SUSTAINABILITY REPORT 2010
Our culture of Sustainable Excellence in Practice

ST Sustainability Mission
To be recognized as world leader in innovation for sustainable development through excellence in our people, our products, the environment and the community.

STMicroelectronics

Alain Denielle, Group Vice President, Corporate Sustainable Development and is managed by the Corporate Ethics Committee.

Our culture of Sustainable Excellence in Practice

This printed report presents STMicroelectronics’ sustainability performance as measured in respect to the material aspects identified as key for the Company’s sustainable development. We have used symbols to illustrate indicators and the level of achievement of our objectives (KPis), which are shown as key performance indicators (KPIs), which are shown as

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For more information on ST-Ericsson’s sustainability strategy and practices of each of its parents, STMicroelectronics and Ericsson, you can also contact us directly at our website or through our access request.

Give us your feedback
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ST Sustainability Mission
To be recognized as world leader in innovation for sustainable development through excellence in our people, our products, the environment and the community.
security, appliances,

value chain

how do we create a chip

Manufacturing Front-end

Assembly Front & Final Test Back-end

R&D Conception Design

Ingot Silicon

New products conception is the result of the Value Chain.

materials, equipment, energy, gas, etc., from whom we purchase raw materials.

Safetys, navigation and engine control and other infotainment…

Our planet

Wafer

how do we create a chip

of electrically testing electrical components and we serve a wide range of customers that are leading companies in the fields of communication, computers and other industry sectors.

DNA analysis, defibrillators, medical imaging, telemedicine,…

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STMicroelectronics AT A GLANCE

ST has two kinds of manufacturing sites: Front-end and Back-end

The Front-end sites produce transistors and integrated circuits on silicon ‘wafers’ through a series of complex processes that enable the transistors in the silicon chip to process electronic information or control the flow of electrical power. The thin slices of silicon range from 5 to 12 inches in diameter, with more advanced technology being required to produce the larger diameters. Back-end sites perform assembly, packaging and testing functions. The individual silicon ‘die’ or rectangles are cut from the wafers and the die are then sealed with wire connections into the ‘package’ or box that connects the chips to an electronic device. The chips are then tested to ensure quality and proper performance.

For more information on ST’s company profile, see www.st.com

Headcount: 3,540 employees (ST + temporary workers)
Profile:
- 75% Men / 25% Women
- Average age: 39 years
- Split by job category: engineers (49%), technicians (19%), operators (32%)
- Domains of expertise: electronics engineer, physicist, chemist, software engineering, packaging, operators and many others
- Synergies via the local presence of Micron-Numonyx, and a strong collaboration with local universities and research institutes

Main activities:
- Research and Development of advanced technologies of BCD and MEMS
- Research and Development of packaging and testing
- Design of products and advanced system architectures
- Manufacturing and industrialization mainly of BCD and MEMS

Cleanroom area: more than 25,000m² for the 8 inches silicon production lines
Production: about 14,000 silicon wafers processed per week (8 inches equivalent) generating more than 9 million integrated circuits per week
Site certifications: EMAS, ISO 14001, OHSAS 18001, ISO/TS 16949, ISO 9001, UNI CEI EN 16001
R&D partners: 50 partners
Investment over the past years: US$3 billions of capital investments since 1996 on site activities

(*) In 2010, the Phoenix site was sold, but ST production ceased at the end of Q1 2011.

For more information on STMicroelectronics Company performance
STMicroelectronics

Sustainability Report 2010

Supporting Sustainable Excellence in ST
Alain Denielle, Corporate Sustainable Development Group Vice President
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2010 was a year of strong recovery for ST after the deep worldwide economic crisis in 2008 and 2009. During that crisis, we were determined that ST would emerge even stronger than before, and we achieved that goal. This is due in large part to the continued dedication of our employees who remained focused on near-term results as well as the future of ST through all the difficulties and the challenges.

Here are some of our most important achievements during 2010:
- We reached the highest revenue level in our history, a record US$ 10.35bn, growing 21.6% in 2010, and at the bottom line, we delivered earnings of US$ 830m.
- We improved our net financial position, turning a net debt of US$ 545m at the end of 2008 into a net cash position of US$ 1.15bn at the end of 2010; a positive turnaround of US$ 1.7bn.
- We significantly increased our sales from new, innovative products, reaping the benefits of the significant R&D efforts we steadfastly maintained during the last two years. In terms of products, MEMS have become pervasive in the exciting smart consumer devices market and, during the year, we achieved the milestone of shipping our one billionth MEMS device. Our new 32-bit microcontrollers and our industrial, analog and automotive products also performed strongly in the market.
- We achieved our best ever safety results in 2010 with a 19% decrease in our recordable cases rate and a 43% decrease in our severity rate.
- Our corporate Health Plan now covers 82% of our employees, compared to 63% in 2009.
- We reduced our energy consumption per production unit by 30% compared to 2009, which also represents a 5.6% decrease compared to 2008 (before the crisis).
- We finalized our fourth EHS Decalogue with ambitious new EHS targets, including the objective of having 100% of our new products eco-designed by 2015. This new Decalogue is accompanied by the decision to increase our environmental investments, focusing on CO2 emissions and energy savings in the coming years.

As in previous years, sustainability was one of our annual priorities and is integrated into our overall company strategy in a variety of ways, including our strong focus on responsible products and on our people. And we see the results: we continued to be included in all of the top five sustainability indices; we received awards from Nokia and the European Institute of Purchasing Management for our continuous involvement in sustainable development; and we saw solid improvement in our employee engagement scores.

Today, ST is a much stronger company. As a result of our actions in 2010 and the efforts of our employees, we are now better positioned to achieve our vision to become the undisputed leader in sensing and power, and multimedia convergence applications. We are also ideally positioned to address our four targeted application areas: energy management and saving, smart consumer devices, trust and data security, and healthcare and wellness. These areas are driven by evolving societal needs and the pressing wider needs of our planet.

ST continues to be at the forefront in tackling such societal and economic challenges with our technology. We are committed to continue to be one of the world’s most innovative and responsible companies, one whose talented and committed people are helping our customers to help make the world a better place on every level: enriching peoples’ lives, making society work better, and helping to preserve the planet.

Carlo Bozotti
President and Chief Executive Officer of STMicroelectronics
In 2010 Alain Dutheil, Chief Operating Officer, announced his retirement after a career at ST spanning 28 years. His successor, Didier Lamouche, joins ST after four years on the company’s Supervisory Board and a long career in the semiconductor industry. In recent years he served as CEO of the French ICT company, Bull.

Looking back and driving forward in our commitment to sustainability

In 2010 Alain Dutheil, Chief Operating Officer, announced his retirement after a career at ST spanning 28 years. His successor, Didier Lamouche, joins ST after four years on the company’s Supervisory Board and a long career in the semiconductor industry. In recent years he served as CEO of the French ICT company, Bull.

Alain Dutheil
Chief Operating Officer and Vice Chairman of the Corporate Strategic Committee

Didier Lamouche
Chief Operating Officer and Vice Chairman of the Corporate Strategic Committee

Interview

Alain, you have been in ST or one of its predecessors for 28 years and in a senior management position for all of these. How would you describe ST’s sustainability journey?

I joined Thomson Semiconducteurs in 1983 and then, STMicroelectronics when it was created in 1987 (SSG-Thomson). Only five years later, under the strong drive and vision of the CEO, Pasquale Pistore, we were among a handful of companies to launch a structured environmental policy. Since then, we have progressively enlarged the scope of our engagement, from compliance to proactivity and from environment to sustainability. And this strong commitment is now recognized by all our stakeholders.

We can be very proud of this because we have never deviated from our path to excellence in sustainability, always striving for the best approach and best results in whatever we addressed, whatever the economic context might be.

Significant Events 2010

March

STMicroelectronics is named by FORTUNE magazine as one of the “World’s most admired companies”. ST was rated by its peers on nine factors including: quality of products, quality of management, global competitiveness, people management and innovation.

April

ST continues its membership of the Die Attach 5 (DAS) Consortium, formed by several semiconductor industry leaders (Bosch, Freescale, Infineon, NXP and ST) to jointly explore and standardize lead-free solders that melt at high temperature for attaching dies to packages during manufacturing. DAS aims at reducing the qualification time needed by customers.

May

ST completes the sale of Numonyx (the joint-venture company it created with Intel and Francisco Partners to supply flash memory solutions) to Micron Technology. ST strengthens its financial position through a focused and less capital-intensive business model.

June

ST’s Secure Microcontroller Division (SMD), through its involvement in Gemalto’s Onomi@topic+ project, won the 2010 EUREKA Innovation Award for its contribution to the architecture and design of the first 0.13µm contactless circuit. Special microchips for smartcards have been developed with very secure microprocessors, incorporating advanced cryptographic material on which an individual’s data could be stored.

ST launches the new solar energy booster, SPV1020, recovering power lost due to solar panel variability. This device deploys an innovative, distributed approach that automatically adjusts solar intensity fluctuations. This technology has significant potential to improve the energy productivity of photovoltaic systems.
In your role as Chief Operating Officer, you have witnessed first-hand many of the challenges the company has faced in the sustainability domain. Which ones stand out for you and how has ST embraced and tried to resolve them?

Actually, sustainability challenges were already common place when I was appointed as COO in 2005, especially with the increasingly stringent requirements of our customers in terms of environmental and then social and ethical performance.

But I would mention two things; the semiconductor market has always been very competitive and subject to significant downturns. To face this economic context in the mid-2000 years, ST had to go through massive restructuring, increasing the relative weight of our Asian production. This resulted in two difficult situations to manage: the restructuring of our western manufacturing sites that we have conducted by alleviating the negative impacts for our people as much as we could; and the alignment of our new Asian sites with our sustainability standards. We succeeded in deploying and applying the same environmental standards and social programs in each and every country in which we operate, thanks to our strong commitment to our Sustainable Excellence values.

Which of ST’s sustainability achievements would you highlight as key for the company and for its wider contribution to sustainable development?

I would like to mention one of the very first steps in ST’s journey to sustainability which is also its foundation; I refer to the deployment of our Total Quality Management (TQM) culture. I am very proud to have participated in the establishment of this key milestone of ST’s history. TQM introduced values that are still important today: a committed management, empowered employees, our dedication to continuous improvement and to our stakeholders’ satisfaction. We have always maintained these robust principles as the basis of our culture, making them evolve to progressively integrate our proactive approach in the environment (TQM) and then in the wider definition of sustainability as it is understood today (through our Principles for Sustainable Excellence).

I am convinced that ST owes a large part of its strong position today to this culture.

In your opinion, how well has ST done to date at integrating its Sustainability strategy into its core business strategy?

When we started our Sustainability strategy, one of the basic ideas was to anticipate changes to legislation and therefore by doing so, to develop a competitive advantage. This is what happened and today the entire industry, including ST, has to integrate sustainability into its core business. It is no more a question of activity; stakeholders, including employees, customers and investors, are expecting more and more in terms of social, environmental and ethical management. I think ST is in a good position with ‘sustainability’ being one of the corporate key annual priorities of the company with a strong focus on product responsibility and people engagement. This integration took place before the business context placed such a strong emphasis on sustainability, which I believe has given ST a distinct advantage in the market.

**INTERVIEW**

Didier, you are well acquainted with the electronic sector and with ST as a company. How do you perceive ST from the perspective of sustainability in the context of the trends and challenges that characterize the sector?

As you said, I have worked for more than 25 years in the electronics industry and I’m very pleased today to take on the role of COO. I think it is probably the best example of industrial success in Europe. When outside ST, I have always been impressed by the vision and the commitment ST had regarding sustainability. ST has always led the pack of all competitors in that field. Having an inside view now, I am impressed by how we “walk the talk” from an execution point of view and how the values of sustainability are embedded deeply inside the company.

How would you like to see ST evolve in the sustainability domain in the coming years?

I want ST to be the leader in this domain. For that, we need to keep on investing for our environmental neutrality, in our people development and well-being and in our innovative and responsible products. There are still a lot of opportunities to reach excellence in these domains and we are committed to continue on this journey.

Your role includes a strong focus on operations, where there are generally plenty of challenges to address. What management approach will you be taking to follow ST’s activities in the sustainability area?

“What gets measured gets done”. ST has already seen the benefits of extensive measurement and quantification of its activities. My intention is therefore to review those results and related actions regularly, on a quarterly basis, with the Sustainable Development Group.

Looking forward, what are the key ways in which you feel ST can continue to integrate ST’s Sustainability strategy in the company’s overall strategy?

From a commitment point of view, we need to make sure we continue at management level to allocate the appropriate level of resources (capital, human effort) to our Sustainability strategy; from a methodology standpoint, I believe we need to “disseminate” the concept not only internally but also through our products e.g. creating less ‘energy-hungry’ products or those with less environmental impact; also helping our customers to build their own products that have the same attributes.
In 2010 ST decided to review the relevance and potential impact of its ‘top sustainability issues’, using the ‘materiality exercise’ as an opportunity to articulate its Sustainability strategy more clearly and deploy it more effectively across the company.

According to you, what challenges is ST facing to keep progressing on the journey of sustainability?

ST has been focusing on sustainability for a long time and today, low hanging fruits have all been picked, meaning that the easy progress is gone. So I would say that one challenge for ST in the sustainability domain now is to address more difficult issues and respond to higher expectations of our stakeholders in terms of sustainability performance.

Could you give us one example of next sustainability focus for ST?

In 2010 we have defined ST’s new environmental strategy with the finalization of our fourth Decalogue. We have renewed our commitments and strengthened our intention to go beyond just doing business in a responsible way, meaning that through our products, we want to address global environmental issues such as global warming with eco-efficient components.

Products seem to be a great opportunity for integrating sustainability into ST’s core strategy and achieve a competitive advantage on the market?

Of course, this is exactly what is happening now. All ST product groups are looking at developing eco-products and products that contribute to improving people’s quality of life. ST helps to limit the power consumption of the devices that our customers create with our components inside. And in the health sector for instance, one of the current and future challenges is an ageing global population and increasing health costs. Here, ST can come up with a lot of smart devices like monitoring systems. Patients using these can remain autonomous thanks to this technology that senses their body functions and communicates the data to medical professionals.

How are sustainability topics and performance reviewed and shared at top management level?

Sustainability is not different from sales or manufacturing performance in the way we are running the company. During our quarterly Corporate meetings with the top ST management, sustainability key performance indicators are reviewed like any other subject. Also we have equally in-depth discussions on the performance that we do on energy, health and other sustainability domains, as on anything else. Sustainability is also a key focus on our Supervisory Board agenda, especially when we discuss the five-year plan and during yearly reviews.
IDENTIFYING OUR MOST RELEVANT ISSUES

In the spirit of continuous improvement, the Corporate Sustainable Development Group facilitated a ‘materiality exercise’ over the course of the year to identify the most relevant issues to be focused on as part of the company’s evolving Sustainability strategy. The key objectives of this exercise were to ensure that: our strategy remains sharp and effective over time; that we focus on the issues that have the greatest impact on our business and on our stakeholders; and that the Sustainability strategy is as closely integrated as possible with the overall company strategy.

A group of members of the top management worked together to evaluate risks and opportunities for ST over a wide range of issues (42 in total) and used a methodology proposed by Business for Social Responsibility (BSR) to retain 25 ‘top issues’ considered to be the most relevant and critical for ST. The company will continue to work on other issues as necessary, but these top 25 issues will be considered high priority and will be the focus of specific sub-objectives, performance measurement and reporting.

The decision was also taken by this top management group to more clearly articulate ST’s Sustainability strategy through the focus on a Sustainability mission, building on key themes contained in the mission — our People, our Products, the Environment and the Community — by accompanying these with high-level objectives, and arranging the top 25 issues under each of the themes. It was decided that each issue should have a clear definition and one or two measurable sub-objectives with identified owners (for example, sites, product groups or a corporate organization). Over time, existing annual key performance indicators that measure the actual performance of the company will be adapted and aligned with these issues and sub-objectives.

It was acknowledged by the top management group that the success of this redefinition of our company Sustainability strategy depends on its appropriation by those who will actually deploy it in the field. With this in mind, a taskforce was launched including the Sustainable Excellence Council*, site managers and their local Sustainable Excellence steering committees*, as well as other managers who are considered owners of measurable sub-objectives or whose organizations play a strong role in achieving specific results. In 2011 these people will provide their feedback, both on the first draft of sub-objectives and on key success factors for an effective deployment of the strategy.

One of the strengths of this new strategic approach to sustainability is that sub-objectives — spanning a three-year timeframe — will be aligned each year to the company’s ‘Policy Deployment’ process for setting annual objectives, defined at the top of the pyramid by Carlo Bozotti, ST’s CEO. All organizations’ ‘Top Page’ objectives will need to align with these sub-objectives in order to contribute effectively to the business. At the same time, this update of the Sustainability strategy remains firmly anchored in the existing foundations of the company’s Code of Conduct, the Principles for Sustainable Excellence, and the Environmental and Health & Safety Decalogue, providing a strong element of continuity and serving as the bridge between past and future.

Interview

Farid Baddache
Director, Europe, Business for Social Responsibility (BSR)

In 2010, you have worked in close collaboration with ST on a ‘materiality exercise’, what is your general perception of the company, and of this project?

This project helped ST question and reshape its strategic priorities and objectives for the next couple of years. There is a lot of value in generating consensus around strategic priorities on sustainability among all people involved internally (Sustainable Excellence Council*, Sustainable Excellence local steering committees*, etc.). ST has a good commitment from its top executives on sustainability issues and benefits from robust internal processes. These are key ingredients to disseminate the required sustainability mindset throughout strategy and operations.

Why is it so key to work on materiality? What is the added value of such an exercise?

The sustainability agenda is very large in scope. ST can no doubt have huge impacts if it is able to focus efforts where there is an obvious level of responsibility and impact on business. Materiality is a key step in strategy development and implementation as it offers opportunities to prioritize issues of relevance and to align on issues before moving on to the next step. Materiality also encourages careful consideration of objectives and strategy in order to properly address relevant issues in a way that is satisfying to stakeholders and is conducive to ST’s business success.

From your experience, in which sustainability domains is ST well positioned in preparation of the future? In which domain do you feel ST should focus more?

ST benefits from a very diversified portfolio of customers. ST’s customers face a wide range of sustainability challenges. There is no doubt that ST’s products have a potential role in addressing these challenges. This has implications for taking a strategic and deliberate approach to integrating sustainability into ST’s customer relationships, and offers the opportunity to develop deep meaningful relationships with customers on sustainability issues. We can contrast this opportunity to some of ST’s peers who, with a much narrower customer base, don’t have the scale of opportunity here. Explicit integration of Sustainability strategy in overall company strategy is a great initiative in this direction. ST will have to further engage with clients to get a robust understanding of their sustainability issues and needs for solutions, learn from existing successes — e.g. on automotive or healthcare businesses — and bring to a greater scale ST’s ability to drive innovation and optimize revenue potential and positioning, enabling clients to face their sustainability challenges.

Note:
* These four high-level objectives are defined and detailed into 25 top issues on page 8.
For several years now, we have prepared our annual Sustainability Report based on high level objectives covering each domain of our Sustainability strategy: company, economic, social, health and safety, environment, product responsibility and supply chain.

In our 2010 Sustainability Report, we have continued to assess our performance against these objectives in our performance overview sections. We used to also summarize achievements in this page but this year we have focused more on our new Sustainability strategy. Based on the ‘materiality exercise’ conducted in 2010, we have reviewed our sustainability objectives, taking into account stakeholders’ expectations along with issues of a global nature and those facing our sector. You will find below the “top sustainability issues” we have defined and on which we will focus in the coming years.

