## Sustainability Report 2014





### Reader's Guide

### Report scope and profile

This annual Report describes our Sustainability performance in the calendar year 2014. It covers all of STMicroelectronics' activities and sites unless otherwise stated. You can find details of ST's structure and countries of operations on page 6. You can access last year's report published in June 2014 and reports from previous years at www.st.com/company-reports I G4-3 I G4-28 I G4-29 I G4-30 I

There is no restatement of information provided in previous reports. I G4-22 I

### Change in scope

In 2014, ST integrated the former Micron R2 Fab, including 170 employees, into the perimeter of the site of Agrate (Italy). The safety, social and environmental data have been updated accordingly. | G4-13 |

### **Materiality**

In 2014. ST conducted an extensive materiality exercise to define the top sustainability priorities according to the impacts of its business on the environment, economy and society, and according to its stakeholders' expectations. The materiality exercise process and its results are detailed on page 14.

13 Sustainability priorities along with related objectives were defined and validated by the Sustainability Council in December 2014. This report discloses our new Sustainability Strategy, our intentions and objectives, the progress made and the challenges we face. Detailed information about each of our Sustainability priorities, as well as management approach can be found in this report and/or on our website at http://www.st.com/web/en/about st/ st approach to sustainability.html I G4-19 I G4-23 I

### Stakeholder engagement

ST interacts with many different stakeholders and has specific approaches with each of them such as employee engagement surveys, customer surveys and requests, supplier evaluations and audits, response to SRI analysts and agencies, industry coalition's memberships, local associations and educational partnerships. These different approaches are reported in this report wherever relevant.

### **Indicators and use of symbols**

We report on performance against our objectives under each of our Sustainability priorities. Progress updates for each objective can be found in the "objectives" tables, illustrated by the following symbols:



Target achieved



In progress



No progress/not achieved



No data available

Each of our Sustainability priorities has a dedicated page within this Report which clearly sets out the objectives relating to that priority and the performance indicators showing our progress. We also include additional performance indicators at the end of each section. These are not necessarily linked to our sustainability priorities but have been developed in response to the separate external stakeholder queries we receive. I G4-18 I

### **Accessibility**

Our Sustainability report is also accessible on the web in interactive PDF format at www.st.com/company-reports along with past reports. Printed copies are available on request (see «We value your feedback» to contact us).

### We value your feedback

We are committed to improving both our sustainability performance and the ways we communicate with our stakeholders. We encourage contributions and debate from all stakeholders and welcome feedback on the content and presentation of this report - as well as suggestions for next year. Suggestions and feedback can be provided at sustainable.development@st.com. I G4-31 I

### Alignment with GRI and the UN **Global Compact**

This report has been prepared following the Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines. We considered the four GRI principles for defining our Report content: materiality, stakeholder inclusiveness. sustainability context and completeness.

We prepared the Report according to GRI G4 to be "in accordance" with the Core option. The GRI G4 content index service confirmed that the GRI Content Index of the report (page 76) is accurate and aligned with GRI General Standard Disclosure G4-32. The Global Compact and ISO 26000 Index table on page 79 shows the correlation between the STMicroelectronics Sustainability Report and the ten principles of the Global Compact and the ISO 26000 standards.

ST has been a signatory of the United Nations Global Compact (UNGC) since 2000, which commits us to fulfilling its ten principles. This Report describes actions we have taken to implement these principles and serves as our communication on progress. | G4-15 | G4-32 |

DNV GL (Det Norske Veritas Germanischer Lloyd) is the entity that has been appointed to provide assurance services to STMicroelectronics. In order to do so, DNV interviewed all relevant corporate departments and visited three sites (Agrate-Italy, Shenzhen-China, Tours-France) to review and validate ST's data reporting process and to provide assurance of this year's Report. ST Foundation information and data were not part of the external verification driven by DNV GL.

DNV GL's assurance statement can be found on page 81. I G4-33 I

#### You can write to us at

Corporate Social Responsibility STMicroelectronics International NV 39. Chemin du Champ-des-Filles CH-1228 Geneva – Plan-Les-Ouates Switzerland | G4-5 |

### 2014 Edition

This report has been prepared following the GRI G4 Guidelines. 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



Carlo Bozotti President and CEO

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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 on ST sites, SE coordinators and EHS teams who support our activity
- Site Directors and HR Managers;
- The teams audited in Agrate, Shenzhen and Tours for their availability.



Although reasonable efforts have been made to ensure the consistency of the summary financial information for the year 2014 in this report with ST's financial reporting, reliance should only be placed upon the complete financial reporting contained in ST's Annual Report on Form 20-F for the year ended December 31, 2014, as filed with the SEC on March 3rd, 2015, which can be found at www.st.com. Some of the statements contained in this report that are not historical facts are statements of future expectations and other forward - looking statements (within the meaning of Section 27A of the Securities Act of 1933 or Section 21E of the Securities Exchange Act of 1934, each as amended) based on management's current views and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those in such statements. Certain such forward-looking statements can be identified by the use of forward-looking terminology such as 'believes', 'may', 'will', 'should', 'would be' or 'anticipates' or similar expressions or the negative thereof or other variations thereof or comparable terminology, or by discussions of strategy, plans or intentions. Some of the relevant risk factors are described in 'Item 3. Key Information - Risk Factors' included in our Annual Report on Form 20-F for the year ended December 31, 2014. We do not intend, and do not assume any obligation, to update any information or forward-looking statements set forth in this report to reflect subsequent events or circumstances.

Company	6
ST at a glance	6
Where you find us	
·· Focus on a region	7
Value Chain	8
Significant Events	9
Foreword by our President and CEO	10
Governance	12
Sustainability Strategy	14
Ethics and Compliance	18
Enterprise Risk Management	20
Business	23
Financial Performance	
Innovation	
Customer Relations	
Business Indicators	30
People	33
Development and Engagement	
Labor and Human Rights	
Health and Safety	
People Indicators	
. 500.5	

Environment & Operations	47
Environmental Efficiency GHG Air Emissions	48
Environmental Efficiency Water	50
Environmental Efficiency Energy	52
Environmental Efficiency Waste	54
Environmental Efficiency Chemicals	56
Sustainable Technology	58
Supply Chain Responsibility	
Environment & Operations Indicators	
Local Communities	67
Local Communities	68
Local Initiatives	70
Local Communities' Indicators	72
Awards	74
GRI Content Index	76
Global Compact and ISO 26000 Index	79
	•
Glossory	80
External Assurance Statement	Ω 1

The region counts five sites, ST Japan

### **Activities**

Functions primarily relate to Customer Relations (250 employees), activities include: Sales and Marketing, Application Support, Software Development, Competence Center, Field Quality Service, Supply Chain, Customer Services, Finance, Human Resources and Administration, ICT, Business Support, External Communication.

### **Net revenue**

Global Presence (% by location of order shipment)

### **Certifications**

ISO/TS 16949 certified

## Focus on a region

### Japan and Korea





(Shenzhen/Longgang

• Advanced research and development

• More than 500 new filings in 2014

• ~ 8,700 people working in Research

and Development, and Product Design

centers around the globe:

• ~ 9,000 patent families

~ 15,000 patents

### The headquarters







Korea

## Where you find us 1G4-41G4-81

ST at a glance 1G4-61G4-91

**COMPANY** 

\* Longgang closed at end of 2014

• The largest European

• 12 manufacturing sites

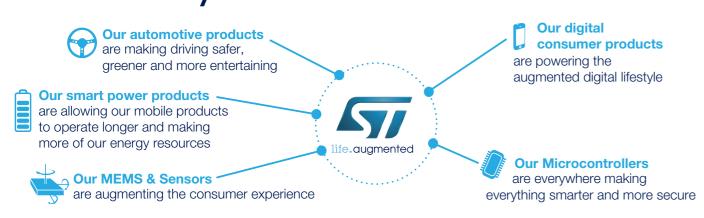
worldwide

semiconductor company

• A global semiconductor leader

• 2014 net revenues of US\$ 7.40bn

Approximately 43,600 employees



• 79 sales offices in 35 countries

Listed on New York Stock Exchange.

Euronext Paris and Borsa Italiana.

### **Major Sustainability initiatives**

The region includes nine technical staff members, who share their expertise with the community and help strengthen ST's technological competitive advantage. Activities to positively impact local communities include: partnering with Waseda University to provide access to ST devices and solutions, delivering educational support to the young through technical seminars and scholarships in Japan, and cooking and serving meals to the homeless and elderly in Korea. A Local Social Contribution Committee has recently been created in ST Japan to support community involvement and drive future programs.



1. Exempt: Refers to employees who hold positions normally requiring graduate or post-graduate education and who are not eligible for overtime compensation.

## Value

**COMPANY** 

### Chain

STMicroelectronics is a global leader in the semiconductor market serving customers across the spectrum of sense and power technologies, automotive products, and embedded-processing solutions. From energy management and savings to trust and data security, from healthcare and wellness to smart consumer devices, in the home, car and office, at work and at play, ST products are found everywhere, microelectronics make a positive and innovative contribution to people's lives. By getting more from technology to get more from life, ST stands for life.augmented.

### **Suppliers**





We purchase silicon ingot, raw materials, equipment, energy, gas, chemicals and services from many suppliers and subcontractors. I G4-12 I

### **R&D** conception 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.

### **Manufacturing** Front-end





The manufacturing of chips is a process of 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**



We electrically test the die on the wafer. It is also known as wafer sort or probing.

#### Assembly line and final test Back-end





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





We offer a broad range of products and we serve a wide range of customers across the markets described in «Where you find us», page 6.

# Significant Events

COMPANY



### **February**

ST and InvenSense settled all pending proceedings between them and entered into a patent cross license agreement.

### April



Jean-Marc Chery was appointed Chief Operating Officer.



Paul Grimme was appointed Executive Vice President, Mass Market and Online Marketing

Programs, a new position created to coordinate the sales and marketing activities in this strategic and growing area for the company.

### May



ST and Samsung Electronics Co., Ltd. announced the signing of a comprehensive agreement on 28-nm Fully Depleted Silicon-On-Insulator (FD-SOI) technology for multi-source manufacturing collaboration.

### June



The Annual General Meeting of shareholders was held in Amsterdam. The Netherlands. Carlo Bozotti was

reappointed as the sole member of the Managing Board and the company's President and Chief Executive Officer for a three-year term, expiring at the 2017 Annual General Meeting.

Maurizio Tamagnini was appointed as the Chairman and Didier Lombard as the Vice-Chairman of the Supervisory Board.



The European Commission approved €400 million in aid for the Nano2017 R&D program led by ST.

This aid, granted by France, will be dedicated to the development of new technologies in the Nanoeletronics sector.

ST announced the pricing of a US\$1 billion dual-tranche offering of convertible bonds (the 'Senior Bonds'). The Senior Bonds were issued in two tranches, one of US\$600 million with a maturity of 5 years and one of US\$400 million with a maturity of 7 years.

### July



ST signed an agreement with Enel Green Power to transfer its equity stake in

3Sun, a joint venture in photovoltaic panels manufacturing.

#### September

ST and Tessera Technologies, Inc. announced they had reached a settlement for all outstanding claims and litigation.

### November

ST completed the repurchase of 20 million shares of its common stock for a total of US\$ 156 million under the share buy-back program. The repurchased shares will be held as treasury shares and used to cover employee stock award plans.



ST was recognized among the world's most innovative companies and was named a Thomson Reuters

Top Global Innovator for the third consecutive year.

## Foreword by our President and CEO





At ST, we believe technology, enabled by semiconductors, will continue to meet the challenges of our society in a sustainable manner and contribute to our vision of an augmented life for everyone.

The global population continues to grow and age as people live longer. Cities are becoming larger and denser, increasing resource-management challenges. The welcomed growth in a global middle class is creating greater demand for goods and services tailored to the individual. These trends require innovative ideas to sustainably manage the planet's resources.

The many technologies ST pioneers and masters can make everything more energy efficient, more intelligent, more secure and more aware of their environment as part of the Internet of Things. We enable equipment manufacturers to build smarter, powerefficient infrastructure and device and car makers to enhance existing products or build new solutions to assist people in their daily life.

Our strategy is based on being an undisputed leader in Sense & Power and Automotive products and in Embedded Processing Solutions through a focused and marketdriven portfolio. It is also based on being a sustainable company, both financially and

We continuously evaluate the effectiveness of our sustainability initiatives and, during 2014 we re-focused our approach around three pillars -- Business, People and Environment & Operations- taking into account our company priorities, the impact of our activities and the expectations of all our key stakeholders.

Our sustainability approach includes driving improvements in our **business** performance as a key to our long-term strategic goals. In 2014, we made significant progress in financial performance, customer expansion, and product and technology leadership. In terms of financial performance, we achieved a significant year-over-year turnaround in both operating income and net income, improving by over \$600 million, and free cash flow improving by \$376 million. We maintained our financial flexibility and continued to reward shareholders by distributing \$354 million in dividends during the year. We expanded our customer base, with our microcontrollers, automotive, industrial, power and discrete products making the greatest contribution to this success. Many of these products enable the Internet of Things and today we are working with many small and medium-size companies, in addition to our major global customers, creating

We have demonstrated product and technology strength using our industry-leading technologies like FD-SOI, embedded Flash, BCD, RFSOI, Bi-CMOS, MEMS. Silicon Carbide and proprietary smart-power processes to deliver a range of innovative products. These included our STM32 and secure microcontrollers, motion and environmental sensors, touchscreen controllers and MEMS microphones, motor-control ICs, intelligent power modules, power-management chipsets, UltraHD set-top-box

chips, silicon photonics, vision-based advanced driver assist system processors, and infotainment and navigation devices. We were honored to have received more than a dozen nominations and awards from industry publications, research organizations, customers, and associations recognizing ST and many of our innovative products.

But no success comes without the dedication and commitment of our people. In 2014, we conducted our employee survey. With a participation rate of 84%, our results showed a favorable engagement--higher than the norm--and confirmed that our employees are very proud, with a strong focus on quality and excellent team agility.

Engagement is also visible in the actions that many employees are taking to support local communities. More than 300 community-related initiatives were recorded worldwide in 2014, from cash donations to work hours inside or outside the company given by

Providing a safe working environment, preventing work injuries and illnesses, and providing access to healthcare is part of our culture. During 2014 we continued to deliver good results, as our recordable case rate further decreased by 17% compared to last year,

among the best of our peers. Manufacturing semiconductors requires energy-intensive processes. Since the mid-1990s, we have been working on increasing our energy-efficiency and although we have already halved our consumption per unit of production, it is still a point of focus for our manufacturing organizations. In 2014 we extended progress in meeting our green-energy objectives and further demonstrated our engagement in responsible energy sourcing. Consequently, with 20% of purchased energy coming from renewable sources, we recorded our best performance ever. Additionally, we re-used and recycled 92% of waste generated through our operations.

Looking at 2015 and beyond, we will build on our re-focused sustainability strategy through the engagement and dedication of our people, our involvement with local communities, our product and technology leadership and our outstanding customer relationships. This will allow us to make

> further progress in our operational and financial performance and to continue working towards our vision of being everywhere microelectronics make a positive contribution

to people's lives.

President and CEO

responsibility for sustainability. Part of his

remit is to chair the Sustainability Council

Executive Officer, and Executives Officers

and update the President and Chief

at quarterly corporate staff meetings.

### Governance

### **Corporate Governance**

STMicroelectronics N.V., our parent company, is organized under the laws of The Netherlands, with its corporate legal seat in Amsterdam. Its shares are 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 N.V., and are located in Geneva, Switzerland. Our operations are also conducted through our various subsidiaries, which are organized and operated according to the laws of their country of incorporation and consolidated by STMicroelectronics N.V. In accordance with Dutch law, we have a two-tier governance structure pursuant to which 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 and Supervisory Board Charter, which are available on our website, in the Corporate Governance section, at http://investors.st.com. I G4-7 I

#### **Supervisory Board**

Our Supervisory Board advises our Managing Board and supervises the policies and actions of our Managing Board and the general course of our affairs and business.

Our Supervisory Board is composed of nine members appointed by our General Meeting of Shareholders for a threeyear term, which may be renewed one or more times in accordance with our Articles of Association, upon the nonbinding proposal of our Supervisory Board.

In accordance with the Profile and the Charter adopted by our Supervisory Board, the members of our Supervisory Board are carefully selected on the basis of their specific business, financial, technical and/or legal expertise, prior professional experience, soundness of judgment, ability to make analytical enquiries and willingness to devote the time required to adequately perform their activities as Supervisory Board members. The Supervisory Board has also

determined the following independence criteria for its members, in accordance with the corporate governance listing standards of the NYSE: Supervisory Board members must not have any material relationship with STMicroelectronics N.V., or any of our consolidated subsidiaries, or our management. A 'material relationship' can include commercial, industrial, banking, consulting, legal, accounting, charitable or familial relationships, among others, but does not include a relationship with direct or indirect shareholders

In June 2014, Mr. Maurizio Tamagnini and Ms. Heleen Kersten were appointed as new members of our Supervisory Board, replacing Messrs. Bruno Steve and Tom de Waard whose terms expired. Messrs. Didier Lombard, Jean d'Arthuys, Jean-Georges Malcor and Alessandro Rivera were reappointed for a threeyear term, expiring at the 2017 Annual General Meeting.

Furthermore, in June 2014, Mr. Maurizio Tamagnini was appointed as the Chairman and Mr. Didier Lombard as the Vice Chairman of our Supervisory Board for a three-year term expiring at the 2017 Annual General Meeting.

The biographies of the nine members of our Supervisory Board can be found in the Corporate Governance section at http://investors.st.com.

### **Supervisory Board Committees**

In performing its duties, our Supervisory Board is advised and assisted by the following committees: the Audit Committee, the Strategic Committee, the Compensation Committee, and the Nominating and Corporate Governance Committee. All committees are independent from the Managing Board and senior management, and report regularly to the Supervisory Board. A Charter governing the duties and responsibilities of each committee is published on our website and can be found in the Corporate Governance section at http://investors.st.com.

### **Managing Board**

At our 2014 Annual General Meeting, Mr. Carlo Bozotti was reappointed as the

sole member of the Managing Board, and the Company's President and Chief Executive Officer, for a three-year term expiring at the 2017 Annual General Meetina.

In accordance with our Corporate Governance Charter, the sole member of our Managing Board, as well as members of our senior management, may not serve on the board of a public company without the prior approval of our Supervisory Board. I G4-34 I

### **Independence of the Corporate Audit function**

The Corporate Audit function is strictly independent from corporate and local management.

The mission of Corporate Audit, as defined in the ST Internal Audit Charter, which is consistent with the Institute of Internal Auditors Standards and approved by the Chair of the Audit Committee and the Chief Executive Officer, is as follows:

- Corporate Audit is an independent function designed to provide objective assurance and consulting activity, which adds value, improves ST's operations at all levels, and evaluates and promotes compliance with ST's Standard Operating Procedures and
- Corporate Audit helps ST accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes.
- Corporate Audit is a major component of ST's governance framework and assists the Audit Committee of the Supervisory Board and the Company's certifying officers in their fiduciary

Our Chief Audit and Risk Executive. Franck Freymond, is the head of Corporate Audit. He reports directly to the Audit Committee of the Supervisory Board, attends all Audit Committee meetings, has direct interactions with the Chair of the Audit Committee throughout the year and attends executive management quarterly meetings. The current functional reporting line and the practices now in place ensure the head of Corporate Audit the appropriate

objectives and strategy with the needs of stakeholders (employees, customers, management and the Supervisory Board. investors, subcontractors, suppliers In 2014, an external quality assessment and impacted communities), while embedding responsible and ethical review was conducted by a "Big 4" audit firm which confirmed that ST Corporate principles into all business operations. Audit performs its activity in conformance Our sustainability efforts adhere to the following international guidelines and standards: International Labor Organization Conventions; United Internal Auditing and the Code of Ethics), Nations Global Compact Principles; United Nations Guiding Principles on Business and Human Rights; OECD Guidelines for Multinational Enterprises; Electronic Industry Citizenship Coalition Code of Conduct: ISO 26000: OHSAS 18001: ISO 14001: EMAS: ISO 50001: ISO 14064; and QC 080000, I G4-15 I Our commitment to these standards is reflected in our code of conduct, which provides guidelines to inform our behavior and decision-making. Corporate Vice President, Human Resources and Sustainable Development, Philippe Brun, reporting to the Chief Strategy Officer, has overall

The Sustainability Council meets bi-annually and comprises 12 Vice Presidents, with the following mission: "Manage the vision, strategy and governance of sustainability in ST and define, assess and update the ST Sustainability strategy, corporate programs, overall goals and means." In 2014, the Council decided to revise ST's Sustainability strategy to align with evolving business priorities and stakeholder expectations. Following this decision, the Corporate Social Responsibility group ran a materiality exercise<sup>1</sup> with the resulting strategy presented to the Council and validated in December 2014.

### **Sustainability Governance** At ST we get more from technology

Auditors.

level of organizational independence

and unrestricted access to executive

with the International Standards for

the Professional Practice of Internal

Auditing (including the Definition of

released by the Institute of Internal

to get more from life - and we do it responsibly. With the environment and people at the heart of our core values, we strive to be among the most sustainable and responsible companies in the world. At ST we are committed to accounting for the social and environmental impact of our business operations. Through our dedication to sustainability we seek to align our business values,



### **Identifying sustainability topics**

material to ST To identify sustainability topics with the most potential to impact our business, employees and the environment, as well as topics that influence the decisions of our stakeholders, we evaluated the following: industry trends, customers concerns, international standards (Global Reporting Initiative, Electronics Industry Citizenship Coalition), investor and analyst questionnaires, social media and publications from the relevant NGOs, semiconductor industry benchmarks and ST management inputs. In total, we reviewed 64 sustainability topics relevant to our sector. Having assessed their significance to ST and our stakeholders, we decided to focus on 27 topics that we consider as important for ST and our stakeholders, I G4-25 I

## Sustainability Strategy

Sustainability has been a guiding principle within ST for more than 20 years. In 2014, ST's Sustainability Council decided to revise its Sustainability strategy to ensure the Company remains focused on the most material topics and to define its sustainability initiatives for the coming years.

In 2014, we conducted a comprehensive Stakeholder survey materiality exercise and carried out a full Considering our stakeholders' expectations is fundamental to determining materiality. review of our Sustainability strategy, to We therefore conducted a survey to identify priority topics. We selected our respond to stakeholders' expectations stakeholders through a comprehensive mapping based on their importance, level and interests, and to ensure alignment of influence, potential impact on our business, the benefits of engaging them and with business priorities and international the type of engagement. We invited over 300 stakeholders to participate, including standards. The revised Sustainability customers, employees, suppliers, investors, SRI analysts, academic and industry strategy defines our initiatives towards, associations, government representatives, local associations and NGOs, asking them and contribution to, worldwide to rate our 27 topics according to importance. sustainable development over the Almost 40% of stakeholders responded. We also invited 20 ST executives, including coming years. We will review and adjust members of the Sustainability Council and selected site directors, to rate the topics by this strategy each year as needed, taking their potential impact on our business. I G4-24 I G4-25 I G4-26 I into consideration external and Company

### Review of the results

Through this materiality exercise, we gained unique insights into our stakeholders' expectations and identified which sustainability topics were the most important. I G4-27 I

Stakeholder	Top 3 Priorities
Employees	Health and Safety     Ethics     Supply Chain Responsibility
Customers	Customer Relationship Management     Health and Safety     Supply Chain Responsibility
Investors & Analysts	Governance     Risk and Crisis Management     Ethics
ST Management	Innovation     Ethics     Employee Engagement



### Our new Sustainability strategy

By aligning the topics highlighted by our stakeholders with the potential impact on our business, we selected 13 Sustainability priorities. These areas reflect the most significant challenges and opportunities we currently face. By reducing this number to 13, we are able to focus our efforts on key topics and activities.

