					
Eutrophication (Kg (P+N))	261,468	259,428	160,155	176,555	164,027
Aquatic oxygen demand (Kg COD[4])	452,943	474,486	508,468	595,257	605,100
Heavy metals to water (Kg Heavy metals)	5,710	6,022	8,217	11,560	14,222
Aquatic ecotoxicity (Kg Cu Eq)	4,795	4,097	5,114	6,208	5,764

[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).
[5] Data corrected versus 2018 sustainability report due to data missing for Agrate site (Italy).

Direct and indirect energy consumption by primary sources[1] (%)

| 302-1 | 302-4 |

	2014	2015	2016	2017	2018
Green electricity purchased	19.7	22.4	23.6	25.8	21.2
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)	17.4	15.6	12.6	12.1	9.2
Electricity purchased from fossil fuel sources	54.7	53.6	55.1	53.7	61.8
Natural gas	7.8	8.1	8.4	8.1	7.6
Other fuels	0.2	0.2	0.2	0.3	0.3

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

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

	2014	2015	2016	2017	2018
Electricity (TJ[1])	7,649	7,517	7,536	7,812	8,094
Natural gas (TJ[1])	650	661	690	695	666
Others (TJ[1])	16	16	17	24	22
Total energy (TJ[1])	8,315	8,193	8,244	8,531	8,782
Energy from electricity (%)	92.0	91.7	91.4	91.6	92.2

[1] Tera Joule.

Consumption of electricity | 302-3 |

Per unit of production - normalized values

	2014	2015	2016	2017	2018
Consumption of electricity	106	109	109	97	89

Baseline 100 in 2010.

Consumption of natural gas | 302-3 |

Per unit of production - normalized values

	2014	2015	2016	2017	2018
Consumption of natural gas	106	113	118	101	86

Baseline 100 in 2010.

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

	2014	2015	2016	2017	2018
Air <2,000km	12	14	16	19	19
Air >2,000km	86	85	82	79	80
Road	2	2	2	2	2
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

	2014	2015	2016	2017	2018
Consumption of water	101	96	99	88	84

Baseline 100 in 2010.

Recycled and reused total water | 303-3 | SDG 6.3 - SDG 6.4

	2014	2015	2016	2017	2018
Total water used (1,000m³)	30,421	29,022	29,219	29,920	30,654
Total volume of water recycled and reused (1,000m³)	13,035	13,080	12,813	12,857	12,450
Water recycled and reused (%)	42.8	45.1	43.8	43.0	40.6

Waste in tons | 306-2 | SDG 12.4

	2014	2015	2016	2017	2018
Total hazardous waste	10,644	10,406	11,291	14,361	20,173
Total waste	34,472	34,571	34,041	40,469	49,471

Waste split in tons | 306-2 |

	2014	2015	2016	2017	2018
Reuse	3,567	3,634	3,696	1,543	2,097
Sent for recycling	26,535	25,969	24,092	32,182	39,077
Recovery[1]	1,629	1,741	3,291	3,098	4,642
Incineration	1,371	1,757	1,336	2,128	1,671
Landfill	1,370	1,470	1,625	1,519	1,983
Total Waste	34,472	34,571	34,041	40,469	49,471

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

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

	2014	2015	2016	2017	2018
Reuse	24.3	26.4	19.1	4.1	3.1
Sent for recycling	50.6	48.5	49.7	62.7	71.8
Recovery[2]	14.9	15.0	24.6	18.5	18.3
Incineration	6.0	7.4	4.7	12.2	4.8
Landfill	4.2	2.7	1.8	2.5	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).

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

	2014	2015	2016	2017	2018
Reuse	4.1	3.7	6.7	3.7	5.0
Sent for recycling	88.8	86.6	81.2	88.9	83.9
Recovery[2]	0.2	0.8	2.2	1.7	3.3
Incineration	3.1	4.1	3.5	1.4	2.4
Landfill	3.9	4.9	6.3	4.5	5.4

[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.

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

	2017	2018
Ground water	3,055	4,236
Surface water	-	0
Municipal water supplies	14,009	13,967
Total withdrawal	17,064	18,204

[1] The sums may not add up due to rounding of the figures.

Total water discharge | 306-1 |

	2014	2015	2016	2017	2018
Water discharge (1,000m³)	13,457	13,053	13,794	14,406	14,926
Treated in ST wastewater treatment plant (%)	79	79	78	78	68
Treated in external wastewater treatment plant[1] (%)	62	58	59	58	57

[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.

Consumption of chemicals SDG 12.4

Per unit of production - normalized values

	2014	2015	2016	2017	2018
Consumption of chemicals	113	117	108	105	108

Baseline 100 in 2010.

ST exposure to Substances of Very High Concern (SVHC)

	2014	2015	2016	2017	2018
SVHC total list	161	168	169	176	191
SVHC used in ST	21	22	22	23	26
SVHC Annex XIV used in ST	1	1	1	1	1
Total SVHC used in ST replaced since 2008	5	6	7	7	7

Elimination of Substances of Very High Concern (SVHC) SDG 12.4

	2014	2015	2016	2017	2018
Total number of action plans[1] completed since 2008	20	22	23	23	23

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

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

	2014	2015	2016	2017	2018
Response rate from key partners	100	99	100	100	100
Full commitment from key partners to ST substances specification	97	96	98	80	89

Spills in 2018 | 306-3 |

Refrigerant leak in Crolles site (France) declared to the French Environmental Authority (DREAL).

Fines and non-monetary sanction in 2018

The Philippines (Calamba): two pending issues.
1/ One new power plant generator installed without the approved Environmental Clearance Certificate. Fine was PhP25K (US$480).
2/ Potential violation related to a noise complaint (pending since 2017).