We have decided to articulate our strategy on four pillars: our People, our Products, the Environment and the Community. In each pillar we have defined the key issues we will address. Going forward, we intend to communicate ST’s achievement against these objectives more precisely. This process is still ongoing and will take into account our “top issues” overview.

For more information on ST’s Sustainability strategy and ‘materiality exercise’, see pages 6-7
STMicroelectronics is registered in the Netherlands and subject to the Dutch Corporate Governance Code. We are listed on the New York Stock Exchange (NYSE), Euronext Paris and the Borsa Italiana in Milan. Our policies and practices are designed to meet all our statutory requirements and also to incorporate international best practices. The company was formed in 1987 as a result of a decision by Thomson–CSF (now called Thales) and STET (now called Telecom Italia S.p.a) to combine their semiconductor businesses and to enter into a shareholder agreement. Details of the Agreement and major shareholders can be found on pages 56 and 57 of ST’s Annual Report.

Our Corporate Governance Structure
In accordance with Dutch law, our management is entrusted to the Managing Board under the supervision of our Supervisory Board. Mr. Carlo Bozotti is currently the sole member of our Managing Board with the function of President and Chief Executive Officer. In 2010 the Supervisory Board was chaired by an independent, non-executive chairperson, Antonino Turicchi. Members of our Managing Board and Supervisory Board are appointed and dismissed by our shareholders. The number and the identity of our Supervisory Board members are approved by the ST’s General Shareholders’ Meeting, based on a majority vote. Our Supervisory Board is assisted by a Secretariat whose responsibilities include ensuring the continuing education and training of Supervisory Board members. Our Chief Compliance Officer, Alisia Grenville, serves as the Executive Secretary of our Supervisory Board.

The Supervisory Board met 11 times in 2010. It is advised by four non-executive committees, comprising members of our Supervisory Board and attended, when deemed necessary by the committees, by members of the management team and/or by our auditors, PWC, and outside legal counsel:
- The Nominating and Corporate Governance Committee, when making its recommenda-

### Information on attendance at Supervisory Board and Supervisory Board Committee meetings during 2010

<table>
<thead>
<tr>
<th></th>
<th>Supervisory Board</th>
<th>Audit Committee</th>
<th>Strategic Committee</th>
<th>Compensation Committee</th>
<th>Nomination and Corporate Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of meetings</td>
<td>11</td>
<td>10</td>
<td>1</td>
<td>4</td>
<td>3</td>
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<tr>
<td>Attendance rate</td>
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<td>92%</td>
<td>100%</td>
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<td>100%</td>
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<tr>
<td>Attendance rate</td>
<td>+3.2%</td>
<td>+12.2%</td>
<td>0%</td>
<td>+7.5%</td>
<td>0%</td>
</tr>
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<td>evolution versus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>last year</td>
<td></td>
<td></td>
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</tbody>
</table>
Company performance • Corporate Governance

Our Standards of Business Conduct
Our standards of integrity and business conduct are specified in our Corporate Policy on Business Conduct and Ethics and our Principles for Sustainable Excellence which require us to integrate and execute all of our business activities, focusing on our employees, customers, shareholders and global business. These Principles apply to all people working in ST and are the top-level reference for guiding our behavior and decision-making. Business ethics, the respect of human rights and a sense of responsibility to all our stakeholders and to the environment are a matter of personal integrity for each of us, and compliance is mandatory.

The Corporate Policy on Business contains specific anti-corruption clauses. In addition to setting the standards of conduct, the Policy also specifies how ethical, legal, environmental, employment and human rights issues must be addressed. These standards are communicated to employees and permanent consultants of all ST companies and all managers are required to renew their commitment to compliance by signing the Corporate Policy on Business Conduct and Ethics each year. In 2010, 99.9% of eligible managers signed the Policy (eligible = approximately 20% of total population). ٠ SO3١

Compliance e-learning was first introduced in 2007 and will be re-launched in 2011 to include a customized module on standards of...
Business Conduct and Ethics. This revised module will be made available to a wider range of employees than before, raising awareness and strengthening our levels of compliance across a broader range of business areas and functions.

No fines or penalties were imposed on any ST businesses during 2010 for any significant non-compliance with laws or regulations. [SO8]

Our Corporate Ethics Committee
The Corporate Ethics Committee was established in 2007 with a mandate to provide advice to management and employees about our Principles for Sustainable Excellence, our Business Conduct and Ethics policy and any other ethical issues. It met eight times during 2010 and has an ongoing commitment to meet at least six times a year, with at least one meeting each quarter. This committee, chaired by the Chief Compliance Officer, fulfills a role as an advisory body for the Managing Board and employees on all areas relating to business conduct and ethics.

Raising Concerns
ST provides two formal channels for employees and business partners to raise serious concerns relating to aspects of business conduct; the first is via an external ombudsman and the second is a direct confidential channel to the Corporate Ethics Committee. Employees are made aware of these via the internet, intranet and supporting communications. The contact details are also sent to suppliers on request. All reports through these channels are raised at the Corporate Ethics Committee and all valid concerns that fall within scope are investigated. During 2010, 22 cases were reported through these channels resulting in four investigations. Allegations are classified according to ten categories. The nature of allegations and investigations during 2010 included: wrongdoing, conflict of interest and administration.

Improvements in 2010
During 2010, we made the following improvements to further strengthen our ethics and compliance:

Regional Ethics committees were introduced in several regions. Their role is to ensure and facilitate the implementation of corporate policies at local level and to also monitor compliance with local legislation. After a review of this new structure, further Regional Ethics committees will be introduced.

Behavioral criteria have been incorporated into senior managers’ overall performance assessments under the leadership of the Chief Administrative Officer. A new policy, introduced in 2010, formalizes the need for everyone at ST to display the highest standards of ethical and professional behavior and recognizes and rewards them for doing so. [4.5]

Our Internal Audit function previously reported to our Chief Compliance Officer. In 2010 we took the decision to review and change this structure to reflect best governance practice. The Head of Internal Audit now reports directly to the Audit Committee of our Supervisory Board which now has a direct and independent oversight of the Internal Audit function, the audit program and audit findings.

Our Risk Management
Management of risk is well embedded in ST’s organizations with policies, procedures and programs in place to manage and monitor those risks. Last year we mentioned our Enterprise Risk Management (ERM) program that has been designed to include a corporate risk reporting and management process. [4.9]

In 2010, we carried out a structured manual review of corporate risks, with the involvement of Executive Vice Presidents and their respective organizations. [SO2]

For more information on the ‘materiality exercise’ conducted in 2010, see pages 7 and 8.

The process highlighted a number of risks already available on pages 6-20 of our 2010 Annual Report.

In 2011, ERM will be further introduced across the company under the responsibility of our Chief Compliance Officer and overseen by the Audit Committee of our Supervisory Board. Recommendations will be made to address major risks highlighted by this company risk review and after corporate formal endorsement, additional action plans will be implemented and followed up.

Our Internal Audit Program will also benefit from the expanded risk assessment with the continued move towards risk-based auditing. The closer linkages between our audit and risk management processes will help to both optimize the efficiency and effectiveness of Internal Audit.

Our Policy Framework [4.8]

Our corporate policies provide a universal, consistent framework for compliance and Sustainable Excellence across the company. These are supported by corporate Standard Operating Procedures (SOPs) which are in turn supported by Local Operating Procedures (LOPs). LOPs interpret and implement corporate policy at local and regional level, taking into account locally-applicable legislation. Together, the set of policies and procedures support internationally agreed standards, including the United Nations Global Compact, the OECD Principles of Corporate Governance and the OECD Guidelines for Multinational Enterprises.

Non compliance reporting in 2010 [SO4] [HR4]
The number of incidents reported to the ombudsman or the Corporate Ethics Committee 22
The number of corporate level investigations 4
Number of incidents closed 16
Open incidents, currently pending 6

CORPORATE POLICIES
The following is a sample of some of our key policies that support our Principles for Sustainable Excellence.

PRINCIPLES FOR SUSTAINABLE EXCELLENCE

- Business Conduct and Ethics
- Classification and Protection of Proprietary Information
- Conflicts of Interest
- Corporate Data Quality
- Corporate Business Continuity
- Corporate Environmental Policy
- Corporate Health and Safety
- Corporate Quality
- Corporate Standard Policies and Operating Procedures
- Introduction of the Corporate Accounting Manual
- Management Independence
- Recruitment
- Sustainable Excellence in Human Resources Management

For more information on the ‘materiality exercise’ conducted in 2010, see page 7.

For more information on the ‘materiality exercise’ conducted in 2010, see page 8.

Our 2011 objectives

- Publish our group-wide policy on harassment.
- Re-launch revised business conduct e-learning.
- Implement Enterprise Risk Management.
- Review the effectiveness of our confidential reporting channels.

STMicroelectronics Sustainability Report 2010 11
A sustainable approach to business creates long-term value for stakeholders by seizing opportunities and managing risks relating to economic, environmental and social issues. Since the 1990s, STMicroelectronics has been a pioneer in integrating environmental issues into its business approach and we have maintained our commitment to be among the most sustainable and responsible companies in the world. Throughout ST, we evaluate how to seize new opportunities that arise from sustainability challenges and take strategic decisions that we believe to be in line with the expectations of our stakeholders.

In 2010, we were recognized by two key partners for excellence in sustainability approach and performance:

**2010 EIPM Award**

The European Institute of Purchasing Management (EIPM), considered as one of the world’s leading educational centers in strategic planning and supply management, has launched an online self-assessment tool to reward companies for their excellence in procurement management, based on the European Foundation for Quality Management (EFQM) Excellence Model. A total of 80 companies competed for these six EIPM awards.

ST has been awarded for the maturity of the purchasing processes and its excellence in corporate social responsibility. In addition to this award, we obtained an overall excellent score in our assessment against EFQM model criteria.

**Nokia Sustainability Award**

Nokia, the world leader in mobile communications, has recognized ST’s efforts to ensure sustainable business operations by awarding its “Outstanding Achievement in the Category of Sustainability” at Nokia World 2010 in London.

Jean-François Baril, Nokia’s Senior Vice President and Head of Sourcing, commented: “Nokia and STMicroelectronics have worked closely together over many years, sharing concepts and best practices for sustainability, most intensely within the area of environmental protection”.

Andrea Cuomo, STMicroelectronics’ Senior Executive Vice President for Europe, Middle East and Africa, welcomed the award and said that ST “continually endeavours to achieve excellence in quality, customer satisfaction and world-class environmental performance”.

**ECONOMIC**

**REWARDS FOR A SUSTAINABLE APPROACH TO BUSINESS**
SOCIALLY RESPONSIBLE INVESTMENT

Investors, non-financial rating agencies and analysts regularly approach ST to evaluate our strategy and progress in several non-financial domains: environment, social, health, safety, ethics, governance, supply chain management and product responsibility. ST considers these evaluations as important indicators of our progress in sustainability.

Our 2010 sustainability rankings and inclusion in Socially Responsible Investment (SRI) indices

In 2010 ST’s performance has been recognized by several key organizations in the area of sustainability:

- Bank Sarasin re-confirmed ST as the sector leader and included our stock in their investment portfolios;
- Oekom evaluated ST as B Prime - placing us among the world’s best companies;
- Corporate Knights ranked ST 87th in the Global 100 Most Sustainable Corporations in the World;
- ST is 11th (out of 50) in the Lundquist CSR Online Awards (Italy).

ST also remains listed in the main series of benchmark ethical indices:

- Dow Jones Sustainability Indices;
- FTSE4Good;
- Advanced Sustainable Performance Indices Eurozone (ASPI);
- E Capital Partners Indices (ECPI);
- Ethibel Sustainability Index.

In 2010, FTSE and ECPI Groups have partnered to create Italy’s first ethics indexes (FTSE ECPI Italy SRI Benchmark and Leaders indices). ST was included in these two new SRI components that highlight global sustainability leaders. ST is considered as a company with a clear long-term strategic attitude, a sound operational management and a positive contribution towards society and the environment.

Our interactions with the Socially Responsible Investment (SRI) community

Ethical indices are mainly developed on the basis of analyses performed by extra-financial rating agencies. These agencies evaluate and rate our Sustainability strategy through our policies, management systems and performance. Each uses its own methodology which includes questionnaires that we complete, public information and other outside sources of information.

More generally, interacting with the SRI community brings significant benefits for ST. Through the regular evaluation of our stakeholders’ expectations we understand better how to adapt and shape our approach to sustainability. Throughout the year we communicate our sustainability successes and challenges to the SRI community.

Over the past years, we have seen the SRI investors, analysts and rating agencies request-
Sustainability has been at the heart of ST’s culture since its creation in 1987. Can you describe the gradual integration of sustainability into the actual business strategy over the years?

We began introducing the Total Quality Management (TQM) culture in ST when this approach was unknown in most European companies. The deployment of TQM required a strong effort over more than 10 years, beginning in the 1990s and continuing through the first years of the 2000s. The values of TQM have been embraced by ST executives and managers, and TQM is now completely integrated within the values that inspire the behavior of ST employees.

In the last five to six years, ST’s TQM has evolved into a more global approach called the Sustainable Excellence program. This approach helps create a strong link between our values and our business objectives. For example, our products based on energy saving, green energy generation, healthcare and automation allow us to contribute to an improved long-term sustainable quality of life. ST’s environmentally-friendly production processes also play a key role in our commitment to the Sustainable Excellence program’s ideals.

With its unique range of technologies and products, ST is well positioned to help its customers meet the growing needs of end-users, and society as a whole. ST is able to create broad economic value for society as a result of a proactive and innovative approach to responsible products.

What is the business strategy of ST today with regard to responsible products? And how would you define “responsible products”?

We develop different strategies according to product features. A characteristic of responsible products is that they respond not only to business needs but also to needs expressed by society as a whole. For example, we develop products that allow lower power consumption, both by the products themselves, as well as at the final application in which they are used. At the same time, we develop products which allow “greener” energy production. This policy has enabled us to build and maintain a competitive advantage in the market.

To what degree is this approach formalized? For example, are there specific objectives or marketing activities relating to the generation of responsible products?

The generation of responsible products is largely embedded into our business needs. Responsible products have, inherently, a greater possibility to attract customers and end-users. A product permitting lower power consumption is easier to sell, especially in battery-operated applications or solutions requiring high power. Our recent marketing campaigns (i.e. Sense and Power) focused principally on the energy-saving capabilities of our products.

How are these products classified or how is their ‘market’ value measured?

Our approach to eco-designed products is global. Manufacturing of eco-compatible products must start from the raw materials used, continue throughout the production process, during product operation and disposal at the end of product lifecycle. This is mandatory for our business, as it is a specific requirement from a majority of our customers. And it also promotes goodwill between ST and the local communities where we have operations. So if we are not eco-compatible at the company level, we cannot survive for long in the marketplace.

What opportunities do you see emerging from the recent ‘materiality exercise’, with its goal to focus on key sustainability issues and their impact on business success and stakeholders?

The ‘materiality exercise’ is a very good way to link our Sustainability strategy to mandatory business needs. Through this exercise, we also have the opportunity to focus on the matters most relevant to corporate responsibility. Moreover, it promotes a greater confidence in our ability to achieve the relevant objectives, because we actually link our sustainability objectives to imperative business needs.

Do you see increasing demand from customers for responsible products? How much is the demand encouraged by ST or driven by customers?

The demand for responsible products is constantly growing. The reasons are related to increasing energy demands which lead to cost increases, and also to intermediate and final customers’ sensitivity to the social and ecological impact of large companies’ operations and products. The demand for responsible products is equally encouraged by our company’s product offering and by customer requests.

How would you like ST to be perceived, by its customers, stakeholders and society in general, from the perspective of its responsible products?

As a responsible company, I believe that it’s mandatory that we have an excellent perception by our customers in terms of responsible products and, more generally, a responsible modus operandi. This perception, undoubtedly, represents a competitive advantage in the market. Moreover, our employees and stakeholders can all be proud of being protagonists in ST’s sustainability approach.

Interview with Carmelo Papa, Senior Executive Vice President, General Manager Industrial & Multisegment Sector

Economic impact • Business development

RESPONSIBLE PRODUCTS AT THE HEART OF ST’S BUSINESS STRATEGY

Interview

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Research and Development (R&D) depends on effective communication and collaboration between ST organizations to share information and best practices. In 2010, R&D participants at ST further improved this collaborative style of working to define and adopt common tools, processes and policies in order to increase R&D effectiveness.

R&D is critical to ST’s ongoing competitiveness in the semiconductor market which is driven by constant demands for innovative, cheaper and higher quality solutions. This requires significant product innovation as well as advances in manufacturing technologies. R&D is also key to the achievement of sustainability through the development of responsible applications that reduce the eco-footprints of our products and our manufacturing.

ST owes its current strong position in the market to significant R&D investment. To build on this investment, ST’s senior management launched the R&D Excellence program in early 2010 to create the best possible conditions to foster an effective R&D environment. A dedicated steering committee composed of Product Groups, R&D and Corporate Strategy Vice Presidents was created. This senior management group observed that Product Groups, Front-end Manufacturing and Technology and R&D organizations all have a significant number of engineers dedicated to R&D but that they often develop their own tools and methods without benefiting from common approaches. The group agreed on a number of areas that should be harmonized throughout the company in order to generate more value from our R&D investments.

To address this, five multi-disciplinary task forces were formed to address the following aspects:

- **Metrics**: The first step in leveraging R&D investments is to improve the measurement and tracking of our R&D activities. A task force has focused on developing the right indicators of success and to harmonize their measurement across the organizations. The objective is to complete the deployment of this initiative within all product groups by the end of 2011.

- **R&D tools harmonization**: Over time, the company has adopted or developed many tools to manage its R&D, sometimes with different tools to achieve the same goals in different areas of the company. There will be an emphasis during 2011 in standardizing the use of fewer tools and associated R&D processes. Also, a new tool for ‘requirement management’ will be introduced in 2011 to manage the emerging complexity of describing the functionality of our most complex products.

- **Intellectual Property management**: As the complexity of our products grows, it becomes more and more critical to weigh up the relative benefits of strategic intellectual properties (IPs) that must be developed in house, against those that we can source outside. An additional complexity relates to the trend for several IPs to be made available concurrently to different organizations within both ST and ST-Ericsson. This makes R&D investment decisions even more critical because of this greater company-wide impact. The objective of the Intellectual Property management work group was to define a process to ensure timely and informed make or buy decisions relating to critical IPs for the whole company, thereby maximizing overall R&D efficiency. This process has been applied in 2010 to several key IPs that are shared across multiple product lines. The work-group has now handed over its mission to a newly created IP Sourcing & Strategy organization. Their activity is overseen by the Corporate IP Committee which meets quarterly and consists of a pool of Vice Presidents.

- **Software and systems development** - ST increasingly delivers a large amount of software together with its products. Indeed, several leading edge developments involve more software engineers than IC designers. Being able to provide an optimized combination of hardware and software is an essential aspect of our customer service and product differentiation. These combined platforms drastically reduce the amount of development our customers need to do on top of our platforms to deliver their products, allowing them to increase the number of products they bring to market while focus on differentiation. Here again, this work group has collaborated with ST-Ericsson that already invests significantly in the development of these solutions. The objective has been to build a common approach to quality software development based on best industry practices, capitalizing on combined skills, knowledge and best practices. As a result we plan to train 500 software engineers in 2011.