When determining our priorities, we considered our level of maturity within each subject, as previous initiatives and programs enabled us to attain a certain level of maturity in many areas. For example, through our corporate program we achieved a high level of control in managing conflict minerals. However,

this topic remains important to us and our stakeholders, and will therefore be addressed within Supply (3 Chain Responsibility. Transport & Logistics is another area Sustainability where our initiatives, such as priorities the Lean Packing program,

have yielded good results, making this no

our Sustainability Council validated the

new Sustainability strategy. This report is

The 13 Sustainability priorities were grouped into three pillars: People, Business, and Environment and Operations. Local Communities is treated as a transversal activity which is linked to the three pillars. In December 2014,

longer a priority.

structured according to the new strategy and intentions.

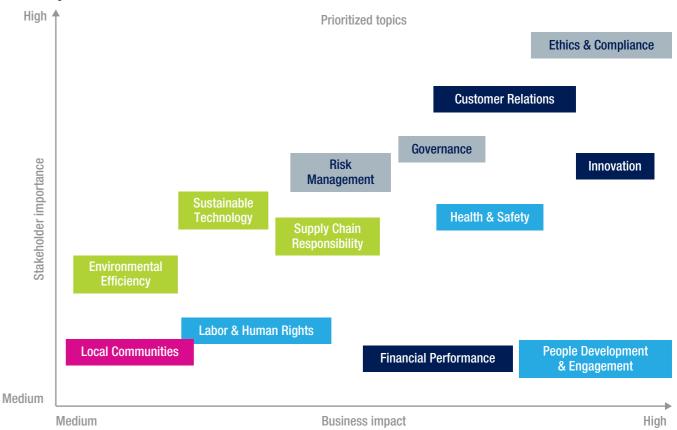
kev

In 2015, we will continue to increase awareness of, and site involvement in key Sustainability issues, to strengthen our contribution

to worldwide Sustainable Development. With the commitment of the Corporate EHS and CSR teams, site EHS experts and Sustainable Excellence coordinators, we will define and implement programs aligned with our top priorities.

I G4-18 I G4-19 I G4-23 I G4-26 I G4-27 I I G4-DMA I

### **Materiality matrix**



developments.

# **COMPANY**

### **New Sustainability Strategy**



- Health & Safety
- Development & Engagement Labor & Human Rights

Governance, Ethics & Risk Management



- Customer Relations
- Financial Performance



- Supply Chain Responsibility

**Local Communities** 



### Philippe Brun Corporate Vice President Human Resources and Sustainable Development Geneva (Switzerland)



### How did ST's engagement on Sustainability evolve in 2014?

Our new strategy embeds everything we do in our business and is easier to understand and act on for our managers and employees.

ST's success is built on the engagement of our employees who are an integral part of the communities surrounding our operations. On top of the business focus on product leadership (greener products) and overall operational excellence (environmental performance), we want to strengthen our roots through the development of the local communities and eco-systems in which we operate.

### According to you, what does Sustainability bring to ST? What is your vision?

Sustainability brings a genuine competitive advantage. It is not only about indices or compliance with environmental and social legislation. Sustainability means much more to us. We believe it contributes to the innovation of our leading products and to our long term economic performance.

In fact there is a multitude of ST products bringing growth and profitability to ST which directly contribute to the overall development of sustainability in society. They include: devices to reduce energy consumption or promote green energy, safety applications in the automotive industry, devices for the telecom industry that enhance new business models in developing countries and health monitoring devices to improve our quality of life.

Moreover it gains the trust and engagement of the people who work with or live around ST, while minimizing risks and creating value for all our stakeholders.

Being part of the Human Resources organization in ST, our aim is to make sustainability an integral part of our employees' daily lives (from sustainable product development to daily decisions), helping the company to attract, retain and engage talent. It also makes it natural to embed it in all management practices including performance management, leadership, operational excellence and business development programs.

### From your experience, what are ST's strengths in terms of sustainability?

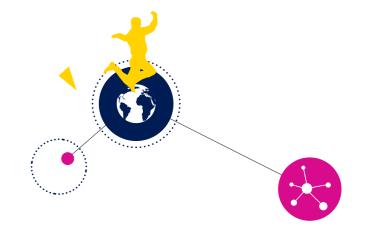
With more than 20 years' experience in sustainability we have reached a certain level of maturity in many areas and are among the industry leaders in environmental and various health and safety practices. Our network of Sustainable Excellence coordinators allows our programs to be adapted to specific business needs and the local context. Our employees are strongly committed, not only through our processes or management systems, but also through their behavior and practices.

### What are the next challenges?

Our next challenge is to take further advantage of our extensive internal experience and leading practices in sustainability, to propose more added value for all users of semiconductors. ST can contribute to face the challenges of the evolving world through product innovation and eventually augment people's lives through innovation in areas such as the Internet of Things and solutions for health or for managing the planet's resources.

### Material aspects and boundaries

ST Sustainability	Corresponding GRI	Boun	daries
priorities	G4 material aspect	Within ST	Outside ST
Governance	Governance	All sites and organizations	
Ethics and Compliance	Society	All sites and organizations	Relations with suppliers Customers and business partners
Risk Management	Organizational profile	All sites and organizations	
Health and Safety	Occupational health and safety	All sites	On-site suppliers and sub-contractors
Development and Engagement	Employment Training and education	All sites and organizations	
Labor and Human Rights	Human rights assessment Diversity and equal opportunity Equal remuneration for women and men	All sites and organizations	
Innovation	No corresponding G4 material aspect	Product and manufacturing organizations	Local communities Customers
Customer Relations	Product and service labeling	Product organizations Sales and Marketing Central functions	Customers
Financial Performance	Economic performance	All sites and organizations	Shareholders Investors Communities where we operate
Environmental Efficiency (GHG, Water, Energy, Waste, Chemicals)	Water Emissions Effluents and waste Energy	Manufacturing sites	Local environment
Supply Chain Responsibility	Supplier human rights assessment Product and service labeling	Purchasing organizations	Suppliers and sub-contractors
Sustainable Technology	Product and service labeling	Product and manufacturing organizations	Customers
Local Communities	Local communities	All sites	Local communities and partners



## Ethics and Compliance

At ST, we are committed to conducting our business with the highest standards of ethics and integrity, as outlined in our Company code of conduct.

### **Our Principles**

We believe that how we carry out our business is as important as what we do. Our code of conduct sets out the Company's principles in the area of business conduct and ethics around Integrity, People and Excellence. These principles are the top-level reference for guiding our behavior and decision-making and apply to all directors, officers and employees of ST without exception.

#### 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 will be ready to share our knowledge, encourage everyone's contribution and develop our people through empowerment, teamwork and training; each one of us will be 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 will be flexible, encourage innovation, develop our competencies, seek responsibility and be accountable for our actions; we will act with discipline, base our decisions on facts and focus on the priorities. Business ethics, the respect of human rights, environmental

responsibility and a sense of responsibility towards all our stakeholders are a matter of personal integrity for each of us, and compliance is mandatory.

On an annual basis, all managers are required to certify that they have received, read, understood and will abide by our Business Conduct and Ethics Policy.

I G4-56 | G4-DMA |

### **Corporate Ethics Committee**

Our Corporate Ethics Committee (CEC) was formed in 2007 and currently comprises nine senior managers nominated by the President and Chief Executive Officer. The CEC was established to provide support to the Company's management in its efforts to foster a business ethics culture consistent across regions, functions and organizations.

The CEC's roles and responsibilities include:

- discussion and evaluation of ST's code of conduct, other procedural documents or initiatives related to business ethics as well as ethical breaches, allegations and related investigations,
- issuing guidance on ethical dilemmas,
- coordination of the local ethics network.

In accordance with its mission and scope, the CEC may issue recommendations to the relevant organization.

In 2014, the CEC met four times and discussed the following topics:

<b>Objectives</b>	Status	Comments
Improve the integration process between allegation reporting and investigation management	210	Partially deployed, new procedural framework to be released in 2015
Strengthen the Ethics Committee network by formalizing the links and reporting lines between the Corporate Ethics Committee and regional ethics committees and by communicating on this updated framework to ST employees	210	Links between the 2 networks formalized. Communication to be done in 2015
Design and implement a structured approach to assess the risk of fraud globally	New	

- approval of the updated CEC Charter.
- organizational guidelines for Local Ethics Committees (LECs),
- review of the ongoing update to the misconduct reporting framework and of the quarterly reporting on investigations of alleged/suspected misconducts, presented by the Chief Audit and Risk Executive.
- review of the Company's ethics and compliance program presented by the Chief Compliance Officer.

### **Local Ethics Committees**

The activities of LECs are complementary to the CEC's and contribute to the same mission within their respective scope. In the organizational guidelines issued by the CEC in 2014, LECs' activities include:

- regular discussion and assessment of procedural frameworks, training and awareness initiatives related to business ethics.
- active participation in ST's 'open door policy' by being a local contact point for employees wishing to report misconduct,
- contributing to the Company's reflection on how to approach ethical dilemmas by providing a local perspective on the issues discussed.

The first LECs were created on the initiative of local management. Their existence is now being standardized to ensure consistent roles and responsibilities and provide adequate network coverage across the Company. Using the guidelines issued by the CEC, in 2014, an LEC was created in France and the roles, responsibilities and organization of existing LECs were redefined.

### Misconduct reporting

ST's misconduct reporting framework is defined in our code of conduct and disseminated throughout the company: "Every employee plays his or her part in how well we adhere to our Principles.

If you think that our Principles are being violated, or if you have a problem applying them, please discuss with your manager, your site Human Resources manager, or your site manager."

In this context, we aim to foster a management culture that enables employees to openly discuss concerns relating to adherence to our Principles with their local management without fear of retaliation.

Employees who do not want to, or feel they cannot, speak openly about their issue can use one of our whistle-blowing hotlines:

 The Company Ombudsman's hotline, managed by a third party, allows all ST employees to submit their allegations and complaints regarding accounting, internal control and auditing matters.
 The contact details necessary to communicate with the Ombudsman (toll-free phone numbers, emails and postal addresses) are available in ST's Business Conduct and Ethics Policy.
 The Ombudsman hotline is also open to external third parties.

The hotline operator ensures that employees can raise their concerns

in multiple languages and from all ST locations, in a professional and confidential way. The third party communicates all reports through the hotline to the Chief Audit and Risk Executive, and to the Chairperson of the Audit Committee of the Supervisory Board.

 An internal hotline, consisting of an email address, can be used by employees for other issues or if they have a suggestion about our Principles.
 All emails sent to this address are received directly by the Chief Audit and Risk Executive, the Chief Compliance Officer and the Corporate Vice President Human Resources. They are treated in confidence.

Misconduct allegations are centralized by the Chief Audit and Risk Executive. Information is provided at least quarterly to the Audit Committee of the Supervisory Board, the Corporate Ethics Committee and the Certifying Officers, which enables its recipients to follow up on the progress and conclusion of investigations conducted by the relevant functions, depending on the nature of the allegation.

The relevance, criticality and potential impact of each alleged or suspected breach are thoroughly examined to determine the appropriate level of remedial actions. In 2014, we improved our methodology by formalizing the assessment process applied to each reported concern before starting an investigation.

In 2014, we continued the improvement of the misconduct reporting framework which started in 2012. We performed extensive internal and external consultations to ensure the updated framework will be compliant with applicable laws and regulations and will meet leading practice standards. The formal deployment of the updated world-wide framework is expected to be initiated in 2015.

### **Bribery and corruption**

Consistent with our commitment to integrity, we recently reviewed and updated our anti-bribery and corruption policy and, as a result, we will deploy it throughout our organizations in 2015.

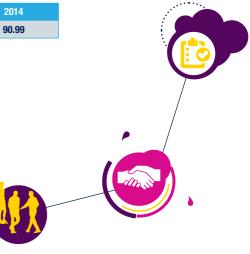
### Non-compliance/Ethical breaches reporting (G4-S05)

	2014
Number of incidents under review as of January 1st	4*
Number of incidents reported or identified during the year	13
Actual fraud cases identified through audit or management review	2
Incidents closed by a formal investigation report	6
Incidents closed after preliminary assessment	6
Incidents still open at year end	3

<sup>\*</sup> Among which 1 case pertaining to ST-Ericsson

### E-signature of Business Conduct and Ethics Policy % (G4-S04)

2010	2011	2012	2013	2014
93.90	90.30	93.40	93.48	90.99



## Enterprise

## Risk Management

To be recognized by our stakeholders as among the best companies for risk management and robust business continuity, by meeting and exceeding customer requirements, local and international legal requirements, and international standards.

### **Enterprise Risk Management**

The purpose of Enterprise Risk Management (ERM) at ST is to systematically, consistently and effectively identify, evaluate and manage all types of risk across the company, including establishing effective risk mitigation action plans for identified key and top priority risks.

Our Chief Audit and Risk Executive is

responsible for:

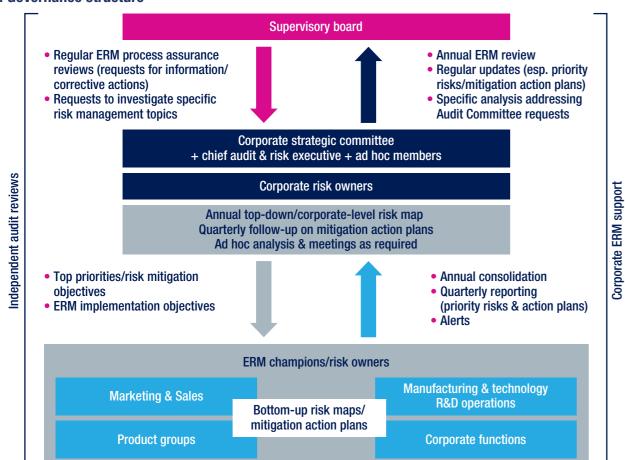
- leading the development and maintenance of the ERM framework,
- overseeing the execution of ERM processes, procedures and infrastructure to ensure that the ERM activity serves as a key enabler for achieving the organization's business objectives.

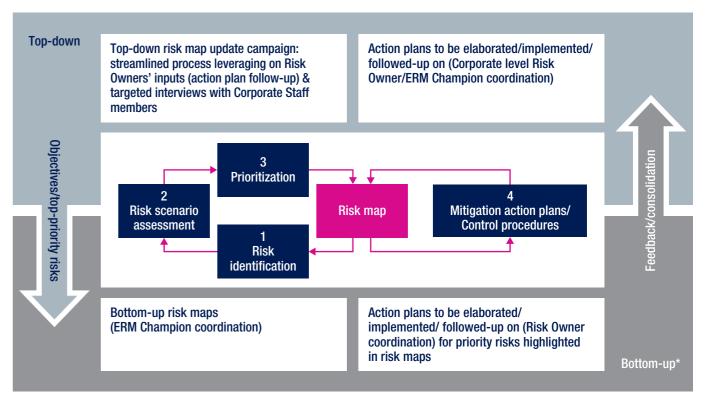
Our ERM process is aligned with the principles and guidelines of the ISO

31000 standard. It applies a holistic approach and is designed to address both top-down and bottom-up perspectives.

It is built on a comprehensive risk universe (comprising generic risk areas that allow consolidated and comparative analysis across ST) and is articulated along the activities described in the graph.

### **ERM Governance structure**





\* ST organizations

### 2014 achievements

Top-down: we conducted a review of our top-down risk assessment with executive management. The output from this exercise was a risk map, including top-priority risk areas. Risk owners were appointed for each of these risk areas in order to develop risk mitigation action plans, which will be reviewed by executive management on a periodic basis.

Bottom-up: the bottom-up approach aims to embed risk identification, evaluation and management activities at the most effective level within each organization. Following a pilot exercise in 2013, we deployed the bottom-up risk assessment approach to around 20 internal organizations, including Marketing & Sales, Product Groups, Manufacturing & Technology, Research & Development and Corporate functions. **ERM tool:** we deployed an ERM tool, which allows us to easily capture and consolidate data from across the company and provide reports to executive management and the Supervisory Board.

**Risk reporting:** we reported on ERM activities to executive management and the Supervisory Board.

### **Business Continuity Management**

ST has a deeply rooted history of toplevel customer service and satisfaction, and we are fully committed to further secure our business continuity to attain the highest level of performance. Our aim is to minimize business continuity risks in our operational processes and supply chain through implementing a reliable, feasible and cost-effective Business Continuity Management program. To achieve this goal in all organizations,

To achieve this goal in all organizations, activities and processes, we:

- Take a proactive approach, built on the principles of ISO 22301, "Business Continuity Management Systems",
- Set objectives for continuous improvement which are positive, realistic, achievable, visible and measurable,
- Allocate cost-effective human, financial and technological resources to achieve these objectives.

Each site and organization is responsible for assessing the risks, identifying both internal and external events which may be critical for business continuity, and developing and implementing a plan to mitigate identified weaknesses. The Corporate Business Continuity Management coordinates and harmonizes the various local approaches to risk assessment, prevention and recovery.

According to the severity of the incident and the capacity of the Company to react, four levels of events are identified:

- **1. Incident Management** Capability to respond to incidents occurring in normal business activities either marginally or not impacting the customer.
- 2. Business Continuity Capability to continue to deliver our products at acceptable predefined levels following a disruptive incident.
- 3. Disaster Recovery Capability to respond to a severe incident which significantly impairs vital infrastructure of an organization or site for a prolonged period of time.
- 4. Crisis Management Capability to respond to an extraordinary event of high severity which dramatically impacts the Company and/or our stakeholders.

  Our contractors and suppliers are encouraged and requested to adopt a similar business continuity approach in order to guarantee ST's ability to continue providing products and services to our end customers.

In 2014, we took the decision to formalize our Business Continuity Management by starting an ISO 22301 certification process for our 15 most important sites. We plan to work on a gap analysis and training in 2015, and then proceed to the certification and audit phase in 2016. I G4-DMA I



## Business

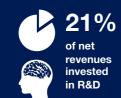
- ST is included in 14 sustainability indices, including the Dow Jones Sustainability Index (DJSI) Europe
- ST is named a Thomson Reuters Top 100 Global Innovator
- ST is certified for ISO 9001 company-wide
- 8,700 employees are dedicated to R&D

I G4-DMA I



### Key figures







+US\$ **628** million net operating income 2014 vs 2013

## Financial Performance

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

### 2014 performance

In 2014, ST made solid progress on key performance and financial metrics. Despite lower revenues, we achieved a significant turnaround year-over-year, with operating income improving by US\$ 633 million, net income improving by US\$ 628 million and free cash flow improving by US\$ 376 million.

ST's net revenue totaled US\$ 7.40 billion in 2014. Net revenues declined 8.4% in total compared to the prior year, mainly due to the significant reduction of legacy ST-Ericsson products. Excluding the former ST-Ericsson products, our revenues declined by 1.8%, mainly due to a decline in sales of commodity image sensor products and a faster-thananticipated revenues decline of set-top box prior generation products and motion MEMS prior generation products. The latter was only partially compensated by increased revenues in microcontrollers, automotive products, industrial and power products, and new generations of acoustic and environmental MEMS. Our 2014 gross margin was 33.7% of revenues, increasing by 140 basis points compared to the prior year. This increase was primarily due to improved manufacturing efficiencies and a positive product mix, but was partially offset by declining selling prices, higher unused capacity charges in digital technology and an unfavorable currency effect. Operating income improved significantly to positive US\$ 168 million from negative US\$ 465 million in 2013, mainly driven by lower operating expenses resulting from our exit of the ST-Ericsson joint venture

Our free cash flow significantly improved from negative US\$ 179 million in 2013 to positive US\$ 197 million in 2014. In the course of the year, we have paid dividends to shareholders totaling US\$

and cost savings initiatives.

354 million and used US\$ 156 million of cash to repurchase 20 million shares of our common stock.

In addition, 2014 was a year in which we made significant steps forward due to the talent and product leadership drive of

our employees as we built a more focused, market-Free cash flow increased from driven portfolio of Sense, Power and Automotive negative US\$ 179 Products, and Embedded million to positive Processing Solutions. New US\$ 1 07 million flagship products during

microcontrollers for general purpose and automotive applications, MEMS microphones, touch-screen controllers, ultra-HD products for set-top box and low voltage power MOSFETs and IGBTs. On a year-over-year basis, revenues in 2014 for the Microcontrollers and Automotive Groups increased by 10% and 8% respectively, with the Industrial and Power Discrete Group growing as well. I G4-DMA I

2014 included our 32-bit

#### **Customer base**

Regarding customer expansion, our mass market initiatives were successful, with revenues in the distribution channel reaching 31% of total 2014 revenues compared to 26% last year. In 2014,

> our ten largest customers represented around one third of total revenues and none of them exceeded 10% on an individual basis. We are now in a different. less concentrated, less

exposed model compared to 2010 when the largest customer represented about 14% of total revenues.

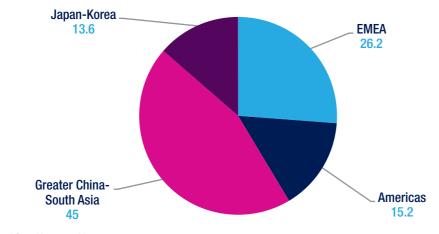
### **Looking forward**

Our main objective in 2015 is to continue to deliver year-over-year improvements by returning to revenue growth and continuing to improve our cost structure.

### **Extra-financial performance**

Each year we receive questionnaires from Socially Responsible Investment (SRI) rating agencies and analysts, requesting

### Net revenues by location of order shipment in (%)\* (G4-8/G4-9/G4-EC1)



\* See table on page 31



Carlo Ferro **Chief Financial Officer** 



### What have been the major business breakthroughs in 2014?

In 2014 we made important steps forward in our business operations, including a significant financial turnaround, after the transition associated with the exit from ST-Ericsson. We re-positioned the company for the next step in terms of growth and sustainable profitability, by extending and diversifying our customer base and by strengthening our product development in the core areas of our product portfolio. Thanks to the efforts of our outstanding employees worldwide, we started to harvest important results, with 72% of 2014 revenues already delivering both growth and profitability, namely from microcontrollers, analog and power discrete products.

#### How does it translate in terms of financial performance?

Despite softer than expected revenue progression, our financial performance was solid throughout 2014, meeting our financial outlook in each quarter. Our operating margin before restructuring and impairment improved to 4.0% and 3.2% in the third and fourth quarters of 2014, respectively, from negative in 2013.

In addition, we began to generate a positive net income starting from the second quarter and a positive free cash flow starting from the third quarter of 2014. Our net income had a significant positive swing, moving from a net loss of US\$500 million to a net income of US\$128 million.

Our free cash flow increased to positive US\$197 million from negative US\$179 million.

We exited 2014 with liquidity of US\$2.35 billion and a net financial position of US\$550 million, while distributing US\$354 million in dividends.

### Which actions have been taken to prepare the company future?

Our solid 2014 financial performance and capital structure have enabled us to re-invest about 27% of our total revenues in research & development as well as in capital expenditure: an investment in innovation and future growth.

Capex totaled US\$496 million in 2014, representing 6.7% of revenues and an average of 6.3% of revenues over the last three years - well within our target level.

During 2014 we also enhanced our liquidity for our sustainable development with the successful issuance of a US\$1 billion convertible bond. At the same time, we protected our equity shareholders from dilution by completing a 20 million share repurchase program. Today, I am pleased to note that our convertible securities are trading at attractive levels in the marketplace. So a win-win situation for all.

#### What are the main directions for 2015?

While 2014 was a year of important progress, revenues did not grow. So we still have work to do in 2015.

Our objective is to ensure that over time all of our businesses positively contribute and that our innovative portfolio brings higher shareholder value. We are confident this will happen thanks to the many new products that we are introducing, leveraging on the know-how of our 8,700 employees devoted to R&D.