Collaborative project with suppliers to renovate a school and create a plant nursery for pupils, Bouskoura middle school, Morocco

Together, we shape the future

100%
of our products are conflict-mineral free

374
education and volunteering initiatives from 33 sites worldwide

124,154
hours of company time donated

- 459 self-assessments completed by suppliers
- 99% of new suppliers screened on CSR criteria
- 55% of volunteering initiatives focused on STEM

Supply Chain Responsibility

Building a responsible supply chain

ST is committed to partnering with suppliers who share our values of respecting people and driving business with integrity and excellence. | 103-1 |

We have a number of programs to address labor and human rights, safety, ethics and environmental risks in our supply chain, based on the Responsible Business Alliance (RBA) methodology. This comprises three main steps:

- Commitment letter, in which the supplier declares their commitment to ST's RBA-based standards.
- Assessment, whereby suppliers complete an RBA self-assessment. The aggregated results enable us to identify areas that require attention.
- RBA audit to identify and prioritize risks. | 103-2 |

In addition, we monitor our sub-tier raw material suppliers through responsible mineral sourcing and hazardous substances programs.

In 2018, we conducted a risk mapping exercise on our direct supply chain to identify the priority categories of suppliers and countries, taking into account the volume of business they do with ST. | 103-3 |

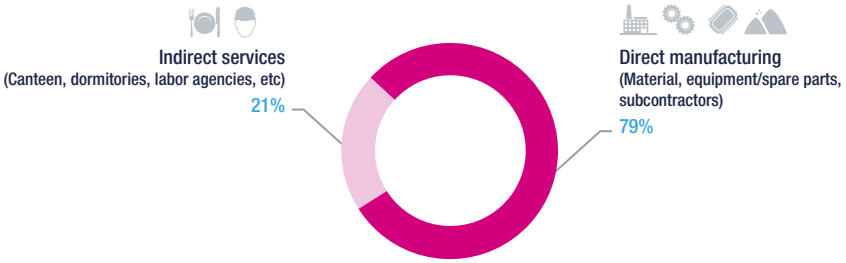
The results of this exercise enabled us to build a 2025 roadmap. Our aim is to involve all our suppliers at risk in a reasonable due diligence process.

We also focused on our capability to report on and analyze audit results. This will help us to comply with multiple due diligence regulations in countries where we operate, such as the 'duty of vigilance' in France or the CAATSA law, which restricts entry into the US of goods made with North Korean labor.

Scalable programs for different types of suppliers

By strengthening our understanding of our risks, we can continually adapt and fine-tune our programs and our level of due diligence to the different categories of suppliers we manage. These fall into two main categories.

Our suppliers | 102-9 |
Procurement volume



Direct manufacturing suppliers

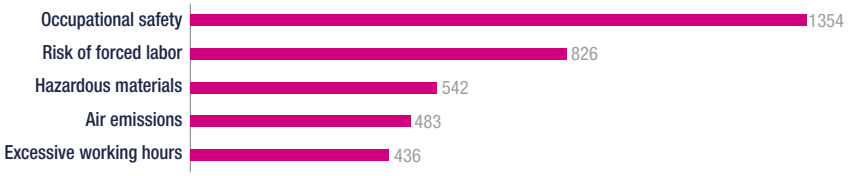
These comprise the highest percentage of our procurement volume, accounting for 79% of our total spend. We monitor key manufacturing subcontractors, material suppliers, and equipment and spare-parts suppliers in this category through our three-step process:

- 91%(1) have signed a commitment letter and 100% of new direct suppliers have undergone the screening process.
- 62%(1) have completed a self-assessment questionnaire. 92% are rated low risk and 8% are medium risk.
- 24%(1) have undergone a 3rd party RBA audit over the past two years.
  See top five risks and findings in the following tables.

(1) Percentages stated refer to percentage of total spend. Figures by number of suppliers can be found in the tables on page 77.

91% of direct manufacturing suppliers have signed a commitment letter

Top 5 risks identified in our supply chain[1] | 308-2 | 414-2 |



[1] Based on analysis of 349 key direct suppliers' RBA SAQs.

Top 5 audit findings in our supply chain[1] | 308-2 | 414-2 |

[1] Based on results of 24 key direct suppliers' RBA audits.

In 2018, we began to address the priorities we identified in the risk mapping exercise. In particular, we have clamped down on foreign worker recruitment fees. For example, we verified on-site the reimbursement of 169 Chinese workers in a subcontractor facility in Singapore.

We also require key suppliers to transition to the revised ISO14001 and we continue to encourage OHSAS certification.

Indirect services suppliers

This category includes local suppliers, such as catering, cleaning, security, labor agencies or facilities management. We have been managing risks associated with this category of supplier since 2015, with a specific focus on human rights. In 2018, we achieved:

- 97% of 200 eligible suppliers have signed a commitment letter.
- 88% of 125 eligible suppliers have completed a self-assessment questionnaire. We also launched a foreign worker survey to comply with US CAATSA requirements in relation to North Korean labor.
- 87% of 92 eligible suppliers have undergone a 2nd party RBA audit over the past two years. We also audited our 10 major labor agencies worldwide to limit our forced labor risk. The top risks identified were excessive working hours, and insufficient training and communication of grievance mechanisms.

87% of eligible indirect services suppliers audited

In 2018, we strengthened our follow up of corrective actions to improve the monitoring of our suppliers. The quote below from a goods transportation company worker at our Bouskoura site (Morocco) illustrates how RBA audits can create positive change, such as ensuring all workers have a written contract in their native language.

ESPACE TRANSIT
VOTRE PARTENAIRE LOGISTIQUE AU MAROC

Rachid Menzeh
Import manager
Espace Transit

"Thanks to the RBA audit of suppliers carried out by ST Bouskoura (Morocco), my colleagues and I now benefit from having formal employment contracts with our company, even though Moroccan law does not require it. The fact that ST supported and encouraged our employer to go beyond local requirements and follow the RBA code is a positive indication of commitment and makes us feel truly valued as employees."

Managing environmental and safety risks in the supply chain

In addition to our global approach, we also coordinate supply chain actions on specific environmental and safety issues.

- Waste disposal suppliers, see page 63 in this report
- Safety reporting, see page 38
- Chemicals management, see page 67
- Responsible minerals sourcing, see Focus below

100% of our smelters validated through the Responsible Minerals Assurance Process

Looking forward

Our ambition is to transform our supply chain through awareness, verification and monitoring. Our 2025 objective is to audit 100% of our suppliers identified as high risk. This represents approximately 500 suppliers worldwide.