- **People** - (see text-box).

The program has so far met many of the objectives that were set by the top management. These deliverables have already started to bring benefits to the key players. More will be introduced and implemented in 2011.

**R&D EXCELLENCE - PEOPLE STREAM**

The lasting success of any program is often determined by employee engagement and creating the right mindsets. This becomes even more significant for programs like R&D excellence which are highly dependent on individual and team skills. With the aim of focusing on the softer aspects of the R&D Excellence program, a specific people stream was launched in the latter half of 2010.

A dedicated working group has identified five major focus areas:

- **organizational structures** with the objective of gaining flexibility and leveraging collective competencies;
- **people R&D skills and careers** aimed at creating broader exposure to and interest in R&D;
- **SMART (specific, measurable, attainable, realistic and timely)** R&D goals with better linkages with market needs;
- **creating a conducive environment** with the objective of bringing people together to enhance knowledge sharing, internally and externally to foster innovation. Another aspect is to make the working environment more efficient by removing operational bottlenecks, through optimized approval processes and accelerated procurement;
- **raised profile of R&D experts** to enhance the image of technical disciplines and to promote R&D.

The working group is now focusing on actions to achieve these objectives with the target of developing a set of proposals by the second quarter of 2011, with implementation planned for later in the year.
2010 was a year of rebound and record sales at STMicroelectronics

In 2010, the semiconductor industry significantly rebounded after the previous year’s decline, with the total revenues reaching new historically high levels.

The 2010 overall improvement of our performances, particularly in terms of higher revenues and manufacturing efficiencies, coupled with a strong decrease in the amount of impairment and restructuring charges, led to a significant turnaround of our operating results, moving from a loss of US$ 1.03bn in 2009 to an income of US$ 476m in 2010. Our continued effort to develop new and exciting products has started to translate into increased profitability as operating results improved in 2010 by approximately US$ 1.5bn on US$ 1.84bn of higher revenues.

In 2010, we were well prepared to take advantage of significantly better industry conditions with the right portfolio and we have started to turn our vision of leadership in ‘Sense and Power’ applications and in multimedia convergence into reality. In the last eight quarters, we went through the most severe economic recession in 2009 and successfully capitalized on the 2010 market recovery. Throughout this time frame, we remained focused on our growth and profitability objectives.

We finished the year on a very strong note

We were growing revenues sequentially during 2010: by 9% in Q2, by 5% in Q3 and by 7% in Q4, registering record quarterly sales and we continued to increase our profitability, moving from an operating loss of US$ 20m in Q1 2010 to an operating income of US$ 213m in Q4 2010. Our gross margin increased in 2010 to 38.8% of revenues from 30.9% in 2009, benefiting from higher sales volume and, consequently, the improved loading of our fabs, overall improvement in our manufacturing efficiencies resulting from our cost optimization initiatives and restructuring plans and new product introductions in several of our product lines.

Our sales by market segment and region

In 2010, we registered a strong performance, posting growth in all regions and in all product segments, with the exception of Wireless. Our revenues reached a record US$ 10.34bn, increasing 21.6% compared to last year, as a result of a broad product portfolio and significantly better industry conditions.

By product segment, our revenues performance was supported by the strong results within both Industrial and Multisegment Sector (IMS) and Automotive, Consumer, Computer and Communication Infrastructure (ACCI) segments, registering an increase of approximately 45% and 32%, respectively, while Wireless sales registered a decline of approximately 14%.

By location of order shipment, Greater China-South Asia and Americas were the top performers, with approximately 32% and 31% growth, respectively, largely exceeding the results registered by Japan-Korea at approximately 15% and EMEA at approximately 7%. Our largest customer, the Nokia group of companies, accounted for approximately 14% of our net revenues in 2010 compared to about 16% during 2009. Important new products recently launched include:

- in the area of MEMS, new families of gyroscopes, high-performance and low-power stereo MEMS microphones, and a new family of high acceleration sensors for advanced airbag systems;
- extremely small silicon pressure sensors for use in smartphones, sports watches and other portable equipment, and a S-Touch® Finger Tip controller, offering smartphones true multi-touch capability;
- important new families of 32-bit microcontrollers for automotive (including several design wins at tier-one OEMS in Europe and the US), industrial and security applications;
- new complex digital ASICs for computer peripherals and communication infrastructure;
- new generation of set-top box and TV products that offer our customers top performance at low power consumption focusing on 3D graphics and 3DTV applications, and three new highly integrated SoCs for integrated digital TVs (iDTV);
- tie-ups with key leaders in markets that require secure solutions, significantly in NFC (Near-Field Communications) applications;
- key products for industrial markets, including the dSPIN motor-control platform, LED lighting drivers and smart-metering chips;
- in wireless, ST-Ericsson’s solutions were chosen by two leading handset manufacturers – the M5730, an extremely power-efficient and compact HSPA+ modem capable of transmitting data at speeds of up to 21Mops, has been launched, ST-Ericsson is preparing to ramp new products, such as the thin modem and U800 smartphone platform;
- and, of course, a wave of new products in the areas of advanced analog, power and smart power for all applications.

Our inclusion in sustainability indices

In 2010, ST confirmed its inclusion in the major sustainability indices, including ASPI (France), Dow Jones Sustainability Index (United States, Germany), Ethibel Sustainability Index (Belgium), ECPI (Italy) and FTSE-4Good (United Kingdom). In 2010, ST has been included in two new sustainability indices, created in partnership between the FTSE and ECPI Groups. Our inclusion in these indices is based on the evaluation of publicly available information and our responses to specific questionnaires and requests for information.

Our 2011 objectives

- Satisfy shareholder expectations through financial and non-financial performance.
- Create economic value for stakeholders.
- Create the conditions for sustainable innovation.
SUSTAIN SHAREHOLDERS’ EXPECTATIONS THROUGH FINANCIAL AND NON-FINANCIAL PERFORMANCE

ST key figures | EC1 |
--- | --- | ---
| | 2008 | 2009 | 2010 |
| ST1 Net revenues | US$ 9,842m | US$ 8,510m | US$ 10,346m |
| ST2 Net earnings (losses) | US$ (786)m | US$ (1,131)m | US$ 830m |
| ST5 Gross profit as a percentage of sales | 36.20% | 30.90% | 38.80% |
| ST3 Gross profit | US$ 3,560m | US$ 2,626m | US$ 4,015m |
| ST4 Earnings (losses) per share | US$(0.88) | US$(1.29) | US$ 0.94 |
| ST6 Market share versus TAM (Total Available Market) | 3.96% | 3.76% | 3.47% |

Dividends paid | EC1 |
--- | ---
| | 2006 | 2007 | 2008 | 2009 | 2010 |
| Dividends | 107 | 269 | 240 | 158 | 212 |

Operating income and cash flow | EC1 |
--- | ---
| | 2006 | 2007 | 2008 | 2009 | 2010 |
| Operating income | 677 | (545) | (198) | (1,023) | 476 |
| Net operating cash flow | 666 | 840 | 548* | 227** | 972*** |

(*) Excluding payments for mergers & acquisitions (Genesis and NXP) which totalled US$1,694m.
(**) Excluding net proceeds received in business combination (Ericsson Mobile Platform) which totalled US$1,137m.
(***) Excluding payments for mergers & acquisitions which totalled US$11m.

Average daily trading volumes | STE8 |
--- | --- |
| Euronext Paris/Borsa Italiana Milan/NYSE |

Share price 2010, NYSE | STE8 |
--- | ---
| US$ |

ST sales by market segment | EC1 | 2.7 | STE9 |
| | 2007 | 2008 | 2009 | 2010 |
| Automotive | 14.4 | 13.8 | 12.2 | 14.0 |
| Computer | 12.4 | 12.0 | 12.9 | 13.0 |
| Consumer | 14.0 | 13.6 | 11.5 | 12.2 |
| Distribution | 18.2 | 18.3 | 15.8 | 20.9 |
| Industrial & Others | 7.5 | 9.0 | 7.7 | 8.1 |
| Telecom | 33.5 | 33.3 | 39.9 | 31.8 |

ST sales by region | EC1 | 2.7 | STE7 |
| | 2007 | 2008 | 2009 | 2010 |
| EMEA | 33.4 | 30.7 | 28.4 | 25.0 |
| Americas | 13.4 | 13.6 | 11.9 | 12.9 |
| Greater China - South Asia | 41.5 | 39.9 | 40.6 | 44.1 |
| Japan - Korea | 11.7 | 15.8 | 19.1 | 18.0 |

ST Revenues | EC1 | 2.7 | STE11 |
| | 2006 | 2007 | 2008 | 2009 | 2010 |
| ST Sales | 9,854 | 10,001 | 9,842 | 8,510 | 10,346 |

ST inclusion in the main sustainability indices | STE11 |
| | ASPI (EU) | DJSI (US) | Ethibel Sustainability Index (Belgium) | ECPI (Italy) | FTSE ECPI Index series (Italy) | FTSE4GOOD (United Kingdom) | TOTAL |
| | DJSI World | DJSI STOXX | ESI Excellence Europe | Ethical Index Enu | Ethical Index Euro | FTSE ECPI Italia SRI Benchmark Index | FTSE ECPI Italia SRI Leaders Index | FTSE4GOOD Europe Index | FTSE4GOOD Global Index |
| 2010 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | 12 |

For more information on the indicators presented in this section, please refer to the Reader’s Guide at the beginning of the report.

You can find the full disclosure on management approach on http://www.st.com/internet/com/about_st/st_company_overview.jsp
Economic performance overview 2010

CREATE ECONOMIC VALUE FOR STAKEHOLDERS

Some key achievements in partnership with our customers
We believe that strategic alliances with customers and industry partners are critical to success in the semiconductor industry. We have a strategy based on four tenets, which we believe will help us gain market share:

- We work with our key customers to identify evolving needs and new applications in order to develop innovative products and product features. We have formal alliances with certain strategic customers that allow us and our customers to exchange information and which give our customers access to our process technologies and manufacturing infrastructure. We have entered into several strategic customer alliances, including alliances with Bosch, Continental, Hewlett-Packard, Marelli, Nokia, Pioneer, Samsung, Seagate, Sharp, Sony-Ericsson and Western Digital. We are actively working to expand the number of our customer alliances, targeting OEMs in the United States, in Europe and in Asia.
- We are targeting new major key accounts, where we can leverage our position as a supplier of application-specific products with a broad range product portfolio to better address the requirements of large users of semiconductor products with whom our market share has been historically quite low.
- We have targeted the mass market, or those customers outside of our traditional top 50 customers, who require system-level solutions for multiple market segments.
- We have focused on two regions as key ingredients in our future sales growth. The first is Greater China-South Asia and the second is Japan-Korea. We have launched important marketing initiatives in both regions.

Creating value for our suppliers
While the amount paid to suppliers of tangible assets is an official and audited figure published in our 20-F report, the split of purchases between tangible assets, materials and others is based on different data sources and timeframes (see graph ‘Purchase expenses by category’). It aims to give a realistic picture of the most important transactions between ST and its main supplier categories but it should not be considered as official and audited accounting information.

We use three main critical types of suppliers in our business: equipment suppliers, raw material suppliers and external subcontractors.

Demand for increasingly smaller chip structures means that semiconductor producers must quickly incorporate the latest advances in process technology to remain competitive. Advances in process technology cannot be brought about without commensurate advances in equipment technology and equipment costs tend to increase as the equipment becomes more sophisticated.

Our manufacturing processes use many raw materials. The prices of these materials are very volatile and they are obtained from diverse sources on a just-in-time basis.

It is then important for us to closely work with our suppliers and we have joint development programs with some of them such as Air Liquide, ASM Lithography, Hewlett-Packard or PACKTEC.

For more details on our suppliers and subcontractors management, see pages 62-63

Our economic contribution to society
We operate in many jurisdictions with highly complex and varied tax regimes. Our tax rate is variable and depends on changes in the level of operating profits within various local jurisdictions and on changes in the applicable taxation rates of these jurisdictions, as well as changes in estimated tax provisions due to new events. We currently receive certain tax benefits in some countries, and these benefits may not be available in the future due to changes in the local jurisdictions.

For more details please refer to our annual report

Other developments
On January 4, 2010, we signed a joint agreement with Enel and Sharp for the manufacture of triple-junction thin-film photovoltaic panels in Italy. On August 2, 2010, we announced, together with Enel and Sharp, the signature of a binding commitment letter for a project financing of around € 150m by a group of banks and our equal share joint venture, named 3Sun, began operations at the Catania (Italy) factory. The Catania factory is to be financed through a combination of equity from sponsors, grants from the Italian Joint Ministerial Committee for Economic planning, which recently committed € 49m to this project, and project financing provided by leading banks. Panel production at the Catania plant is scheduled to begin in the second half of 2011.

In 2010, we continued the execution of the framework agreement with the French Ministry of Economy, Industry and Employment, the “Nano2012” Research and Development program. Under this agreement, we are the Coordinator and Project Leader and have been allocated up to € 340m (about US$ 450m) in grants for the period 2008-2012 if all technical parameters and objectives are met. Nano2012 is designed to promote development of advanced CMOS (32nm and below) technologies for System-on-Chip semiconductor products in the Grenoble-Crolles region of France, in cooperation with International Semiconductor Development Alliance (ISDA) led by IBM and grouping seven leading world-wide semiconductor partners.

All of these worldwide activities create new ideas and innovations that enrich our portfolio of intellectual property and enhance our ability to provide our customers with winning solutions. Furthermore, an array of important strategic customer alliances ensures that our R&D activities closely track the changing needs of the industry, while a network of partnerships with universities and research institutes around the world ensures that we have access to leading-edge knowledge from all corners of the world. We also play leadership roles in numerous projects running under the European Union’s Information Society Technologies programs.

See more on page 19

For more details please refer to our annual report

Payments for purchases of tangible assets | STE1 | US$m

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchases of tangible assets</td>
<td>1,553</td>
<td>1,140</td>
<td>983</td>
<td>451</td>
<td>1,034</td>
</tr>
</tbody>
</table>

All taxes of the year | EC1 | US$m

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax expense for the year</td>
<td>98</td>
<td>64</td>
<td>49</td>
<td>(34)</td>
<td>183</td>
</tr>
</tbody>
</table>
Research and Development

While R&D is essential to all semiconductor companies, we at ST place particular emphasis on it and believe that this unswerving commitment has been a key factor in our success. New developments in semiconductor technology can make end products significantly cheaper, smaller, faster, more reliable, and embedded with more functions than their predecessors. This directly results in value creation for our customers and for ST. In addition, being one of the industry’s most innovative companies is important for motivating our people and attracting talented young engineers.

The main R&D challenge we face is to continually increase the capabilities, speed and cost-effectiveness of our devices and the range of competencies required as we increasingly seek to deliver complete system solutions, while ensuring that technological developments are converted into profitable commercial products as quickly as possible.

Because our product portfolio ranges from discrete power devices to the most complex System-on-Chip devices, our technology R&D follows two main directions. One is the development of next-generation Complementary-Metal-Oxide-Semiconductor (CMOS) processes that are mastered by very few companies and the other is the development of proprietary analog, sensing and power technologies.

CMOS technology is used to manufacture the most advanced integrated circuits and there is a continuous market pressure to increase the density of integration. The costs and technological risks involved in the development of next-generation processes continually increase. To minimize these most of the major manufacturers work together to develop the basic next-generation CMOS processes. ST was a pioneer of this model with the ground-breaking alliance in the nineties with Philips Semiconductors (now NXP), which was based at ST’s site at Crolles, France. Later on Freescale and TSMC joined with ST and Philips Semiconductors to form the Crolles2 Alliance, which achieved all of its goals.

In 2008, after the successful conclusion of the Crolles2 Alliance, we entered into a new R&D alliance with the ISDA (International Semiconductor Development Alliance), a technology alliance led by IBM and including top players such as GlobalFoundries, Infineon, Renesas, Samsung and Toshiba whose goal is to develop the CMOS process technologies for the 32/28-nm and 22/20-nm nodes. ST also established some additional strategic objectives:

- to develop additional differentiated CMOS technologies that deliver added value in particular applications e.g. better analog performance;
- develop libraries, methods and tools necessary to design complex ICs using these technologies;
- equip the Crolles 12 inches operation with competitive leading edge manufacturing capability;
- perform advanced technology research on the CMOS nano-structures that will be needed for future CMOS generations.

ST is a major partner in the ISDA and in 2010 Joel Hartmann, from ST’s Technology Research and Development organization, was appointed to jointly head the IBM Semiconductor Research & Development Center (SRDC) that covers both ASTA (Advanced Semiconductor Technology Alliance) and ISDA. Within the overall ISDA agreement, ST and IBM also have a separate agreement to jointly develop unique, value-added, differentiated versions of the core CMOS technology.

Furthermore, in order to serve customers in all electronics application sectors, we are continuing our development of multiple proprietary technologies. These include Smart Power (BCD and VIPower), analog, discrete, MEMS, IPAD (Integrated Passive and Active Devices) and mixed signal processes, in all of which we have a long tradition of leadership.

Research and Development funding & expenses

We participate in several programs established by the EU, individual countries and local authorities in Europe (principally France and Italy) that encourage R&D activities, capital investment and industrialization in the relevant regions. These programs are partially supported by direct funding, tax credits or specific loans (low-interest financing).

The main cooperative European programs for R&D in which we are involved include the Eureka-CATRENE program (Cluster for Application and Technology Research in Europe on Nanoelectronics); EU R&D projects within FP7 (Seventh Frame Program) for Information Technology; ENIAC, the Joint Technology Initiative with combined public support from Europe Member States and the European Commission; and national or regional programs for R&D and industrialization involving many companies and laboratories.

Because our principal investment and resource allocation decisions are necessary for expenditures on R&D and capital investments in manufacturing facilities, we ensure that our various product groups share, as much as possible, process technologies, IPs and manufacturing capacity.

Product innovation

Our advanced Product R&D centers are strategically located around the world: in France, Italy, Belgium, Canada, China, India, Singapore, Sweden, the United Kingdom and the United States.

In 2009, despite the worldwide economic crisis, we resolved to protect our future by maintaining our efforts in R&D. This decision paid off in 2010 with the introduction of an important wave of new products.

We have the knowledge, partners and financial resources to develop new, leading edge products, such as cellular modems and application processors for wireless applications (via ST-Ericsson, our wireless JV with Ericsson); automotive, MEMS; digital consumer products focused on set-top boxes and digital TVs; and system-oriented products for the multisegment market where we are one of the few semiconductor companies able to offer complete kits of parts and are also moving up the value chain by providing full turnkey solutions.

ST’s vision is to be the leader in Multimedia Convergence and in Sensing and Power applications. To this end, we intend not only to reinforce our current strong positions in the already established multimedia and power applications but also to be the leader in new markets such as healthcare/wellbeing and energy-saving applications.
ST conducts a regular anonymous worldwide employee engagement survey. In September 2010, 45,575 employees were invited to participate in the survey. The overall response rate reached 86%, an increase of 6% compared to 2008. These results have significantly improved thanks to two years of focused work by Human Resources (HR), the Internal Communications Group and senior management who collectively acted on the key drivers for engagement.

As the result of this, ST employees have expressed growing motivation and involvement in their day-to-day work due to increased trust in senior executive management and the company strategy. To continue this positive trend, ST has decided to conduct the survey on a yearly basis from 2011. This more regular feedback will give a unique opportunity for ST to fine-tune its responses. Moreover, each organization and each site within ST have been mobilized to develop action plans to improve future engagement.