We also expect our strong presence in the Internet of Things, in mobile and in the car to support our growth in 2015. Our innovative products enhance peoples' lives in many ways: in smart watches and other wearable devices for monitoring fitness and health, or in cars to make driving safer, while our world-class ultra-low power technologies contribute to a sustainable planet.

strategy and performance, along with data to substantiate our answers and commentary on our performance. These evaluations are an opportunity for us to assess our performance within a wider context, benchmark ST against our peers and identify areas for further improvement. It also enables us to monitor investment trends and identify new risks and opportunities. In 2014, we were included in 14 sustainability indices, including the Dow Jones Sustainability Index (DJSI) Europe, which we re-entered in 2013. In 2014, we increased our global DJSI Europe score by one point and reduced the gap for inclusion in the DJSI World to only

two points. I G4-DMA I

detailed feedback on our Sustainability

### ST key figures (G4-9/G4-EC1)

	2010	2011	2012	2013	2014
Net revenues (US\$ m)	10,346	9,735	8,493	8,082	7,404
Gross profit (US\$ m)	4,015	3,574	2,783	2,614	2,498
Gross profit as a percentage of sales (%)	38.8%	36.7%	32.8%	32.3%	33.7%
Net earnings (US\$ m)	830	650	(1,158)	(500)	128
Earnings per share (diluted) in (US\$)	0.92	0.72	(1.31)	(0.56)	0.14
Market share versus TAM (%) (Total Available Market)	3.47%	3.21%	2.87%	2.60%	2.20%

### Operating income and cash flow (G4-EC1)

	2010	2011	2012	2013	2014
Operating income (US\$m)	476	46	(2,081)	(465)	168
Net operating cash flow (US\$m)	972	(278)	34	(179)	197

### Innovation

We aim to contribute to a sustainable world by fostering innovation wherever microelectronics can positively impact people's lives.

As a hi-tech company innovation is part of our DNA and essential for our longterm success. To nourish our innovation each year we invest a significant percentage of our revenue in research and development. In 2014 our R&D investments totaled US\$ 1.52 billion, representing 21% of our net revenue. 8,700 employees are currently dedicated to R&D and product design.

In 2014, we launched a wave of new and innovative products in the market which will fuel our growth in 2015. We also strengthened our Intellectual Property portfolio by filing a total of 553 patent applications.

For the third consecutive year we were named a Thomson Reuters Top 100 Global Innovator. This prestigious award recognizes companies around the world for their outstanding commitment to innovation, the protection of ideas and commercialization of inventions.

### Our approach to innovation

Our approach is strongly market driven to ensure we provide added value for the end customer. Innovation is embedded throughout ST; in our basic research, in our manufacturing, in our product design, in our application labs and in our go-tomarket strategy.

Our basic and advanced research typically yields 'technology bricks'. When combined with other such bricks and implemented in a semiconductor technology, or in software on a microprocessor core, these may result in new commercial products. More often, however, they result in blocks of circuits or code that implement certain functions of a system, known in the industry as 'IP Blocks'. Our product development team's ability to

aggregate the IP Blocks as components of a much larger System-on-Chip and to verify their design on an electrical,

logical and functional level prior to prototyping is an important factor for success in our industry. It is also central to the subsequent

'productization' step of the process. Alternatively, inventions may relate to our Front-end or Back-end semiconductor manufacturing process. These typically aim to produce denser or more complex integrated circuits, or reduce our manufacturing costs or environmental footprint.

Our innovations also aim to improve the end application through lower energy consumption, a reduction in materials and waste, or higher recycling potential at end-of-life.

In addition to our technology and product innovation, we also have design labs which produce innovative reference designs and boards to support our customers in developing new applications. I G4-DMA I

### **Internet of Things**

Today, the Internet of Things (IoT) is a main driver of innovation in the electronics industry. It provides a leading opportunity for technology to help solve societal challenges.

ST already leads the market with core IoT components, including sensors, connectivity, low-power microcontrollers and leading-edge energy management and analog solutions. In addition, we have developed system-level applications such as innovative body-heat powered solutions and gesture control devices, and are continuing to develop new technology and products to drive IoT

Comments Status 553 new filings. Objective for In 2014, file 540 patents for innovation 2015, file 550 patents Increase efficiency of product development: Reduce average age Objective for 2015, reduce to of development projects to 15 months 14 months Increase efficiency of product development: Increase proportion 37%. Objective for 2015, of projects less than 1 year old to 33% increase proportion to 40%

innovation

R&D investments

totaled US\$

.52 billion

As examples of the innovative products launched in 2014, we expanded our

> STM32 Microcontroller family with new highperformance and lowerpower products, we introduced new sensors

such as our MEMS pressure sensor that combines high accuracy and robustness with ultra-small physical size, we introduced a new version of our Bluetooth Low Energy network processor, and solutions for wireless charging and energy harvesting. ST is also fostering innovation in the IoT by working with start-ups, universities and small to medium-sized companies with a number of initiatives such as providing office space for start-ups at some of our French sites.

To accelerate innovation within the IoT we have also developed a wide range of reference designs with partners, in addition to development boards and tools, including the STM32 Open Development Environment which allows fast and easy prototyping with ST components.

### **Community innovation**

Our commitment to innovation also extends beyond our business activity. Each year we organize and sponsor a number of events to boost innovation in the community, including:

- The European STM32 competition, where technology fans created innovative applications for the IoT using at least one STM32 microcontroller and as many of our other components as possible. The contest was sponsored by ST in partnership with ARM, Farnell element14, Würth Elektronik and Rubik's Futuro Cube
- The Smart Home Hackathon in Turin, of which ST was sponsor and technology provider. This competition was launched by the Energy@home association and promoted by I3P, the Innovative Enterprise Incubator of the Politecnico of Torino. In 54 hours, participants were challenged to visualize an ideal Smart Home, outline

a prototype using JEMMA open-source software, and make a value proposition and business model. The competition united innovators and fast-prototyping developers in the Smart Home field with companies who can turn their ideas into reality

 Strategic cooperation with India's National Innovation Foundation (NIF), supporting technological innovation in remote areas of India and creating a marketplace for these inventions. Under the sponsorship of the Department of Science and Technology, Government of India, NIF will support complete product development, while ST will validate and develop electronic solutions for some of these innovative ideas.





Alessandro Cremonesi **Group Vice President** General Manager ST Central Labs Geneva (Switzerland)

In recent years, the development of technology has accelerated and the interaction of people with technology has become more intense and more intimate. Today's successful technologies are an integral part of our lives, improving our quality of life and even our longevity.

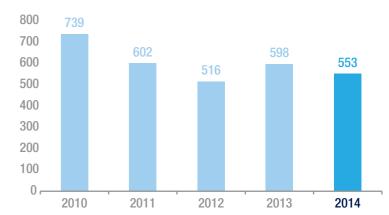
One important factor to consider in understanding which technologies will be successful in the future is the "over-investment" of the previous period. Today, there are already a huge number of connected objects and we are generating and storing massive quantities of data. There is so much data that the challenge of the next decade will surely be to manage, connect and properly exploit the data to create more intelligent systems and services. This is one of the challenges that ST technical staff are taking on to anticipate the future and help ST be among the leaders in the next wave of innovation.

Comet-Explorer Satellite The Philae space probe's landing on the Churyumov-Gerasimenko comet in 2014 was a particularly proud moment for ST: the space satellite Rosetta and its probe Philae contain over 10,000

radiation-hardened, high-reliability ICs designed and manufactured by ST. After a six billion kilometer journey, started over ten years ago, the space satellite Rosetta placed the Philae probe on the comet to obtain images from its surface and analyze its composition. This is the first operation of its kind in the history of space exploration. The valuable information Philae relayed back to Earth will enable significant progress in understanding how the universe was formed. ST delivered four device types to the Central Parts Procurement Agency, including more than 4,000 radiation-hardened logic ICs and Focus more than 6,500 rad-hard transistors.



### ST patents filed



### **Innovation activity**

	2010	2011	2012	2013	2014
Median age of immature projects (months)	15	15	18	15	15
% of immature projects* younger than 1 year	32	35	28	39	37
% of projects* maturing within year	28	33	30	41	25

\* Immature project: product development project, defined in accordance with IFRS criteria, measured in asset value, not yet at Maturity 30 at the end of the year



## Customer Relations

We maintain a continuous and open dialog with customers to ensure that their expectations are met in all respects, including quality, service and timely delivery.

development. As principle stakeholders, it is vital for our business to consider our customers' needs and expectations whether relating to our product offering, the quality of our products and services, or the requirements around our Environmental, Health and Safety (EHS) and social responsibilities. Proactively managing the relations with our customers enables us to understand, meet or exceed their current and future expectations. At ST, customer relations means customer satisfaction, effective support, proactive communication, knowledge exchange, strong partnerships and full compliance to agreed and legal requirements. We

have Standard Operating Procedures

in place at corporate level to manage

programs for improving quality, which are

our customer relations, as well as

supported by various organizations.

I G4-DMA I

Meeting stakeholders' needs is a

fundamental element of sustainable

### **Customer satisfaction**

Customer satisfaction is a pillar of ST's values and business strategy, and involves all our employees. We have identified five areas of excellence that contribute to customer satisfaction: Innovation and R&D, Business Excellence, Supply Chain, Quality and Sustainability.

### **Customer feedback**

We regularly evaluate customer satisfaction through customer meetings, metrics analysis, surveys and ST site audits. Our satisfaction index provides an accurate measurement of what is important to our customers. This is done through collecting and analyzing internal indicators, such as the number of customer complaints, failure analysis cycle time, the percentage of customer returns and one-time delivery. Each ST account manager is responsible for receiving customer feedback, identifying

strengths and weaknesses, and defining and monitoring all agreed improvement actions. We conduct our surveys every two years. The results of the survey conducted in 2013 can be seen in our 2013 Sustainability Report page 30. I G4-PR5 I

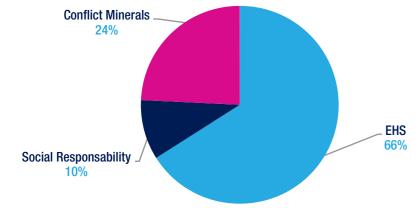
### **Customers and sustainability**

Our customers show increasing interest in corporate responsibility and performance, particularly in EHS, social and ethics. Our customer requirement process is managed and owned by our Corporate Product Quality Excellence group. In 2014, we received almost 800 customer inquiries regarding sustainability at corporate level, 66% related to our approach towards EHS and 34% related to Social Responsibility (SR). Our experts in chemicals, the environment, quality, conflict minerals, social responsibility and ethics analyzed all specific requests.

As members we are committed to be fully compliant to the Electronics Industry Citizenship Coalition (EICC), and to meet the increasing volume of inquiries, the SR team promotes standardized answers to customers, either through providing access to our self-assessment questionnaires (SAQ) and audit reports published on the EICC-ON platform or through the Conflict Minerals Reporting Template (CMRT), developed by the Conflict-Free Sourcing Initiative (CFSI)1. As 71% of SR requests relate to conflict minerals, we adopted a proactive approach by sending our regular customers the up-to-date CMRT. At the end of 2014, we focused our efforts on collecting data to update our conflict minerals declaration according to the CMRT V3.02. For more information, see page 61.

The EHS team primarily receives inquiries around product legal compliance and

### **Customer requests on Sustainability**



Objectives	Status	Comments
Just in Time on committed rate superior to 90%	×	Impacted by high volumes on one specific product family, working to improve in 2015
Delinquency on requested date to be at 0.35 week of sales	3,5	Continue to focus on this in 2015
Reduce customer complaints per million units by 6% by Q4 2014 compared with a 2011 baseline	~	2015 objective, 6% by Q4 2015 compared with a 2011 baseline

therefore developed a preemptive approach to this by publishing information on www.st.com. This led to a decrease in information requests during the second semester.

Our Sales organization acts as the interface with customers, relaying the relevant information.

### Online support

In September 2014, we launched the new version of our online platform to provide better and faster support to customers, users or potential users of our products. They can now request technical or commercial information from ST through our website. At the end of 2014, 350 support centers, organized by region and product, were handling over 650 requests per month. From this, we noted that 89% of requests through our online support platform were technical, and 88% were coming from online users (small mass market companies). By listening to our customers and product users, we acquire knowledge of trends, understand their needs and explore new business opportunities. We aim to use these information exchanges (customers' questions and ST's replies) to further develop our FAQ database on our website. The system also provides statistics and enables us to receive customer feedback after each case is closed.



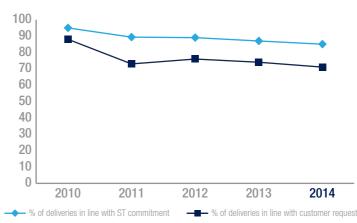
### Vodafone rewards

ST provides secure microcontroller products for advanced SIM (Subscriber Identity Module) and M2M (Machine-to-Machine) modules to Vodafone and its partner companies across multiple geographies. This award recognizes ST's outstanding commitment and performance and our contribution to Vodafone's success.

through exceptional supply-chain management and customer service. "Vodafone uses a rigorous multitiered process to qualify, optimize, evaluate, and audit its suppliers, and its recognition of ST for outstanding delivery performance is a significant achievement," said Marie-France Florentin, Group VP and General Manager Secure Microcontroller Division, STMicroelectronics. "We are also proud to have been among the four finalists for Vodafone's Supplier of the Year award, and have a goal to do even better next time."

Focus

### **Delivery date**



### Quality (Baseline 100 in 2011) (G4-PR5)

(u4-rh3)	Q4 2010	Q4 2011	Q4 2012	Q4 2013	Q4 2014
Customer complaints	NA	100.0	97.3	87.0	86.1
Cycle time to process failures analysis	NA	100.0	111.6	112.9	111.6
Customer Quality returns	NA	100.0	46.1	47.7	49.2



<sup>1.</sup> CFSI: Initiative of the EICC and the GeSI (Global e-Sustainability Initiative)

## Business

## Indicators

This section includes indicators and GRI Standard Disclosures.

### ST's inclusion in sustainability indices in 2014

Index	
DJSI Europe	Dow Jones Sustainability Indices In Collaboration with RobecoSAM
EuroNext Vigeo World 120	EURONEXT VICEOV World 120
EuroNext Vigeo Europe 120	EURONEXT VICEOV Europe 120
EuroNext Vigeo Eurozone 120	EURONEXT VICEOV Eurozone 120
EuroNext Vigeo Benelux 20	EURONEXT VICEO Benelux 20
Ethibel Sustainability Index (ESI) Excellence Europe	included in ETHIBEL SUSTAINABILITY INDEX EXCELLENCE EUROPE

Index	
ECPI Euro Ethical Equity	
ECPI EMU Ethical Equity	Sense in sustainability
ECPI Global Developed ESG Best in Class Equity	
FTSE4G00D Global index	
FTSE4G00D Europe index	A CO
FTSE ECPI Italia SRI benchmark index	FTSE4Good
FTSE ECPI Italia SRI Leaders index	
STOXX® Global ESG Leaders indices	STOXX  ESG LEADERS INDICES

### **Dividends paid** (G4-EC1)

	2010	2011	2012	2013	2014
Dividends (US\$m)	212	327	355	346	354

### ST sales by market channel in (%)\* (G4-9/G4-EC1)

		2010	2011	2012	2013	2014
	OEM	79.1	77.3	77.6	74.4	68.7
	Distribution	20.9	22.7	22.4	25.6	31.3

<sup>\*</sup> 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 distribute our products around the world.

### Net revenues by location of order shipment in (%)\* (G4-8/G4-9/G4-EC1)

	2010	2011	2012	2013	2014
EMEA	25.0	23.9	24.7	24.2	26.2
Americas	12.9	13.8	14.7	15.1	15.2
Greater China-South Asia	44.1	44.8	41.9	42.1	45.0
Japan-Korea	18.0	17.5	18.7	18.6	13.6

<sup>\*</sup> 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 Greater China-South Asia affiliates are classified as Greater China-South Asia 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.

### **Taxes** (G4-EC1)

		2010	2011	2012	2013	2014
T	Tax expense for the year (US\$m)	183	205	79	72	67











## People

- 20 of our sites, including all our manufacturing sites are OHSAS 18001 certified
- 100% of our manufacturing sites and our 3 major design sites are covered by EICC programs
- Robust internal Health and Safety audit process
- New learning blended approach including e-Learning, peer-to-peer development, mentoring, workshops and webinars.

G4-DMA I





### Key figures



ST recordable case rate decreased by 17% 2014 vs 2013



+13% of disabled people employed in ST 2014 vs 2013



## Development and Engagement

We develop people who develop leading products. We aim to cultivate our employees' competencies, foster leading technical expertise, and provide continuous learning and career opportunities. Key to this is a culture where talents are proactively developed, performance management is effective and recognition, pride and trust is the norm.

### A new framework for development and engagement

In 2014, we worked on aligning our development and engagement programs with stakeholders' needs. We also periodically adjust our people strategy and processes, and enhance our practices.

### Aligning learning with stakeholders' needs

In 2014, we enhanced our Learning Needs Analysis process to ensure alignment with customers and business objectives and monitor the effectiveness of our practices.

We made sure that individual development plans are consistent with the Company's global strategy and budgetary requirements. Needs definitions are driven by the Groups, while deployment and implementation is handled locally.

We are completing our transition from

with the quarterly workforce plan execution

internal candidates to exceed 50% in 2015

plan, linked to their annual performance

expectations

their annual performance

of all the relevant job requisitions

Recruitment: ensure that each ST organization is 100% aligned

Internal mobility: Deploy new SOP and monitor internal posting

Increase the percentage of open positions for exempts filled by

Continuously increase the engagement level, and keep voluntary

Ensure that more than 50% of employees have a development

turnover within 10% worldwide (excluding operators)

Ensure a worldwide average of 35 hours of learning per

Ensure that all employees have qualitative performance

Following engagement surveys, ensure that each Corporate

Vice President sponsors action plans to address employees' key

feedbacks, and the majority have a development plan related to

training to holistic learning, promoting the full range of development opportunities we offer beyond the typical education framework. This 'blended learning' includes a range of initiatives, such as face-to-face training, e-Learning, peer-to-peer development, mentoring, workshops and webinars. I G4-DMA I We monitor the effectiveness of these programs and assess their impact on stakeholders to shape our strategy.

### People leadership

Status

We reworked our leadership Engagement model to increase the index at 66% effective impact on our stakeholders and, above all, our employees. We also merged a number of our people management initiatives, such as lean, speed and agility and quality boosters for customers. Our new people leadership framework is based on our company values and leverages four pillars:

Deployed a new recruitement

process and tool. Quarterly

released, internal posting

Engagement index:

66% vs 64% in 2012.

Turnover 6.7% in 2014.

41% Objective replaced

43.7 hours/employee

Objective discontinued

Not applicable as the survey

was postponed to end of 2014.

workforce plan monitoring in

place. Objective discontinued Standard Operating Proccedure

monitored. Objective discontinued

25% of jobs filled internally for

- Alignment: based on shared vision, collaboration and transparency
- Accountability: re-emphasizing discipline, speed and effectiveness toward customers
- · Robustness: about prevention, simplification and finding sustainable solutions to challenges
- Engagement: leveraging trust. coaching and empowerment.

### **Performance management**

Based on previous employee surveys

and in line with our new leadership model, we involved employees and managers in revamping our performance management

process, in order to improve alignment, differentiation and engagement. The new process, in effect since early 2015, will provide managers with more empowerment and give greater transparency for all. It will also reinforce a culture of continuous qualitative feedback and simplify our systems.

This includes harmonized annual goal reviews, effective goal setting in line with strategy, individual performance feedback, and differentiated recognition and rewards.

### **Employee engagement**

In 2014, after enhancing our questionnaire, we conducted a new employee survey, monitoring engagement, alignment and agility. We took this opportunity to introduce a more focused questionnaire, linked to external benchmarks and global best practices. Participation rate reached 84% and results showed a favorable engagement index at 66%, which is two percent higher than the norm<sup>1</sup> and a 2%

- 1. Corporate Executive Board Company worldwide electronic industry average
- 2. ST corporate document issued annually by each organization, containing objectives, enablers and

improvement on 2012.

The results also confirmed that employees are highly committed and proud, at 8% above the norm. We continue to observe strong alignment (3% above the norm), great connection between people and operational goals a strong culture of quality (6% above the norm) and excellent team agility. We identified opportunities to improve employees' confidence in the future, and their connection to our overall strategy. The results were analyzed at CEO level at the end of 2014. The launch of new processes and action plans agreed started in January 2015. Our approach is to ensure that each internal entity requiring significant improvement commits to a focused action plan. These plans can be organizational (group, team), geographical (regional, site) or linked to a domain or activity. The next steps include qualitative feedback, involving people in improvement actions and conducting reviews to address engagement throughout the year.

### **Looking forward to 2015**

By enhancing our performance management process, we can now monitor learning – not only in terms of volume by activity, but also in adherence to customer and learning needs. Together with people engagement, this is included in our 2015 corporate top page<sup>2</sup>, deployed globally. I G4-DMA I

### **Employees with a formal individual** development plan (%) (G4-LA11)

	2010	2011	2012	2013	201
Exempts	69.4	44.5	26.5	21.7	22.5
Female					24.5
Male					22.0
Non-Exempts and Operators	-	19.0	17.3	15.5	16.3
Female					19.9
Male					14.9

### **Employees survey - Engagement rate**

	2010	2011	2012	2013	2014
Overall participation rate (%)	86	86	87	NA	84
Individual Engagement index	0.34	0.33	0.32	-	-
Individual Engagement index (%)	NA	NA	64	NA	66
Organization Agility Index (%)	NA	NA	NA	NA	58
Goal Alignment Index (%)	NA	NA	NA	NA	68



It aims to develop principles such as visual management, involve employees in workshops, address daily operational problems, spread the LEAN mindset to managers and teams, and meet our customers' expectations. After six years, with 1,900 people trained and more than 250 workshops, we have significantly improved our industrial performance in terms of flow, quality and customer service. Involving people from the field has led to tailored operational solutions. The program's success is also visible in improved social indicators, including a reduction of safety-recordable cases and absenteeism, and improved

The LEAN program was launched in 2008 by Corporate Vice President Philippe Brun.

ergonomics and engagement, a guarantee for the stability of the initiative. I have witnessed the growth of many employees, especially operators, and their pride and emotion in being solicited to deploy or improve Company standards.

teams in the growing markets of China, Japan, Korea and America.

**Grow your career** 

To support our talent and business growth objectives, we developed a program providing international opportunities for our talented employees. This aims to strengthen the connection between product groups in Europe and sales and marketing

our people

Growing

Positions are open for Application, Field Application, Product Marketing and Market Development engineers working in product divisions. This three-year experience allows employees to embrace new professional challenges and broaden their skills and horizons. After this period, employees can either renew their local contract or return to their original location. Gianluca Aureliano joined this program and is now growing his career in Shanghai.

Focus



## and Human Rights

We ensure that all employees are treated with respect and dignity, and that business practices are aligned with the highest international, social and labor standards for the electronics sector. This includes promotion of diversity and equal opportunities at all levels of our organization.