Responsible minerals sourcing

FOCUS

Extending due diligence to align with OECD guidelines

With our early adoption and implementation of the RBA conflict minerals standard, we have been able to map 251 smelters in our 3TGs[1] supply chain in 2018. In addition, we had 100% of them validated through the Responsible Minerals Assurance Process (RMAP) for the second consecutive year.

In 2017, we joined the Responsible Minerals Initiative (RMI) to progressively extend the scope of responsible sourcing due diligence to other minerals at risk globally due to severe violations of human rights or disregard for the environment. The aim is to address negative impacts beyond the issue of conflict minerals in the Democratic Republic of Congo.

In 2018, RMI developed a new audit protocol with an emphasis on preventing corruption, child labor and forced labor. We will start implementing the new protocol for our smelters in 2019.

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

[1] 3TGs : Tin, Tungsten, Tantalum, Gold.

Contributing to the Sustainable Development Goals

Our commitments and programs related to Supply Chain Responsibility 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.

2018 OBJECTIVES	Status	Comments
Ensure 90% of all eligible local suppliers are audited by end of 2018.	✗	87% Replaced by 2025 goal.
≥90% of eligible suppliers signed an agreement to comply with the RBA code of conduct.	✓	94%

Education and Volunteering

L'Usine Extraordinaire (Extraordinary Factory), Paris, France

Education & Volunteering

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

2018

7/20 countries

China, France, India, Italy, Malta, Singapore and the Philippines.

LBG
London Benchmarking Group

We have a longstanding commitment to having a positive impact on the communities where we operate, to create additional value and minimize risks for our stakeholders. We aim to engage employees through effective local programs aligned with our sustainability strategy and with the local, operational and cultural context. | 103-1 |

Starting from 2012, we have measured our community involvement through the London Benchmarking Group methodology, a global standard to measure and manage corporate community investment. | 103-3 |

New strategic STEM program

In 2017, we updated our strategy to focus on education in Science, Technology, Engineering and Mathematics (STEM), with the aim of developing a more detailed framework to engage our sites in supporting STEM education.

In an increasingly complex digital world where technological change is accelerating, we are convinced we have a role to play in inspiring the next generation to pursue STEM-related careers. Opportunities linked to STEM are expected to grow in the coming years, especially in technical engineering roles, as the 'baby boomer' generation approaches retirement. So attracting more young people to STEM is a priority. | 103-1 |

Our objective is to attract young talent, minimize potential skills shortages, increase recruitment diversity, promote our products and image, increase employee experience and engagement, and prepare for tomorrow's innovations.

In 2018, we set up a worldwide taskforce to develop our STEM program. The aim is to share internal and external best practices to define structured activities that can be implemented across all our sites. | 103-2 |

Although we are still developing the program, we already conduct many STEM initiatives. In 2018, 11 sites in seven countries already had STEM programs in place, and 55% of our community initiatives were STEM based. I 103-3 I

In line with SDG 4, our goal is to spread our STEM program throughout the Company to cover a minimum of 20 countries by 2025.

2018 overall achievements

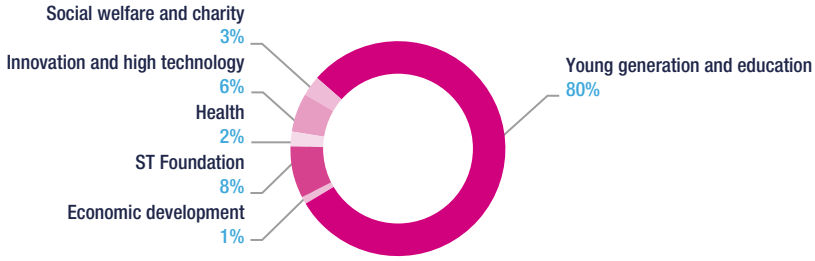
374 initiatives from 33 sites worldwide

In 2018, we implemented 374 community initiatives worldwide. These included:

- 33 sites in 20 different countries
- 124,154 hours of company time, representing 75% of the total contribution
- US$1,240,364 in cash donations

As in previous years, education and innovation are our main drivers. Supporting education was an important focus in 80% of our initiatives, with 44% linked to innovation.

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.

55% of community initiatives are STEM related

Many of the initiatives we conducted in 2018 were linked to our STEM program, such as:

- giving a taste of science to the very young through STEM science fairs
- employees volunteering as STEM ambassadors in schools
- organizing site visits for students and teachers from high schools and universities
- developing partnerships with higher education establishments and employees giving lectures
- organizing contests that foster learning and lead to the development of innovative solutions using our technology (Focus on page 76)
- using ST products in teaching courses with partner institutions
- engaging girls in STEM studies through specific actions (see quote on page 47)

One important event that we contributed to in 2018 was the French national event 'L'Usine Extraordinaire' (or 'The Extraordinary Factory') held in November in Paris. This life-sized promotional factory mock-up was initiated by a group of industry leaders to showcase modern and innovative French industry to the general public, with a specific focus on the young generation (15 to 25 year-olds). ST sponsored the event with the support of 59 of our employees who explained the semiconductor industry by displaying equipment from our clean rooms, our technologies and products, and end-user applications (see quote below).

Bruno Grandjean
President, FIM
Fédération des Industries Mécaniques (France)

"When we began the incredible adventure of l'Usine Extraordinaire, our goal was to demonstrate that French factories are open to the world, innovative and inclusive. These values are shared by many companies, but ST was at the top of our list of potential partners. As soon as we started working with ST, it was clear we had the same vision for industry as a solution for issues like the future of our planet, the role of women or European integration. The involvement of ST employees was instrumental to the success of this extraordinary cultural event. I am deeply grateful for their support."

Italian sites' innovation competition

FOCUS

Building the future with STM32 Nucleo and STM32 Open Development Environment

ST Italy recognizes the importance of promoting STEM education and opportunities to young people. One of the most interesting projects is the 'Let's build the future' competition, promoted by all our Italian sites. Focusing on high school students, it aims to stimulate creativity and entrepreneurship by getting students to design an application based on the STM32 Nucleo boards and the STM32 Open Development Environment.