In 2010, there were many examples of concrete programs across the whole company to support specific action plans. One such example relates to ST Ang Mo Kio (Singapore). Since the 2008 engagement survey, the Ang Mo Kio (AMK) Front-end manufacturing site has launched a pioneering management development program linked to their engagement roadmap.

This program acknowledged that managerial effectiveness was the key to employee engagement. A two-pronged approach was taken. Firstly, communication was reinforced between managers and their teams through increased forums, dialogue and one-to-one sessions. Through this regular communication, important drivers of employee engagement such as recognition, mentoring and employee development were built. Secondly, management development programs were enhanced to strengthen managerial skills such as communication, coaching and mentoring. This engagement roadmap has been closely followed-up with the support of the AMK management, HR and training functions.

In addition to this management development program, a Welfare committee comprising senior management staff was asked to look into employee welfare policies and practices to enhance the overall working environment and culture.

Such engagement programs in AMK have had encouraging results with the follow-up engagement survey showing a marked improvement. These initiatives will be continued in 2011 as a key program for AMK and are expected to benefit ST employees and promote the company’s success.

As a result of these successful action plans, other organizations will be inspired to take similar actions thanks to the positive feedback from ST AMK site.
As part of ST’s commitment to maintain a leading edge position, we have renewed the way we approach learning. The new Corporate Learning organization helps ST’s employees to meet business challenges.

In July 1994, ST created its first formal learning structure to enhance employees’ capabilities. To build a strong educational and knowledge base, ST has provided high-level development opportunities across a worldwide platform, consisting of a large variety of company training programs and learning services. This culture of learning has continued to evolve over the past 15 years.

To create learning within a business context, ST coordinates the training and development of its employees, via a new Corporate Learning (CL) organization which has succeeded the original ST University. CL is a networked structure that is closer to operations and business. It is governed by a Group Vice President and aimed at establishing an organization-wide learning infrastructure encompassing both professional and behavioral competencies through an extensive mix of tools e.g. e-learning, classrooms, seminars, workshops, etc.

This new learning structure is tightly integrated within the business. Its aims are to:
- connect learning closely with the business;
- adopt an operating model for learning that is resilient through the cyclical nature of the business;
- get maximum value for ST investment in learning for the business and the people.

The CL structure is based on ST’s long experience in learning, and on the 70-20-10* model detailing how people learn: about 70% of organizational learning takes place on the job (through problem solving, job experience, and tasks), 20% comes from others (from feedback, observation, coaching & mentoring), and the remaining 10% occurs through formal learning (such as classrooms, e-learning). The three styles are complementary and are needed to operate in tandem to be effective. ST has oriented its learning process around this framework and is organized around three pillars:
- the ‘Collaborative Problem Solving Workshops’ pillar, tailored to a specific business issue and executed in close collaboration with business owners;
- the ‘Professional Competencies Development’ pillar, covering multiple disciplines e.g. quality, personal development, front-end and back-end operations, engineering, product and technology R&D, based on a network of experts, and coordinated at corporate level;
- the ‘Leadership Development’ pillar, to develop managerial and leadership competencies for managers at all levels.

Corporate Learning is deployed around two main ideas: cross-fertilization and networks. By creating an environment for people to collectively solve key business issues, we will enable good practices to be shared and will create strong cross-organizational networks. The other benefit is that, across the company, people have access to consistent and joined-up training that is closely matched to ST’s business priorities.

2010 has been largely dedicated to the definition of this new learning organization, but we have already seen some initial achievements:
- a First Collaborative Problem Solving workshop, held in September, to bring new innovative ideas to ST’s marketing. A second session is planned for February 2011 to define actions to tackle supply chain challenges;
- a ‘Leadership Development’ program, the ‘Monte Blanc’ program, aimed at developing the skills of junior managers. 11 sessions involving 156 participants coming from 23 different sites (Europe, Asia, US) have been held in 2010. 35 new sessions are planned for 2011;
- the deployment of Leadership courses, e.g. Coaching Skills for Managers, Situational Leadership, Managing Remote Teams, Leaders as Communicators.

Corporate Learning has new challenges to take up in the coming years. ST wants collaboration and working in synergy to become engraved in its culture, and it relies on CL’s network to deliver this. In a multinational company like ST, this means finding the right balance between a corporate and local approach, taking into account different cultures and learning styles. ST’s objective is also to maintain high quality training, regardless of the prevailing economic context. This renewal of a learning culture continues to be seated within ST’s key Human Resources principles.

ST ROUSSET SITE DEVELOPS A LEAN CULTURE THROUGH THE ‘ELAN’ PROGRAM

In 2008, ST Rousset (France) began to implement a Lean management initiative, the ‘Elan’ program, to improve its operations and people performance through the development of a Lean culture. This management system is based on the fast resolution of problems and a culture that brings about efficiency and cooperation between functions. The Lean system identifies potential added value for customers and focuses employees’ attention on reducing non value-added processes, or ‘wastes’. This is achieved through the training and engagement of staff.

The Lean initiative relies on people empowerment to further improve manufacturing site performance. One key aspect of this program consists of workshops that adopt the Plan Do Check Act (PDCA) process to drastically improve manufacturing performance, using multi-disciplinary teams of employees working together. The first three-day module is followed by a weekly session with the aim of improving a defined issue in less than three months. These workshops have focused on four strategic themes:
- ergonomics, environment and working methods, to gain safety, comfort and productivity;
- equipment robustness and efficiency;
- manufacturing flow, to improve cycle times;
- quality.

Another key aspect of the ‘Elan’ program is the ability to visualize issues and opportunities. Production and support teams use visual performance boards aimed at improving communications within the team to create a clear and shared understanding of issues and progress in real-time and on a daily basis. These boards are effective ways to engage a larger audience and to keep the site updated. They typically highlight people news, operational goals, current performance and potential gaps.
In 2010, ST’s Corporate Human Resources (CHR), under the governance of the new Chief Administrative Officer, Tjerk Hooghiemstra, decided to focus on talent and performance as a means of developing our people. This responded to the findings of the 2010 employee engagement survey which highlighted employees’ expectations in this area.

Aimed at achieving a breakthrough in organizational and resource development, the Talent and Performance management program was fully launched in 2010. It has created a powerful momentum for change and laid the foundations for talent development which is essential to our success.

The initiative is driven by Corporate Human Resources Development and co-chaired by a steering committee composed of Executive and Corporate Vice Presidents, Corporate HR and senior HR managers. It aims at promoting sustainable competitiveness by attracting, engaging and retaining talented people. It uses a two-way, win-win approach between management and employees so that:

- managers are able to anticipate and provide efficient and effective resources to meet our business needs;
- ST can encourage and support transparent and progressive career management and succession planning to raise employees’ employability and adaptability.

The program encompasses the main HR processes such as People Review, Performance Appraisal, job evaluation, reward, career management, mobility and recruitment. These are managed through seven workstreams, focusing on major bottlenecks which had limited the efficiency of these key processes in the past.

The articles below look at three specific programs: People Review and Performance Appraisal (two complementary processes to support people growth and company competitiveness) and the new Technical Ladder (which recognizes our specialists and experts).

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**PEOPLE REVIEW: ENSURING ALIGNMENT OF RESOURCES WITH BUSINESS NEEDS**

The People Review process has been enhanced this year to respond to employees’ expectations, highlighted in the previous employee engagement survey, calling for an improvement in the evaluation of potential, and for this to be better-linked to their career development. In 2010, the People Review process has been deployed at company level to provide a mid-term perspective and corresponding action plans in the areas of resources planning and people development relating to major trends in business direction and job development.

A double approach was used:

- Collective organizational approach: a comprehensive ‘bottom-up’ analysis has been conducted by business organizations to identify how the market environment, ST’s strategic positioning and key business challenges will impact on future job categories.
- By the end of 2010, 100% of ST organizations had performed their SWOT analysis and developed the first step of a strategic resource action plan.
- Individual analysis: within each site, country and region, People Review meetings, led by committees of managers at each level of the organization, have assessed employees’ contribution against their potential and performance.

There was a specific focus on management level JG14 and above in order to identify talent pools and potential successors for all key positions across the company.

This has also allowed a dynamic picture to be built up of employees’ professional development mapped against future organizational needs.

The 2010 campaign successfully covered 73% of levels JG14 to JG18 and 93% of JG19 and above. Talent pools have been identified from all levels of the organization.

The People Review double approach:

In 2010, for the first time, the main outcomes of both collective and individual reviews were consolidated by Corporate HR, after discussion with all ST organizations.

In order to make People Review an efficient and sustainable process, Corporate HR will ensure that this process is repeated every two years and will follow-up on the People Review action plans annually.

A key objective for 2011 is to prepare the next generation of leaders through the development and deployment of a new talent management policy which will incorporate career evolution, succession planning, individual feedback and development plans. Specific attention will be paid to talented people with the potential to attain a senior position in the organization and who are anticipated to achieve rapid career development. One of these programs which will be deployed in 2011 is the Development Booster, detailed on the opposite page.

(*) Strengths, Weaknesses, Opportunities and Threats analysis
CAREER MANAGEMENT: THE INDIVIDUAL PATH FOR TECHNICAL AND SPECIALIST FUNCTIONS

At ST, we have a career management system that offers employees attractive career prospects along three possible paths: a management path, a cross functional management path, and a new individual path for technical and specialist functions. In order to realize the full potential of technical and specialist personnel we have specifically reviewed these job roles and career paths. To support our core business we had to redefine and/or confirm ST’s areas of expertise and identify the associated technical roles and competencies that are needed. This led us to clarify the characteristics of technical and specialist functions, to include what is expected from employees in terms of competencies and contributions as they grow and develop within this career path. To achieve a better balanced career management system, able to offer a channel to senior positions, our objective was to increase the number of these senior positions in technical and specialist functions.

Thanks to the strong support of ST’s Chief Technology Officer (CTO), the new approach was adopted by all internal stakeholders. Its methodology and practice is now incorporated into a new corporate procedure. We are anticipating it will bring clearer and more consistent deployment across all the regions, and also improved alignment with ST’s expertise strategy.

Some key outputs of this new approach include:

- The identification of the features that define a technical or specialist function. Technical functions from within the core business were identified that required a solid engineering background and that had the potential to create “breakthrough” innovative ideas and solutions.
- A common career path for all individual functions. The previous path did not adequately define or group technical and specialist functions. Job titles have now been redefined to better represent different levels of expertise or specialization.
- Recognizing the expertise of technical functions, internally and externally. Technical expertise is now evaluated through Technical Advisory committees at corporate, regional and local levels.

PERFORMANCE APPRAISAL

In 2010, our Performance Appraisal process evolved in response to our last employee engagement survey results. It has focused on improving the linkage between individual contributions, results and overall organizational objectives and performance. It seeks to achieve this through a broader individual assessment and a clearer differentiation of performance. There was also a need to strengthen management accountability and improve consistency relating to the deployment of this important process. These objectives have been addressed through the Talent and Performance management program.

Broader individual assessment

The level of achievement of business objectives ultimately depends on individual performance but it is the way in which this is achieved that is crucial to long term sustainable performance. Employee evaluation has therefore been broadened to assess their overall contribution to the organization. It now takes into account three complementary dimensions:

- the achievement of individual objectives;
- the way these objectives have been achieved, including:
  - demonstration of specific behaviors that are in line with ST’s shared values,
  - the mastering of the job role, as described in the contribution matrix, job description*, and compared with job competencies.

(*) Contribution matrix and job description are internal HR documents that detail the missions of a job and the associated competencies expected.

Improved performance differentiation

It is important that our Performance Appraisal process reflects the reality of ST’s working environment. In 2010, the five-level rating scale was reviewed to better assess employees’ overall contribution by incorporating the three dimensions mentioned above. Also the expected performance levels have been reviewed so that employees fully meeting their job requirements are positioned in the middle of the rating scale.

Achieving consistency across organizations

The consistency of the Performance Appraisal process, both within and between organizations, has been greatly improved through the establishment of a three-stage review, with assessment now performed at:

- team level - the evaluation of employee performance by his/her manager;
- organizational level - a deeper analysis of performance is now in place which collectively reviews the evaluation data at all levels of the organizational structure. Adjustments are made as necessary to achieve consistency;
- company level - a collective review is now in place to achieve global consistency.

Deployment across all levels

To date, the application of Performance Appraisal across the company has been somewhat inconsistent: well done in most cases but not coordinated in a systematic and comprehensive way, in particular for senior management. This has now been improved to incorporate the very specific personal interaction between the manager and the employee and has been applied throughout, including the highest levels of the organization.

DEVELOPMENT BOOSTER

The Development Booster is a specific program, dedicated to highly talented, fast track individuals in the early stage of their career who have been specifically identified during the People Review as having career development potential. It offers participants opportunities for accelerated learning and development through a set of development activities:

- a 360° assessment;
- mentoring activities by a top manager from another organization;
- action learning program which provides an opportunity to collaborate with other participants on a project of strategic importance to ST and an individual customized development plan that responds to needs identified through their 360° assessment;

As a result, it provides the participant with an individual customized development plan, increased visibility by senior management and a wider knowledge and deeper understanding of the company. For the company it prepares people to hold other job responsibilities through a more structured, consultative and proactive development path.

THE TALENT MANAGEMENT APPROACH
Human Resources are particularly involved in the deployment of ST’s Principles for Sustainable Excellence, especially addressing subjects such as gender equality, integration of young people, employment of seniors and people with disabilities.

Whereas French labor standards and regulations are among the most extensive and rigorous in the world, Human Resources (HR) has gone beyond these legal obligations with the creation of a department dedicated to the management of RSE issues. This collaboration of French ST sites in France allows the pooling of resources, sharing of best practices and has resulted in deploying common policies and common action plans.

In addition to Sustainable Excellence contacts and sponsors, each French site has a “RSE coordinator” to oversee the following areas:

- **Seniority,** to encourage senior employees to disseminate and share their knowledge through mentoring and tutorial programs;
- **Young employability,** to attract pupils and students into industrial jobs at ST and support them during their studies through apprenticeship programs (we have an objective of maintaining 4% of apprentices in French sites) or through social initiatives such as “100 Chances 100 Emplois” (100 opportunities 100 jobs);
- **Transportation management,** to ensure that employees benefit from transportation incentives;
- **People with disabilities and gender equality** (detailed below).

**People with disabilities**

In France, people with disabilities are among the most fragile populations in the labor market: 85% of unemployed disabled people have low qualifications and their unemployment rate is twice as high as the national rate (*). French ST sites have been engaging actively for many years to facilitate disabled people’s access to a job (the first site was Grenoble in 1991) and since January 2010 they have adopted a common agreement on integrating and keeping disabled persons at work. ST France has taken the option of encouraging opportunities for less-able people instead of merely paying legal compensatory fees. This policy is built around five axes:

- communication and awareness, both internal to educate employees and managers about prejudices and external, under the banner “employer for people with disabilities”;
- retaining ST employees who become disabled during their career at ST;
- integrating people with disabilities across all types of employment contracts, including internships and apprenticeships;
- developing specifically adapted professional training programs;
- sub-contracting to specific companies that employ people with serious disabilities;
- equal opportunities for people with disabilities e.g. access to training, career evolution, wages.

HR France has committed to hiring 130 people with disabilities by 2012, which will make up approximately 4% of the total French ST workforce, compared with 1.23% in 2006.

**Gender equality**

Semiconductor companies face cultural gender stereotyping, mainly relating to technical jobs that are often considered to be ‘male roles’. ST has decided, in a jointly signed agreement with trade unions, to prevent and correct this imbalance through several actions. Firstly by monitoring recruitment so that the hiring ratio of women to men is equivalent to the gender ratio of graduated students in partner schools and universities. HR will monitor and adjust this ratio by job type e.g. operators, non-exempts and exempts throughout employees’ career evolution. In 2010 the percentages of women in each category in France were: operators 50%, non-exempts 25%, exempts 22%. Equality in remuneration and promotion is a second key aspect of the agreement. In 2010, HR and unions worked together on the definition of criteria and methods to ensure and evaluate this equality. French HR will launch this program in 2011. Besides, personal decisions to take maternity or parental leave should not negatively impact career evolution either. Individual interviews are held with HR before and after these periods to help employees adapt their job roles to their new circumstances.

Internal and external communications, including a presence at external events such as school forums, support this policy to counteract stereotyping and encourage women to join our industry. An internal dashboard, closely monitored by HR and the Employee Representative, also ensures these measures are working.

For each of these aspects, ST France is working in close collaboration with stakeholders such as employees, unions, public organizations, local and national associations, sourcing companies or the academic community. Not only does ST benefit from stakeholders’ expertise but it also contributes to better responses to their expectations.

(1) Source: French association for employment of disabled persons, AGEFPH.
As a signatory of the United Nations Global Compact and a member of the Electronic Industry Citizenship Coalition, ST is committed to improve and promote its workers’ rights and labor conditions in sensitive countries.

As full member of the EICC, we have to update our sites’ SAQ once a year and to conduct audits on our resulting high risk sites (based on the SAQ scores). In 2010, our 12 production sites were covered by SAQs including our Calamba (Philippines) and Longgang (China) sites which were included for the first time. Even though none of ST’s sites have been evaluated as high risk, we have nevertheless decided to deploy an internal audit program based on the EICC Validated Audit Process (VAP). Over the next three years it will focus on our Asian and Back-end sites where the risk of having non-conformities is the highest. The VAP program aims at verifying that our operations are conducted in a socially and environmentally responsible manner, identifying good practices and areas for improvement. It also enables us to share the results with our customers, many of whom are also members of EICC. Going forward, we shall extend this approach to all our sites.

The program started in April 2010 with the first audit of our Shenzhen site (China) by a third party EICC-certified audit company. With the support of our local Environment, Health and Safety (EHS) and Human Resources (HR) teams, the auditors led a four day on-site evaluation gathering evidence in order to assess our management systems and verify that Shenzhen site’s EHS and HR programs are fully defined, implemented and effective. It included interviews with employees and managers and a facility walk-through tour to observe physical conditions and current practices (working environment, emergency procedures, canteen and dormitory hygiene and safety, etc.). The auditors also reviewed HR records to evaluate working hours, wages and benefits, and EHS, labor and ethics management system documentation.

The audit raised major non-conformities related to safety maintenance, living conditions and working hours, and minor ones related to wage calculation, medical checks and personal protection equipments. This has been useful to help us further strengthen our policies and practices. Following the audit, the site’s management implemented a corrective and preventive action plan and a better data capture system to improve control on the issues raised. The two main actions related to dormitories and overtime. On the first issue, ST Shenzhen has improved living conditions through a maintenance improvement program (electricity, cleanliness, renovation, etc.), and has drafted and implemented a local specification on dormitories. The site’s management is also preparing an e-OT (electronic Overtime) tool providing weekly automated overtime report alerts to managers which will enable them to predict and prevent excessive overtime.

To ensure completion of remedial actions and to systematize the management of our human rights risks, ST has developed a pilot human rights dashboard, as a new internal tool to provide a more precise overview of ST’s major human rights areas e.g. working hours, living conditions, migrant workers’ conditions, etc. At the end of 2010, Muar (Malaysia) and Calamba (Philippines) sites were preparing the two other EICC audits planned in 2011.