### Due diligence at the heart of our strategy

Supporting human rights is at the core of ST's values. We are committed to monitoring our performance and diligently assessing the risks associated with working hours, forced labor, discrimination, harassment and freedom of association, within the context of the regions where we operate. Since the early 2000s, we have progressively enhanced our human rights due diligence by going beyond legal requirements and adopting the most stringent international standards, such as the Electronic Industry Citizenship Coalition's (EICC's) Code of Conduct and conducting stringent risk assessments and audits. I G4-15 I

In regions where labor rights are well controlled and respected, we strive to promote diversity and exceed legal requirements. Ensuring gender diversity and the integration of disabled employees are major goals which we continue to focus on. I G4-DMA I

**Objectives** 

non-manufacturing sites, in addition to all manufacturing sites

Ensure 100% of ST Asian and Back-end sites are audited every

Ensure that our audited sites have 0 major non-conformance

Review the Company HR policy and deploy it through ST

Ensure that all sites with a headcount >200 have in place

Ensure that 100% of major and minor non-conformities are

In each region, increase by 1% the percentage of women from

Extend EICC Self-Assessment Questionnaire (SAQ) to three

two years versus the EICC Code of Conduct

(NC) on the labor, and health and safety section

organizations

ioh grades 15 and above

seniority and disability plans

closed during the closure audit

### A path toward continuous improvement

Our due diligence approach to protecting human rights is based on a two-step process. First, we perform annual self-assessments of all our major sites. regardless of their location. In 2014, 87%

of our employees were covered by these risk assessments. Based on these results, we then conduct audits

in the regions where human rights' risks are highest. We share the results with our customers to increase transparency. In 2014, we extended our selfassessment campaign to include our three main design sites. Located in India, Italy and France, these sites comprise around 10% of our total workforce. We continued to reduce our global risk level through sustainable corrective actions and by encouraging knowledge sharing between sites. These activities are part of our goal to achieve continuous improvement within our production sites. With an average EICC self-assessment score of 91.2% for our manufacturing

sites, ST's performance is above the

Objective discontinued

Average of 1.8 major NC in

2013/2014 cycle. vs 3.5 in

2011/2012 cycle. Objective

Policy reviewed and now in

14.53% vs 14.02% in 2013.

Objective discontinued. New

Objective discontinued. Will be

replaced with a new program

approval cycle. Objective

replaced

discontinued

program in place

Status

New

industry average. I G4-DMA I

99.9% compliance

with the 60-hour working

week limit in China

The manufacturing sites involved in our audit program have now completed their first EICC audit cycle, including third party audits and audit closures. Reaching this milestone has enabled us to reflect on the underlying strengths and weaknesses

> of ST's processes. By interviewing local program managers and coordinators, and performing a

comprehensive diagnosis, we have reinforced our ability to address risks, and have engaged more local managers in assessing and mitigating these risks. We made significant progress in the following areas:

- We achieved 99.9% compliance with the 60-hour working week limit in China. In comparison, the EICC estimates that only 10% of audited Chinese sites comply with this limit.
- of the labor agencies we use. More information can be found in Supply Chain Responsibility, pages 60 to 61 This progress helped us improve the effectiveness of our corrective actions and as a result, we achieved 100% compliance in the two closure audits of

We increased our control and auditing

Among the actions identified to improve our processes, we have already initiated the following:

- Revise our internal policies and create implementation guidelines to support
- Develop knowledge sharing and communication between sites encountering the same risks.
- Reinforce capability-building programs through the launch of a new e-learning platform. Through our work with the association "Entreprises pour les Droits de l'Homme" in France, ST participated in the development of

an e-learning program for managers on Business and Human Rights awareness, to be released in 2015.

I G4-15 I

### Preparing the next generation of female leaders

Gender diversity remains a challenge for ST. Through various gender initiatives, we learned that focusing on the top of the hierarchy to increase the representation of women in leadership positions does not obtain breakthrough results. Since 2012, we have increased women's representation in management positions by 1%. Going forward, we aim to increase this trend through a new approach.

Although emerging talent is most often identified within junior job grades, we noted that promotion of women at this career stage is still slightly lower than men. To drive a deep and sustainable change in our gender structure, we will focus on providing increased and better opportunities for talented women in entry-level and middle management positions. We will also address the daily challenges these women encounter in driving their career while balancing

important events, such as motherhood. Enhancing the identification and promotion of talented women at earlier stages of their career will help us prepare the next generation of female leaders.

### **Disability programs**

Thanks to our equal opportunity programs, in 2014 we increased the number of disabled employees by 13%. Although there is a need to develop awareness and knowledge in the regions where our Back-end activities are located, and more specifically in Asia, our French and Italian sites have very advanced programs and monitoring in place and have achieved a good level of integration. For example, in France 4.66% of the total workforce is disabled. In 2014, convinced that education is a strong lever for integrating disabled employees within ST's wider workforce, ST France went a step further and developed an innovative training program to provide disabled employees with access to higher education diplomas. However, to improve further in this domain, we need to adapt our strategy to take into account more the local context.





Supply Chain Corporate Responsibility Specialist, Motorola Solutions

Collaboration with suppliers is a core tenet of Motorola Solutions' efforts to address labor and human rights issues in our supply chain. We periodically attend supplier audits to understand conditions firsthand. Our focus areas in China continue to ensure fair working hours, fair treatment of student workers and safe working conditions. As demonstrated in the recent ST Shenzhen audit. the factory takes the conditions seriously and has made meaningful changes to address these issues and eliminate areas of concern. We look forward to ongoing collaboration that leads to continuous improvement in our supply chain.

### **EICC Audit program results - Major non-conformances** (G4-HR9)

	2011	2012	2013	2014
Number of audits	2	4	5	4
Working hours	2	4	4	2
Wages and benefits	1	1	1	2
Occupational injury and illness		3	1	1
Freely chosen employment	1			1
Child labor avoidance (Young Workers)		1		1
Occupational safety	1			1
Waste water and solid waste				1
Emergency preparedness		2		
Hazardous substances		1	1	
Supplier responsibility		1		
Non-discrimination	1			
Machine safeguarding	1			
Protection of identity		1		
Total	7	14	7	9
Average major NC/audit	3.5	3.5	1.4	2.25



### Disabled employees (G4-LA12)

	2010	2011	2012	2013	2014
Disabled people employed as % of total workforce	1.01	1.05	1.28	1.32	1.49
Budget spent on disability programs (US\$k)	2,321	3,567	3,597	1,746	2,127





### More performance indicators are available on pages 41 to 45

<sup>1.</sup> For more information on EDH association, visit their website: http://e-dh.org

culture of safety. When beginning

a task that involves diagnosis or

troubleshooting without a check-

In 2014, ST Crolles (France)

introduced a best-practice approach to support the site's

proactive and free tool can be easily

deployed to other sites.

such as rushing, falling into a routine, being over confident

SAFETY

## Health and Safety

We are committed to protecting the health and safety of employees, contractors and visitors by providing a safe working environment, preventing work injuries and illnesses, and providing access to healthcare.

### Management approach

For ten years, ST has been committed to its goal of achieving zero accidents in the workplace, through formal safety programs such as Safety First. Today, 20 of our sites are certified OHSAS 18001, including all manufacturing sites. All our sites are engaged in reporting and improving their safety performance. The health of our employees, both within and beyond the workplace, is very important to us. We are committed through our Corporate Environmental, Health and Safety (EHS) Decalogue to providing voluntary health promotion programs to enhance employees' wellbeing.

Health and safety are closely linked. We remain focused on reducing hazards and risks, and improving our practices, results and the associated indicators. When we conduct site audits, we now assess health and safety together and in 2014, we adopted this approach for three sites. When addressing health or safety, risk prevention is crucial for achieving better results, and ST relentlessly pushes this approach wherever possible. I G4-DMA I

### Health

We aim to expand and promote employees' health and well-being through the ST Health Plan program, while also leveraging local initiatives and campaigns. The Plan ensures that employees can benefit from medical services and advantages, even in countries where no legal obligation prevails.

#### **Trend analysis**

Identifying trends helps to anticipate risks and enable action. In 2014, the overall number of medical check-ups remained at a reasonable level, above 70% of the covered population (all countries except USA). This was due to good coverage in most large sites and was primarily driven by legal requirements in the countries, especially in Europe.

Over the last five years, the volume of screening examinations globally is stable, although the deployment rate varies across regions. Bio-monitoring and vaccination levels are also satisfactory. However, preventive medical examinations have decreased in some

<b>Objectives</b>	Status	Comments
Reduce our Recordable Cases rate to 0.2 or less	~	0.17
Reduce our severity rate to 2.3 or less	×	2.6. Increase in the number of days lost for on-site domestic accidents
Ensure ST employees have an average of four hours of training and awareness per year on environment, health and safety (EHS) topics	/	Average of 5.4 hours per employee.
Expand and promote employees' health and well-being with programs such as "Health Plan", local initiatives and campaigns	~	Overall number of medical exams increased compared to 2013. Objective discontinued
Expand and promote the well-being services offered to employees at ST sites to facilitate day-to-day life	215	Objective discontinued but sites continue to follow their own programs
Reduce the main on-site subcontractors Lost Work Day Cases rate to 0.5 or less	New	
Update the Company wide standard for medical visits and	New	

#### Prevention

Health prevention assessments are based on voluntary participation. During check-ups, medical staff capture at least six indicators, including smoking, blood pressure, being overweight, obesity, exercise, and cholesterol levels. The aim is to identify high-risk factors and use this information to prioritize local prevention campaigns, such as stopping smoking or promoting healthy diets and sport. In 2014, around 10,000 employees volunteered for data collection during their medical check-up.

Our reporting highlights the risk parameters for each site and enables comparison between sites. While at some sites all indicators are green, a few others demonstrate risks associated with smoking, being overweight and taking no

Based on such analysis, a Health Plan working group will be launched at the end of Q2 2015, to identify potential improvements, taking into account country-specific factors and priorities.

### Safety

### **Achievements**

Our global management approach is to strengthen the culture of safety through the deployment of training, audits, publications, communication and bestpractice sharing.

Above all, we continue to urge managers to take ownership of safety matters and adopt a proactive attitude, demonstrating leadership on the ground through their visible involvement. I G4-DMA I

This approach has delivered results; our recordable case rate decreased by 17% to 0.17, while structured root causes analysis with management increased by 9%. We have also largely improved the analysis of our first aid assistance, and safety visits by management more than doubled to over 41,000.

### More efforts needed

We continue to push the inclusion of safety targets in managers' incentives, with this figure increasing globally to

The severity rate reached 2.6 in 2014, which was above the set target of 2.3. This was due to the increase of on-site domestic accidents. The target for 2015 remains at 2.3, with the aim to drive further improvements in employees' behaviour and work conditions. We have improved the tracking and analysis of near misses, hazards, and unsafe acts and conditions. This is also the case for contractors' accident rates

#### **Audits and certifications**

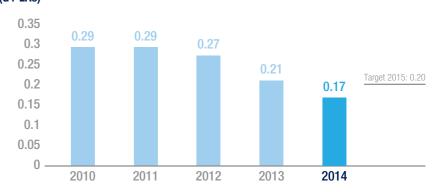
In 2014, we conducted nine EHS audits, identifying both good processes and areas for improvement. The duration of these audits, conducted by two auditors, ranged from one to three days, depending on the site's performance and risks (three days for manufacturing sites). In total, we have 20 OHSAS18001, 16 ISO14001 and 14 EMAS certifications. These three certifications cover all our manufacturing sites, as well as Castelletto (Italy) and Grenoble (France). Our own audit process was audited satisfactorily by ST's corporate audit team. It helped us to better formalize the processes and harmonize practices.

### **Training**

At 5.4 hours, we exceeded our target of an average of four hours training per employee. Two e-learning courses on safety management and leadership were deployed to approximately 7,000 managers, and this will continue in 2015. In 2014 we conducted a survey addressing training within all ST sites and locations. It focused on compliance with company safety training standards, such as basic safety training, first-aid, fire extinguishers, chemicals, electrical equipment and EHS e-learnings. The results were positive and will help us to further improve our risk management. We provided feedback to each site. While 86% of ST employees were involved in evacuation drills, this was below the ST standard of 100% each year. However, we are proud to count more than 6,000 first aiders, which is a positive indicator of ST employees' safety involvement.

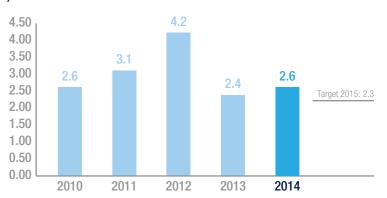
### Recordable cases rate\* (G4-LA6)

Focus



<sup>\*</sup> Work-related injuries and illnesses per 100 employees per year as defined by OSHA-US regulation.

### **Severity rate** (G4-LA6)



<sup>\*</sup> Number of days lost per 100 employees per year as defined by OSHA-US regulation.



### **Looking forward to 2015**

The GRI 4 indicators are now in place to record and report accident statistics. We also now have a baseline from 2014 data.

We will continue to focus on proactivity through training and early detection of hazards, unsafe acts and conditions. We have a clear goal to reduce accidents and analyze each recordable case, first-aid incident and main event, and to define and implement adequate action to prevent recurrences.

### Lost Workdays Cases Incidence rate (LWDC rate), Subcontractors (G4-LA6)

	2014
Lost workdays cases per 100 FTE (Full-time equivalent) employees	0.54

Target 2015: 0.5

### Lost Workdays Incidence rate, Subcontractors (G4-LA6)

	2014
Lost workdays per 100 FTE (Full-time equivalent) employees	8.5

Target 2015: 7.7

### **Health Plan - Medical examinations**

Exam type	2010	2011	2012	2013	2014
Medical examinations	69,180	70,480	60,216	43,411	49,310
Screening test	10,958	13,097	8,837	12,438	13,564
Immunization	3,505	3,019	2,234	2,153	1,721
Total services provided	83,643	86,596	71,287	58,002	64,595





Aurelio D'Arpa Environment, Health and Safety Agrate (Italy)

Agrate (Italy) is certified «Workplace Health Promotion site" by the European Workplace Health Promotion public-private network, a network built through partnerships and collaboration with the regional health system, organizations, trade unions and companies. The accreditation was received in December 2014, with an award for «Health Promotion Workplace».

As project manager I interfaced with all stakeholders and ensure implementation. I was impressed by the massive commitment of employees, who assessed the current conditions and proposed improvements and also by the opportunity to build relationships and share experience on health and well-being with other organizations. To maintain the accreditation, which is a continuous improvement process, over the next three years the site has to implement six best practices per year linked to health and well-being. We have started with mobility, road safety and personal social well-being/work-life balance. We also benefit from the best practice European database, which allows companies to share existing practices and learn how to set up new activities.

This ENWHP Certification is a great opportunity for the site to capitalize on what we already do in terms of health and well-being at work and to create new best practices with the support of all employees.

People Indicators

This section includes indicators and GRI Standard Disclosures.

### Headcount evolution by region (G4-10)

	2010	2011	2012	2013	2014
Americas	1,701	1,176	1,158	967	870
Female					202
Male					668
Asia Pacific	22,355	19,757	19,652	18,910	17,699
Female					7,129
Male					10,570
Europe	19,022	18,724	19,346	20,789	20,308
Female					4,932
Male					15,376
Mediterranean	4,677	4,348	4,349	4,493	4,550
Female					2,478
Male					2,072
Japan	210	207	208	202	204
Female					51
Male					153
Total	47,755	44,212	44,713	45,361	43,631
Female					14,792
Male					28,839

### External hires in manufacturing (%)

	2010	2011	2012	2013	2014
Percentage of jobs filled externally vs overall jobs filled	96	90	95	98	97

### Hires by job type (G4-10)

	2010	2011	2012	2013	2014
Exempt	3,573	2,563	2,721	1,770	1,578
Female					356
Male					1,222
Operators	8,193	5,154	6,833	8,013	7,748
Female					2,723
Male					5,025
Non-exempts	1,884	1,728	1,716	1,586	2,094
Female					411
Male					1,683
Total	13,650	9,445	11,270	11,369	11,420
Female					3,490
Male					7,930

### **Newcomers induction program (%)**

	2010	2011	2012	2013	2014
Newcomers who participated in a formal induction session (e.g. newcomers seminar) during their first year of employment	97.23	97.29	97.75	72.00	93.00

### Workforce by employment type (% of employees) (G4-10)

	2010	2011	2012	2013	2014
Full time contract	97.85	97.74	97.43	97.28	96.98
Female					92.92
Male					99.07
Part time contract	2.15	2.26	2.57	2.72	3.02
Female					7.08
Male					0.93

### Workforce by employment contract (% of employees)

(G4-10)

	2010	2011	2012	2013	2014
Regular contract	96.56	97.48	98.21	96.33	95.15
Female					95.00
Male					95.22
Temporary contract	3.44	2.52	1.79	3.67	4.85
Female					5.00
Male					4.78

### **Remuneration (%)**

	2010	2011	2012	2013	2014
Employees below the ST minimum salary scale in their job grade	16.6	12.8	13.9	18.5	14.9
Employees covered by annual individual salary increase	95.2	96.9	98.5	91.8	89.4

### Benefits, bonus & USA (%)

	2010	2011	2012	2013	2014	
Unvested Stock Awards (USA) % of eligible (exempt >JG 11) employees receiving unvested stock awards	24	21	22	22	26	
Unvested Stock Awards (USA) Number of employees rewarded	3,790	3,390	3,570	3,920	4,620	

### Number of nationalities in the headcount by region\* (G4-LA12)

	2010	2011	2012	2013	2014
Europe	68	74	78	76	74
Americas	29	26	25	25	23
Mediterranean	18	16	17	17	21
Asia Pacific	36	36	36	36	37
Japan	NA	NA	4	5	5

\* Expatriates and assignees are counted in host country.



### Number of nationalities in corporate staff (G4-LA12)

	2010	2011	2012	2013	2014
Different nationalities represented in the corporate staff	7	7	6	7	8

### **Gender breakdown by region (%)**

		2010	2011	2012	2013	2014
Furana	Male	74	75	75	75	76
Europe	Female	26	25	25	25	24
Amorioso	Male	79	79	78	78	77
Americas	Female	21	21	22	22	23
Mediterranean	Male	42	43	44	44	46
	Female	58	57	56	56	54
Asia Dasifia	Male	55	57	58	58	60
Asia Pacific	Female	45	43	42	42	40
Japan	Male	NA	76	75	76	75
	Female	NA	24	25	24	25

### Career length and voluntary turnover rate (%) (GA-LA1)

	2010	2011	2012	2013	2014
new hires (below 2 yrs)	45.54	52.67	52.08	72.29	74.06
employees from 2 to < 5 yrs	18.07	27.83	24.02	22.67	31.75
employees from 5 to < 10 yrs	5.31	7.82	8.03	9.57	11.35
employees from 10 to < 20 yrs	2.02	1.79	1.72	3.87	3.28
employees above 20 yrs	1.06	0.72	0.68	7.21	4.93

### **Average turnover rate (%)** (GA-LA1)

	2010	2011	2012	2013	2014
Average turnover rate	15.16	18.49	15.61	15.93	13.97

### Average turnover rate by gender, by category and by region (%) 2014 (GA-LA1)

	Exempts		Non-ex	cempts	Operators	
	Female	Male	Female	Male	Female	Male
Americas	3.76	5.86	6.97	0	NA	NA
Asia-Pacific	9.21	10.97	19.47	30.16	35.13	71.67
Europe	1.28	1.22	0.50	0.38	0.39	0.58
Mediterranean	7.11	7.89	0.47	2.68	2.72	5.62

### Average employee age

	2010	2011	2012	2013	2014
Average employee age (years)	33	36	36	37	38

### Average employee age by category

	2012	2013	2014
Operators	32	33	33
Non-exempts	36	37	38
Exempt	40	41	42

### Age group split by category (%) 2014

	Under 30 years old	30-50 years old	Over 50 years old
Exempt	8.63	72.62	18.75
Non-Exempt	21.95	67.92	10.14
Operator	37.61	54.27	8.12

### Promotion ratio female/male by category and by region (%) 2014 (G4-LA12)

	Exempts		Non-exempts		Operators	
	Female	Male	Female	Male	Female	Male
Americas	14	13	9	6	NA*	NA*
Asia-Pacific	14	15	9	4	6	8
Europe	11	12	13	11	16	8
Mediterranean	17	14	14	9	12	4

<sup>\*</sup> The company has no manufacturing sites in these regions

### Women in management (G4-LA12)

	2010	2011	2012	2013	2014
Women in experienced management (% JG15 and above)	-	13.77	13.77	14.02	14.53
Women in senior management (% JG17 and above)	9.91	9.56	9.79	10.04	10.68
Women in executive management (% JG19 and above)	9.71	9.80	8.78	9.50	9.41
Women on the Board (value)	-	-	1	2	3

### **Employee Performance assessment (yearly)** (G4-LA11)

	2010	2011	2012	2013	2014
% of employees	78	89	93	92	93
Female					93
Male					93
% of exempts	89	96	98	98	97
Female					97
Male					97
% of non-exempts			90	91	91
Female					89
Male					91

### **Career development (%)**

	2010	2011	2012	2013	2014
Employees with a promotion in the year	15.00	15.87	16.37	14.72	10.56
Employees with a job function change in the year	32.95	25.02	15.47	19.74	5.50

### ST population recognized through the technical ladder (%)\*

	2013	2014
Worlwide	2.43	2.84
Asia Pacific	1.22	1.17
Europe/Mediterranée	3.21	3.80

<sup>\*</sup> The specified path starts from job grade 14 and above which is the reference population.

### Internal mobility for exempt positions (%)

	2010	2011	2012	2013	2014
% of jobs advertised internally	40.54	36.75	34.86	33.17	19.23
% of jobs filled internally		22.95	25.88	39.71	24.58

### **Average training hours**

(G4-LA9)

	2010	2011	2012	2013	2014
Exempts	32.1	31.0	29.0	30.3	22.3
Female					22.9
Male					22.1
Operators	91.1	78.0	70.0	70.4	78.6
Female					74.5
Male					83.7
Non-exempts	43.3	38.0	36.0	41.7	38.3
Female					44.6
Male					36.5
Total*	49.0	50.0	45.9	48.0	46.5
Female					57.0
Male					41.0

<sup>\*</sup> Includes training on equipment and outside training

### Schooling programs (%)\*

	2010	2011	2012	2013	2014
Exempts	4.39	5.26	1.74	1.83	2.15
Operators	1.02	7.96	2.31	2.39	0.83
Non-exempts	6.01	7.58	0.95	0.89	1.67

<sup>\* %</sup> of employees following ST supported external schooling programs vs total number of employees.

### Formal recognition

	2010	2011	2012	2013	2014
Overall recognition budget of all sites (USk\$)	3,305	3,101	2,782	2,321	1,586
Number of people recognized*	36,697	48,606	33,823	39,629	25,178
% of accepted suggestions which were implemented	54.75	65.2	59.56	50.13	60.9

<sup>\*</sup> Can include more than one recognition for one employee over the year.

### Unplanned absenteeism (%) (G4-LA6)

2010	2011	2012	2013	2014
2.67	2.77	2.82	2.93	2.45
				NA
				1.27
				3.45
				0.21
				3.47
				3.28
				2.00
				كنفيط كنفيط كنفيط كنفيط

### **Collective bargaining**

(G4-11)

	2010	2011	2012	2013	2014
Number of collective agreements signed in the year	38	33	45	38	39
% of people covered by collective bargaining agreements					66.50%
Number of people covered by representatives	24,021	-	31,962	34,225	32,694
% of people covered by representatives	50.08%	-	72.34%	76.00%	74.93%

### Average weekly working time (hours) in selected countries\*

		2010	2011	2012	2013	2014
China	ST standard working time	40.00	40.00	40.00	40.00	40.00
Gillia	Overtime	5.00	5.03	11.37	5.71	3.68
France	ST standard working time	38.50	35.00	35.00	35.00	35.00
rialice	Overtime	0.31	0.26	0.20	0.04	0.03
Italy	ST standard working time	40.00	40.00	40.00	40.00	40.00
italy	Overtime	1.15	0.95	0.72	0.15	0.16
Malavaia	ST standard working time	48.00	48.00	48.00	48.00	44.00
Malaysia	Overtime	10.32	9.39	8.50	8.68	9.26
Malta	ST standard working time	40.00	40.00	40.00	40.00	40.00
Ividita	Overtime	6.00	4.50	5.00	5.90	5.41
Morocco	ST standard working time	44.00	44.00	44.00	44.00	44.00
MOLOCCO	Overtime	2.62	1.46	1.10	1.76	1.70
North	ST standard working time	40.00	40.00	40.00	40.00	40.00
America	Overtime	1.51	0.60	0.85	0.05	0.10
Cingonoro	ST standard working time	44.00	44.00	44.00	44.00	44.00
Singapore	Overtime	5.88	1.53	3.84	3.16	4.69
the	ST standard working time	-	-	48.00	48.00	48.00
Philippines	Overtime	-	-	6.00	4.34	3.98

<sup>\*</sup> Standard legal working time for non-exempts and operators

### **Working time and overtime hours**

	2010	2011	2012	2013	2014
Employees with regular worktime less than 48 hours per weeks (%)	100	100	96.3	96.0	96.0
Average weekly overtime (hours per employee)	3.14	3.10	3.61	1.68	2.30

### Fair wages (%)

	2010	2011	2012	2013	2014
Percentage of employees paid up to 105% of the legal or conventional minimum wage*	16.65	12.20	11.95	10.83	11.82

<sup>\*</sup> Employees paid above 105% are not part of this scope.