Applications are evaluated in terms of their technical complexity, degree of innovation, utility, feasibility, and economic viability. There is also a particular focus on sustainability, both in terms of the environment and the potential impact on people's lives.

The competition brings many potential benefits for our business, our people and for society. It helps increase the number of students choosing STEM-related studies and careers; it leads to greater collaboration between schools and businesses; and it improves awareness of sustainable innovation and of the STM32 ecosystem. It also enhances perceptions of the ST brand, both internally and externally.

ST Foundation

The ST Foundation continues to bridge the digital divide between those who have access to modern technologies and those who do not, both in countries where we operate and in several where we do not, especially in Africa. The Digital Unify (DU) program started in 2003. It has trained over 620,840 people in 26 countries since its inception and 115,650 students took part in 'Informatics and Computer Basics' and 'Tablet for Kids' classes in 2018 alone. SDG 4.3

More than 115,000 Digital Unify trainees in 2018

In 2018, the Foundation received a wide range of support from ST, including:

- cash donation of US$500,000
- electronic and IT equipment donations
- time contribution by employees engaged in the DU program as trainers or for technical support
- support from Corporate External Communication to produce the Foundation's activity report to external stakeholders and to maintain their website

The Foundation continues to support migrants in Europe. In Italy, with the help of ST volunteers, the Foundation set up a new DU lab at the Cara di Mineo camp, the biggest European reception center for asylum seekers, refugees and migrants, situated in Sicily. In France, the 'Numérique pour tous' project continues to expand with the support of our Paris site (France), with the aim of increasing access to IT for disadvantaged people.

In India, thanks to the involvement of ST employees, we launched a new advanced IT course to enable job-seekers to acquire new skills to help them find employment.

In 2019 ST and the ST Foundation will collaborate to create new synergies and further improve programs for the future.

For more information, visit the ST Foundation website - www.stfoundation.org.

Contributing to the Sustainable Development Goals

Our commitments and programs related to Education and Volunteering as described above contribute to:

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

Indicators

This section includes indicators and GRI Standard Disclosures.

Suppliers' and subcontractors' Environmental, Health & Safety performance

	2014	2015	2016	2017	2018
Number of eligible suppliers/subcontractors					
Material suppliers	73	89	81	95	96
Equipment/spare-parts suppliers	83	80	80	80	74
Back-end subcontractors	60	55	31[1]	29	28
Front-end subcontractors	17	16	12	13	12
Total	233	240	204	217	210
ISO 14001 certified/EMAS validated (%)					
Material suppliers	76	79	78	93	82
Equipment/spare-parts suppliers	55	70	75	80	5[2]
Back-end subcontractors	100	100	100	96	96
Front-end subcontractors	100	100	100	100	100
Overall %	76%	82%	81%	89%	58%
OHSAS validated (%)					
Material suppliers	40	47	46	50	48
Equipment/spare-parts suppliers	26	26	35	23	1[2]
Back-end subcontractors	66	67	70	67	72
Front-end subcontractors	77	75	75	70	67
Overall %	44%	46%	47%	44%	36%

[1] In previous years we counted the number of plants for BE subcontractors but starting from 2016 we count only the number of companies.
[2] Issue with data consolidation in 2018.

New suppliers screened using social & environmental criteria in 2018 (%) | 308-1 | 414-1 |

	2018
Direct manufacturing	100%
Indirect services	99%
Total	99%

Step 1 - supplier agreement to comply with RBA code in 2018

	Eligible suppliers[1]	% signed
Direct manufacturing		
Material suppliers	96	93%
Equipment/spare-parts suppliers	74	89%
Back-end subcontractors	28	89%
Front-end subcontractors	12	100%
Total	210	91%
Indirect services		
Local suppliers	164	96%
Local labor agencies	36	100%
Total	200	97%

[1] Suppliers identified at risk.

Step 2 - supplier CSR self-assessment questionnaires[1] (SAQ) in 2018 | 308-2 | 414-2 |

Direct manufacturing	Eligible facilities[2]	% completed[3]
Material suppliers	242	89%
Equipment/spare-parts suppliers	102	73%
Back-end subcontractors	45	96%
Front-end subcontractors	17	100%
Total	406	86%
Indirect services	**Eligible suppliers**	**% completed**
Local suppliers	107	86%
Local labor agencies	18	100%
Total	125	88%

[1] Either official RBA SAQ or ST SAQ based on RBA SAQ.
[2] For direct manufacturing suppliers SAQs are completed at facility level.
[3] All suppliers who have completed an SAQ are required to have a corrective action plan.

Step 3 - supplier CSR audits[1] | 308-2 | 414-2 | SDG 8.8

Direct manufacturing	Eligible facilities	% verified
Material suppliers	215	3%
Equipment/spare-parts suppliers	74	1%
Back-end subcontractors	43	16%
Front-end subcontractors	17	59%
Total	349	7%
Indirect services	**Eligible suppliers**	**% verified**
Local suppliers	82	85%
Local labor agencies	10	100%
Total	92	87%

[1] Percentage of valid audits (audits took place over a two-year period - Q1 2017 to Q4 2018, either official 3rd party RBA audit or ST verification based on RBA audit protocol).

Supplier facilities average RBA SAQ score[1] (%)

	2014	2015	2016	2017	2018
Health and Safety section	90.7	91.9	92.1	90.7	90.7
Environment section	89.8	90.4	90.6	88.4	88.0
Labor section	86.6	91.1	91.4	92.2	91.1
Ethics section	88.6	93.0	93.8	93.6	93.1
Overall average	89.0	91.6	92.0	91.2	90.5

[1] Based on analysis of 349 key direct suppliers' RBA SAQs.

Suppliers terminated as a result of a negative social or environmental impact | 308-2 | 414-2 | SDG 8.7

	2015	2016	2017	2018
Number of suppliers	0	2[1]	1[2]	2[3]

[1] Data corrected versus 2018 sustainability report: 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).