As a global company, we are operating in China, Malaysia, Philippines and Singapore where the economic and social aspects of out-migration from Asian countries raise a number of important issues relating to the human and labor rights of migrant workers in our sites.

ST addresses ethical, social and human rights questions through its Principles for Sustainable Excellence (PSE), and is continuously seeking to strengthen its human rights approach in all sites. As a member of the Electronic Industry Citizenship Coalition (EICC), ST also deploys the EICC Code of Conduct, both on its own sites and for its suppliers. ST’s commitment to uphold human rights across its operations and spheres of influence is illustrated by its management of the passport retention issue in Singapore. The retention of migrant workers’ passports to prevent their potential departure is a common practice in this country. Since 2006, ST has been tackling this issue by providing guidance to institute an equitable treatment of employees regardless of their nationality.

ST Singapore has progressively implemented policies to reduce the period of time for passport retention: two years in 2006, six months in 2009 and from July 2010 all ST migrant workers have been able to keep their passports safely during their employment. ST also encourages labor agencies, labor brokers, or labor service providers acting as intermediaries to release migrant workers’ passports. In doing such, ST was one of the first companies in Singapore to stop passport retention.

This is a common practice in Malaysia too. Since January 1997 ST Muar returned the passport of all foreigners hired directly by ST and since the end of 2010 passport retention was also stopped for contract workers hired through labor agencies. Other Asian sites do not have a culture of passport retention.

Another issue linked to freely chosen employment is the payment of agency fees by employees (foreign workers in Singapore and Malaysia and workers from rural areas in China). At the end of 2010, the Corporate Responsibility team reviewed ST sites’ practices in these countries to confirm that our Shenzhen, Longgang (China), Ang Mo Kio and Muar sites pay these fees on behalf of employees, preventing any form of financial bond. Actually, three kinds of practices exist: ST pays the fees directly, ST reimburses them immediately and in full; or ST reimburses employees in incremental payments over a reasonable period of time.

These are challenging subjects to manage because we progressively had to change local habits and HR practices, while dealing with local administrative guidelines and implementing other approaches to attract and keep our workforce. Tracking is also difficult because of the number and diversity of stakeholders and practices in each country. Starting in 2011, we will be able to follow these issues more effectively through the implementation of a human rights dashboard and our commitment to conduct at least two EICC audits on our sites per year.

As a global company, we are operating in China, Malaysia, Philippines and Singapore where the economic and social aspects of out-migration from Asian countries raise a number of important issues relating to the human and labor rights of migrant workers in our sites.
Since 2003, the ST Foundation has helped reduce the digital divide in both developing and developed countries through a worldwide computer literacy program, Digital Unify (DU), based on a voluntary network of ST employees. So far, over 110,000 people have benefited.

The ST Foundation’s core mission is to develop, coordinate and sponsor projects that employ the use of modern science and technology to promote the sustainable development of less privileged communities around the world. Currently, ST Foundation’s resources are entirely dedicated to the Digital Unify program, which aims at providing free basic training to those who have no knowledge of how to use a personal computer or access the internet.

The ST Foundation is also an active member of the United Nations Global Alliance for Information and Communication Technologies (ICT) and Development, bringing together governments, international organizations, businesses, NGOs and academia to share cutting-edge ideas, knowledge and best practice to promote the effective use of ICT for development.

In 2010, 30,285 trainees completed the Informatics and Computer Basics (ICB) course, bringing the total number of people who have benefited from the program to over 110,000. Two new countries, the Congo Brazzaville and the Dominican Republic, joined the program in 2010, raising the number of participating countries to 20.

The organization of this voluntary-based network:
This success has been made possible thanks to the joint effort of ST Foundation’s volunteers, partners and staff.
ST volunteers from different countries are constantly developing and updating the ICB course to adapt it to local needs and culture. Through the “train-the-trainer” program, they train local partner’s staff who then cascade ST Foundation’s specific basic computer literacy course to their local community.

The local partners i.e. associations, administrations, schools, guarantee outside hours access to the learning center for trainees and to those who have completed the course. Basic computer literacy and access empowers people to have improved opportunities on the job market, improved access to information and higher educational skills.

The following testimonies demonstrate how the ST Foundation is active in local community development:

From the DU coordinator in Morocco:
Houmad Boukdir: “My role is both to support actual partners by providing DU courses material kits (equipments, internet, manuals, diplomas, etc.) and to seek for other potential Moroccan partners. I can count on the total support of ST Morocco management and ST Foundation’s staff to deploy the DU program in my region. The benefits I get from this experience over seven years are to continually learn other ways of working and thinking thanks to these collaborations with various people.”

From DU trainers in India:
Chhavi Baijap: “To help my fellow Indians and contribute towards man-kind, I have been engaged since the beginning of this program. From this experience I gain satisfaction and a feeling that we are a resource for many in the world. This has helped to connect people.”

Menka Tangri: “Digital Unify offers an amazing opportunity to make a real difference to bridge the gap of knowledge and make this world digitally connected irrespective of age and status. Moreover, I get from this experience several gain factors like confidence, enthusiasm, leadership qualities which are add-ons to guide one to success in the professional life.”

Gaurav-hed Sharma: “As a trainer I feel satisfied by sharing my computer knowledge with others. It gives me immense pleasure when I see that many students, women and aged persons of village community who are connected to DU program are now able to work on computers. As a result now most of the population of my hometown Porsa is computer literate.”

Here is a testimony from a DU trainee in Bolivia:
Noemy Villagómez Núñez: “I study at the Nuestra Señora del Carmen School. The teachers used to come to my school and they invited me directly. I have followed the informatics course for about four weeks, two hours every day. I learnt a lot, everything was new for me.”

For more details on these testimonies, see www.stfoundation.org/du/testimony.php
For more information on STMicroelectronics Foundation, Digital Unify program and the overall commitments by country, please visit: http://www.stfoundation.org

ST FOUNDATION
At the beginning of 2011, the ST Foundation lost its Chairman and founder, Carlo Emanuele Ottaviani. In order to continue Carlo’s work, Pietro Fox has been chosen as his successor. Pietro has been a top executive manager at ST for many years and, once retired, he dedicated most of his time to promote and support technical education in African Countries.

Carlo leaves a wonderful legacy of helping disadvantaged people. He will be remembered with great respect and admiration.

- Bolivia
- Burundi
- Cambodia
- Congo Brazzaville
- Dem. Republic Congo
- Dominican Republic
- Ethiopia
- France
- India
- Italy
- Malaysia
- Malta
- Morocco
- Nepal
- Rwanda
- Senegal
- Sierra Leone
- Thailand
- Tunisia
- Uganda

For more information on STMicroelectronics Foundation, Digital Unify program and the overall commitments by country, please visit: http://www.stfoundation.org

ST FOUNDATION
The Digital Unify (DU) reaches 110,000 trainees and 20 countries.

2005
The DU expands to the first non ST countries: Nepal and Congo D.R.

2003
The DU program is established in four pilot countries: India, Italy, Malta and Morocco, in the neighborhood of ST sites.

2001
ST Foundation is incorporated in Geneva, Switzerland.
In early January 2010, a devastating earthquake struck Haiti. ST immediately reacted by launching a company-wide, voluntary fund-raising scheme with the company matching the funds raised by employees. Contributions went to Médecins Sans Frontières (MSF), an international medical and humanitarian non-governmental aid organization active in projects in war-torn regions and developing countries facing endemic disease.

ST sites are used to fund raising for local communities and when a major disaster strikes a region of the world, employees often ask for a company-wide campaign to be set up. When the earthquake struck Haiti, ST immediately responded by organizing a collection of donations around the world. Laurent Sauveur, Communication and Fundraising Director at MSF Switzerland, provides feedback on how ST’s contribution supported their relief efforts.

“We were extremely pleased with the huge solidarity and contribution provided by ST employees which was matched by the company, resulting in a total donation amount of more than US$ 500,000.

Such donations from the private sector and from individuals are critical for an NGO like MSF which is 80% funded by private donations. It reinforces our principles of independence, neutrality and impartiality and it allows our teams to be under less pressure and enjoy more freedom in the field.

MSF’s response to the Haiti earthquake is the most significant in the organization’s history. The scope of the catastrophe in terms of lives lost, people injured and the destruction of infrastructure required a truly massive response. For example, 60% of the medical infrastructure had been destroyed.

Médecins Sans Frontières has been working in Haiti since 1991 and was therefore able to react immediately to the earthquake, working out of temporary facilities after its own structures were damaged, performing emergency triage and surgical interventions wherever possible, and bringing in tons of supplies on a daily basis, including an inflatable hospital. All of this was done with the active and tireless participation of Haitian staff members who had themselves suffered great losses in the earthquake.

Even if MSF’s primary mission is medical action, we also contributed by providing items that were immediately needed, such as shelter, drinking water, hygiene kits, etc., in order to respond to the urgency of the situation.

After the first hours and days, during which emergency intervention and lifesaving surgery were the clear priorities, as time went on, the needs evolved. After several weeks in place, we also contributed to post-surgery care and started providing psychological follow-up to meet the needs of the population.

In October, only 9 months after the earthquake, the Haitian population was affected by a terrible cholera epidemic. By the end of the year, more than 62,000 cholera cases had been treated by MSF medical teams in 47 cholera treatment centers throughout the country. We established more than 3,200 hospital beds for the cholera outbreak and maintained a case fatality rate of less than 2 percent in these facilities.

Today, in addition to responding to the cholera epidemic, our focus is to ensure as best as we can the continued free access to health care for the Haitian population who, in the vast majority, does not at present have the capacity to pay for it. We are also adapting temporary facilities to more permanent structures that MSF can manage and operate for the time being and possibly turn over to local participants in the future.”

Fund raising for Haiti is still going on, for any information or donation you can contact MSF at www.msf.org

SOME KEY FIGURES TO BEAR IN MIND…

Thanks to the solidarity of people from all over the world, MSF raised around 104 million euros to respond to the earthquake in Haiti, to be spent during 2010.

In the first month, MSF performed 1,300 urgent surgical operations in 26 health facilities including hospitals, post-operative care facilities, rehabilitation centers, general medical centers and mobile clinics.

After three months, MSF had taken care of 92,000 patients and performed nearly 5,000 surgical operations.
Objective 2010

Publish social objectives for 2010

Disclosure on management approach

For 2010, almost all of our sites have participated in data collection covering 99% of our employees. As usual, very small sites (up to 10 employees) are not included in the data collection process.

Note that social indicators refer to different categories of employees, including: ‘professionals’ i.e. employees who hold positions normally requiring graduate or post-graduate education and who are not eligible for overtime compensation; ‘others’ i.e. those who may hold administrative or technical positions and who are eligible for overtime compensation; ‘operators’ i.e. those who work in production facility cleanrooms and are also eligible for overtime compensation.

Ensuring the right resources are in the right place

Headcount evolution

The company’s overall headcount increased in 2010 by 2,445, with the large part of this increase occurring in manufacturing in China (788), Malaysia (509) and Singapore (443). For manufacturing, the hiring has followed the intended plan in line with demand expectations. In non-manufacturing sites the increase was just 97, indicating that we have stabilized the headcount in this domain.

The highest percentage of headcount increase has been in Asia-Pacific, at +8%, and the lowest in the Mediterranean area at +3%.

The overall hiring for professionals was 3,573; that of operators was 8,193 and for others the figure was 1,884. Following the 2009 recession, there was a sudden surge in demand which has necessitated an increased focus on hiring activity.

Our Human Resources (HR) strategy aims to ensure the right level and kind of hiring and retention, to match the company’s evolving requirements in terms of profiles, competencies and the dynamic integration of new people. Attraction and retention is addressed and enhanced through several internal programs and in 2010 it was initiated through the “Talent and Performance management” program. This comprehensive program comprised seven work streams, led jointly by one Vice President and seven Senior HR managers, was aimed at enhancing people development, increasing focus on hiring activity.

Retention

In 2010 the overall turnover rate was 15.2% with some considerable differences between the regions. In the Asia-Pacific region it was highest at 31%, mainly due to operators in China, Singapore and Malaysia. High turnover rate in China is due to a specific context in this region. A large proportion of employees are migrants from rural China and many of them leave their job to return home once a year. With the local labor shortage employees often change employers in order to increase their earnings. To have more meaningful information, we have a new indicator where we now have turnover by job category and by gender. Among women, the rate was high in Asia-Pacific region among operators at 36.8% and lowest in Europe for operators at 0.4%. Among men, again the rate was high in Asia-Pacific region among operators at 53.3% and the lowest was in Europe for others at 0.6%.

Focusing on the voluntary turnover rate and career length, we notice that the highest turnover rate is for employees who have been with the company for less than two years. This is also highly influenced by the turnover among operators in the Asia-Pacific region. The turnover for the employees who have been with the company for more than 10 years is stable and this corresponds mainly to the non-manufacturing professionals.

Hires by job type

<table>
<thead>
<tr>
<th>Job Type</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineers and managers</td>
<td>2,312</td>
<td>1,775</td>
<td>5,224</td>
<td>538</td>
<td>3,573</td>
</tr>
<tr>
<td>Technicians and administrators</td>
<td>1,154</td>
<td>774</td>
<td>1,163</td>
<td>639</td>
<td>1,884</td>
</tr>
<tr>
<td>Operators</td>
<td>4,088</td>
<td>3,663</td>
<td>5,502</td>
<td>5,984</td>
<td>8,193</td>
</tr>
<tr>
<td>Total</td>
<td>7,554</td>
<td>6,212</td>
<td>11,889</td>
<td>7,161</td>
<td>13,650</td>
</tr>
</tbody>
</table>

External hires in manufacturing

<table>
<thead>
<tr>
<th>Year</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>92</td>
</tr>
<tr>
<td>2010</td>
<td>96</td>
</tr>
</tbody>
</table>

For more information on the ‘materiality exercise’, see page 5

KEY HIGHLIGHTS OF 2010

In February 2010, Tjerk Hooghiemstra joined ST as Chief Administrative Officer, taking the responsibility of eight departments, including Human Resources, Learning, Compliance, Internal Communications, and Sustainability. Having these departments under the scope of one Senior Executive Vice President offers significant opportunities in the areas of people development, employee engagement and social compliance. The new synergies brought about by this organizational change are also key to support ST in its sustainable growth and in the completion of its strategic priorities.

For more information, see Tjerk Hooghiemstra interview on page 5

In 2010, ST conducted a ‘materiality exercise’ to define and focus on key issues considered to be the most relevant and critical for ST and its stakeholders. Through this exercise the following high level objective related to ST’s employees has been defined as: “Support our people in their growth and development within the company, promoting their health, safety and well-being and their overall ability to contribute to ST’s innovation and business success.” Based on the results of this exercise, sub-level objectives will be defined with relevant people at site, organization and corporate levels in 2011.

For more information on the ‘materiality exercise’, see page 6

For more information on management approach, see www.st.com/internet/com/about_st/st_approach_social_aspects.jsp

Total headcount evolution

<table>
<thead>
<tr>
<th>Region</th>
<th>LA1</th>
<th>ST12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>51.74</td>
<td>45.52</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>52.14</td>
<td>47.97</td>
</tr>
<tr>
<td>Mediterranean</td>
<td>51.74</td>
<td></td>
</tr>
<tr>
<td>Americas</td>
<td>45.52</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>47.97</td>
<td></td>
</tr>
</tbody>
</table>

For more information, see pages 22-23

Attraction and recruitment

As the economic conditions improved, the demand for our products increased and therefore increased our need to attract new talent. The total number of professionals and operators hired when compared with headcount evolution in 2010 reflects higher turnover in some countries (notably those in Asia) requiring more regular hiring on the one hand, and an increase in hiring to respond to the increase in production on the other. During 2010 even though the demand had sharply increased, ST kept a high level of permanent contracts (97%), compared to temporary contracts. Positions filled through external resources were 96% (for the most part in manufacturing operations) and all these employees went through a newcomers’ program to integrate them into ST.

For more information on this Talent and Performance management, see pages 22-23

For more information, see Tjerk Hooghiemstra interview on page 5

For more information on the ‘materiality exercise’, see page 5
Objective 2010

Encourage all ST sites to have a formal program for equal opportunities and document best practices.

As detailed in our earlier report, ST’s strategy for equal opportunities, with a particular focus on gender equality, was defined in 2006. We continue to be committed with formal programs overseen by committees in France and Italy. In other ST sites, programs exist in line with our culture for Sustainable Excellence but are less formalized.

In 2010, the percentage of women in senior and executive management increased in line with the trend of the previous years, 9.9% in 2010 and 8.9% in 2009. To have a close look at the equality of opportunities, when we consider the promotion rate by gender and by category, the data indicates that women are promoted to an equal extent or more than men in some regions (number of women and men in each region should also be considered). Data shows that, across all regions, women consistently have more promotions in the operator category, but this should be considered along with the number of women as a percentage of total operators (as indicated in the chart showing this breakdown).

Ensuring equal opportunities for employees with disabilities is another important aspect of our strategy, and there has been steady progress in this area over the last few years. In 2010 the percentage of employees with disabilities has increased to 1.0%. The budget invested by our sites to support the integration of disabled employees is US$ 2.3m which is less than the 2009 budget of US$ 3.5m. This reduction is due to the closing down of operations in a few locations while the budget in the remaining locations remained stable.

For more information on gender equality and disability programs in France, see page 24.

In 2010 a specific program was designed by Corporate HR Development to accelerate and support transmission of knowledge to prepare a small group of employees for senior job responsibilities in ST in the medium or long term. This program includes a mentoring program with executive managers as mentors. We plan to extend this program to various geographical regions involving senior professionals in the future.

For more information on this program, see page 31.