### Gender split by category (%) 2014 (G4-LA12)

	Female	Male
Exempts	21.28	78.72
Non-exempts	23.15	76.85
Operators	57.61	42.39

### Manufacturing sites subject to human rights SAQ & Audits

	Manufacturing sites	SAQ*	Audits	% Workfore
High Risk				
China	Shenzhen	✓	<b>✓</b>	
Offilia	Longgang	stopp	ped in 2014**	
Malaysia	Muar	✓	<b>✓</b>	
Philippines	Calamba	✓	<b>✓</b>	
Singapore	Ang Mo Kio	<b>✓</b>	<b>✓</b>	
Medium Risk				
Morocco	Bouskoura	<b>✓</b>	<b>✓</b>	77%
Malta	Kirkop	<b>✓</b>	<b>✓</b>	
Low Risk				
France	Rousset	<b>✓</b>		
	Crolles	V		
	Tours	V		
Italy	Agrate	V		
	Catania	V		
Number of manufacturing rights assessments an	ring sites that have been subject to human and audits	11	6	
	Percentage	100%	100% of high risk and medium risk sites	
	Major Design sites	SAQ	Audits	% Workfore
India	Greater Noida	V		
France	Grenoble	V		10%
Italy	Castelletto	V		
Number of major design assessments and audi	gn sites that have been subject to human rights its	3		
	Percentage	100%		

### Recordable cases rate benchmarks\* (G4-LA6)



<sup>2014</sup> benchmark data not available at time of publishing.

### Recordable cases rate\* by gender and by region (G4-LA6)

	2010	2011	2012	2013	2014
Gender					
Female					0.19
Male					0.16
Region					
Asia Pacific	0.2	0.2	0.1	0.1	0.10
Europe & Mediterranean	0.5	0.5	0.4	0.3	0.24
Americas	0.1	0	0	0	0.00

<sup>\*</sup> Work-related injuries and illnesses per 100 employees per year as defined by OSHA-US regulation.

### **Recordable cases rate - breakdown:** industrial/domestic

(G4-LA6)

	2010	2011	2012	2013	2014
Recordable cases industrial rate	0.17	0.19	0.17	0.13	0.11
Recordable cases domestic rate	0.12	0.11	0.10	0.07	0.06

### Breakdown (%) of recordable cases by type of event, accident or exposure (G4-LA6)

	2010	2011	2012	2013	2014
Fall or slip	28	20	31	25	32
Struck by or against	37	41	26	40	36
Overexertion	11	9	7	11	5
Others	5	5	3	8	7
Caught in, under or between	6	7	10	5	5
Contact with chemicals	6	7	13	8	8
Bodily reaction from slip or motion	7	11	10	3	7

### Severity rate by gender and by region (G4-LA6)

	2010	2011	2012	2013	2014
Gender					
Female					3.2
Male					2.4
Region					
Asia Pacific	0.8	0.5	0.8	0.9	0.6
Europe & Mediterranean	4.9	6.5	7.8	4.1	4.5
Americas	0.0	0.0	0.0	0.0	0.0

### **Lost WorkDays Cases Incidence rate** (subcontractors) by region (G4-LA6)

	2014
Asia Pacific	0.19
Europe & Mediterranean	0.73
Americas	0

### % of Lost WorkDays Cases by gender (subcontractors)

(G4-LA6)

	2014
Female	21%
Male	79%

### Lost Workdays Incidence rate (subcontractors) by region (G4-LA6)

	2014
Asia Pacific	1.0
Europe & Mediterranean	12.6
Americas	0

### % of Lost Workdays by gender (subcontractors)

	2014
Female	19%
Male	81%

### **Health Plan - Medical examinations**

Exam type	2010*	2011	2012	2013	2014
Medical examinations	69,180	70,480	60,216	43,411	49,310
Check up with a physician	32,472	35,689	34,604	19,645	22,042
Blood analyses (including biomonitoring tests**)	17,344	15,954	11,986	10,987	13,150
Chest X rays	9,763	8,881	5,624	5,782	6,380
Colorectal cancer immuocult test	523	966	310	277	412
Electrocardiograms	5,728	5,497	4,682	4,427	5,489
Mammography	1,080	1,094	1,026	760	573
Pap smear tests	1,691	1,586	1,572	1,198	890
Prostate cancer screening	579	813	412	335	374
Screening test	10,958	13,097	8,837	12,438	13,564
Immunization	3,505	3,019	2,234	2,153	1,721
Total services provided	83,643	86,596	71,287	58,002	64,595

### **Injuries/illness cost and savings**

	US\$m					
	2010	2011	2012	2013	2014	
Injuries/illness cost	1.66	2.37	2.94	1.83	1.94	
Results without action	8.43	8.89	8.50	9.63	9.22	
Savings*	6.77	6.52	5.56	7.80	7.28	

<sup>\*</sup> Around 63M\$ savings in 11 years

### Fines and total number of non-monetary sanctions in 2014

NO FINES



<sup>\*</sup> Self Assessment Questionaire \*\* Production ramp down in 2014 and full closure in 2015

 <sup>\* 2010</sup> results slightly modified in 2011 after adjustments communicated by some sites.
 \*\* These tests are dedicated to employees working in manufacturing areas (and especially on some specific maintenance operations).



# Environment & Operations

- 16 of our sites are ISO 14001 certified
- 14 of our sites are EMAS validated
- Our 6 Front-end manufacturing sites are ISO 50001 certified
- ST aligns its chemical management system with the IFCO OC 080000 HSPM standard

G4-DMA I



### Key figures



of ST's was recycled an re-used

of energy purchased come from renewable sources



of ST's Back-end subcontractors engaged in EICC audits

## Environmental Efficiency **GHG** Air Emissions

We aim to manage and reduce direct and indirect greenhouse gas (GHG) emissions, including perfluorinated compounds (PFCs), from our manufacturing and other business operations.

The volume of emissions continues to increase globally, despite efforts to reduce GHG emissions. ST has been taking into consideration climate change for more than two decades. While GHG emissions in the semiconductor industry are relatively minor, they have a very high global warming potential. To address this situation, we have continued to make climate change a principal element of our environmental strategy and initiated new programs to manage and reduce our GHG emissions, I G4-DMA I

### **Direct emissions roadmap and** status

PFCs are essential to the semiconductor manufacturing process. Ninety percent of ST's direct emissions, identified as Scope 1 of GHG Protocol, result from the use of PFCs in the manufacturing processes. In 2014, ST issued a new version of the environmental, health and safety (EHS) Decalogue. We removed the target of achieving neutrality for the Scope 1 emissions, realizing that the results achieved so far were below our expectations.

ST is committed to the World Semiconductor Council's 2020 targets on climate change, including its goal to reduce PFC normalized emissions by 30% from 2010 to 2020.

To reduce our emissions we continue to implement projects to install PFC abatement systems and develop greener manufacturing techniques. Despite ongoing progress in GHG

emissions management, our PFC emissions increased overall in 2014.

This was primarily due to delays in implementing a refurbishment program in Ang Mo Kio (Singapore) and to the change of production mix ST 2014 CDP score: in Catania (Italy), In 2015.

ST will continue its efforts to reduce direct emissions.

### Indirect emissions - Scope 2

ST's initiatives on indirect emissions, identified as Scope 2 of GHG Protocol, are detailed in the Energy section of this

### A project dedicated to transportation emissions

In our Sustainability strategy we are committed to reducing our CO<sub>o</sub> emissions in the transportation and logistics of our products, materials and employees. In 2014. ST continued to report on three out of the 15 GHG Protocol Scope 3 categories: employee commuting, goods transportation and business travel. A full revision of the methodology and factors used to calculate transportation emissions was conducted to improve process and data robustness. This improved methodology resulted in a significant increase primarily for employee commuting and business travel.

### Employee commuting

After a successful pilot scheme across nine sites, we deployed the new method for calculating employee commuting, enlarging the perimeter to 18 sites (12 manufacturing and six large R&D centers). By capturing typical employee commuting distances and transportation modes, ST was able to calculate an 'employee

commuting footprint' using the official **Objectives** Comments Direct emissions (Scope 1): reduce PFCs emissions (tons CO<sub>2</sub> per No deployment of new PFCs production unit) by 30% in 2020 from 2010 baseline abatment systems Indirect emissions (Scope 2): decrease CO, indirect emissions New through our energy management programs Transportation emissions (Scope 3): reduce CO<sub>2</sub> emissions (tons CO<sub>2</sub> per production unit) from transportation and logistics for our products, materials and employees

GHG Protocol emissions calculation methodology. This activity also aimed to share best practices and facilitate

improvements, such as increasing carpooling, as well as promoting public, bus and/or 'zero emission'

transportation. Currently, 5% of ST employees are categorized as using 'zero emission' transportation.

### Goods transportation

Emissions related to goods transportation comprise around 40% of our Scope 3 emissions. Product transportation includes the delivery of goods between ST sites, as well as to customer sites. In 2014, we succeeded in reducing our carbon footprint through different initiatives. For example, we changed transportation modes to reduce air freight, where possible. We also optimized the number of departures per week and focused on loading containers efficiently.

 Business travel (rail and air) Business travel represents around 12% of ST's Scope 3 emissions. After installing a video-conferencing network in 2013 to reduce business travel, we sought to improve the process and quality of data collection in 2014. As result of our 2014 activity, we have succeeded to improve the reliability of our emissions reporting for business

#### **Compensation and reforestation**

To offset our direct emissions, ST has developed a number of reforestation programs. Between 2002 and 2003, ST planted approximately 9,000 hectares of trees in Australia, Italy, Morocco and Texas. These 9,000 hectares of trees offset about 1,500 kTons of CO<sub>2</sub>, since the launch of the plantation program. Having removed our Scope 1 neutrality target, in 2015, we will verify the relevance of the overall reforestation program and consider the possibility to compensate our direct emissions through other types of projects.

1. See pages 52 to 53

### Performance review and disclosure

The Carbon Disclosure Project (CDP) is an initiative that provides a global system to measure, disclose and share information about carbon management. ST has participated in this annual performance review since 2006 and in 2014, we obtained a disclosure score of 93/100 and a B-grade, ST is among 11 companies selected out of 53 for inclusion in the Italian Carbon Disclosure Leadership Index. This recognition is a considerable achievement and reflects ST's advanced management of its impact on climate change.



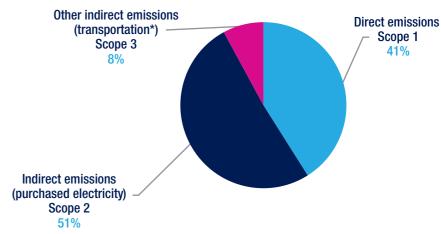
### Electric vehicles charging stations

Focus



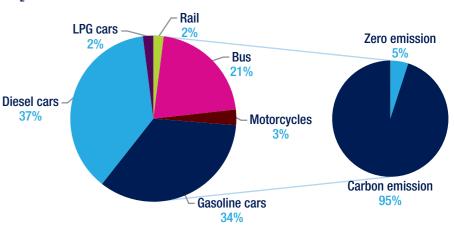
In 2000, we launched a mobility plan to minimize the environmental impact of employee commuting. Since then, we have continued to advocate alternatives to commuting alone by car through our promotion of initiatives, including incentives for public transportation, car-pooling networks and bike parks. To date, 72% of Grenoble employees have joined the mobility plan and I am very satisfied with this result. The extension of the Grenoble tram has certainly helped, as more than 100 employees opted for this new alternative in the month after its opening. For example, Francois Quetin, who switched from private car to tram, found this mode less stressful and more cost-effective, without increasing his commuting time. In 2014, we received two awards in recognition of these efforts; a regional award for the intercompany mobility plan we developed with neighboring enterprises, as well as the regional 'commute to work without my car' award.

### **Summary of net CO**<sub>a</sub> emissions (%) (G4-EN15/G4-EN16/G4-EN17/G4-EN18)



\* The transportation emissions value is a global estimate of employees and goods transportations.

### CO<sub>2</sub> - Means of transport (Scope 3)



## Environmental Efficiency Water

We are committed to reducing water use and ensuring high standards of effluent and waste water treatment. We also identify and manage water-related risks and opportunities, including impacts on local communities.

Water is becoming a scarce resource due to the increasing demands of population growth and urbanization, as well as reduced supplies due to climate change. Moreover, in some countries, pollution makes water unusable or expensive to

Semiconductor manufacturing processes require significant volumes of pure water and the processed waste water can impact the environment. The availability and quality of water, as well as its related costs are risks and challenges we need to consider. I G4-DMA I

### Our approach to water management

Since 1994, efficient water management has been a major element of our sustainable management of resources. Over the last 20 years, through continuous improvement programs, we have successfully reduced our overall water footprint by more than 73%. Today, it remains essential for ST to further improve water efficiency and consider how this impacts local communities. We have therefore adopted a comprehensive water management approach which includes water use assessments, implementing water conservation and waste water treatment programs, and initiatives to raise employees' awareness of water conservation. This is done through investments, the use of new technologies, regular engagement with our stakeholders and team commitments from all our sites, I G4-DMA I

### Water management performance

Water management performance is driven

projects (cubic meters per production unit)

Continuously improve water efficiency at equivalent production

level through water saving programs and water recycling

Achieve an overall Company recycling rate of 45% by 2015

by reuse and recycling, conservation and process optimization. In 2014, we slightly reduced our water consumption through continuous improvement programs undertaken by each manufacturing site. For instance, we mentioned in our 2013 Sustainability report, the water saving project deployed in ST Tours (France). This project,

In 2014, we maintained our 43%which involves several rate of recycled and reused water stakeholders,

enabled a further 15% reduction in the water used per wafer in 2014, and since the beginning in 2011, a total reduction of 30%. ST Shenzhen (China) also put in place new programs improving recycling and treatment capability in flow and quality, and received an award in 2014. In 2014, we maintained our 43% rate of recycled and reused water.

### **Treatment of water discharge**

Waste water is treated in dedicated treatment plants, either located onsite or developed in collaboration with local authorities, to remove polluting substances such as fluoride, which cannot be treated by municipal plants. Once it has obtained a sufficient level of purity, and any risk of pollution is eliminated, it is discharged into the natural environment. We work closely with local communities to reduce all risks related to water discharge and pollution.

### Water footprint analysis and risk mitigation

In 2014, ST conducted a study to measure the carbon and water footprint of our operations in collaboration with

-0.2% water consumption per

Recycling rate decrease to 42%

(-2% versus 2013). Objective

unit of production

discontinued

1. Water demand is the sum of all volumes of water withdrawn. This includes whether it is later evaporated, consumed or released again downstream (method: Quantis Water Database.

water use deprives other users of water. It is based on the water demand indicator. Method: Pfister et al. 2009. Units: m<sup>3</sup>-eq.

Quantis, a consulting firm specializing in sustainability and environmental impact assessments, and a partner of CDP on the water program. The objective of this study was to identify areas where environmental impacts can be mitigated. In addition, a risk assessment was performed to identify and prioritize actions

> required to manage and mitigate these

The graph on page 51 shows that only 25% of ST's water demand<sup>1</sup> is consumed and that nearly two thirds of this amount comes from water-stressed areas. These results are calculated applying a life cycle assessment approach, which includes ST's supply chain. Freight transportation, raw materials, paper and cardboard, transportation, manufacturing operations, electricity and natural gas consumption are all included.

The results of the 2014 carbon and water footprint analysis were presented to ST's environmental representatives during a two-day workshop. Quantis presented a step-by-step methodology to address the short and long-term risks of water quality, availability and cost. This approach enables each ST manufacturing site to perform their own risk assessment in order to identify and reduce the major risks related to water management. Consequently, for each of our manufacturing sites, we now have ID cards that provide key information, such as the carbon footprint breakdown, water-stress assessment<sup>2</sup> and whether or not the site is located in a high water-

## 2. Water Stress Assessment: indicates to what extent

### **Looking forward**

In 2015, we will continue our efforts to improve water efficiency at equivalent production level through water saving programs and water recycling projects.

### Consumption of water (per unit of production): normalized values



Baseline 100 in 2010



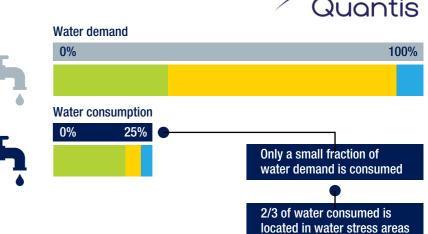
Monica Bianchi Corporate EHS Group **Environment Project Leader** Agrate (Italy)

Since the publication of the first Environmental, Health and Safety Decalogue in 1995, ST has been committed to reducing water use and ensuring the right quality of effluent discharged by our waste water treatment plants. In 2014 we decided to take a step forward by evaluating the water risk assessment of all our manufacturing sites. We developed this study in cooperation with Quantis and involved all our manufacturing sites. By cross-checking publicly available geographic 'hot-spotting' information with ST information on water usage, we obtained a map which clearly showed whether or not sites were located in water-stressed areas. We are now able to prioritize locations to invest in operational efficiencies and risk-mitigation measures in order to prevent potential future issues in this domain.

Sustainable

Focus

Quantis



### Recycled and reused total water (G4-EN10)

Raw

y materials

	2010	2011	2012	2013	2014
Total water used (1,000m³)	27,736	29,113	28,315	30,967	30,421
Water recycled and reused rate (%)	37.3	40.5	43.0	43.5	42.8

Electricity

Manufacturing

operations

## Environmental Efficiency

## Energy

We reduce energy consumption and our associated carbon footprint through energy efficiency and conservation programs, and through purchasing CO<sub>2</sub>-free and renewable energies. In addition, we carefully monitor and anticipate developments in the energy market to mitigate business exposure to climate change.

Semiconductor manufacturing processes are performed in specific conditions of cleanliness, temperature, humidity and pressure, and require a stable production environment which is energy-intensive. The energy needed to maintain these cleanroom conditions represents about 30% of the total site's consumption. We are committed to reducing our overall energy consumption and mitigating our indirect greenhouse gas (GHG) emissions (scope 2 of GHG protocol). To achieve this, we are initiating responsible energy management across all sites by implementing programs, defining clear targets, spreading best practices and ensuring this remains a priority.

### **Energy sourcing and** management performance

ST's main source of energy is electricity, with only relatively low quantities of fossil fuel and natural gas needed for air heating, abatement devices and general facilities. One of our targets is to increase the amount of green energy purchased. Therefore, we always consider renewable energy sources when purchasing energy. Our energy sourcing department takes into account both financial and environmental aspects and selects the greenest alternative wherever possible. In 2014, once again, we made progress in our green energy objectives and demonstrated our engagement in responsible energy sourcing. Consequently, we recorded our best

performance, with 20% of purchased energy coming from renewable sources. This mainly results from our initiatives with local power suppliers in France and Italy. Despite our efforts and the progress made, in 2014 our global

electricity consumption increased by 1.57%. Our energy performance was impacted by inclusion of the ex-Micron R2 manufacturing plant inside

the ST perimeter in Agrate (Italy), the integration of the Catania (Italy) gas farm, as well as production fluctuations.

All ST Front-end sites have been ISO

### ISO 50001

50001-certified since 2013. Certification involves implementing dedicated and common tools to collect data from all our sites. This gives us better visibility to deploy programs and continually improve our energy efficiency. Going forward, we will continue to enhance our energy management efforts. In 2014, ST Grand Ouest (Le Mans and Rennes, France) began the process to achieve ISO 50001 certification in 2015. It will benefit from applying our Company's environmental responsibility strategy while establishing a system to save costs through better energy management. These sites already monitor their energy consumption with dedicated programs and the recent building of Le Mans is

particularly energy efficient. However,

Objectives	Status	Comments
Continuously improve energy efficiency at equivalent production level (kWh per production unit) through process and facilities optimization, conservation and building design	X	+1.57%. Due to integration of new plant into the scope in Italy
Yearly increase by 10% the quantity of green energy used by the Company		19.74% vs 17.6% in 2013
By 2015, ensure that 100% of call for tenders from 200 k\$ include criteria on energy efficiency and use of CO <sub>2</sub> emission-free and/or renewable energy regarding facilities and site services	210	

achieving ISO 50001 certification will still require the introduction of a new energy management system. This ISO 50001 certification program is developed in close cooperation with

of energy

purchased comes

from renewable

sources

other local companies and organizations, and benefits from public funding.

### **Energy-saving plans**

Our Energy teams are actively working on energysaving programs. They have

identified facilities equipment optimization as a key factor for improving energy efficiency. In 2014, due to economic constraints, we focused on actions which did not require large financial investments.

Energy-saving programs were achieved without impacting equipment performance. These included changing the set points of the chillers according to seasons, reducing laminator flow, optimizing lighting with timers and density levels, optimizing the free-cooling system (using external air according to weather conditions), installing inverters which drive motors at different speeds, rebalancing exhaust distribution and recovering heat

The results of energy-saving programs are compiled in the ISO 500011 framework (a program that received the ST Bronze STAR award in 2013), and regular exchanges between sites are led by the Facilities Technology Committee

Through these programs, in 2014 we succeeded in saving 18 GWh of electricity and 5 GWh of natural gas. I G4-DMA I

1. ISO 50001: standard requirements include establishing, implementing, maintaining and improving an energy management system

### Consumption of energy (per unit of production): normalized values (G4-EN3/G4-EN5)



■ Baseline 100 in 2010

Vanessa Mullet **Energy Champion** Crolles (France)

As the site Energy Champion, I am in charge of managing the Energy team. I believe the team's strengths

- it is made up of around 20 employees coming from different organizations, such as Facilities, Information Technology, EHS, Human Resources, Manufacturing, Communication, Purchasing and Site Services
- · we have discussions with other ST sites and external companies which allow us to benchmark and share best practices

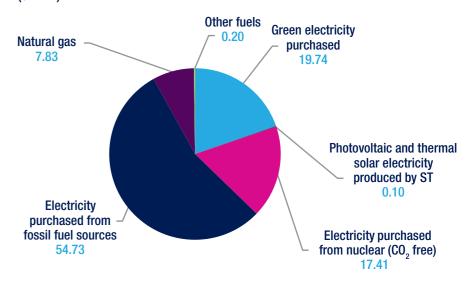
The diversity of expertise is a valuable asset and contributes to our good results.



### Energy-saving in Crolles

Focus

### Direct and indirect energy consumption by primary sources (%)



### **Breakdown of energy sources** (G4-EN3-G4-EN4-G4-EN5)

	2010	2011	2012	2013	2014
Electricity consumption (TJ)	7,265	7,409	7,347	7,530	7,649
Natural gas consumption (TJ)	616	598	550	657	650
Others sources (TJ)	0	0	13.57	16.34	16.23
Total energy consumption (TJ)	7,880	8,006	7,911	8,204	8,315
Energy consumption due to electricity %	92.19	92.54	92.87	91.79	91.99

## Environmental Efficiency Waste

We continuously reduce, reuse, recycle and manage waste streams from manufacturing sites, including hazardous substances, metals, packing, plastics and other non-biodegradable materials.