Suppliers engaged in reporting EHS and social KPIs

	2014	2015	2016	2017	2018
Number of front-end material suppliers	44	37	42	41	46
Number of back-end material suppliers	26	39	42	48	47

Conflict minerals - suppliers/subcontractors and smelters

	2014	2015	2016	2017	2018
Number of materials suppliers and subcontractors involved in the RBA-RMI[1] Due Diligence survey	139	148	170	186	189
Number of involved suppliers and subcontractors associated with at least one 3TG metal	104	117	118	126	128
Involved 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	89	118	119	143	182
Number of smelters identified in ST subcontractors' supply chain	113	133	174	191	251
Total number of smelters identified in ST supply chains	119	139	177	197	251

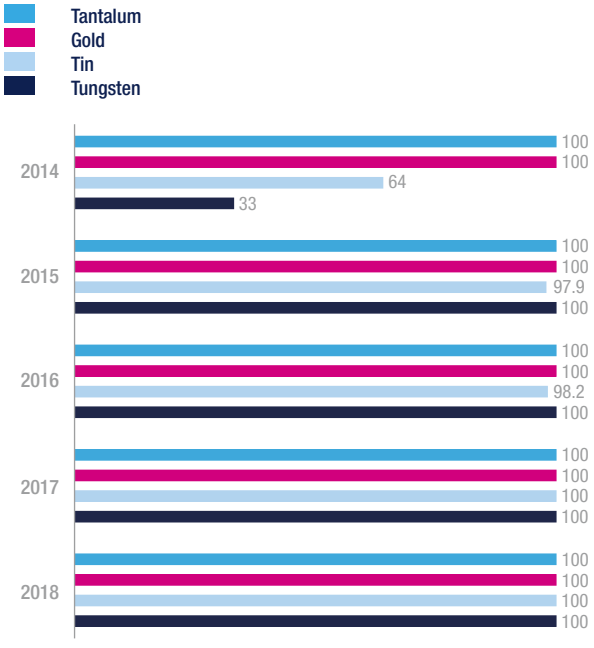
[1] Responsible Minerals Initiative.

Conflict minerals inquiry results 2018

	Gold	Tantalum	Tin	Tungsten
Number of smelters	99	39	73	40
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 31 December 2018 (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

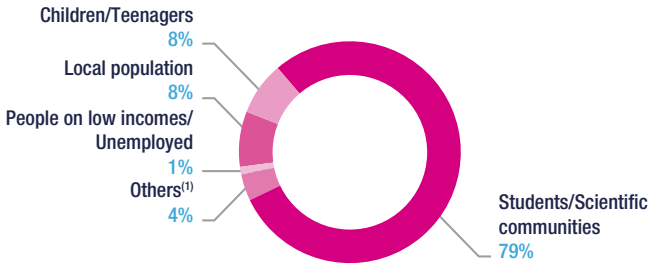
[1] Responsible Minerals Assurance Process (formally Conflict Free Smelter Program).
[2] Level 1 countries are not identified as conflict regions or plausible areas of smuggling or export from the Democratic Republic of Congo and its nine adjoining countries.
Level 2 countries are known or plausible 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.

Smelters which are RMAP[1] validated (%) SDG 8.7



[1] Responsible Minerals Assurance Process (formally Conflict Free Smelter Program).

Direct beneficiary groups in 2018 (%)



[1] Includes mainly people with poor health and disabled people.

Community involvement - inputs | 201-1 |

	2014	2015	2016	2017	2018
Number of community involvement initiatives	312	338	307[1]	335	374
Total contribution (evaluated in US$m)	6.0	6.9	6.6	8.2	8.0

[1] From 2016 onwards, multiple activities linked to the same program count as one initiative.

Type of contribution breakdown[1]

	2014	2015	2016	2017	2018
Cash donations (%)	15	9	4	10	15
Staff time volunteering (%)	75	83	84	84	75
In-kind (%)	5	2	4	5	7
Management costs (%)	4	6	7	1[2]	2
Number of employees engaged in volunteering[3]	8,655	7,680	6,182	6,712	5,663
Number of hours contributed inside Company time	99,761	138,520	125,616	139,003	124,154

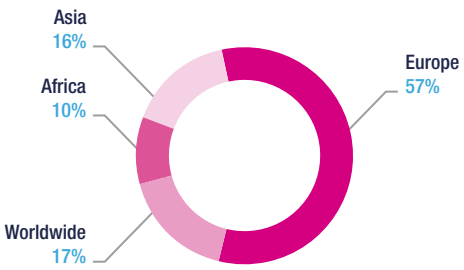
[1] The sums may not add up to 100% due to rounding of the figures.
[2] Including time spent on awareness and reporting. From 2017 onwards, management costs related to the logistics of events are included in cash donations and staff time volunteering.
[3] Employees are counted for each initiative, so the same employee may be counted several times.

Motivation for contribution[1] (%)

	2014	2015	2016	2017	2018
Community investment	97	88	91[2]	95	97
Charitable donation (gift)	2	10	8	4	3
Commercial initiative	0	1	1[2]	1	0

[1] The sums may not add up to 100% due to rounding of the figures.
[2] Data corrected versus 2017 sustainability report: Students support in Grenoble initially declared in commercial initiative instead of community investment.

Geographical spread of contributions in 2018 (%)



Community involvement - outcomes

	2014	2015	2016	2017	2018
Number of beneficiary organizations	1,204	1,832	1,487	1,722	1,384
Number of direct beneficiaries	121,166	157,281	57,702	105,117	103,703

Awards

Each year we receive external recognition for our sustainability practices. Here is an overview for 2018.

WE IMPROVE EVERYBODY'S LIFE

SMART TECHNOLOGY OF THE YEAR

ST won the Platinum Award in the Smart Technology of the Year category at the India Smart Grid Forum 2018. ST's innovative smart grid metering and efforts to develop the ecosystem in India were shortlisted among 250 entries.

EUROPEAN STAR INNOVATION PROJECT

ST received the European Star Innovation award from the French Ministry of Higher Education, Research and Innovation for successfully leading the Pilot Optical Line for Imaging and Sensing (POLIS) project. During this 4.5-year project, 21 leaders in imaging technology cooperated to build pilot lines dedicated to differentiating technologies that will enable a large range of innovative sensors.