Promotion ratio female/male by category and by region in 2010

<table>
<thead>
<tr>
<th>STS9</th>
<th>LA13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americas</td>
<td></td>
</tr>
<tr>
<td>Professionals</td>
<td>Female 93.25</td>
</tr>
<tr>
<td>Others</td>
<td>Female 73.10</td>
</tr>
<tr>
<td>Operators</td>
<td>Female 53.21</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td></td>
</tr>
<tr>
<td>Professionals</td>
<td>Female 91.17</td>
</tr>
<tr>
<td>Others</td>
<td>Female 66.82</td>
</tr>
<tr>
<td>Operators</td>
<td>Female 46.82</td>
</tr>
<tr>
<td>Europe</td>
<td></td>
</tr>
<tr>
<td>Professionals</td>
<td>Female 90.17</td>
</tr>
<tr>
<td>Others</td>
<td>Female 70.17</td>
</tr>
<tr>
<td>Operators</td>
<td>Female 50.17</td>
</tr>
<tr>
<td>Japan</td>
<td></td>
</tr>
<tr>
<td>Professionals</td>
<td>Female 94.82</td>
</tr>
<tr>
<td>Others</td>
<td>Female 74.82</td>
</tr>
<tr>
<td>Mediterranean</td>
<td></td>
</tr>
<tr>
<td>Professionals</td>
<td>Female 93.21</td>
</tr>
<tr>
<td>Others</td>
<td>Female 73.21</td>
</tr>
<tr>
<td>Operators</td>
<td>Female 53.21</td>
</tr>
</tbody>
</table>

Gender split by category in 2010

<table>
<thead>
<tr>
<th>STS10</th>
<th>LA13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionals</td>
<td>Female 50.06</td>
</tr>
<tr>
<td>Others</td>
<td>Female 49.94</td>
</tr>
<tr>
<td>Operators</td>
<td>Female 53.41</td>
</tr>
</tbody>
</table>

Disabled employees

<table>
<thead>
<tr>
<th>STS12b</th>
<th>STS12c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of disabled people employed</td>
<td>0.62</td>
</tr>
<tr>
<td>Total budget spent on disability programs (US$)</td>
<td>-</td>
</tr>
</tbody>
</table>

Number of nationalities in corporate staff

<table>
<thead>
<tr>
<th>STS8</th>
<th>LA13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Different nationalities represented in the corporate staff</td>
<td>7</td>
</tr>
</tbody>
</table>

Average employee age

<table>
<thead>
<tr>
<th>STS4</th>
<th>LA1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average employee age (years)</td>
<td>2006</td>
</tr>
<tr>
<td>34</td>
<td>34</td>
</tr>
</tbody>
</table>

Workforce by employment type

<table>
<thead>
<tr>
<th>LA1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of employees by employment type</td>
</tr>
<tr>
<td>Full time contract</td>
</tr>
<tr>
<td>Part time contract</td>
</tr>
</tbody>
</table>

Newcomers induction program

<table>
<thead>
<tr>
<th>STS18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of newcomers who participated in a formal induction session (e.g. newcomers’ seminar) during their first year of employment</td>
</tr>
<tr>
<td>83.95</td>
</tr>
</tbody>
</table>

Average turnover rate

<table>
<thead>
<tr>
<th>LA2</th>
<th>STS12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average turnover rate</td>
<td>2006</td>
</tr>
<tr>
<td>8.79</td>
<td>8.81</td>
</tr>
</tbody>
</table>

Career length and voluntary turnover rate

<table>
<thead>
<tr>
<th>LA2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total voluntary turnover vs career length</td>
</tr>
<tr>
<td>% voluntary turnover of new hires (below 2 yrs)</td>
</tr>
<tr>
<td>% of voluntary turnover of employees from 2 to &lt; 5 yrs</td>
</tr>
<tr>
<td>% voluntary turnover of employees from 5 to &lt; 10 yrs</td>
</tr>
<tr>
<td>% voluntary turnover of employees from 10 to &lt; 20 yrs</td>
</tr>
<tr>
<td>% of voluntary turnover of employees from above 20 yrs</td>
</tr>
</tbody>
</table>
Employee engagement

Employee engagement can be summarized as ‘the extent to which employees commit to something or someone in their organization, how hard they work and how long they stay as a result of that commitment’.

The focus on employee engagement continues to be a critical factor for ST to achieve its business targets. Taking forward the initiative started in 2008 to move to an engagement focused survey, in 2010 this survey was conducted globally, providing employees with an opportunity to share their perception regarding their jobs and ST’s work environment.

The overall participation rate in this survey was 86%, which was higher than the 80% achieved in 2008. The engagement relationship measured through the survey shows a significant improvement in our employee engagement levels across ST, compared to 2008 results and despite the 2009 crisis, though the results remain below benchmark averages. Over the same period (2008-2010), the average engagement levels across the benchmark fell, indicating ST’s performance is even stronger in relative terms. The percentage of ST employees exhibiting the highest levels of engagement increased from 3.8% to 6.6% (an increase of 74%) and benchmark average is 5.9%. Improvement in employee engagement has been driven largely by improvements in managerial performance.

Another area of improvement has been employees expressing greater confidence in ST’s senior executive team and the strategic direction of the company.

The results of the survey have been cascaded to all managers and other relevant staff. HR and Internal Communications groups have worked closely together to improve confidence, trust and pride in ST and its leadership as well as to increase the amount of employee recognition.

In line with our initiatives to engage employees, the focus on our long-standing suggestion scheme has remained consistent, measuring the percentage of accepted suggestions that are implemented. In 2010 this rate improved marginally to 55% from 53% in 2009. In 2010 the recognition activities continued to be our strategy embedded in our culture of Sustainable Excellence. The budget available with local sites for recognition activities was a US$ 3.3m which was almost double the budget of 2009 at US$ 1.6m. In addition to this, in order to improve the direct connection between employees’ contributions and ST strategy, the corporate recognition program, STAR, has evolved to ensure that the STAR categories to which participants must apply correspond with ST’s key annual priorities: manufacturing and supply chain excellence; new product and business creation; quality; innovation; corporate responsibility and improving efficiency.

Compensation and benefits

Remuneration

In 2010 annual increases in salary were implemented across all sites after no increase in 2009. Due to specific local and cultural challenges there was also a mid-year increase given by an additional budget which was specially focused on a few countries in Asia-Pacific region (see page 28). Overall 95.2% of the employees have been covered by individual salary increases; 82.4% of employees are above the ST’s minimum range of salary for their job grade according to the company policy. For 2010 the number of employees below ST’s minimum salary scale has increased compared to 2009, which is largely due to the salary freeze during 2009. Each year a dedicated budget is assigned to reduce the percentage of those who do not reach this minimum of the salary range of their job grade. We will continue to monitor this in future.

Benefits, bonuses and Unvested Stock Awards

In 2010, around 24% of eligible employees (from the professional population) received Unvested Stock Awards, compared to 23% in 2009 and 33% in 2008. This is in line with the company’s desire to deliver Stock Awards to a limited population as a strong recognition and retention tool for key contributors. ST’s incentive plans vary throughout the world based on local market practices, and there is a consistent element applicable to all relating to company performance with better results achieved by the company resulting into better incentives received. For top management and executives, 50% of their incentive is conditional on the achievement of the targeted company performance level, while for all others 25% is subject to this measure. As the company achieved its performance target for 2010, the incentive payments will be made accordingly.

Employees survey - Engagement rate

<table>
<thead>
<tr>
<th>STS28a</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall participation rate (%)</td>
<td>80</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td>Rational Commitment Index</td>
<td>0.16</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Emotional Commitment Index</td>
<td>0.35</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Discretionary Effort Index</td>
<td>0.43</td>
<td>0.44</td>
<td></td>
</tr>
<tr>
<td>Intent to Stay Index</td>
<td>0.34</td>
<td>0.32</td>
<td></td>
</tr>
</tbody>
</table>

Formal recognition

<table>
<thead>
<tr>
<th>STS28</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall recognition budget of all sites (US$k)</td>
<td>1,031</td>
<td>2,684</td>
<td>2,161</td>
<td>1,644</td>
<td>3,305</td>
</tr>
<tr>
<td>Number of people recognized</td>
<td>77,390</td>
<td>50,171</td>
<td>38,805</td>
<td>38,373</td>
<td>36,697</td>
</tr>
</tbody>
</table>

| STS34 | | | | | |
|-------|------|------|------|
| % of accepted suggestions which were implemented | 39 | 62 | 61 | 53 | 55 |

Unplanned absenteemism

<table>
<thead>
<tr>
<th>STS28b</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unplanned absenteemism</td>
<td>3.05</td>
<td>2.90</td>
<td>3.00</td>
<td>2.47</td>
<td>2.67</td>
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</table>

Remuneration

<table>
<thead>
<tr>
<th>STS30a</th>
<th>STS30b</th>
<th>STS38</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees above the ST minimum salary scale in their job grade</td>
<td>87</td>
<td>82.44</td>
</tr>
<tr>
<td>Employees below the ST minimum salary scale in their job grade</td>
<td>12</td>
<td>16.62</td>
</tr>
<tr>
<td>Employees covered by annual individual salary increase</td>
<td>NA*</td>
<td>95.24</td>
</tr>
</tbody>
</table>

Benefits, bonus & USA

<table>
<thead>
<tr>
<th>STS47</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unvested Stock Awards (USA)</td>
<td>34</td>
<td>35</td>
<td>33</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>Number of employees rewarded</td>
<td>6,000</td>
<td>6,300</td>
<td>5,700</td>
<td>3,670</td>
<td>3,790</td>
</tr>
</tbody>
</table>

* Not applicable in 2009 due to salary freeze.
Objectives 2010

Consolidate people management processes into a comprehensive corporate talent/performance management platform

Establish a learning infrastructure as a key strength of ST with an offering of state-of-art programs in all critical domains for all employees

Performance and assessment of potential

Employees’ performance and potential are assessed through two internal complementary programs: ‘Performance Appraisal’ and ‘People Review’. While performance appraisal is focused on short term evaluation of the employee’s contribution to the organizational needs, people review is projecting the employee’s evolution during medium to long term through an assessment of his/her potential to grow in the company.

In 2010 68% of employees (excluding operators) received an appraisal performed using electronic Performance Appraisal (ePA). For professionals, the percentage has increased from 78% in 2009 to 89% in 2010 which represents a continuous progress in the usage of this key process.

Performance appraisal creates the backbone for the annual individual salary increase. Another intended outcome is the individual development plan which is implemented and monitored throughout the year. 69% of the professionals who used ePA had a formal development plan.

To align with the strategy of ST and to enhance the collective stake of employees in ST’s performance, a workgroup comprising business managers was initiated during 2010 by Corporate HR Development. This workgroup revisited the current performance appraisal process with a goal to enhance the management accountability, to take into account the overall contribution of the individual and to allow more differentiation in the reward process. To reflect this evolution and change in approach, the evaluation was extended to three dimensions (individual achievements, professional behaviors and job fit to organizational needs) and the new performance rating scale was implemented.

The people review process was conducted in 2010 with a target to cover all professionals. While we did not reach the full target, the actual result of 43% of professionals assessed represents a considerable improvement against the 21% of professionals assessed in 2009. This professional category includes 73% of job grade 14 and above. Our strategy is to identify key talent across all sites and have an integrated talent management approach for them.

The revised focus of the people review in 2010 was to have an evaluation of the experienced professionals in order to identify the talents within ST. Our strategy is to identify the key talents of our company across all the sites and the organizational hierarchy and have an integrated talent management approach for them.

Career development

We continue to monitor three indicators to evaluate the effectiveness of our career development process. These show that 15% of employees had a promotion during the year, while 33% had a change in their job function. The third indicators shows that the percentage of jobs filled internally was slightly lower at 41%, compared to 48% in 2009. This is due to the fact that most of the hiring had taken place in manufacturing operations in the Asia-Pacific region, leading to limited possibilities for internal mobility.

In 2010, the number of training hours for professionals increased to 32 from 26 in 2009. We see a similar trend for non-professionals, with a marginal increase to 43 from 41 in 2009. For the operator population, the number of average training hours is 91 which has decreased slightly from 94 in 2009 and this is primarily due to closing down of manufacturing operations in US where the average was relatively high in 2009. The training for operators reflects both mandatory training on equipment and procedures often linked to certification and re-certification.

ST continues to invest in its employees’ development in various ways, including the fact that 3% of the total number of ST employees are enrolled in formal external schooling programs paid for by ST. While the percentage is stable compared to 2009, there is a significant increase in the number of professionals who are now included in this program, 4.4%.

In 2010, 1.5% of ST employees are formally recognized as ST ‘Associate Trainers’, qualified to train other ST employees on key programs and subjects. While this continues to be a good source of motivation for the employees, it also helps in ensuring consistency of the training that is conducted.

In this area of training, 2010 was a special year with significant changes occurring in ST’s learning structure. ST’s new Corporate Learning organization has established a company-wide learning infrastructure encompassing the learning offerings for both professional and behavioral competence domains for all employees through an extensive mix of tools.

For more information on ST Corporate Learning, see page 21
Objective 2010

Prepare for deployment of EICC training on worker-management communication

Working time and overtime

2010 was marked by a significant increase in production after last year’s economic crisis, and this is reflected in the average overtime per employee, which rose to 3.14% compared to 1.97% in 2009. ST faced stronger customer demand and stronger production needs. Working hours and overtime have been especially high in ST Muar (Malaysia). Local labor regulations allow 72 hours per week, limited by ST to the Electronic Industry Citizenship Coalition’s (EICC) standard working time of 60 hours per week, except in emergency cases. Working time and overtime issues have been addressed by the site’s management during preparation for the EICC audit that will take place in April 2011. Following the EICC audit of ST Shenzhen (China) in April 2010, the site’s management has implemented a corrective action plan and better data capture to have a better control on overtime issues.

Freedom of association and collective bargaining | HRS 1

We estimate that 75% of our workforce is covered by union or employee-elected representation. In 2010, in countries where freedom of association has been historically limited, or remains limited by regulations, significant improvements have been achieved on ST sites this year. In May 2010, two Moroccan unions have integrated our Bouskoura site, and already three agreements have been signed with them. Our Shenzhen site in China has invested four full-time dormitory representatives to manage administrative matters, cleanliness, and complaints. In our Malaysian site, an evolution in the national legislation has enabled a major local trade union to require an official recognition through an onsite election aiming at acknowledging in 2011 the first employees’ union and the first collective agreements.

In 2010, 38 agreements have been signed between management and unions. For example, in France, agreements have been signed regarding medical insurance spending and high risks (incapacities-invalidities-death) and the reimbursement of medical costs to anticipate employees’ risks of illness or death in service.

Human Rights management systems activity update

In 2010, we have consistently focused on strengthening our management systems for Human Rights, and we have developed several programs to systematically embed Human Rights into our corporate and local management systems. Our activities in this area included:

Social/ethics management systems reinforcement

In 2010, we improved our social and ethics reporting campaign guidelines through a renewed reporting and consolidation system that ensures more reliable and flexible data collection. Human Rights management has been included in two main corporate programs; our ‘materiality exercise’ resulting in the renewed ST Sustainability strategy, and our Enterprise Risk Management (ERM) process. Also, ST Corporate Responsibility and Corporate Human Resources organizations started to draft a Corporate Social Manual aimed at harmonizing and enhancing our social management system.

Development of EICC shared methods and tools and participation in EICC activities

In 2010, ST continued in its full membership of the EICC (including representation on the EICC’s Board of Directors). ST has been involved in the EICC’s Learning & Capability Building workgroup to develop a training course on worker-management communication, including workers’ rights (for use by all EICC members and suppliers in the electronic supply chain). ST had a specific facilitator role in the partnership of this workgroup with the Fair Labor Association (FLA) and International Labor Organization (ILO) and in the communication with stakeholders.

ST is also deeply involved in the EICC Membership Compliance program, with our 12 manufacturing sites completing annual Self-Assessment Questionnaires (SAQs) and with an audit campaign launched in 2010.

Training, communication and stakeholder engagement

Since 2010, ST has worked with Business for Social Responsibility (BSR) that helped ST to conduct its ‘materiality exercise’ and the definition of its new Sustainability strategy. ST is also engaging with stakeholders and has participated in the Human Rights event organized by BSR, and the Living Wage event organized by Nokia in which several stakeholders such as Good Electronics, SOMO, investment communities and International Metalworkers’ Federation (IMF) also participated. In 2010 the Corporate Responsibility team also completed formal SA8000 training.

In 2010, ST continued to participate in the business network, Entreprises pour les Droits de l’Homme (EDH) and attended sessions with EDH to provide a common answer to the draft of United Nations framework for Business and Human Rights, and started looking at ways for internal implementation.

For more information on Human Rights management, see page 24

For more information on the ERM program, see pages 9-11

For more information on the ‘materiality exercise’, see page 7

For more information on Human Rights management, see page 24

For more information on our compliance to this program, see page 24

Collective bargaining | LA4 | THR5 1

2009 2010

Number of collective agreements signed in the year 59 38

Average weekly working time in selected countries in 2010 | THR8 1

<table>
<thead>
<tr>
<th>Country</th>
<th>Average weekly working time in 2009</th>
<th>Average weekly working time in 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>1.51</td>
<td>40</td>
</tr>
<tr>
<td>China</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Malaysia</td>
<td>10.32</td>
<td>48</td>
</tr>
<tr>
<td>Singapore</td>
<td>5.88</td>
<td>44</td>
</tr>
<tr>
<td>France</td>
<td>38.50</td>
<td>44</td>
</tr>
<tr>
<td>Italy</td>
<td>1.16</td>
<td>40</td>
</tr>
<tr>
<td>Malta</td>
<td>6</td>
<td>44</td>
</tr>
<tr>
<td>Morocco</td>
<td>2.62</td>
<td>44</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>ST standard working time</th>
<th>Overtime</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hours</td>
<td>Hours</td>
</tr>
<tr>
<td>North America</td>
<td>1.51</td>
<td>40</td>
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<tr>
<td>China</td>
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<tr>
<td>Malaysia</td>
<td>10.32</td>
<td>48</td>
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<tr>
<td>Singapore</td>
<td>5.88</td>
<td>44</td>
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<tr>
<td>France</td>
<td>38.50</td>
<td>44</td>
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<tr>
<td>Italy</td>
<td>1.16</td>
<td>40</td>
</tr>
<tr>
<td>Malta</td>
<td>6</td>
<td>44</td>
</tr>
<tr>
<td>Morocco</td>
<td>2.62</td>
<td>44</td>
</tr>
</tbody>
</table>

Percentage of employees working part-time by gender | THR9 1

<table>
<thead>
<tr>
<th>Gender</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>84.77</td>
<td>84.96</td>
</tr>
<tr>
<td>Men</td>
<td>15.23</td>
<td>15.04</td>
</tr>
</tbody>
</table>

Working time and overtime hours | STS36 | THR7 1

<table>
<thead>
<tr>
<th>Year</th>
<th>STS36</th>
<th>THR7</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>100</td>
<td>4.17</td>
</tr>
<tr>
<td>2007</td>
<td>100</td>
<td>3.12</td>
</tr>
<tr>
<td>2008</td>
<td>100</td>
<td>2.22</td>
</tr>
<tr>
<td>2009</td>
<td>100</td>
<td>1.97</td>
</tr>
<tr>
<td>2010</td>
<td>100</td>
<td>3.14</td>
</tr>
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</table>

Communication meetings | LAS | STS34a 1

<table>
<thead>
<tr>
<th>Year</th>
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<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
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<tr>
<td>Number of meetings</td>
<td>9</td>
<td>10</td>
<td>10</td>
<td>15</td>
<td>11</td>
</tr>
</tbody>
</table>
ST’s commitment to the local community
Engaging with the local community at all of our sites around the world in a variety of different ways remains a strong aspect of our culture. Many site-based initiatives and activities have a charitable aim, either social or environmental. Here are some examples of initiatives implemented in 2010:
- ST Ang Mo Kio (Singapore) has initiated a ‘Have a Heart, Share a Gift’ charity drive. This initiative driven by the Electrical Wafer Sort (EWS) organization, called on employees to donate basic necessities such as rice, cooking oil and canned food to beneficiaries of the welfare organization ‘Care Corner for Elder Care Services’. Employees’ collection has benefited 110 needy or elderly people and both sites’ management and employees personally handed gifts to the beneficiaries on December 21.
- In March 2010 in La Jolla (US), ST employees participated in the San Diego Race for Autism in partnership with the National Foundation for Autism Research. The purpose of the 5km run/walk was to raise funds for programs to benefit children diagnosed with autism in the San Diego community.

Partnerships with the academic community
In 2010, we refined our community indicator to distinguish between partnerships with local universities, colleges and schools and R&D partnerships (reported in the economic section). Collaboration with academic institutions, universities, schools and colleges represents 374 strategic partnerships for 2010. An example of an initiative conducted with these partners is ST Rousset (France) which has implemented an original program called ‘ST3e’, offering a class of 20 pupils and their teachers from a secondary school the opportunity to see what industry is like. Different workshops were developed in collaboration between teachers and ST engineers to provide educational materials with examples of their application in the company. The objective is to make pupils think about their career path, their professional vocation, and to stimulate technical interest.