Waste management is a key area of concern for each ST site, as improper activities, from collection to final disposal, could negatively impact human health and the environment. For the last two decades, we have been committed to reducing waste generated by our operations and to reusing or recycling materials. We have established an integrated process for the environmental management of waste; ensuring regulatory compliance, monitoring the quantity of annual waste production, and collecting and reporting on data. We uphold strict controls across all company activities. The Waste Ladder methodology we developed ensures an appropriate end-of-life treatment for each waste stream, based on its economic and ecological impacts. I G4-DMA I

### **Waste management performance**

In 2014, we reused and recycled 92% of waste generated through our operations. This best-ever score was a collective effort across all sites. Reused and recycled waste at our sites varies between 81% and 99%, depending on the local technologies available and specific waste characteristics. ST's Agrate (Italy) site exceeded the target with a recycle rate of 96%, thanks to efficient waste management. Compared to 2013, general waste was reduced by 17%, while wafer production increased by 19% following the integration of ex-Micron R2 manufacturing plant. Operations, such as recycling Waste Water Treatment Plant (WWTP) sludge to produce bricks, recycling solvents through distillation, burning with heat recovery and recycling

**Objectives** 

### Waste electrical and electronic equipment - WEEE

For a number of years, ST Calamba (the Philippines) has been contributing positively to ST's waste recycling and reuse performance. However, proper waste management, particularly of waste electrical and electronic equipment (WEEE), is a greater priority. Indeed, the environmental impact of improper waste management can be far more significant than the issue of recycling versus landfill



ST Calamba therefore decided to extend a WEEE recycling program beyond the footprint of its operations, due to the prevalence of WEEE in all households. In partnership with local stakeholders, such as the Department of Environment and Natural Resources, and Industrial Park Locators, ST extended collection of defective or obsolete WEEE at its plant to employees. This delivers the dual benefit of reducing employees' waste impact on the environment and enhancing their awareness of materials management; explaining why ST is so cautious about the materials we use to produce our products and making the terms 'from cradle to grave' and 'Life Cycle Analysis' relevant to our teams.

In 2014 92%

of ST's waste was

recycled and reused

'municipal' wastes, have improved waste performance and contributed to Agrate's positive waste management trend of the last three years.

The installation of an ammonium sulfate evaporator also contributed to the performance improvement, enabling

Status

ST to add another manufacturing plant without increasing waste. In Agrate, concentrated ammonia drains are treated in a way that produces ammonium sulfate as waste. The evaporator enabled us to reduce the amount of ammonium sulfate waste by a factor of five. This

Comments

not only creates a direct reduction in the waste produced, but also in CO. emissions as fewer trucks are required for transportation.

> One target of our Environmental, Health and Safety (EHS) Decalogue is to achieve a landfill waste rate of 3% or less by 2020. In

2014 we made progress in our objective and we remain committed to reaching this target. In 2015, we will further pursue our efforts to reduce landfill waste.

### **Hazardous waste management**

Almost all processes in semiconductor manufacturing generate hazardous or potentially hazardous wastes, including chemical substances and contaminated plastics. Most hazardous waste is reused and recycled, and the remaining waste is treated locally by specialist companies. Where local treatment is not possible, we transport hazardous waste safely to

a location where it can be treated, in full compliance with the Basel convention. In 2014, 0.9% of ST's hazardous waste was transported from Kirkop (Malta) to France.

### **Looking forward**

In 2015, we will continue to address these challenges and evaluate actions to further reduce our waste generation and improve recycling.



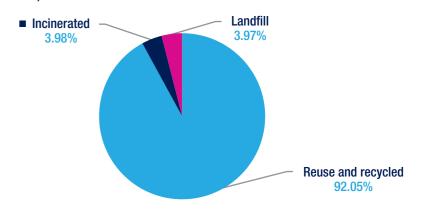
Adeline Oliva Site Environmental Champion Tours (France)

The Environmental Steering Committee meeting was a good opportunity for participants to meet and exchange information on shared practices. Since this meeting, I have contacted my colleagues in Agrate (Italy) to discuss their best practices and exchange experiences with our suppliers. It was also interesting to have the presence of our Back-end colleagues. For example, through discussion on chemicals with Bouskoura (Morocco) and Kirkop (Malta) colleagues, we realized we often have the same technical problems to solve. I look forward to being part of this community in the future, as it will enable us to be more efficient in sharing best practices.

## Steering



### Waste split in tons (G4-EN23)



### Waste in tons (G4-EN23)

	2010	2011	2012	2013	2014
Total hazardous waste	11,365	10,415	12,624	11,031	10,644
Total waste	40,775	38,593	37,511	36,091	34,472





Denise Ann Buhagiar Site Environmental Champion Kirkop (Malta)

Finding ways to recycle cured epoxy resin culls on the Maltese Islands is a challenge. This is due to limited recycling possibilities, combined with environmental restrictions on more conventional recycling options, such as using backfilling material in the construction of roads. Normally, ST's Back-end manufacturing sites send spent-resin culls to cement manufacturing companies, where they are granulated and mixed with cement powder. However, this is not economically feasible in Malta. Therefore, ST Kirkop found a solution for recycling spent-resin culls with a local waste broker. who is involved in manufacturing concrete blocks. The spent-resin culls are mixed whole with wet concrete and shaped in blocks with a base of one square meter. The blocks are then used as barriers for construction sites. Occasionally, in-house building projects also make use of spent-resin culls. A spent-resin bed is laid out and topped with wet concrete - a practice which significantly reduces the cost of concrete.

Remain among the best in class companies with a reuse and 92% in 2014 4% in 2014. Remains at a very Remain among the best in class companies with landfilled waste good level, but slightly increased rate at 3% or less in some Back-end sites

## Environmental Efficiency Chemicals

We are committed to reducing and managing the environmental, health and safety risks of the chemicals and materials used in our manufacturing processes. We achieve this through basing their selection, handling and substitution on the precautionary principles.

The semiconductor industry uses a range of chemicals, especially in Front-end activities, of which some can present health, safety and environmental hazards. Since the early '90s, ST has been engaged in the management and control of chemical substances and materials, to protect people and the environment from potential exposure, and to comply with legal and customer requirements.

#### **Site Chemical Committee**

One commitment of our EHS Decaloque is to ensure that all sites adopt an approach based on precautionary principles when assessing the environmental, health and safety (EHS) impacts of new processes, chemicals and materials. In accordance with this commitment, the Site Chemical Committee (SCC) evaluates, defines and authorizes the use of chemicals in each site, aided by various organizations:

- An EHS representative coordinates activities and requests installation upgrades, where necessary.
- Purchasing helps to obtain the necessary information from suppliers to identify chemical hazards.
- Facilities and Engineering help determine how to adapt installations to specific chemicals.
- Engineering, Research and Development, Products Groups and Quality representatives research potential, less hazardous alternatives.
- Site Physicians determine preventative

**Objectives** 

Strive towards continuous control, reduction or elimination

of risks and of substances of concern in our processes and

activities for an environmentally friendlier, safer and healthie

medical checks to verify employees' health is protected.

Site management retains ultimate responsibility for safety processes, but it is also the end user's

duty to apply SCC recommendations. We conduct regular

EHS internal audits to ensure that conditions of use, as defined by the SCC according to ST procedures, are maintained. I G4-14 I G4-DMA I

### **Compliance and transparency**

Across our manufacturing activities and supply chain, we implement the highest standards and adopt ISO 140011 and OHSAS 18001<sup>2</sup> management systems. Through our Material Declaration Process, we report externally on the chemical composition of all our products and track the presence of all substances according to the IPC 1752<sup>3</sup> standard. Additionally, we evaluate chemicals using ST's EHS-regulated substances lists to identify potential handling issues or changing legal requirements. The EHSregulated substances list contains more than 2,500 substances. In 2014, more than 5,300 chemicals were used and assessed across ST manufacturing sites. ST annually reviews and updates the EHS-regulated substances list to:

- Comply with standards and regulations (REACH<sup>4</sup>, RoHS<sup>5</sup>, ELV<sup>6</sup>),
- Meet customer requirements,

Status

Ensure all suppliers and subcontractors

Comments

2 substitution plans completed

are aligned with ST's rules of chemicals and hazardous substances use. We perform detailed checks on all suppliers and validate their compliance

> through certification, safety datasheets and written engagements.

When we identify concerns around a substance's use, either due to changing regulation, or employee or environmental exposure, we formulate a substitution plan using the following strategy:

a) elimination

I U regulated substances

replaced since 2008

- b) substitution
- c) engineering controls
- d) signage/warnings and/or administrative controls
- e) personal protective equipment. Where elimination or substitution is impossible, we implement strict risk management measures, including engineering systems, administrative controls and personal protective equipment, to ensure we protect our employees and the environment. Furthermore, manufacturing sites have emergency response teams trained to coordinate operations and use firefighting equipment, breathing apparatus, chemical protective clothing and spill kits in case of chemical accidents.

### **Substances substitution and** elimination

In 2014, ST focused on the replacement of a substance of very high concern, the DEHP and the removal of Refrigerant 22.

#### **DEHP** substitution program

Tapes are used during Back-end manufacturing in wafer preparation, during back grinding, mounting, sawing and die attach processes. The tape's base film material contains DEHP Di (2-Ethylhexyl phthalate), an organic chemical additive for softening PVC film.

However, DEHP is listed in Annex XIV REACH Regulation, with a defined 2015 phase-out date. ST therefore initiated a company-wide project to check the availability of new materials, identify the impacted sites, groups and products, and to define the risk assessment, qualification strategy and implementation plan. In 2014, the Company focused on the sites directly impacted by the REACH regulation. Although non-European sites are not required to comply with REACH, all assembly sites have completed the new material qualification. By the end of 2014, all sites impacted by the substitution of die attach film successfully passed the qualification. Through 2015, ST will continue to deplete the existing stock and switch to the new qualified material.

### **Looking forward**

As reported in the fifth EHS Decalogue and outlined in the 2013 Sustainability report, we are aligning our materials management with HSPM7 systems requirements. We aim to develop an integrated approach for collecting data. analyzing, monitoring and reporting the hazardous substances used in ST product manufacturing. Following the preliminary phase performed in 2014, we will implement a new system in 2015. Data will be collected from all our materials suppliers in a new, centralized system, enabling us to disclose details of our products' hazardous content while enhancing traceability from the materials supplied to the final products. ST will continue to anticipate legislative changes, manage and reduce the risks around chemicals use, protect employees' health and safety, and preserve the environment.

Focus

Refrigerant 22 at Tours

(France)



Gaetano Caputo Quality and Reliability Automotive Product Group Agrate (Italy)

new DEHP/PVC-free materials to ensure they meet automotive targets from a workability, quality and reliability perspective. DEHP is an organic chemical additive for softening PVC film. These tapes are used to support the wafers during back grinding, mounting, sawing and die attach processes. Due diligence and rigorous qualification flows - which are standard for automotive applications - have been applied to validate this

In line with the standard automotive

approach, we have assessed the

### ST exposure to Substances of Very High Concern (SVHC)

	2010	2011	2012	2013	2014
SVHC	44	71	138	151	161
ST concern	5	8	18	20	21
ST concern Annex XIV		1	1	1	1
Replaced	3	4	5	5	5

- 1. **ISO 14001** = Environmental Management Systems Requirements
- 2. **OHSAS 18001** = Occupational Health and Safety Management Systems Requirements
- 3. IPC = Association Connecting Electronics Industries®
- 4. **REACH** = Registration Evaluation and Restriction of Chemicals
- 5. RoHS = Restriction of Hazardous Substances
- 6. **ELV** = End of Life Vehicles
- 7. **HSPM** = Hazardous Substance Program Management

Ensure 100% of key suppliers and subcontractors fully commit to ST specifications and procedures (through ST Banned and Objective discontinued **Exempted Substances specification)** Increase in number of Adopt an approach based on precautionary principles when evaluations of chemicals and assessing the EHS impacts of new operational processes. materials before entry and in chemicals and materials

transition, even though the

concerned materials are not in

present in the final packages.

direct contact with ST devices or

## Sustainable Technology

We identify and promote innovative products that provide environmental and social benefits to society, for example, through reducing end-application energy consumption, saving resources, protecting the environment or providing solutions to improve the end-user's quality of life. We also aim to design products, taking into consideration the environmental impact of their entire life cycle.

### The Sustainable Technology program: a global framework

What we consider important is confirmed by our stakeholders. Indeed, the 2014 materiality exercise showed eco-design to be in the top five priorities of customers and investors. The Sustainable Technology program includes product compliance with legislation and agreed customer requirements regarding the exclusion of certain chemical substances from products. By using a systematic eco-design approach in the conception of our products we can minimize their environmental impact throughout their life-cycle. Devising a strategy on both responsible products and eco-design gives ST a real competitive advantage. The program comprises three main pillars linking sustainability to products:

- Product compliance: with legislation and customer requirements regarding REACH1 and RoHS<sup>2</sup>, ECOPACK® and conflict-free minerals.
- Responsible products: identifying innovative products that provide clear environmental and social benefits.
- Eco-design: integrating a process to design products, systematically taking into consideration products' parameters linked to their environmental impact.

I G4-DMA I

### **Product compliance**

Our products are branded ECOPACK® and meet all applicable requirements, such as REACH and RoHS. We develop solutions that eliminate RoHS chemical compounds from our manufacturing lines and products. Our approach to conflictfree minerals is detailed in the Supply Chain Responsibility pages.

### Responsible products and eco-design

During 2014, we started integrating the Sustainable Technology program, with its two main pillars – responsible product and eco-design – into the product development process. The process has been fine-tuned and approved by all our Product Groups, with the associated specifications released. Responsible products and eco-design elements have been integrated in the project

management system (PMS), used from 2015 to manage all new Company

### Eco-design is a top-five priority for ST customers and investors

In 2014, we consolidated the eco-design process. Its integration within PMS starts a new phase, with formal embedding in all new ST product designs since the end of the year, based on filing a checklist to track results. We leveraged a core team of Product Group representatives, which was indispensable for defining the program's elements.

In 2015, our focus is to synchronize the program's training sessions with the deployment of PMS in all main Research and Development sites.

#### ST31 is secure and safe

Data security is gaining increasing importance in people's lives, enabling secure transactions and protection of personal data. Thus, the security of personal information is a subcategory of Social Responsible Products. The ST31 contactless and dual-interface series has been identified by ST as a 1-STAR Social Product (Data Security). It offers secure microcontrollers specifically designed for contactless smartcard applications and is based on the latest ARM SC000 32-bit CPU core, allowing an exceptional code density and high computation power.

It offers a wide range of memory sizes and cryptographic algorithms addressing security certifications, and its highly secure architecture makes it particularly suited for a wide range of applications where security is the main concern (e.g. high-speed contactless secure payment transactions or ID cards and passports). ST31 multi-standard adherence (e.g. MIFARE® and Calypso) allows the same card to be used for different applications, retaining security and interoperability.

Objectives	Status	Comments
ECOPACK® 3 (no RoHS exemption and Halogen free): 25% of new packages implemented in ECOPACK® 3 by the end of 2015	215	Objective discontinued. No significant interest from customers
90% of new products to apply Sustainable Technology criteria within our Product Development Process	New	

<sup>1.</sup> REACH = Registration Evaluation and Restriction



Nathalie Fleury Program Management Team Digital Products Group Grenoble (France)

I am involved in eco-design, with a transversal role in project management, acting as a relay for organizations. Eco-design is now in place, thanks to a simple, robust plan: tool, awareness and indicators. Upstream we focused on how to deploy a tool involving all functions and actors concerned: marketing, design, project management, packaging and engineering.

This new tool now enables us to introduce eco-design in a systematic and structured way. It is systematic because all new projects follow a development flow requiring eco-design consideration, and it is structured because, at each step of product design, engineers refer to a checklist of possibilities to improve the environmental impact. A team-awareness campaign started at the end of 2014. The process ensures that questions are raised systematically at each step and for all parameters – examining what can be taken into account, improved and implemented, such as the parameters of package weight, the number of steps, and manufacturing flows. Data is recorded to compare new generation products to the older ones and evaluate improvements. Opportunities were already created from capturing feedback from the project managers of two important new projects driven through PMS. I am confident that, with the tools and knowledge in place and the support of management, ecodesign will be a key sustainability initiative, which will bring a competitive advantage.

### Our Schottky diode saves energy

Focus

### Responsible products and STAR classification criteria (G4 -PR3)

	Number of STAR products in 2014							
	1 STAR Incremental improvement to existing offering	2 STARS Significant improvement to existing offering	3 STARS New or dramatic improvement to existing offering	Total				
Social - Embedded in applications dedicated to: physical well-being, safety, personal security, improving quality of life	12	23	8	43				
Energy saving of the ST chip itself or in the application thanks to the ST chip	159	129	6	294				
Environmental - Contributes to resources saving and environmental preservation	7	2	4	13				
Total	178	154	18	350				





<sup>2.</sup> RoHS = Restriction of Hazardous Substances

## Supply Chain Responsibility

As part of their contract with ST, our suppliers are required to commit to ST and the EICC's Social Responsibility standards, including conflict mineral and chemical requirements. To contribute to improve the electronics supply chain, we monitor our suppliers' performance through regular assessments and audits.

### An evolving challenge

Our supply chain, managed at different levels of our organization, is both diverse and geographically widespread. In 2005, we started to address the challenge of supply chain responsibility through longterm collaboration between procurement, outsourcing and sustainability departments.

Today, increasing demand from our customers and external stakeholders further encourages us to enhance our monitoring of suppliers and subcontractors, and support them in their path towards improvement.

The US Dodd-Frank Act, which requires device manufacturers to undertake due diligence across their supply chain, and the California Transparency Act against Forced Labor are driving companies to extend their responsibility far beyond their own operations.

ST has a leading role to play by taking

**Objectives** 

Ensure none of the suppliers are classified "high risk" based on

Continuously reduce the number of non-conformances arising

Ensure business ethics: 100% of Global Procurement and

Outsourcing organization buyers to sign the business ethics

Define and deploy systems and processes to provide reliable

- maintain the EICC-GeSI Due Diligence Tool update for 100% of

our material suppliers, Front-end and Back-end subcontractors

engage all the smelters identified in our supply chain to join

Create and implement a process to engage local suppliers in

Get 100% of the smelters identified in our supply chain verified

Deploy and control ST Hazardous Substance-Free programs to

Ensure 80% of key suppliers (by purchasing volume) are

involved in the EICC compliance program (annually)

Self-Assessment Questionnaires (SAQs)

evidence that our products are conflict-free:

the EICC-GeSI Conflict-Free Smelter Program

by a 3rd party as Conflict-Free by the end of 2015

Sustainability programs including audits

suppliers and subcontractors

from SAQs and audits

into account the impact of its sourcing decisions. I G4-DMA I G4-12 I

### **Building a responsible** supply chain

Our supply chain programs are strongly aligned with our internal programs and common industry standards. We believe

the most effective way to manage our supply chain is to adopt a sector-based approach, which enables audits increased to resource and best-practice sharing. It also allows us to harness the positive

influence of collective sector pressure and helps in understanding the geographical

Our supply chain programs cover a wide range of issues, including the adoption of standards, management of social, environmental and safety risks through assessment and audits, management of

For 2015: Ensure 80% of key

suppliers are involved in the

improve their performance

Programs in place. Objective

Objective discontinued

Objective discontinued

Objective discontinued

discontinued

EICC program, and continuously

Status

New

New

hazardous substances, and responsible sourcing of minerals.

We have implemented these initiatives among our key suppliers and subcontractors, who represent 80% of manufacturing procurement segments. They include Front-end and Back-end subcontractors and suppliers of material,

spare parts and equipment managed at corporate level.

We are also increasingly deploying these programs to local, primarily services suppliers, with a focus on

specific regional risks, such as dormitory living conditions or forced labor. Conflict minerals and hazardous substances programs are deployed extensively to all relevant suppliers.

### Assessing and auditing

Back-end

subcontractors

engaged in EICC

80% in 2014

In 2014, we requested our key suppliers and subcontractors to complete a new EICC self-assessment questionnaire (SAQ) through the EICC's online platform. With a successful participation rate, a record number of 294 Corporate and Facilities SAQs were completed, with 70% of SAQs renewed in 2014. ST's overall supply chain EICC SAQ score was 89%, indicating a low level of risk and exceeding the target of 85% in the three main areas of Labor and Ethics, Environment, and Health and Safety. In 2014, we also made significant progress in engaging our suppliers and subcontractors in audits. We integrated the third-party audits as a positive criteria in our overall performance evaluation of suppliers. Thanks to the recognition of these audits, the coverage of our Backend subcontractors engaged in EICC audits increased from 35% in 2013 to almost 80% in 2014. For the first time, we also participated

in the audit of a major Front-end

subcontractor, which was achieved through strong collaboration between our outsourcing organization and the subcontractor. From preliminary assessment to corrective action monitoring, the audit resulted in important measures being taken to increase compliance around working hours and against forced labor. The effectiveness of these measures will be assessed next year in a closure audit and we have invited our subcontractor to share with us the principle outcomes.

In parallel to our supply chain programs, internal audit results emphasized the importance of selecting responsible local services, such as labor agencies, when recruiting or subcontracting migrant workers. Through careful due diligence, we have made positive progress in addressing forced labor risks and protecting our employees' rights. We extended our labor agency audit program from Singapore to Malaysia, and in 2015, we will replicate this program in China. We understand that engaging local managers is fundamental to achieving our objectives and that the best way to accomplish this is through local capability-building programs.

### Management of hazardous substances

In 2015, we will implement the Hazardous Substance Program Management (HSPM) system based on data collected from our suppliers. The program will integrate substance traceability within product information. More details of this can be found in Chemicals, pages 56 to 57.

### Towards a conflict-free supply chain

An initiative of the EICC and GeSI



### Total number of suppliers and subcontractors facility SAQs by level of risk 2014

	Number of SAQ			Average
	Low risk	Medium risk	High risk	score
Back-end materials suppliers	58	7	0	88.7%
Front-end materials suppliers	65	4	0	89.5%
Back-end subcontractors	27	4	0	89.8%
Equipments suppliers	13	2	0	85.5%
Front-end subcontractors	4	0	0	86.0%

## HS华虹宏力 Green & Intelligent Manufacturing

In 2014, with the support of ST, HHGrace started to use the EICC-ON tool and standardized our management systems to align with EICC requirements. To answer the needs of the industry's supply chain, we built our Sustainability strategy based on

- Maintain our strong position in green production, safety, health and employee care
- Internally promote industry best practices to improve our weaknesses such as the management of working hours or structural risk assessment.

HHGrace understands enforcement of social responsibility is a long journey. The EICC-ON approach based on SAQ and the VAP (Validated Audit Program) is a powerful tool to help us implement systematic management systems and to show us the electronic industry's best practices along with challenges. HHGrace will continue aligning with the EICC standards to promote sustainable development throughout the supply chain together with our valued customers and other stakeholders.

## Environment & **Operations Indicators**

This section includes indicators and GRI Standard Disclosures.

Our environmental data collection covers our 12 manufacturing sites representing more than 95% of the overall environmental impact of the whole company.