Photo: MESRI

Photo: Leo Johnson

ELEKTRA MANUFACTURER OF THE YEAR

ST received the title of Manufacturer of the Year at the prestigious Elektra Awards organized by Electronics Weekly in London. The independent panel of judges from the UK electronics industry recognized our product and technology innovation and Company performance.

THOMSON REUTERS TOP 100 GLOBAL TECH LEADER

ST was recognized among the world's most innovative companies in being named a '2018 Thomson Reuters Top 100 Global Technology Leader'. This recognition honors companies that have demonstrated a commitment to leadership across several pillars such as finance, management and investor confidence, risk and resilience, legal compliance, innovation, people and social responsibility, environmental impact, and reputation.

WE PUT PEOPLE FIRST

ATTRACTIVE COMPANY

ST was recognized among the top five most attractive companies in France and received a Randstad Award 2018. This is aligned with the strong focus of the Company to attract the best talents.

Photo: Alexis PAOLI

HARMONIOUS LABOR RELATIONSHIP

This award was given to our Shenzhen site (China) by the Chinese and Shenzhen Entreprises with Foreign Investment associations. It recognizes the site's efforts to instill a harmonious relationship between employer and employees.

Awards

WE PUT PEOPLE FIRST

TROPHÉE LUMIÈRE

ST France received a Trophée Lumière for its innovative initiative to support the employment of disabled people. This rewards the inter-company apprenticeship program developed by ST and deployed locally to support training for disabled people within the company and ensure their successful integration.

HUMAN RESOURCE DEVELOPMENT AWARDS

Our Muar site (Malaysia) received two national awards from Pembangunan Sumber Manusia Berhad, an agency under the Ministry of Human Resources, for promoting a learning and development culture to enhance employee competencies, as well as for developing creative solutions and innovations in the domain of human resources.

RBA PLATINIUM

Our Calamba site (the Philippines) was recognized by the Responsible Business Alliance for completing the validated audit process with a score of 200/200. It rewards the efforts, commitment and leadership in corporate social and environmental responsibility at the site.

WE PROTECT THE ENVIRONMENT

AWARD FROM THE MOROCCAN MINISTRY OF ENVIRONMENT

During the 12th Environment Award ceremony held by the Ministry of the Environment of Morocco, our Bouskoura site received an award for its active contribution to sustainable development. Among the 100 participants (companies, associations, professionals and local governments), ST was one of the three companies recognized in the business category.

OUTSTANDING POLLUTION CONTROL OFFICER

Senior Manager, Environment, Safety and Security, Elizabeth T. Beronio from our Calamba site (the Philippines) was recognized as an outstanding pollution control officer by the Department of Environment & Natural Resources and the Science Park of the Philippines, Inc. for her invaluable support in promoting environmental protection, preservation and sustainability.

TOGETHER, WE SHAPE THE FUTURE

UNIVERSUM MOST ATTRACTIVE EMPLOYERS

ST was recognized for the activities it organizes in universities and was ranked among the most attractive employers in Italy. This result was based on a Universum survey of over 40,600 university students from 44 universities throughout the country.

BEST INDUSTRY 4.0 INITIATIVE AND SUSTAINABLE DEVELOPMENT AWARD

ST's Agrate site (Italy) received the special prize 'Best Industry Initiative 4.0 and sustainable development' for the program 'IoT, build the future' from the Italian Sodalitas Foundation. Sodalitas is dedicated to improving social cohesion in Italy and the prize recognizes an initiative that enhances contact between industry and education.

International Standards

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ST has been a signatory to the Global Compact since 2000 and a member of the Responsible Business Alliance (formerly the EICC) 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	• Labor and Human Rights • Supply Chain Responsibility • Education and Volunteering
	Principle 2	make sure that they are not complicit in human rights abuses.	• Labor and Human Rights • Supply Chain Responsibility
Labor	Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	• Labor and Human Rights • Supply Chain Responsibility
	Principle 4	the elimination of all forms of forced and compulsory labor;	• Labor and Human Rights
	Principle 5	the effective abolition of child labor; and	• Labor and Human Rights
	Principle 6	the elimination of discrimination in respect of employment and occupation.	• Labor and Human Rights • Development and Engagement • Diversity and Inclusion
Environment	Principle 7	Businesses should support a precautionary approach to environmental challenges;	• Sustainable Technology
	Principle 8	undertake initiatives to promote greater environmental responsibility; and	• Energy and Climate Change • Water • Waste and Effluents • Chemicals • Sustainable Technology
	Principle 9	encourage the development and diffusion of environmentally friendly technologies.	• Innovation • Sustainable Technology
Anti-corruption	Principle 10	Businesses should work against corruption in all its forms, including extortion and bribery.	• Ethics and Compliance

Alignment of ST Sustainability programs with the ISO 26000 guidelines

ISO26000:2010 standards	ST Sustainability programs
6.2 Organizational governance	• Governance
6.3 Human rights	• Labor and Human Rights • Supply Chain Responsibility • Diversity and Inclusion • Education and Volunteering
6.4 Labor practices	• Development and Engagement • Health and Safety
6.5 The environment	• Energy and Climate Change • Water • Waste and Effluents • Chemicals • Sustainable Technology • Supply Chain Responsibility
6.6 Fair operating practices	• Ethics and Compliance • Supply Chain Responsibility
6.7 Consumer issues	• Quality • Sustainable Technology
6.8 Community involvement and development	• Education and Volunteering • Innovation • Sustainable Profit

GRI Content Index I 102-55 I

For the GRI Content Index Service, GRI Services reviewed that the GRI content index is clearly presented and the references for all disclosures included align with the appropriate section in the body of the report.