Charitable donations
Cash donations to support charitable activities, including employee donations to Haiti’s victims, remained stable at US$ 452k, while in-kind donations significantly increased in 2010. Donations are made directly to Haiti’s victims, remained stable at US$ 452k, while in-kind donations to support charitable activities, including employee donations to Haiti’s victims, remained stable at US$ 452k, while in-kind donations increased in 2010. Donations are made directly

Corporate responsibility awards
In 2010 there were 23 awards received by ST sites for excellence in corporate responsibility.

In December 2010, ST Calamba (Philippines) was given an award by the Haribon Foundation for its support to the ‘Road to 2020 Campaign’ to restore the Philippines’ rainforests and for assisting in the rehabilitation of the vulnerable Caliraya Watershed considered to be a major forest reservation. The site aims to plant 20,200 trees by 2020 to mark its milestone 20th year in the Philippines.
In Ang Mo Kio (Singapore), Mr. Sirtori, the ST Group Vice President and Asia Chief Financial Officer, received the 2010 May Day ‘Upturn the Downturn’ award from the National Trade Union Congress (NTUC). This award recognizes individuals and companies who have saved jobs and looked after workers during the 2009 economic downturn. Mr. Sirtori was recognized for his contribution to facilitating the re-skilling and re-deployment of workers, guiding downsizing activities and enhancing workers’ employability.

ST Foundation
2010 has been an extremely successful year for the ST Foundation Digital Unity (DU) program with over 30,000 trainees who have completed the Informatics and Computer Basics (ICB) course. The DU program exceeded the symbolic threshold of 100,000 beneficiaries worldwide. In addition to this, two new projects were launched in Congo Brazzaville and the Dominican Republic, bringing the total number of DU countries to 20. In 2010 the program has also been expanded in France with the development of a new partnership with CARITAS-secours Catholique in Grenoble. Teachers have been trained for the deployment of the DU program to make it available to ageing, unemployed and immigrant sections of the community.
In 2010, two groups of ST volunteers have worked in cooperation with the Foundation’s staff to prepare a standardized DU program package with updated DU basic information course and a number of supplementary materials for the deployment of this program in DU labs worldwide. This new material is expected to be available in 2011.

For more details on the ST Foundation’s activities, see page 26

Our 2011 objectives
- Publish social objectives for 2011.
- Complete implementation and communication of the talent and performance management programs.
- Deploy the networked learning approach and execute the Leadership Development curriculum based on organizations’ needs and associated investments.
- Achieve continuous improvement in key engagement drivers at all levels in the organization, measured through our annual engagement survey.
- Following our ‘materiality exercise’ conducted in 2010, review our objectives and KPIs in terms of: labor rights & social issues, local sustainability impacts and partnerships in R&D & education.

Table: STMicroelectronics donations I S01 I EC1 I STS43 I
<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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<tbody>
<tr>
<td>STS39</td>
<td>271</td>
<td>444</td>
<td>463</td>
<td>474</td>
<td>452</td>
</tr>
<tr>
<td>STS39a</td>
<td>772</td>
<td>250</td>
<td>188</td>
<td>268</td>
<td>4,253</td>
</tr>
</tbody>
</table>

(*) In 2010, we restructured our data for partnerships with the academic community doing a split between the partnerships for R&D purposes (common research labs, long term research contracts (CPRL, BDI), any Research and Development programs, etc.) and those dedicated to teaching programs, internship programs and recruitment.

Table: Corporate responsibility awards I 2.1 I STS43 I
<table>
<thead>
<tr>
<th>Number of recognitions or awards received for excellence in CR</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>STMicroelectronics Foundation</td>
<td>S01</td>
<td>EC1</td>
<td>2006</td>
<td>2007</td>
<td>2008</td>
</tr>
<tr>
<td>Total new trainees</td>
<td>171</td>
<td>645</td>
<td>120</td>
<td>72</td>
<td>57</td>
</tr>
<tr>
<td>Total trainees from beginning of program</td>
<td>564</td>
<td>1,209</td>
<td>1,329</td>
<td>1,401</td>
<td>1,458</td>
</tr>
<tr>
<td>Total trainees</td>
<td>12,915</td>
<td>15,118</td>
<td>15,178</td>
<td>26,091</td>
<td>30,285</td>
</tr>
<tr>
<td>Total trainees from beginning of program</td>
<td>24,975</td>
<td>40,093</td>
<td>55,271</td>
<td>81,362</td>
<td>111,647</td>
</tr>
</tbody>
</table>

(*) In 2009, a project in Cango, which was originally born as a telemedicine project, has offered some informatics and Computer Basics courses on top of that. We have updated the figures of the total number of trainees for 2009 taking into account this initiative.
ST is strongly committed to ensuring robust safety management at our sites. A dedicated ‘Loss Prevention’ program is defined to ensure each manufacturing site and large non-manufacturing site has an appropriate level of protection against fire and associated hazards, e.g. smoke, corrosion, explosion, heat and water, etc. The objectives are also to provide an aid to the decision process for cost effective risk reduction and preserve human and physical assets.

In addition to ongoing safety risk prevention, an external risk control expert visits all the sites enrolled in the program annually. During these visits, he tests the effectiveness of prevention and protection equipments and evaluates the site’s safety management. Findings are communicated via a comprehensive report which includes a set of risk improvement recommendations. Based on these recommendations, sites have to propose loss-prevention actions and if necessary investment plans. Reports and action plans are reviewed and followed-up at corporate level. This process is also factored into site extension programs so that all loss prevention requirements can be implemented.

To promote continuous improvement, ST has defined criteria that recognize sites’ achievements in this area. To reach Adequately Protected Risk (APR) or Highly Protected Risk (HPR) levels, sites have to be compliant with 10 or 14 rules respectively, covering management, processes, equipment, fire protection, subdivision, storage of substances and handling, etc. At the end of 2010, seven manufacturing sites had attained either APR or HPR levels. The objective for 2011 is to have two more sites in line with these criteria and to continue the broadening of this program to additional non-manufacturing sites.
Since its inception, ST’s Health Plan has provided over 260,000 medical examinations for ST employees.

ST launched a worldwide Health Plan in 2006 with the goal of providing the same level of healthcare for all ST employees, wherever they are and whatever their work. The Health Plan both enhances employees’ wellbeing and health, helping to fill the gap between regions who have universal public healthcare systems and those who have not.

The health promotion strategy is global, but all programs implemented in ST sites are customized to address local needs and cultures. Sites’ involvement is fundamental to ensure that the health services and benefits offered to employees reflect local priorities.

ST’s Health Plan is based on established medical practices, and is deployed thanks to best practice initiatives that are shared and implemented throughout ST sites. This program includes medical check-ups, blood analysis, screening for the most common types of cancers (e.g., breast, colorectal and prostate), and educational programs including awareness of tobacco risks, nutrition, cancer prevention and cardiovascular risks.

**ST Health Plan management**

The definition and implementation of local health programs and activities are jointly managed by several local functions such as Communication, Human Resources, and Environment Health and Safety (EHS), working together with internal or external medical experts. The Corporate EHS department supports these programs and activities, playing a key role in the sharing of good practices.

A significant number of health projects have now been formally designed and developed across all ST sites. Since the Health Plan was introduced in 2006, over 260,000 medical examinations have been provided to ST employees. To foster the health prevention programs on site, a global budget is allocated to each of them for developing awareness campaigns and medical examinations. In parallel to this, we run a range of corporate communication campaigns to raise awareness about global health and wellbeing issues. We also reinforce good practice sharing between the sites to promote more innovative programs and health initiatives.

In order to follow-up on these projects and their benefits for ST employees, Corporate EHS collects various indicators such as the deployment rate of medical examinations (number of people with at least one medical examination during the last 18 months), the number of medical services by region, and the Health Plan’s expenditure. These figures are monitored by on-site Human Resources.

In 2008 ST defined six additional global health indicators to be tracked by sites (respecting the confidentiality of individuals) in order to help identify and address relevant health issues across the company: smoking, blood pressure, Body Mass Index (overweight and obesity), regular sport practice and cholesterol.

Based on these results, we have decided to focus our efforts on three aspects; tobacco consumption, overweight and physical inactivity. Guidelines adapted to each theme have been designed to support ST sites to better address these specific health programs. An example was the campaign on the importance of sport practice and good nutrition which is a good way to reduce risks of morbidity and mortality from cardiovascular and other diseases.

For more details on ST’s Health Plan approach, see pages 38-39

**Definitions of our global health indicators tracked and classified in 2010 by their level of importance**

<table>
<thead>
<tr>
<th>Global health indicators</th>
<th>ST definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical inactivity</td>
<td>Percentage of the population examined in the period of 18 months who declare having no regular sport activity.</td>
</tr>
<tr>
<td>Smoking</td>
<td>Percentage of the population examined in the period of 18 months who declare that they smoke (whatever the number of cigarettes per day).</td>
</tr>
<tr>
<td>Body Mass Index (BMI)</td>
<td>Overweight: Percentage of the population examined in the period of 18 months with a BMI between 25 and 30. Obesity: Percentage of the population examined in the period of 18 months with a BMI &gt;30.</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>Number of people among the population who have a HDL &lt;0.35g/l or a LDL &gt;1.6g/l in the period of 18 months.</td>
</tr>
<tr>
<td>Blood pressure</td>
<td>Percentage of the population examined in the period of 18 months with a blood pressure higher than 140/90mmHg.</td>
</tr>
</tbody>
</table>

(*): High Density Lipoprotein (HDL). (**): Low Density Lipoprotein (LDL).
ST’s 23 largest sites are certified to OHSAS 18001, with corporate rules and procedures deployed locally and a comprehensive safety dashboard of indicators. Since ST started to implement its corporate safety management system in 2001, recordable cases have decreased by 69% and the severity rate by 84%. Current safety results compare well against the semiconductor industry as a whole, positioning ST as best-in-class. In order to maintain improvements in the company safety performance, we are further strengthening training and awareness at both corporate and local levels. The objective is to empower employees and managers regarding safety, and to increase their commitment to a safety culture.

Enlarge the scope of employees covered by ST’s safety management system

In 2010, to further improve the completeness of safety performance reporting, the systemized, formal capture and reporting of safety performance was expanded and now covers 99% of ST’s employees. In addition to manufacturing and main Research and Development sites, about 80 ST entities are now included in monthly review and follow-up of their safety performance. To coordinate and facilitate this, safety reporting supervisors and deputies have been appointed at all sites. Each of these specialists has undergone dedicated training from the Corporate Safety senior manager, covering company safety reporting and procedures, OSHA indicators and the use of SafeTrack, ST’s recording and reporting tool, which is also useful for internal benchmarking and cross-fertilization. The training places an emphasis on the importance of capturing reliable data by stressing how this data can be used to make the workplace safer.

In 2011, the objective is to extend systemized data capture to the remaining 600 employees.

Enlarge the scope of employees covered by ST’s safety management system

There have been two particular initiatives at corporate level to complement local actions in terms of managers’ awareness and empowerment. Firstly, safety managers at all ST’s manufacturing sites have been trained to use a self-assessment tool that was initially piloted in 2009 at ST Crolles and Rousset (France). The tool will be invaluable in helping us to identify opportunities for the improvement of our Environmental, Health and Safety (EHS) management systems across the company. It supports sites’ safety managers in continuously improving safety performance through the integration of best international standards, regulations and practices. The second initiative was the design and deployment of two EHS e-learning courses for all managers within ST. These are aimed at raising managers’ awareness of:

- their role in terms of EHS management e.g. ensuring the safety of operations and demonstrating involvement and commitment to ST’s EHS values and objectives;
- the reasons for accurate capture and measurement of EHS performance and how this is achieved. Also the high profile of this in terms of the interest and expectations of ST’s key stakeholders e.g. relating to performance, commitment to local and international regulations and standards and continuous improvement against our EHS Decalogue.

The first course was launched in September 2010 and, by the end of the year, more than 700 managers had successfully completed it. It is also interesting and encouraging to note that some sites like Catania (Italy) have made the course compulsory.

EHS WEEK IN ST MUAR (MALAYSIA) IN NOVEMBER 2010

Every year, many sites organize EHS events to raise employees’ awareness through exhibitions and activities. Such events are always a great success and are a good way to draw attention to the importance of safety.

In November 2010, Muar organized this kind of event for more than 1,800 employees who participated in the following activities over a three-day period:

Day 1
- fire hose drill competition;
- exhibition on:
  - awareness of water, hazardous waste, air pollution with posters supplied by the Malaysian Department of Environment;
  - awareness of Health and Safety; information with posters supplied by the Malaysian Department of Occupational Health and Safety.

Day 2
- blood donation organized by the Muar Johor Health Department and distribution of health awareness pamphlets.

Day 3
- health check i.e. blood sugar content, blood pressure, Body Mass Index, by the Mahkota Medical Centre and the distribution of health awareness pamphlets.

ST has reached a level of safety performance that is best-in-class and is now focusing on empowering employees and managers so that safety becomes everyone’s responsibility.
The Ang Mo Kio site emphasizes a shared ownership of safety culture and a mindset that creates a proactive approach to safety management. A robust commitment to training and awareness building is necessary to cultivate and reinforce this culture and mindset to an extent where they become second nature to employees in their day-to-day work. A systematic approach is used to communicate safety protocols and procedures to employees, starting from the induction of new employees and carrying on throughout their career with ST. In 2010, employees at Ang Mo Kio received an average of 4.2 hours of EHS training per employee in areas such as Safety Awareness, Gas Safety, Risk Assessment, Fire Safety Awareness and OHSAS 18001, exceeding the corporate target of 3.5 hours per employee.

Designated Emergency Responders undertake specific Emergency Response Team training and certification. In 2010, 94 employees were certified in areas that included; emergency response procedures and use of fire extinguishers, self-contained breathing apparatus and personal protective equipment.

Recognizing the importance of basic first aid, cardiopulmonary resuscitation and use of fire extinguishers, the Ang Mo Kio Front-end site jointly organizes a Community Emergency Preparedness program with the Singapore Civil Defense Force. In 2010, 395 employees attended this program.

Safety training and awareness-building has had a positive impact on workplace incidents. The recordable cases rate has been steadily declining since 2007, bringing the Ang Mo Kio Front-end recordable cases rate has been steadily declining since 2007, bringing the Ang Mo Kio Front-end site closer to the corporate target of 0.32. The severity rate of 0.92 is below the corporate target of 4.2 with very promising progress again in 2010.

For almost a decade STMicroelectronics has aimed to be “a corporation that strives for zero accidents in the workplace for our people and partners”. ST started in 2001 with the deployment of the International Health and Safety (H&S) standard, OHSAS 18001 as the common management system for each manufacturing site. Nine years later, ST is among a small best-in-class group in the semiconductor industry and maintains its ambition to reach the ultimate goal of zero accidents.

ST’s performance is also recognized in Italy where ST has been engaged to support its industrial peers in enhancing their safety management and performance.

In 2007, during the traditional end of year speech, the President of the Italian Republic declared on television that the Italian injuries frequency rate* for 2005-2007 was 33.38 (this compares with 8.00 for ST) was unacceptable and that all managers leading companies had to be involved in putting in place new programs to reverse this poor trend.

Following this communication, ST Italy decided to actively participate in its country’s efforts to improve this situation. It initiated the design of a training course focused on managers’ legal responsibilities with the support of a judge from the Court of Milan. Italian ST managers have been involved in the project, mainly for the analysis of events and injuries that occur in Italian companies, and in establishing their root causes. This collaboration between legal professionals and ST managers has been very fruitful, combining “legal theories” with practical facts in a very open-minded discussion with the objective of reducing the injury level.

ST was also invited to join a working group created by the President of the Court of Milan and involving the most important judges, Trade Unions, the Italian national insurance of injuries on the work institute, the Istituto Nazionale per l’Assicurazione contro gli Infortuni sul Lavoro, offices of judicial police in charge of health and safety. ST was invited to join this group and to represent Italian industry. The objective of this network is to collect and share experiences and deploy best practices. The Court of Milan has organized several conferences to explain how misunderstandings can result in fatal events and what can be done to avoid misinterpretation of legal obligations. The President of the Court of Milan introduced one of these conferences by declaring that the mission of the working group was not only to help all organizations to be compliant with legal rules but also, and above all, to save workers’ lives.

For more information on these conferences, visit this website osservatoriosicurezzalavoro.it

For more information on the Italian Business International organization, see www.businessinternational.it/home action

ST Agrate management worked with Business International organization to create networks with several companies that are adopting best practices. This was an opportunity to share information with other experts, increasing everyone’s efficiency in health and safety management. For instance, ST Agrate shared its experience on safety ownership rules and safety training to empower employees.

ST Agrate is also involved in a school in its neighborhood community to provide safety training to young people and to contribute to the creation of a safety culture. These experiences have also benefited ST Italy. Analyzing the root causes of accidents has helped enhance our own risk analysis and management.

(*) Injuries frequency rate = (number of injuries/ number of employees) x 1000.
Disclosure on management approach

We manage our Health and Safety (H&S) performance and systems to the international OHSAS 18001 standard which is widely recognized as the most rigorous international standard for Occupational Health and Safety. 23 of our sites, including all 13 manufacturing sites covering more than 92% of our employees, are certified to OHSAS 18001. One additional site (Bangalore) was certified in 2010.

The safety performance data presented in this section covers approximately 99% of our employees. The remaining 1% will be included in 2011 and work in functions and locations unrelated to manufacturing. Since 2010 we have extended the scope of our reporting by using a new online reporting tool to track, record and investigate all work-related injuries and illnesses across the company. It also allows internal benchmarking and the calculation of the related indices that are necessary for performance monitoring.

Best-ever safety results achieved in 2010

We are pleased to report that, since we began keeping company-wide records in 2004, there have been no work-related fatalities. There was further improvement of our performance in 2010 with a 19% decrease in the recordable cases rate for work-related injuries and illness, going beyond our 10% reduction target. The overall improvement since 2002 is 69%.

Our severity rate decreased by 43% in 2010, which was significantly better than our 10% reduction target. The overall improvement since 2002 is 84%.

The impact of these results can be seen in the decrease of the estimated cost to the company by more than 40% in 2010 compared with 2009 (see graph). In total, the improvements since 2002 have resulted in savings of more than US$35m.

In 2010 we continued to expand a number of initiatives and programs, in particular in the areas of communication, awareness and training. We also deployed our self-assessment tool to all our manufacturing sites. This tool helps us identify and control gaps and risks and choose the best way of preventing them. It stimulates the implementation of new ideas, sharing of good practices, helps our sites prepare and define next year’s objectives and assists in continuously improving the safety culture.

Contractor safety

In 2008 we started to track one element of recordable cases, injuries with lost time, incurred by our main contractors at all our manufacturing sites and our main non-manufacturing sites. In 2010 the injury rate remained at the 2009 level of 0.74. This covers more than 6,500 contractors. The overall improvement since 2007 has been 25%.

Chemical workstation assessment | STEV67 | STEV68 |

Each workstation using chemicals has been assessed using an internal methodology called ST Chemical Risk Assessment. ST has a comprehensive approach to ensure the identification of hazards associated with chemical storage, usage and disposal, with rigorous actions to control all such risks to an acceptably safe level.

This Chemical Risk Assessment takes into consideration both the specific characteristics of the workstation and the risks of all chemicals used. Following the company-wide chemical workstation assessment carried out in 2005, we have adopted an approach based on precautionary principles when assessing the Environmental, Health and Safety (EHS) risk of new chemicals. All new chemicals are screened, evaluated and require the approval of the site chemical committee before entering the site. In this evaluation, strict engineering controls, hazard identification, training, measurement, collective and personal protective equipment are taken into consideration on a continuous basis.