For CO<sub>2</sub> emissions reporting ST uses the following international methodologies: Scope 1:

• PFCs emission: 2006 IPCC Guidelines for National Greenhouse Gas Inventories-Chapter 6 Electronics Industry Emissions

- Combustion emissions: World Resources Institute (2008)-GHG Protocol Calculation tool for stationary combustion v.4)
- World Resources Institute (2004) GHG protocol - A Corporate Accounting And Reporting Standard

 Indirect emissions due to electricity consumption: World Resources Institute (2014). GHG Protocol tool for stationary combustion. Version 4.5

### Scope 3:

- Emissions due to Goods transportation, Employee commuting and Employee business travels: Mobile Combustion GHG Protocol tool v.2.5
- Supplement to the Corporate Value Chain (scope 3) accounting and reporting standard

For all the other environmental indicators ST uses the methodologies described in internal Company procedures which are regularly reviewed during third party environmental audits (i.e. EMAS, ISO 14001, ISO 50001).

### Summary of net CO<sub>2</sub> emissions (kTons) (G4-EN15/G4-EN16/G4-EN17/G4-EN18)

	2010	2011	2012	2013	2014
Direct emissions Scope 1	551	626	561	554	626
Indirect emissions (purchased electricity) Scope 2	907	903	828	815	778
Other indirect emissions (transportation*) Scope 3	126	116	107	108	121
Total emissions**	1,584	1,645	1,497	1,477	1,525

- The transportation emissions value is a global estimate of employees' transportation and
- \*\* Transportation emissions are integrated in the total emissions.

### **CO**<sub>2</sub> emissions (per unit of production): normalized values (G4-EN15)

	2010	2011	2012	2013	2014
CO <sub>2</sub> emissions	100	108	107	95	95

Baseline 100 in 2010

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

	2014
Air <2000km	11.75
Air >2000km	86.33
Road	1.92
Ocean	0.00

### Direct and indirect energy consumption by primary sources (%)

	2010	2011	2012	2013	2014
Green electricity purchased	5.79	8.56	7.38	17.64	19.74
Electricity produced by ST's windfarm	1.09	1.13	0.00	0.00	0.00
Photovoltaic and thermal solar electricity produced by ST	0.01	0.09	0.10	0.10	0.10
Electricity purchased from nuclear (CO <sub>2</sub> free)	23.72	23.23	22.13	17.79	17.41
Electricity purchased from fossil fuel sources	61.57	59.53	63.27	56.25	54.73
Natural gas	7.81	7.46	6.96	8.01	7.83
Other fuels	0.00	0.00	0.17	0.20	0.20

### **Environmental investments**

	2010	2011	2012	2013	2014
% of total company investments	0.06	0.50	0.85	0.21	0.73

### **Consumption: absolute values** (G4-EN3/G4-EN5)

	2010	2011	2012	2013	2014
Electricity (TJ)	7,265	7,409	7,347	7,530	7,649
Water (1,000 m³)	17,393	17,314	16,151	17,484	17,386
Chemicals (tons)	17,138	17,076	17,792	19,713	19,170
Natural gas (TJ)	616	598	550	657	650

### **Consumption of electricity (per unit of production):** normalized values (G4-EN3/G4-EN4/G4-EN5)

	2010	2011	2012	2013	2014
Consumption of electricity	100	105	114	105	106

### Consumption of natural gas (per unit of production): normalized values

	2010	2011	2012	2013	2014
Consumption of natural gas	100	100	101	108	106

Baseline 100 in 2010

### **Total water discharge** (G4-EN22)

	2010	2011	2012	2013	2014
Water discharge (1000 m³)	14,000	13,650	12,444	13,422	13,457
Treated in ST waste water treatment plant (%)	73	74	76	78	79
Treated in external waste water treatment plant* (%)	57	55	54	58	62

<sup>\*</sup> Part of this water has already been treated in ST waste water treatment plant, meaning that 100% of water discharge is treated whether internally, externally or both of them.

### **Waste under Basel Convention** (G4-EN25)

	2010	2011	2012	2013	2014
Hazardous waste transported (as a % of total hazardous waste)	0,000	0,000	0,000	1,331	0,872

### Waste split (Tons) (G4-EN23)

	2010	2011	2012	2013	2014
Total Waste	40,775	38,593	37,511	36,091	34,472
Reuse and recycled	36,113	35,387	34,032	32,975	31,731
Incinerated	3,522	2,134	1,758	1,352	1,371
Landfill	1,140	1,072	1,721	1,764	1,370

### **Consumption of chemicals (per unit of production):** normalized values

	2010	2011	2012	2013	2014
Consumption of chemicals	100	103	117	116	113

Baseline 100 in 2010

### Elimination of substances of very high concern (SVHC)

		2013	2014
Total number of action plans* complete	d since 2008	19	20
Action plans completed on-time (%) for reduction of hazardous substances included Very High Concern (SVHC)		100	100

<sup>\*</sup> One substance can be subject to several action plans to be eliminated from different ST processes

### **Environmental burden: net values** (G4-EN18/G4-EN21)

	2010	2011	2012	2013	2014
Emissions to air					
Global warming* (MTCE)	413,974	429,187	408,202	402,875	415,960
Ozone depletion (kg R11 Eq)	7	0	0	0	0
VOCs (Tons)	178	192	147	153	221
Atmospheric acidification (Kg SO2 Eq)	36,581	41,525	34,456	42,181	45,610
Photochemical oxidant creation (Kg ethylene Eq)	25,292	38,125	27,165	29,501	16,946
Air emission toxicity** (Kg PH3 Eq)	4,484	3,075	4,337	2,680	2,598
Emissions to water***					
Eutrophication (Kg (P+N))	396,271	378,339	330,993	326,918	261,468
Aquatic oxygen demand (Kg COD****)	709,202	667,146	529,623	565,693	452,943
Heavy metals to water (Kg heavy metals)	9,579	9,796	6,458	6,446	5,710
Aquatic ecotoxicity (Kg Cu Eq)	5,774	4,032	4,109	4,437	4,795

- Includes direct greenhouse gas (GHG) emissions from our manufacturing plants and indirect emissions from energy consumption and transport, reported in Metrics Tons of Carbon Equivalence (MTCF). Does not include GHG emissions from controlled manufacturing sites. subcontractors and foundries.
- 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
- Domestic waste water is included.
- \*\*\*\* Total Chemical Oxygen Demand (COD).

### **Deployment of ST substances specification to key** supppliers and subcontrators

	2010	2011	2012	2013	2014
Response rate from key partners (%)	100	100	100	100	100
full commitment from key partners to ST substances specification (%)	91	98.5	99.0	99.0	97.0

### Incidents in 2014 (G4-EN24)

### Fines and non monetary sanctions in 2014

Singapore (Toa Payoh)
730 US\$ (S\$1000) to Minister Of Manpower for incompatible mix of chemical waste,
incident occured in June 2013 and fine was paid in 2014
China (Longgang)
5000 US\$ for waste water, incident occured in September 2013 and fine was paid in







### Suppliers' and subcontractors' environmental and health and safety performance\*

	2010	2011	2012	2013	2014
Number of s	uppliers/s	ub-contra	ctors		
Suppliers of materials	104	102	94	92	73
Suppliers of equipment	40	40	40	40	40
Suppliers of spare-parts	35	38	39	44	43
Total	179	180	173	176	156
Subcontractors Back-end	62	59	51	59	60
Subcontractors Front-end	19	22	19	19	17
ISO 14001 cer	tified/EM	AS validat	ted (%)		
Suppliers of materials	81	81	76	90	76
Suppliers of equipment	83	80	83	78	55
Suppliers of spare-parts	54	47	59	61	58
Total	76	74	75	89	75
Subcontractors Back-end	97	98	98	98	100
Subcontractors Front-end	100	96	100	100	100
OHS	AS valida	ted (%)			
Suppliers of materials	44	50	48	51	40
Suppliers of equipment	8	21	18	18	25
Suppliers of spare-parts	20	16	18	18	26
Total	31	36	34	35	32
Subcontractors Back-end	87	62	67	64	66
Subcontractors Front-end	84	77	77	73	77

<sup>\*</sup> Suppliers and subcontractors change from one year to another. The list is updated regularly which changes the reference perimeter.

## Number of suppliers/subcontractors targeted for EICC programs (G4-HR11)

	2010	2011	2012	2013	2014
Suppliers of materials	104	102	102	92	76
Suppliers of equipment/ facilities/IT	104	87	87	86	86
Suppliers of spare-parts	35	35	35	33	33
Subcontractors Back-end	32	32	32	59	60
Subcontractors Front-end	19	22	22	19	17

### Phase 1 - Introduction: Agreement to comply with EICC (%)

	2010	2011	2012	2013	2014
Suppliers of materials	89	95	82	97	96
Suppliers of equipment/ facilities/IT	50	99	93	97	97
Suppliers of spare-parts	71	94	87	94	93
Subcontractors Back-end	98	97	100	100	100
Subcontractors Front-end	95	96	100	100	100

### Phase 2 - Assessment: EICC Self-assessment questionnaires completed (G4-HR11)

	2010	2011	2012	2013	2014
Suppliers of materials	76	97	183	209	233
Suppliers of equipment/ facilities/IT	0	0	13	18	19
Suppliers of spare-parts	NA	NA	NA	NA	NA
Subcontractors Back-end	20	23	42	49	37
Subcontractors Front-end	3	4	8	6	5

### Suppliers facilities SAQs scoring by EICC Code of Conduct main sections (%)

	2012	2013	2014
Health and Safety	90.2	90.3	90.7
Environment	86.8	90.7	89.8
Labor and Ethics	87.9	87.7	87.6

### Number of suppliers engaged in reporting EHS and social KPI's

	2012	2013	2014
Number of Front End material suppliers	18	34	44
Number of Back End material suppliers	45	43	26
Number of key FE & BE subcontractors plants	24	27	NA

### **Conflict minerals**

	2011	2012	2013	2014
Number of materials suppliers and subcontractors involved in the EICC-GeSI Due Diligence survey	171	168	162	139
Number of suppliers and subcontractors that are associated with at least one 3TG metal (involved suppliers)	84	88	105	104
% (number) of involved suppliers and subcontractors that have completed the EICC-GeSI Due Diligence survey	100% (84)	100% (88)	100% (105)	100% (104)
Number of smelters identified in ST's raw materials supply chain	61	74	75	89
Number of smelters identified in ST subcontractors' supply chains	111	102	98	113
Total number of smelters identified in ST supply chains (raw materials & subcontractors)				119



### **Conflict minerals inquiry results**

			2014		
	Number of smelters	% of smelters which are CFS validated <sup>1</sup>	% of smelters which are active in the CFS Program but were not CFS validated as of Decemver 31 2014 (Active smelters)	% Active smelters which have declared sourcing from L1/L2 countries or recycled or scrap sources <sup>2</sup>	% Active smelters which have not provided a declaration regarding country of origin or recycled or scraps sources
Tantalum	24	100	0	0	0
Gold	44	100	0	0	0
Tin	33	64	36	64 <sup>3</sup>	36
Tungsten	18	33	67	67 <sup>4</sup>	33

- 1. Based on EICC CFS program
- 2. Based on information represented by suppliers and subcontractors
- 3. L1/L2 countries declared as Brazil, Bolivia, Poland, China
- 4. L1/L2 countries declared as Australia, Bolivia, Canada, Portugal, Russia, Spain, China

### WEEE (G4-EN28)

As a supplier of components to the electronics industry (and not manufacturers of electronic equipment), we are not directly affected by the European Directive 2012/19/ EU Waste of Electrical and Electronic Equipment (WEEE).







## Local Communities

- Within the framework of our Community Involvement Charter we let our sites decide which initiatives correspond best to their local, operational and cultural context
- ST favors long-term partnerships with associations and local authorities, rather than one-off events
- We proactively engage with industry and academic bodies to fulfil our role as a responsible citizen and to ensure our long-term viability in a highly competitive market



### Key figures



312 initiatives from 30 sites worldwide





## Local

## Communities

Our intention is to add value to the communities where we operate through local economic development, industry and academic partnerships, and community involvement initiatives.

### **Local communities are essential** to ST

#### Our culture and values

Engaging in a variety of different ways with the local communities of our sites worldwide is a strong aspect of our culture. Whether at corporate, site management or employee level, the many initiatives we launch or participate in all year round confirm our commitment to positively impacting the local communities around our sites. We have been applying the London Benchmarking Group (LBG) methodology since 2012. This has helped us structure our reporting and improve the relevance of our investment. The ST Community Involvement Charter, formalized in 2013 and rolled out in 2014, enables the global deployment of our strategy to all sites, where the Sustainable Excellence coordinator, in close relation with HR and site management, drives and reports on most of these initiatives.

Where possible, we favor activities in three main areas: community involvement, industry and academic partnerships, and local economic development. Most initiatives are site driven, as it is our intent to let our sites

decide which initiatives correspond best to their local, operational and cultural context. As per our Charter, our main areas of involvement are:

- young generation and education,
- social welfare and charity,
- environmental involvement,
- economic development,
- innovation and high technology,
- supporting the ST Foundation. Our analysis of the 2014 initiatives confirms that education is our main driver. This is reflected in:
- · Our partnerships in education and our intent to highlight our industry, jobs and activity. Indeed, our main sites regularly organize visits for schools, universities and associations. Our employees give lectures and our managers are proactively engaged with local educational authorities or associations. These activities all promote the variety of jobs that our industry offers to men and women.
- The ST Foundation, which helps bridge the digital divide, thanks to its main program, Digital Unify. This program assists communities in need and helps families to keep in contact by setting up laboratories with recycled Company PCs, while employees volunteer to

train new users.

hours given by

ST employees

The majority of our activities are run in long-term partnerships with associations and local authorities, rather than one-off events. Activities held outside working

> hours are either driven by ST or by employees engaged in a cause, who encourage their colleagues to participate through logistical or

communications support from their site. In 2014, our contributions through 312 recorded initiatives worldwide included:

- cash donations of US\$ 908,766
- involvement of more than 30 sites in 19 countries
- 8,655 ST employees volunteering their time
- 99,761 hours of company time dedicated to the community. In addition, 4,292 hours were given to managing these initiatives, while 4,796 hours were contributed by employees outside work hours, either for employee or company-driven initiatives, benefitting at least 121,166 individuals. Over the coming years we will increasingly focus our efforts on initiatives which simultaneously support several priorities of our Sustainability strategy. We also intend to contribute to local economic development through direct and indirect employment, investments in local infrastructure and hiring local suppliers. I G4-DMA I G4-SO2 I

<b>Objectives</b>	Status	Comments
Support ST Foundation's activities	~	Cash, PCs, ST employee time
Prepare and deploy ST community involvement Charter.	~	Deployed in February 2014
For the mid to long-term: raise young populations employability by providing access to PhD, apprenticeships and internship experience	~	Numerous partnerships
Strengthen our network of public and industrial affairs activities worldwide; create and observe good sustainability practices as well as efficiently manage sustainability-related risks and opportunities	~	Objective discontinued.
Local initiatives and communication 100% aligned with new strategy (main sites)	New	
All sites to report their local community initiatives in the CSR tracking tool all through the year	New	



### **ST Foundation**

The Foundation continues to bridge the digital divide throughout the world - both in countries where ST is present and also in several others, especially Africa. The program started in 2003 and has trained over 270,000 people in 23 countries since its inception.

In 2014, the Foundation received a range of support from ST, including:

- PCs and other electronic and IT equipment
- time from those employees engaged in the Digital Unify program, who gave courses or translated course materials (now available in seven languages)
- support from ST management and Corporate External Communications to produce the Foundation's first activity report to external stakeholders
- · support for management of the ST Foundation website.

Please visit the ST Foundation website - www.stfoundation.org for more information

## A perfect example of local leverage

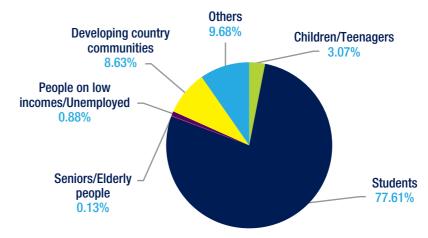
In France, the association 'les Restos du Coeur' provides meals to people in need throughout winter. In Rousset (France), employees launched an annual music concert in 1998 which has evolved into the local amateur event that raises the most funds for this association.

meals for the association.

This initiative leverages all aspects of local community impact. Indeed, 30 employees from all the organizations present at the site rehearse and perform outside working hours. The site provides support by announcing the event through communication channels, authorizing ticket sales in the canteen and providing a donation. Additionally, the Works Council (Comité d'Etablissement) provides the infrastructure, a room for rehearsals and a donation. Rousset town hall provides a concert room at no cost with the support of technical staff and two subcontractors also provide donations. Employees, their families and local inhabitants are proud and happy to attend the show and share a great moment while positively impacting the local community. The show has run for 17 years and is now performed twice - a sign of the initiative's success. In 2014, it raised enough funds to provide 19,000

### Focus

### **Direct beneficiary groups**



Franck Maugein EHS, Facilities and Plating Manager Sandrine Abou El Fadel Morocco Purchasing Director

### The five days that changed Bouskoura (Morocco)

By the end of 2014, the ST Foundation had trained more than 98,800 students in Morocco. To provide students with a safe and comfortable learning environment, ST Bouskoura (Morocco) decided to launch a new challenge: to renovate the Digital Unify training room in the Idriss 1st High School within five working days.

The site convinced its main partners to get involved in this project to renovate and improve the woodwork, electricity, floor, wall painting, green spaces, cleaning, furniture, plumbing, air conditioning and safety.

The project involved contributions from 16 suppliers, who were fully committed and covered their own costs, and approximately 20 employees who gave their time and energy to clean, paint and make this challenge a success - including the organization of a recognition ceremony!

We often organize activities to increase our employees' team spirit or engagement and their awareness of sustainability issues and programs. We are proud that our employees regularly participate in activities and events in their local communities, which our sites support and promote.

Here we have chosen to highlight a few of our many initiatives which have a positive impact on our employees and the communities around our sites.

### **Engagement\***



Bouskoura - Calamba - Crolles -Muar - Rousset: Family Day visits for employees and their families spread awareness of our industry, jobs and working conditions. The visitors are given a tour of production lines and facilities and then our products and

EHS initiatives are shown and explained on stands and videos. Games or competitions are organized too.

Munich: A "Competition Trophy" was created to appreciate the collective team performance of sales and marketing departments. It also enabled transparency regarding the sales growth. 92 employees participated.

#### **Environment**



**Taipei:** The site participated in cleaning the Linshanbi beach recreation area, organized in collaboration with the European Chamber of Commerce Taiwan, Taipei European School and other companies.

Ang Mo Kio: ST birdwatching guides participate in the conservation of native tree species and increasing biodiversity in urban Singapore (return of songbirds and other wildlife).

### Partnerships in R&D and Education, High-Tech Development



Agrate - Ang Mo Kio - Catania - Coppell - Crolles - Grenoble -Marcianese - Prague - Montrouge - Muar - Napoli - Shanghai - Tours: Sites regularly organize conferences for pupils, students and teachers to arouse technical and scientific vocations and inform on our jobs and industry. Three French sites renewed their participation to "Capital Filles", a national mentoring program aiming to increase the number of girls choosing technical graduate education, this year benefitting close to 100 girls thanks to 100 godmothers. We also provide local associations and universities with IC products, related hardware, expertise and even financial aid to support study, research and

practical exercises for students. Employees regularly participate in high-tech forums or fairs with presentations, exhibits, demonstrations and labs. All levels of managers and experts actively participate in regional networks, quality workgroups or workshops, for example on IP protection or supporting small and medium sized companies. We also cooperate to define international industry standards.



Edinburgh - Netanya: In Scotland, three employees participated in a Science Lab set up in a Lorry that travels round schools. In Israel, two helped with the First Lego League robotics contest for the benefit of 300 children.

Rennes: Collaborates with the Maupertuis Institute, which supports industrial firms in integrating new technologies to improve their competitiveness.

Calamba: Conducted two training sessions on balloon-making for teachers, providing them with skills on venue decoration, which can also be a personal business opportunity. 51 teachers joined.

### A variety of initiatives based on local context

Prague (Czech Republic): Employees can participate 2 days per year in activities organized by the site such as doing repairs in a home for disabled children or other, freely chosen activities. For example, helping after after floods, working with children or preserving natural protected areas. In 2014, 16 employees gave their time.



Burlington - Coppell - Livonia - Santa Clara - Schaumburg - Mississauga (USA and Canada): Over 180 employees actively participated in fundraising runs, walks and golf outings for cancer benefit, harvest food drive and health and wellness. They collected and distributed food, toys, clothing and school supplies for needy children and families. They supported non-profit associations helping children with intellectual and developmental disabilities, lymphoma and leukemia and an after school program for 'latchkey kids'. ST regularly matched employees' donations.



Tours (France): Throughout 2014 various theme days were held for employees: sustainable development (2d), mobility plan and public transportation (3d), health (3d), waste management (1d), energy management (1d) and a cancer prevention communication campaign.

Calamba (the Philippines): In April the site launched the first ST Foundation Digital Unify training program in Antipolo City; In May it organized a two-day safety training for 25 employee relatives.

Munich\* (Germany): A course was held for employees on progressive muscle relaxation as part of the stress-prevention program.

Greater Noida (India): Focus is often placed on underprivileged children and the schools educating them. Site and employees, in collaboration with the SMILES (Smart Minds Influencing Life and Earth Sustainably) committee, ran welfare activities on site, such as a book collection and fund raising to donate benches and desks. 900 students participated in a painting/poster-making competition and tree planting.

Loyang (Seoul): Employees regularly entertain and cook meals for homeless or elderly people.

Hong Kong: Donations from the sale of Mooncake boxes helped a non-profit organization enhance its social welfare services.



**Shenzhen (China) sales office:** The site donated stationery to a primary school in Tibet. Employees gave more than 90 books to help eight schools in Yunnan Province set up libraries.

Kirkop (Malta): The site is a mine of ideas: To raise funds for charity, an employee was sponsored to join the National Cycling challenge and a group of employees sponsored to run in a race with the President of Malta. Money was collected to purchase a van for Maltese missionaries in Peru, and a swing adapted for wheelchair users at an adult day centre. A donation was also given to the national Christmas campaign. Employees cleaned up a green area in Zebbug and did voluntary work in an orphanage.



<sup>\*</sup> Beyond LBG scope

# Local Communities' Indicators

This section includes indicators and GRI Standard Disclosures.

### **Community involvement inputs** (G4-S01/G4-S02/G4-EC1)

	2012	2013	2014
Number of community involvement activities	374	385	312
Total contribution (evaluated in mUS\$)	8.5	11	6

### **Community involvement - Outcomes** (G4-S01/G4-S02/G4-EC1)

	2013	2014
Number of beneficiary organizations	826	1,204
Number of direct beneficiaries	34,495	121,166

### Type of contribution break down (%)

	2012	2013	2014
Cash donations	31	14	15
Staff time volunteering	57	78	75
In-kind	4	3	5
Management costs	8	5	4
Number of employees engaged in volunteering	4,515	9,944	8,655
Number of hours contributed inside	100,972	177,610	99,761

### **ST Foundation**

	2010	2011	2012	2013	2014
Total trainees	30,285	36,444	28,307	42,257	53,127
Total trainees from beginning of program	111,647	148,136	176,443	218,729	271,856

### (G4-S01/G4-S02/G4-EC1)

	2010	2011	2012	2013	2014
Total trainees	30,285	36,444	28,307	42,257	53,127
Total trainees from beginning of program	111,647	148,136	176,443	218,729	271,856

Benches donated from fundraising in Greater Noida (India)

### **Domains of involvement (%)**

	2012	2013	2014
Young generation and education	79	75	76
Environment	3	2	2
Social welfare and charity	6	6	5
Innovation and high technology	8	8	5
Economic development	3	1	3
ST Foundation	0	5	9
Other	1	3	0

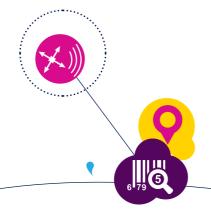
### **Motivation for contribution (%)**

	2012	2013	2014
Community investment	87	85	97
Charitable gift	5	10	2
Commercial initiative	8	5	0

### **Geographical spread of contribution (%)**

	2012	2013	2014
Local	80	39	16
National	19	31	34
International	1	30	50

Note: We estimate to have captured 85% of our contribution



## Awards

Each year we receive external recognition for our sustainability practices. Here is an overview for 2014.