GRI 101: Foundation 2016

General Disclosures	Disclosure		Page number(s)/URL(s)
GRI 102: General Disclosures 2016	**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 5) / ST Products and Solutions (page 6) / Sustainable Profit (page 23) 2018 Annual Report (Form-20F) at http://investors.st.com (page 17)
	102-3	Location of headquarters	About this report (page 2)
	102-4	Location of operations	ST at a glance (page 5)
	102-5	Ownership and legal form	Governance (page 10)
	102-6	Markets served	ST Products and Solutions (page 6) / Sustainable Profit (page 23) Indicators (page 34) / 2018 Annual Report (Form-20F) at http://investors.st.com (page 17)
	102-7	Scale of the organization	ST at a glance (page 5) / Sustainable Profit (page 23) / Indicators (page 34) 2018 Annual Report (Form-20F) at http://investors.st.com (page 18)
	102-8	Information on employees and other workers	Indicators (page 48)
	102-9	Supply chain	Value Chain (page 18) / Supply Chain Responsibility (page 71)
	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 54) / EHS decalogue at www.st.com/ehs-decalogue
	102-12	External initiatives	About this report (page 2) / International Standards (page 81)
	102-13	Membership of associations	Governance (page 11) / Our approach to the environment (page 55) / International Standards (page 81) / Involvement in Industrial and International Organizations at www.st.com
	Strategy		
	102-14	Statement from senior decision-maker	CEO foreword (page 4)
	Ethics and integrity		
	102-16	Values, principles, standards, and norms of behavior	Ethics and Compliance (page 12) / ST's Code of Conduct on www.st.com
	Governance		
	102-18	Governance structure	Governance (pages 10 and 11)
	Stakeholder engagement		
	102-40	List of stakeholder groups	Sustainability Strategy (page 20)
	102-41	Collective bargaining agreements	Indicators (page 50)
	102-42	Identifying and selecting stakeholders	Sustainability Strategy (page 20)
	102-43	Approach to stakeholder engagement	Sustainability Strategy (page 20)
	102-44	Key topics and concerns raised	Sustainability Strategy (page 20)
	Reporting practices		
	102-45	Entities included in the consolidated financial statements	2018 Annual Report (Form-20F) at http://investors.st.com (pages 26 and 27) / Governance (page 10)
	102-46	Defining report content and topic boundaries	About this report (page 2) / Sustainability Strategy (page 16)
	102-47	List of material topics	Sustainability Strategy (page 16)
	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 82 and 83)
	102-56	External assurance	About this report (page 2) / Assurance statement (pages 86 and 87)

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 16) / Sustainable Profit (page 22)	
	103-2	The management approach and its components	Sustainable Profit (page 22)	
	103-3	Evaluation of the management approach	Sustainable Profit (page 22)	
GRI 201: Economic performance 2016	201-1	Direct economic value generated and distributed	Sustainable Profit (page 23) / Indicators (pages 34, 49 and 78) / 2018 Annual Report (20F) at http://investors.st.com (pages 4, 5, 35 and 40)	Payment to government by country not reported due to confidentiality constraints
Energy & Climate Change				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability Strategy (page 16) Our approach to the environment (page 54)	
	103-2	The management approach and its components	Our approach to the environment (page 54)	
	103-3	Evaluation of the management approach	Our approach to the environment (page 55)	
GRI 302: Energy 2016	302-1	Energy consumption within the organization	Indicators (page 68)	
	302-3	Energy intensity	Energy and Climate Change (page 57) / Indicators (page 69)	
	302-4	Reduction of energy consumption	Indicators (page 68)	
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	Indicators (page 68)	
	305-2	Energy indirect (Scope 2) GHG emissions	Indicators (page 68)	
	305-3	Other indirect (Scope 3) GHG emissions	Indicators (page 68)	
	305-4	GHG emissions intensity	Energy and Climate Change (page 57) / Indicators (page 68)	

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Material topics	Disclosure		Page number(s)/URL(s)	Omission
Water				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability Strategy (page 16) / Our approach to the environment (page 54)	
	103-2	The management approach and its components	Our approach to the environment (page 54)	
	103-3	Evaluation of the management approach	Our approach to the environment (page 55)	
GRI 303: Water 2016	303-1	Water withdrawal by source	Water (page 61) / Indicators (page 69)	
	303-3	Water recycled and reused	Indicators (page 69)	
Waste & Effluents				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability Strategy (page 16) / Our approach to the environment (page 54)	
	103-2	The management approach and its components	Our approach to the environment (page 54)	
	103-3	Evaluation of the management approach	Our approach to the environment (page 55)	
GRI 306: Effluents and Waste 2016	306-1	Water discharge by quality and destination	Indicators (page 69)	
	306-2	Waste by type and disposal method	Waste and Effluents (page 62) / Indicators (page 69)	
	306-3	Significant spills	Indicators (page 69)	
Chemicals				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability Strategy (page 16) / Our approach to the environment (page 54)	
	103-2	The management approach and its components	Our approach to the environment (page 54) / Chemicals (page 65)	
	103-3	Evaluation of the management approach	Our approach to the environment (page 55) / Chemicals (page 65)	
Supply Chain Responsibility				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability Strategy (page 16) / Supply Chain Responsibility (page 71)	
	103-2	The management approach and its components	Supply Chain Responsibility (page 71)	
	103-3	Evaluation of the management approach	Supply Chain Responsibility (page 71)	
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	Indicators (page 77)	
	308-2	Negative environmental impacts in the supply chain and actions taken	Supply Chain Responsibility (page 72) / Indicators (page 77)	
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	Indicators (page 77)	
	414-2	Negative social impacts in the supply chain and actions taken	Supply Chain Responsibility (page 72) / Indicators (page 77)	
Development & Engagement				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability Strategy (page 16) / Development and Engagement (page 42)	
	103-2	The management approach and its components	Development and Engagement (page 42)	
	103-3	Evaluation of the management approach	Development and Engagement (page 42)	
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	Indicators (48 and 49)	
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	Indicators (page 50)	
	404-3	Percentage of employees receiving regular performance and career development reviews	Indicators (page 50)	
Health & Safety				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability Strategy (page 16) / Health and Safety (page 36)	
	103-2	The management approach and its components	Health and Safety (pages 36 and 37)	
	103-3	Evaluation of the management approach	Health and Safety (pages 36 and 37)	
GRI 403: Occupational Health and Safety 2016	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Health and Safety (37 and 38) / Indicators (50, 51 and 52)	
Diversity & Inclusion				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability Strategy (page 16) / Diversity and Inclusion (page 45)	
	103-2	The management approach and its components	Diversity and Inclusion (page 45)	
	103-3	Evaluation of the management approach	Diversity and Inclusion (pages 46 and 47)	
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	Indicators (48 and 49)	
Labor & Human Rights				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability Strategy (page 16) / Labor and Human Rights (page 39)	
	103-2	The management approach and its components	Labor and Human Rights (page 39)	
	103-3	Evaluation of the management approach	Labor and Human Rights (page 40)	
GRI 412: Human Rights Assessment 2016	412-1	Operations that have been subject to human rights reviews or impact assessments	Indicators (page 51)	
Sustainable Technology				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability Strategy (page 16) / Sustainable Technology (page 31)	
	103-2	The management approach and its components	Sustainable Technology (page 31)	
	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 33) / Indicators (page 34)	
Innovation				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability Strategy (page 16)	
	103-2	The management approach and its components	Innovation (page 27)	
	103-3	Evaluation of the management approach	Innovation (page 27)	
Quality				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability Strategy (page 16) / Quality (page 28)	
	103-2	The management approach and its components	Quality (page 28)	
	103-3	Evaluation of the management approach	Quality (page 28)	
Education & Volunteering				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundaries	Sustainability Strategy (page 16) / Education and Volunteering (page 74)	
	103-2	The management approach and its components	Education and Volunteering (page 74)	
	103-3	Evaluation of the management approach	Education and Volunteering (pages 74 and 75)	