### **Business**

### **Top 10 young Italian innovators**

**COMPANY** 



On May 12 in Bologna, two young researchers from ST Catania were voted among the top10 innovators under the age of 35 in Italy by

Technology Review (the Italian edition of the magazine published by the MIT-Massachusetts Institute of Technology). Ignazio Aleo, 28, holds a PhD in Electronics from the University of Catania. He presented a project to make wearable systems that evolve from sensing to actuating. The invention will benefit medical and physical rehabilitation. Cristina Miccoli, 31, is a member of the ST Technical Staff and holds a degree and PhD in Material Physics from the University of Catania. She presented a project to make gallium-nitrite sensors (instead of silicon ones) to collect data reliably and quickly in a harsh environment.

Her invention enables data to be collected inside combustion engines where the temperature is too high for silicon and where the sensors are exposed to chemical attacks and extreme temperatures and pressure.

### Best Supplier Award 2014 from Pioneer Electronics AsiaCentre



On July 15, Pioneer Electronics AsiaCentre Pte Ltd presented ST with the Best Supplier Award 2014. This came as recognition

for our excellent service in terms of quality, environment, cost, delivery, technology and service. Pioneer chose between 100 suppliers in the Electrical/ Electronics category and rewarded the best performance for the period from April 2013 to March 2014.

### Thomson Reuters Top 100 Global Innovator

TOP100

GLOBAL INNOVATOR

ST was recognized as among the world's most innovative companies in being named a Thomson Reuters Top 100 Global Innovator for the third consecutive year. This prestigious award recognizes companies around the world for their outstanding commitment to innovation, the protection of ideas and the commercialization of inventions.

### Top supplier awards from Coolpad and OPPO



ST received two top supplier awards from smartphone manufacturers Coolpad and OPPO during the customers' Annual Suppliers' Days, on November 25 and December 9 respectively, in the Shenzhen region. It was the third consecutive year that ST received this award from Coolpad in recognition of excellent service, fast response time and outstanding product quality.

### Flextronics award

At Santa Clara (USA), ST received an award from Flextronics as preferred partner for design activity. This award recognizes the efforts of the ST team supporting Flextronics globally.

### Vodafone rewards ST for Outstanding Delivery Performance in 2014



On December 10, ST received an Outstanding Delivery Performance Award from Vodafone. The award recognizes ST's outstanding

commitment and performance to Vodafone's success, through exceptional supply-chain management and customer service. In addition, ST was shortlisted among the four finalists for Vodafone's 2014 Supplier of the year award.

### Electron d'Or



On June 18, the French "ElectroniqueS" magazine awarded ST an "Electron d'Or" for the STCOMET 10, a highly innovative System on Chip (SoC)

platform that integrates all the principal functions of a smart meter on a single chip. STCOMET10 was partly developed within the SOGRID project, led by ERDF and ST in cooperation with a consortium of industrial partners such as Sagemcom, Landis & Gyr, Nexans and laboratories involved in G3 certification such as Trialog and LELAN.

### Best Technical Support and Best Individual Xiaomi awards



ST received two awards at Xiaomi's Supplier Convention held on March 1 in Beijing. Richard Zhu, Sales Manager of North

China Operations received the "Best Attendance" individual award in recognition for his availability and fast response to customer inquiries. ST was awarded the "Best Technical Support" in recognition of our strong engineering support.

### People

### 9th Gawad Kaligtasan at Kalusugan (GKK)





The GKK is a biennial award given by the Department of Labor and Employment

(DOLE) to companies and individuals with outstanding occupational safety and health practices, programs, innovations and contributions.

On October 27, in the individual category, Elizabeth Beronio, EHS Manager, received silver GKK award. In the institutional category, ST Calamba (the Philippines) received silver GKK award.

### European Network for Workplace Health Promotion (ENWHP)



ST Agrate (Italy) received European ENWHP, «Workplace Health Promotion - Companies that promote health» certification.

The European Network for Workplace
Health Promotion is a network of national
occupational health and safety institutes,
public health, health promotion and
statutory social insurance institutions
committed to developing and promoting
good workplace health practice.

## Environment & Operations

## ST Shenzhen (China) recognized as water saving outstanding enterprise



Shenzhen, like some other large cities in Asia Pacific, is under stress and at risk of water shortage.

In 2014, ST Shenzhen was rewarded as one of the city's "water saving outstanding enterprises", due to the local team's dedication.

### Secretary's Award Don Emilio Abello Energy Efficiency Award



On December 4, ST Calamba (the Philippines) received this award for its contribution to energy efficiency and conservation goals of the

country, and substantial effort to mitigate climate change.

### Local Communities

### **Blood donation**



On July, ST Calamba (the Philippines) received an award from the Philippines Red Cross for its 15<sup>th</sup> year of service.

### Support to Bohol (the Philippines)



On November 26, ST Calamba received from the Philippines Red Cross a plaque of recognition for the invaluable role & unfailing support through

its donation to the operations for Bohol Earthquake, Typhoon Yolanda & other disaster management operations.



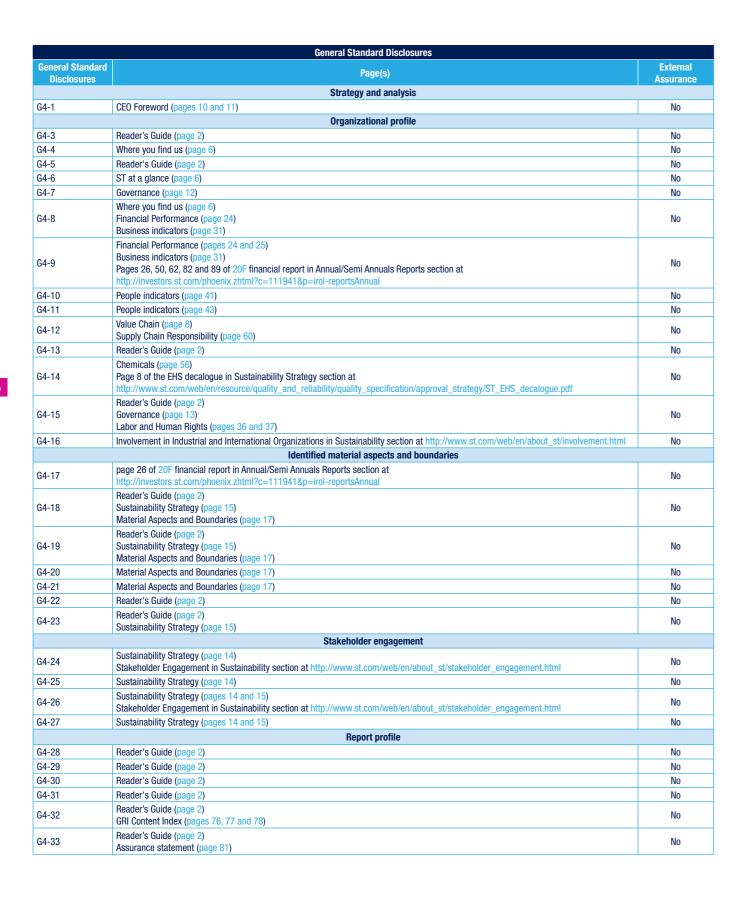


## GRI Content



MAY 2015 SERVICE





I G4-32 I

	General Standard Disclosures	
General Standard Disclosures	Page(s)	External Assurance
	Governance	
G4-34	Governance (page 12) Corporate Governance section at http://investors.st.com/phoenix.zhtml?c=111941&p=irol-IRHome Sustainability Governance section at http://www.st.com/web/en/about_st/sustainability_governance.html Company information at http://www.st.com/web/en/about_st/st_executive_officers.html	No
	Ethics and integrity	
G4-56	Ethics and Compliance (page 18)  Our Cultures & Values in Careers section at http://www.st.com/web/en/about_st/careers/our_culture_values.html  Principles for Sustainable Excelle in Sustainability section at http://www.st.com/web/en/about_st/st_approach_to_sustainability.html	No

	Specific Standard Disclosures		
DMA and Indicators	Page	Omissions	External Assurance
	Category: Economic		
	Material aspect: Economic performanc	e	
G4-DMA	Business (page 23) Financial Performance (pages 24 and 25)		No
G4-EC1	Financial Performance (pages 24 and 25) Business indicators (page 31) Local communities indicators (page 72)		No
	Category: Environmental		
	Material aspect: Energy		
G4-DMA	Environment & Operations (page 47) Energy (page 52)		No
G4-EN3	Energy (page 53) Environment & Operations indicators (page 62)		No
G4-EN4	Energy (page 53) Environment & Operations indicators (page 62)		No
G4-EN5	Energy (page 53) Environment & Operations indicators (page 62)		No
	Material aspect: Water	·	
G4-DMA	Environment & Operations (page 47) Water (page 50)		No
G4-EN10	Water (page 51)		No
	Material aspect: Emissions		
G4-DMA	Environment & Operations (page 47) GHG, Air emissions (page 48)		No
G4-EN15	GHG, Air emissions (page 49) Environment & Operations indicators (page 62)		No
G4-EN16	GHG, Air emissions (page 49) Environment & Operations indicators (page 62)		No
G4-EN17	GHG, Air emissions (page 49) Environment & Operations indicators (page 62)		No
G4-EN18	GHG, Air emissions (page 49) Environment & Operations indicators (pages 62 and 63)		No
G4-EN21	Environment & Operations indicators (page 63)		No
	Material aspect: Effluents and waste	·	
G4-DMA	Environment & Operations (page 47) Chemicals (page 56) Waste (page 54)		No
G4-EN22	Environment & Operations indicators (page 63)		No
G4-EN23	Waste (page 55) Environment & Operations indicators (page 63)		No
G4-EN24	Environment & Operations indicators (page 63)		No
G4-EN25	Environment & Operations indicators (page 63)		No
	Material aspect: Products and services	S	
G4-DMA	Sustainable Technology (page 58)		No
G4-EN28	Environment & Operations indicators (page 65)		No



I G4-32 I

Specific Standard Disclosures  DMA and Indicators  Page  Category: Social  Sub-category: Labor Practices and decent work	
	ıce
Sub-category: Labor <u>Practices and decent work</u>	
· ·	
Material aspect: Employment	
G4-DMA People (page 33) People Development & Engagement (pages 34 and 35)  No	
G4-LA1 People indicators (page 42) No	
Material aspect: Occupational health and safety	
G4-DMA People (page 33) Heath and Safety (page 38)  No	
G4-LA6 Health and Safety (pages 39 and 40) People indicators (pages 43 to 45) No	
Material aspect: Training and education	
G4-DMA People (page 33) People Development & Engagement (page 34 and 35)  No	
G4-LA9 People indicators (page 43) No	
G4-LA11 People Development & Engagement (page 35) People indicators (page 42) No	
Material aspect: Diversity and equal opportunity	
G4-DMA People (page 33) Labor and Human Rights (page 36) No	
G4-LA12 Labor and Human Rights (page 37) People indicators (pages 41 to 43) No	
Sub-category: Human Rights	
Material aspect: Assessment	
G4-DMA People (page 33) Labor and Human Rights (page 36)  No	
G4-HR9 Labor and Human Rights (page 37) People indicators (page 44) No	
Material aspect: Supplier human rights assessment	
G4-DMA Supply Chain Responsibility (page 56)  No	
G4-HR11 Supply Chain Responsibility (page 61) Environment & Operations indicators (page 64)  No	
Sub-category: Society	
Material aspect: Local communities	
G4-DMA Local Communities (page 68) No G4-S01 Local Communities indicators (page 72) No	
Local Communities (page 68)	
G4-S02 Local Communities indicators (page 72) No	
Material aspect: Anti-corruption	
G4-DMA Ethics and Compliance (page 18) No	
G4-S04 Ethics and Compliance (page 19) No	
G4-S05 Ethics and Compliance (page 19) No	
Sub-category: Product Responsibility	
Material Aspect: Product and Service labeling  Supply Chain Responsibility (page 56)	
G4-DMA Sustainable Technology (page 58) Customer Relations (page 28)	
G4-PR3  Supply Chain Responsibility (page 59) Chemicals (page 56) Material declaration in Quality and Reliability section at http://www.st.com/web/en/support/quality/product-environmental-compliance.html	
G4-PR5 Customer satisfaction page 30 of 2013 Sustainability report at www.st.com/company-reports Customer Relations (pages 28 and 29) No	

## Global Compact and ISO 26000 Index

The following table shows the correlation between the STMicroelectronics Sustainability Report and the ten principles of the Global Compact and the ISO 26000 standards.



This is our Communication on Progress in implementing the principles of the United Nations Global Compact and supporting broader UN goals.

We welcome feedback on its contents.

	Global Compact 10 Principles	ISO 26000:2010 clauses
	Company	
Reader's Guide		6.2; 7.5.3
ST at a glance		
Where you find us		
Value Chain		
Significant events		
CEO Foreword		6.2; 7.2
Governance		6.2; 7.4.3
Sustainability Strategy		4.5; 5.2; 5.3; 6.2.3; 7.3.2; 7.3.4
Ethics and Compliance	Principle 10	4.4; 6.2; 6.6.3
Entreprise Risk Management		
	Business	
Financial Performance		6.2; 6.8
Innovation		6.6.7
Customer Relations		6.7
Business Indicators		6.2; 6.8
	People	
Development and Engagement	Principe 6	6.4.3
Labor and Human Rights	Principles 1,2,3,4,5,6	4.8; 6.2; 6.3.3; 6.3.4; 6.3.7; 6.3.10; 6.6.6
Health and Safety		6.4.6; 6.8.8
People indicators	Principles 1,2,3,4,5,6	6.3.10; 6.4; 6.4.3; 6.4.4; 6.4.5; 6.4.7
	Environment & Operations	
Environmental Efficiency GHG , Air Emissions	Principles 7, 8 and 9	6.5.3; 6.5.5
Environmental Efficiency Water	Principle 8	6.5.4
Environmental Efficiency Energy	Principles 7 and 8	6.5.4; 6.5.5
Environmental Efficiency Waste	Principle 8	6.5.3
Environmental Efficiency Chemicals	Principle 7	6.5.3
Supply Chain Responsibility	Principles 2 and 3	4.8; 6.3.3; 6.3.4; 6.6.4; 6.6.6
Sustainable Technology		6.5.3; 6.7.4; 6.7.5
Environment & Operations Indicators	Principles 2,3, 7, 8 and 9	6.5.3; 6.5.4; 6.5.5; 6.7.5
	Local Communities	
Local Communities	Principle 1	6.8
Local Initiatives		6.8
Local Communities' Indicators	Principle 1	6.3.9; 6.5.2; 6.5.3; 6.8
	Company	
Awards		6.2
GRI Content Index		7.6.2
Indicators Index		
External Assurance Statement		7.6.2

## Glossary

	Second phase of manufacturing during which the silicon chip is		
Back-end	mounted in a package	IP	Intellectual Property
Bi-CMOS	Bipolar-CMOS	IPC	Association connecting electronics industries
CDP	Carbon Disclosure Project	ISO	International Organization for Standardization
CEC	Corporate Ethics Committee	KPI	Key Performance Indicator
CE0	Chief Executive Officer	LBG	London Benchmark Group
CFS	Conflict-Free Smelter	LEC	Local Ethics Committee
CMOS	Complementary MOS (Metal Oxide Semiconductor)	MEMS	Micro-Electro-Mechanical Systems
CMRT	Conflict Minerals Reporting Template	MMS	Microcontrollers, Memories & Smartcards
DJSI	Dow Jones Sustainability Index	MOFSET	Metal Oxide Semiconductor Field Effect Transistor
DNV	Det Norske Veritas	MTCE	Metric Tons of Carbon Equivalent
ECOPACK®	Lead-free labelling for RoHS-compliance (the EU Directive on Restriction on Use of Hazardous Substances)	M2M	Machine to Machine
EHS	Environmental, Health & Safety	NGO	Non-Governmental Organization
EICC	Electronics Industry Citizenship Coalition	NYSE	New York Stock Exchange
ELV	End of Life Vehicles	0ECD	Organization for Economic Cooperation and Development
EMAS	Eco-Management and Audit Scheme	OHSAS	Occupational Health & Safety Assessment Series (OHSAS 18001)
EMEA	Europe, Middle East & Africa	PFCs	Perfluorinated Compounds
ENWHP	European Network for Workplace Health Promotion	PMS	Project Management System
ERM	Enterprise Risk Management	R&D	Research & Development
ESG	Environmental, Social and Corporate Governance	REACH	Registration, Evaluation and Authorization of Chemicals
Fab	Semiconductor fabrication plant	RoHS	Restriction of Hazardous Substances
FD-S0I	Fully Depleted Silicon-On-Insulator	SAQ	Self-Assessment Questionnaires
Front-end	First phase of the production cycle involving the manufacturing of circuits on a silicon wafer	SE	Sustainable Excellence
GeSI	Global e-Sustainability Initiative	SOP	Standard Operating Procedure
GHG	Greenhouse Gases	SRI	Socially Responsible Investment
GRI	Global Reporting Initiative	SVHC	Substances of Very High Concern
HSPM	Hazardous Substance Program Management	VAP	Validated Audit Process
IC	Integrated Circuit	WEEE	Waste Electrical and Electronic Equipment
ICT	Information and Communication Technology	WWTP	Waste Water Treatment Plant
IGBT	Insulated Gate Bipolar Transistor	20-F	Annual report filed with the Securities and Exchange Commission

**DNV·GL** 

### MODERATE ASSURANCE STATEMENT

External Statement issued by DNV GL – Business Assurance France Financial year ended 31 December 2014

#### Introduction

Det Norske Veritas Germanischer Lloyd Business Assurance France ('DNV GL – Business Assurance') has been commissioned by the management of STMicroelectronics NV ('the Company') to carry out a verification on the "2014 Sustainability Report" ('the Report') in its draft electronic format.

STMicroelectronics NV is responsible for the collection, analysis, aggregation and presentation of information contained in the Report. Our responsibility in performing the work assignment is solely towards the Management of STMicroelectronics NV and in accordance with the terms of reference agreed with the Company. The assurance statement is based on the assumption that the data and information provided are complete, sufficient and authentic. STMicroelectronics NV's stakeholders are the intended recipients of the assurance statement.

#### Scope of verification

The scope of work agreed upon with STMicroelectronics NV to provide a moderate level of assurance includes the following information and entities:

- Key Performance Indicators for Ethics, Employee Engagement, Labour and Human rights, Global Diversity & Equal Opportunities, Employee Health, Innovation Management, Environmental Efficiency (GHG Air Emissions, Energy, Waste, Chemicals), Sustainable Technology and Supply Chain Responsibility, in accordance with material issues and our previous verification campaign, related to the period between January 2014 and December 2014, as contained in the 2014 Report.
- Our verification was carried out from March to May 2014. As part of this engagement we visited selected sites on the basis of their contribution which represents 24% of the Group's consolidated environmental data and 23 % of consolidated social data (a higher level of Assurance would have required a more detailed review): Geneva (Headquarters), Tours (France), Agrate (Italy), Shenzhen (China).

#### **Verification methodology**

Our assurance engagement was planned and carried out in accordance with the DNV GL 'Protocol for Verification of Sustainability Reporting'. The available parts of Report were evaluated against the following criteria in accordance with the Protocol: Materiality, Completeness, Reliability, Comparability and Stakeholders inclusiveness.

As part of the verification, we have:

- Challenged the statements and claims related to the following subjects: Ethics, Employee Engagement, Labour and Human rights, Global Diversity & Equal Opportunities, Employee Health, Innovation Management, Environmental Efficiency (GHG Air Emissions, Energy, Waste, Chemicals), Sustainable Technology, Supply Chain Responsibility statements and assessed the robustness of the data management systems, information flow and controls;
- Examined and reviewed documents, data and other information made available to DNV GL – Business Assurance France by the Company;
- Interviewed the Corporate Social Responsibility Team and conducted interviews with an excess of 40 company's representatives, we visited in three sites and the company's headquarter (including data owners and decision-makers from different divisions and functions) to assess compliance by the sites visited with Corporate procedures, processes and quidance. Interviews with external stakeholders were not included;
- Performed sample-based audits of the mechanisms for implementing the Company's own policies, as described in the available parts of Report;
- Performed sample-based audits of the processes to review the methods, practices and tools used in the collection, calculation, aggregation, analysis, internal quality control and reporting of qualitative and quantitative data and information, as it is transferred, managed and stored within the Company.

#### Conclusions

It is the opinion of DNV GL – Business Assurance that the 2014 Sustainable Report is an accurate and impartial representation of the Company's sustainability-related strategies, management systems and performance.

Based on the verification work we performed on both the Key Performance Indicators as well as parts of the narratives in the Company's "2014 Sustainability Report", it is our opinion that sufficient evidences have been obtained to achieve a moderate level of Assurance, moreover information and data communicated and subjected to our verification were found to be

In 2014, STMicroelectronics NV presents a satisfactory and dynamic continuous improvement momentum in terms of Corporate Social Responsibility. The axes of progress are well identified at corporate level, deployed and followed at local level. STMicroelectronics NV, further to the renewal of the materiality analysis (end of year 2014), is now committed to the deployment of its new strategy, and strengthening of data internal control measures.

Based on our review, we assessed adherence of the Report to the following principles, on a scale of 'Good', 'Acceptable', 'Need for improvement':

**Materiality**: we consider that the Report includes the major material aspects concerning the Company's performance and stakeholders' concerns.

In our opinion, the level at which the Report adheres to the principle of materiality is 'Good'.

Completeness: we believe that, overall, the topics and indicators contained in the Report cover STMicroelectronics NV material impacts sufficiently to enable stakeholders' assessment of the Company's sustainability performance in 2014

In our opinion, the level at which the Report adheres to the principle of completeness is 'Good'.

**Reliability:** we found that the information and processes are sufficiently collated, recorded, compiled, analysed and disclosed in a manner that allowed us to examine and assess the accuracy of the information.

In our opinion, the level at which the Report adheres to the principle of reliability is 'Good'.

Comparability: we consider that stakeholders have sufficient information that is adequately selected and compiled in order to analyse the changes in the Company's performance over time.

In our opinion, the level at which the Report adheres to the principle of comparability is 'Good'.

**Stakeholders' inclusiveness:** we consider that the views and concerns of stakeholders have been taken into consideration and that dialogue was effective. However, a larger sample of external stakeholders' views should be considered for the coming years.

In our opinion, the level at which the Report adheres to the principle of stakeholders inclusiveness is 'Acceptable'.

#### **Opportunities for improvement**

Our verification report includes observations, findings and opportunities for improvement which have been reported back to the Management of the STMicroelectronics NV. These do not, however, affect our conclusions on the Sustainability Report 2014.

#### Competence and independence of DNV GL – Business Assurance France

DNV GL was not involved in the preparation of any statements or data included in the Sustainable Report. DNV GL maintains complete impartiality in the work carried out and expressly disclaims any liability or co responsibility for any decision a person or an entity may make based on this Assurance Statement. DNV GL is a leading provider of sustainability services, including the verification of sustainability reports. For more information, please visit our web site <a href="https://www.dnvgl.fr/certification">www.dnvgl.fr/certification</a> or <a href="https://www.st.com">www.st.com</a>

For DNV GL - Business Assurance France,

Marc-Antoine Horenfeld Project Manager

Jean-Christophe Carrau Reviewer Paris, May 18<sup>th</sup>, 2015

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DNV GL - BUSINESS ASSURANCE FRANCE

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