ST supports the United Nations Sustainable Development Goals (SDG)

SDG	Target	ST Sustainability program	Page(s)
	**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	Health and Safety	36
	3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Waste and Effluents Chemicals	62-68 65
	**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	Development and Engagement Education and Volunteering	42-50 74-76
	**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	45-49
	**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	Waste and Effluents Chemicals	62-68-69 65
	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	Water	60-69
	**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	56
	**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	Labor and Human Rights Supply Chain Responsibility	39 71-77-78
	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	Health and Safety Labor and Human Rights Supply Chain Responsibility	37 39-51 71-77
	**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	25-34
	**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	45-49-50
	**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	65-69
	**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	56-68

Glossary

20-F	Annual report filed with the United States Securities and Exchange Commission (SEC)
3TG	Tantalum, tin, tungsten and gold
ADAS	Advanced Driver Assistance System
AI	Artificial Intelligence
ASICs	Application Specific Integrated Circuit
ASSP	Application Specific Standard Products
Back-end (BE)	Second phase of manufacturing during which the silicon chip is mounted in a package
CDP	Carbon Disclosure Project
CEO	Chief Executive Officer
COP	Communication On Process
DJSI	Dow Jones Sustainability Indices
ECOPACK®	ECOPACK® Lead-free labelling for RoHS-compliance
EHS	Environmental, Health & Safety
ELV	End of Life Vehicles
EMAS	Eco-Management and Audit Scheme
EMEA	Europe, Middle East & Africa
ERM	Enterprise Risk Management
ESG	Environmental, Social and Governance
ESIA	European Semiconductor Industry Association
Front-end (FE)	First phase of the production cycle involving the manufacturing of circuits on a silicon wafer
GHG	Greenhouse Gases
GRI	Global Reporting Initiative
HSPM	Hazardous Substance Process Management
IECQ	International Electrotechnical Commission Quality
IGBT	Insulated Gate Bipolar Transistor
IoT	Internet of Things
IPCC	Intergovernmental Panel on Climate Change
IPC	Association connecting electronics industries
IPCEI	Important Project of Common European Interest
KPI	Key Performance Indicator
LBG	London Benchmark Group
LWDC	Lost Workdays Cases
MEMS	Micro-Electro-Mechanical Systems
MTCE	Metric Tons of Carbon Equivalent
NFC	Near Field Communication
NYSE	New York Stock Exchange
OECD	Organization for Economic Cooperation and Development
OEM	Original Equipment Manufacturer
OHSAS	Occupational Health & Safety Assessment Series (OHSAS 18001)
PFCs	Perfluorinated Compounds
PFOA	Perfluorooctanic Acid
PMS	Project Management System
POLIS	Pilot Optical Line for Imaging and Sensing
QMS	Quality Management System
R&D	Research & Development
RBA	Responsible Business Alliance
REACH	Registration, Evaluation and Authorization of Chemicals
RF	Radio Frequency
RoHS	Restriction of Hazardous Substances
SAQ	Self-Assessment Questionnaires
SDGs	Sustainable Development Goals
STEM	Science, Technology, Engineering, Mathematics
SVHC	Substances of Very High Concern
UNGC	United Nations Global Compact
UPW	Ultra-pure Water
WEEE	Waste Electrical and Electronic Equipment
WSC	World Semiconductor Council

STMicroelectronics NV – Sustainability Report 2019 - Performance 2018 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 Sustainability Report 2019 - Performance 2018 ('Report') concerning 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 2018, as contained in the Report.
- Evaluation of GRI Sustainability Reporting Standards principles and requirements.
- Evaluation of specific sustainability performance with regards to disclosures 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 "2018 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 13th March to 29th April 2019. As part of this engagement we visited selected sites based on their contribution which represents 25.9% of the Group's consolidated environmental data and 22.4% of consolidated social data:

- The corporate functions in Grenoble (France)
- The Front-end manufacturing in Agrate Brianza (Italy)
- The Back-end manufacturing in Muar (Malaysia)
- The Front-end manufacturing in Tours (France)

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 Social Responsibility Team and more than 70 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 2019 Report.
In addition, we interviewed five different stakeholders on their relations with the Company.

We evaluated the performance data using the materiality, stakeholder inclusiveness, responsiveness, completeness, accuracy, reliability and neutrality principles, together with ST protocols for how the 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 2019 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 2018. 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. During our work, we found a limited number of non-material errors and these were corrected prior to inclusion in the Report.

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

16th, May 2019

Fabrizio Foglia
Lead Verifier

Zeno Beltrami
Reviewer

life.augmented

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Reference : BRSTREPORT2019

For more information on ST products and solutions, visit www.st.com