Health and Safety topics covered in formal agreements with trade unions | LA9 |

For details, see the online version of the report

Health and Safety fines & penalties

None.

(*) Domestic Recordable Cases are on-site cases with a fall or slip on stairs/floor, ground/indoors, while walking, struck by or against door/chair/building and structures/trees, etc. This is based on OSHA event classification followed by ST. See the chart on the html version of the report.

Reduce recordable cases rate to 0.32 and severity rate to 4.2

Reduce the rate of injuries with days lost for our contractors by 10%

Deploy a new self-assessment tool to main manufacturing sites

We continue to encourage and adopt a proactive approach; looking forward, anticipating and predicting in order to prevent injuries. We firstly identify a hazard and then anticipate its possible impact. The hazard is analyzed, recommendations are proposed and corrective actions and system improvements are implemented.

This has resulted in a 28% decrease in the rate of industrial cases and a 1% decrease in the rate of on-site domestic cases, which are not directly linked with industrial activity. Note that, in ST, we split recordable cases into two main categories: ‘industrial’ and ‘on-site domestic’, to allow a more effective approach to improvement**.

For more information on our training and awareness programs, see page 37

[Diagram: Health & Safety performance overview 2010]
Objective 2010

ST's Health Plan approach
The health and well-being of our employees is essential to the success of our company. ST's Health Plan provides voluntary health promotion programs, based on the following key building blocks:

- regular medical examinations for all ST employees, at least every 18 months, with check-ups performed by a doctor or clinician;
- specific tests or examinations, based on risk factors for early diagnosis and disease prevention, i.e. blood analysis, mammography, chest X-rays, colorectal cancer tests, nutrition and weight counselling, or stress management;
- biomonitoring for employees working in manufacturing areas, and especially on some specific maintenance operations to measure potential exposure to hazardous substances;
- educational programs based on identified health concerns such as physical inactivity, obesity, smoking, stress management.

In addition to ST's Health Plan, in 2010 ST's Corporate Environment Health and Safety department required all ST's manufacturing and non-manufacturing sites to be equipped with heart defibrillators. This program was designed to complement the emergency preparedness for cardiovascular risks. Their deployment is accompanied by specific training and awareness.

At the end of the year, 25 sites, including 8 of our 12 manufacturing sites, had started equipping their buildings with defibrillators. Tours (France) installed 6 defibrillators, one in each building. The objective for 2011 is to cover 90% of our employees.

Health Plan deployment in 2010
In 2010, we continued to deploy a number of health initiatives and programs. The corporate expenses for ST's Health Plan were US$ 815,000, which paid for 32,456 check-ups and approximately 51,000 single immunizations. The corporate expenses for ST's Health Plan were US$ 815,000, which paid for 32,456 check-ups and approximately 51,000 single immunizations.

Based on our stated 18-month check-up frequency, the average number of people who should have been offered a health check last year covers two thirds of ST's employees: 43,400*, i.e. 29,000 employees. For the first time, in 2010, we have achieved this target with 32,456 check-ups.

We are pleased to see that the number of check-ups provided this year has increased by about 63% compared to 2009.

For the recordable cases rate and severity rate, increase the reporting coverage to 100% of our employees.

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(*) ST total population minus the US which participates in the Health Plan but does not disclose any information about health for legal reasons.

INTERVIEW WITH DR. GAN AH SAI, EXTERNAL VISITING DOCTOR IN ST MUAR (MALAYSIA)

“Through my experience in Muar, ST is the only company in Malaysia that has a comprehensive corporate Health Plan. When I’m interacting with the workers, they are very appreciative of this program.

Through ST’s Health Plan, employees have become much more aware of their health status as it allows them to take preventive measures to reduce the occurrence of medical issues.”

HEALTH & SAFETY AWARDS
Calamba, Philippines
Department of Labor and Employment, Bureau of Working Conditions Director, Brenda Villafuerte, presented STMicroelectronics and its safety practitioners a Dow-BWC Smile award for the Safety Milestone of 9,224,643 safe man-hours, which was achieved between May 2008 and June 2010.

Longgang, China
The award, given by the local fire bureau to Longgang (China), is based on the achievement of four attainments:

- the ability to extinguish a fire;
- knowledge in fire safety;
- evacuation plans and practices;
- high management commitment and awareness in fire safety programs.

For more information on our health programs, see the article on page 35

For more information on the indicators presented in this section, please refer to the Reader’s Guide at the beginning of the report.

For definition of the safety indicators presented in this section, please see the online version of the report.

Our 2011 objectives

- Achieve a recordable cases rate of 0.3 or below and a severity rate of 3.7 or below.
- For the recordable cases rate and severity rate, increase the reporting coverage to 100% of our employees.
- Reduce the rate of contractor lost time injuries to 0.67.
- Continue company Health Plan deployment.
1.0: REGULATIONS & COMPLIANCE

1.1: Comply at all of our locations with all applicable national, regional and local Environment, Health and Safety (EHS) regulations.

1.2: Meet at all of our locations, the most stringent of, either our national/local EHS regulations, or the Company EHS Standard Operating Procedures (SOP).

1.3: Apply this requirement for all locations, activities, processes and products.

2.0: CONSERVATION

2.1: Energy for manufacturing: reduce total energy consumption (kWh per production unit) by 5% per year through process and facilities optimization, conservation and building design.

2.2: Energy for products applications: develop products for alternative energy uses, reduced fuel and energy consumption and increased energy efficiency.

2.3: Energy for products use: reduce continuously the energy used by our components.

2.4: Water use: reduce water draw-down ([cubic meters per production unit]) by 5% per year, through re-use and recycling, conservation and process optimization, and strive towards recycling rates of 45% for our manufacturing sites.

2.5: Chemicals: reduce total consumption of chemicals by 5% per year (weight per production unit), through process optimization and recycling.

3.0: GLOBAL WARMING

3.1: Energy: reduce total emissions of CO₂ due to our energy consumption (tons of CO₂ per production unit) by 5% per year.

3.2: Renewable energies: adopt whenever possible renewable energy sources such as wind, hydrotlectric, geothemic, photovoltaic and thermal solar.

3.3: PFCs: reduce absolute perflurinated compounds (PFC) emissions by 30% in 2020 from 1995 baseline.

3.4: Carbon neutrality: compensate the remaining direct CO₂ emissions through reforestation or other carbon sequestration methods, to reach CO₂ direct emissions neutrality by 2015.

4.0: POLLUTION

4.1: VOCs (Volatile Organic Compounds): implement at 100% of all sites VOC abatement systems*.

4.2: Acidification: implement at 100% of all sites acids/ammonia scrubbers*.

4.3: Heavy Metals: implement at 100% of all sites heavy metals segregation/abatement systems*.

4.4: Fluorides: implement at 100% of all sites fluorides abatement systems*.

4.5: Noise: meet a “noise-to-neighbors” rate of less than 60 dBA at any point and any time outside our property for all sites, or comply with local regulations (whichever is most stringent)*. (*) Whereser technically possible.

5.0: RISK MANAGEMENT

5.1: Chemicals selection and screening: adopt an approach based on precautionary principles when assessing the EHS impacts of new chemicals (liquids, gases and solids) and operational processes.

5.2: Continuously reduce hazards and hazardous materials in our processes and activities, striving for an environmentally friendly, safe, and healthy working place.

5.3: Strive towards continuous reduction and elimination of substances of high concern such as DFR (Carcinogenic, Mutagenic, toxic for Reproduction), bio-accumulative, persistent, ODS (Ozone Depleting Substances) in our processes and products.

6.0: WASTE

6.1: Reuse and recycle at least 95% of our waste.

6.2: Reduce the generation of waste by at least 5% per year (weight per production unit).

6.3: Reduce the generation of hazardous waste by at least 5% per year (weight per production unit).

6.4: Reduce the landfill waste to less than 2%.

7.0: PRODUCTS & PROCESSES

7.1: Design products for decreased energy consumption and for enablement of more energy efficient applications (2.2) and products that create value for all stakeholders, with a focus on healthcare and safety applications.

7.2: Develop and manufacture products and processes, responsibly managing their potential social, EHS impacts, establishing Eco-tools (Life Cycle Assessments, Eco-Profiles,…).

7.3: Strive towards “products greening strategy” through EcoPack® programs deployment and 100% recyclable and PVC free packing materials.

7.4: Have 100% of our new products “eco-designed” by 2015.

8.0: PROACTIVITY

8.1: Promote the use of more efficient (less consumption and lower pollution) vehicles for our employees, and encourage the use of alternative ways of transportation (mass transportation, car sharing) and clean and healthy ways of transportation (bicycles, walking).

8.2: Support local initiatives for sponsoring EHS projects, sponsor local EHS events at each of our sites, encourage our people to lead or participate in EHS committees, conferences, etc.

8.3: Select only suppliers and sub-contractors compliant with our EHS requirements and practices. Establish long-standing partnerships with suppliers and customers to achieve common environmental goals and strongly encourage suppliers and subcontractors to be EMAS validated or ISO 14001 certified and OHSAS 18001 certified (target of 100% for our key suppliers and sub-contractors), and assist them through training, support and auditing.

8.4: Strive towards ‘green procurement’ and purchase Eco-Label TM or other ‘green labels’ (when available) materials, products and energies.

9.0: HEALTH & SAFETY

9.1: Number of work-related injuries and illnesses: reduce the Recordable Cases Rate* by at least 5% per year.

9.2: Severity Rate**: reduce the Severity Rate by at least 5% per year.

9.3: Subcontractors: reduce the main on-site subcontractors Lost Work Days Cases Rate* by 5% per year.

(*) OSHA (Occupational Safety and Health Administration-USA) model.

10.0: MEASUREMENT & VALIDATION

10.1: Continuously monitor our progress, including periodic audits of all our sites worldwide, including non-manufacturing sites, and cooperation with international organizations and corporations to benchmark and define future goals.

10.2: Measure progress and achievements and publish our results in our Sustainability Report.

10.3: Maintain the ISO 14001 certification, EMAS validation and OHSAS 18001 certification of all our manufacturing and large non-manufacturing sites worldwide.

10.4: Certify new manufacturing and large non-manufacturing sites within 18 months of their operational start-up.

10.5: Design and certify all new buildings and manufacturing sites according to LEED® (Leadership in Energy and Environmental Design) or equivalent methodology (concept of zero energy building).

10.6: Verify by a third party our GHG emissions of our manufacturing sites and our CO₂ sequestrations.
Sustainable water management is a crucial issue for both communities and businesses. The world’s population is growing at a rate of 80 million people per year which generates an increased annual fresh water demand of approximately 64 billion cubic meters*. In the meantime, the demand for industrial water is also rising to sustain this growing population. The responsible management of this essential resource is of critical importance for a company such as ST.

ST identified water conservation as a key issue for sustainable growth in the first release of its EHS Decalogue in 1998. Since then we have achieved our yearly reduction target of 5% for water draw-down i.e. cubic meters per production unit. Through continuous improvement programs undertaken by each Front-end manufacturing site, ST’s water footprint has been further reduced by 50% in the past five years. The Agrate site has chosen to go beyond ST’s EHS Decalogue targets to minimize the impact of its water consumption on local communities.

Re-engineering to save water

ST Agrate has developed a dual approach, firstly through the ‘water saving’ program, focusing on reducing consumption, and secondly through the ‘zero deep water’ program taking measures to preserve the high quality water source. The result is that, in 2010, ST’s extraction from the deep aquifer was 75% lower than in 2006.

Following the ‘reduce, recycle, reuse’ strategy, Agrate’s first step was to measure and evaluate patterns of water use to know which areas to focus on. This entailed a detailed analysis of how every drop of water was being used throughout our production processes. It then set about introducing specific measures to reduce consumption. Actions undertaken have included:

- **Reducing** - Identifying the most water-efficient equipment and processes for each production step and then aligning operating procedures with these best practices to reduce the overall primary consumption.
- **Recycling** - Extracting further usable water from the concentrate produced by the UPW plant. Prior to this, the concentrate had been discarded.
- **Reusing** - Using post-production water from the manufacturing process for specialist equipment such as scrubbers and cooling towers.

In 2006, before implementing the ‘zero deep water’ program, extraction from the deep aquifer accounted for 24% of the total site consumption. This major program was undertaken to improve the efficiency of UPW production, and at the same time, modify water distribution across the site to divert UPW only to the production processes that needed it. These steps reduced the site’s dependence on the deep aquifer and, by 2010, only 7% of water was being drawn from this source. This residual extraction is due to one particular application which needs exceptionally pure water with zero organic content which, at the present time, is still located close to one well extracting deep water. In the coming year, this application will be upgraded which will enable us to eliminate all deep water extraction by 2012.

Cost savings and community benefits

ST Agrate has always taken pride in its role in the local community and has recognized the critical importance of responsible water management. The overall levels of water extraction have been reduced by 33% over the past six years. The reduction is highly significant to the community as it equates to the typical water usage of around 20,000 people, equivalent to the total combined population of the two towns closest to the plant, Agrate and Caponago.

The programme has also delivered some significant cost savings. From a total investment of US$ 150,000, the water management program has saved US$ 600,000 per year over the past six years. The work carried out at the Agrate site gained a wider interest and the site is now contributing to several national water conservation programs.

(**) ST standard to calculate the water consumption by production unit (water out for front-end sites, number of units for back-end sites).
ST RENEWS ITS EHS STRATEGY AND COMMITMENTS

With the fourth version of its Environmental, Health & Safety (EHS) Decalogue, ST renews its historical commitments and resets its strategy. Alain Denielle, Sustainable Development Group Vice President, comments on ST’s ‘ten commandments’ and on the environment, health and safety challenges facing the company over the next few years.

Alain Denielle
Corporate Sustainable Development Group Vice President

**Interview**

In 2010, you enlarged your responsibilities beyond EHS (your previous role) to include Corporate Responsibility (CR). What synergies are you seeking to generate with this new scope?

Managing both EHS and CR groups, which are major domains of sustainable development, offers a lot of opportunities for synergies. One key added value is to take advantage of the long-term expertise of ST’s environmental teams, at corporate and local levels, and of the CR department view and understanding of our external stakeholders’ expectations. Indeed, ST has always been very active in constantly raising the environmental performance of our manufacturing sites. But in the meantime, international society’s mindset rapidly evolves and pushes for an ever more considerate industry, with wider responsibilities. The CR team is well-positioned to detect and address these new expectations, share them with our internal EHS community, and communicate our performance to our stakeholders such as Socially Responsible Investment (SRI) rating agencies.

**ST ENVIRONMENTAL COMMITMENTS FRAMEWORK**

*DECREASING THE ENVIRONMENTAL FOOTPRINT OF ST PRODUCTS*

*DECREASING THE ENVIRONMENTAL*

Moore’s Law and Mere Moore
Reducing the size and weight of our devices (shrinks)

- Launch of Design for Energy saving
- Management of chemicals and substances
- Life Cycle Assessment (LCA) and 1st Life cycle initiative
- Energy efficiency program
- EcoPacks program to remove polluting and hazardous substances from packages

- Manufacturing sites certified to ISO 14001 and EMAS validated
- Start of legal/regulatory audits (ERM)
- Local initiatives and People Empowerment (TQM)
- Environment managed at site level
- Creation of the Corporate Environmental function
- 1st Corporate Quality program: Total Quality Management (TQM)
- 1st Corporate Environment policy implementation
- 1st Ecological Decalogue
- Corporate Environmental Management Manual
- Carbon neutrality goals set
- EU Waste Electrical and Electronic Equipment (WEEE) Directive
- 1st Corporate Environmental report

**文字和策略**

**Programs and Initiatives**

**texts, laws and strategies**

1987
Birth of SGS Thomson Microelectronics

1989
Creation of the Corporate Environmental function

1992
1st Corporate Quality program: Total Quality Management (TQM)

1995
1st Ecological Decalogue

1998
1st Corporate Environment policy implementation

1999
Environmental data-banks collect all site environmental data

2000
Energy saving plans

2003
Energy efficiency program

2003
EU Waste Electrical and Electronic Equipment (WEEE) Directive

2002
Carbon neutrality goals set

1997
Manufacturing sites certified to ISO 14001 and EMAS validated

1996
Management of chemicals and substances

1996
Launch of reduction processes for consumption (energy, water, chemicals...) and emissions (air, water...)

1993
Start of legal/regulatory audits (ERM)

1993
Environmental Management Systems launched (EMS)

1993
1st Corporate Environment policy implementation

1987
Environment managed at site level

1993
Local initiatives and People Empowerment (TQM)

1998
Environmental data-banks collect all site environmental data

1999
Energy saving plans

2000
Measurement methods for site eco-footprints and environmental impacts

1995
Launch of Design for Energy saving
What is your vision of sustainability for ST?

We want to be recognized as a sustainability leader within the electronic industry. Since 1993, ST has continuously striven to develop its activities and products in a more responsible way, establishing ‘people’ and ‘environment’ as core company values.

Multinational firms are major actors on the sustainable development scene and ST has a key role to play in addressing the worldwide social, environmental, health and safety challenges. We cannot account for everything, but through our strong Sustainable Excellence values, our long-term experience in sustainable development and our deep commitment to continuous improvement, we pursue our journey towards environmental neutrality by reducing all our impacts.

One of your key programs in 2010 was the revision of ST’s EHS Decalogue. Why a fourth version?

ST released its first environmental Decalogue in 1995, and has renewed its EHS commitments several times. The third version of the Decalogue dated from 2005 and since then we have met new challenges. So, with this new edition, ST reiterates its strong commitment to our long-term values by engaging new ambitious EHS objectives. This contributes to ST’s ambition of being the benchmark in terms of sustainability, as stated on several occasions by our President and CEO, Carlo Bozotti.

The third version of the Decalogue dated from 2005 and has renewed its EHS commitments several times. The fourth version focuses on reaching the neutrality of our direct emissions, what does it mean?

ST’s objective is to approach environmental neutrality through the reduction of our total impacts. As our largest impacts arise from the release of CO2 and perfluorinated compounds (PFCs) at our manufacturing sites, we maintained the neutrality objective for our direct emissions, although we have already decreased our PFCs emissions per production unit by 60% since 1995. As regards other emissions such as volatile organic compounds, ammonia, heavy metals and acids, they are already well treated on sites, but we must continue to equip the sites where abatement systems are missing.

For more information on this new Decalogue, see page 40

Many things have already been done; what do you see as the main challenges of the EHS policy?

At ST, we are continuously looking for ways to improve our practices. I see several challenges to be addressed in the years to come:

Firstly, the impacts of our products in their manufacturing phases, and also during their whole life cycle. The eco-design program that we have added in our new EHS Decalogue aims at mitigating these impacts through the integration of environmental parameters in our devices’ design and production;

Secondly, the increasingly stringent chemicals management required from regulations and our customers, with regular updates of banned or restricted substances. We are really committed to ensuring a safe and healthy environment for our internal and external stakeholders in our daily activities;

Thirdly, our environmental neutrality, not limited to CO2 emissions, but embracing the whole spectrum of our impacts;

And finally we also have to ensure the continuous safety robustness of our manufacturing tools and processes to ensure that we are free from any safety, chemical or environmental accidents at our sites and locations.

Our ultimate objective is to be proactive and lead change through our EHS management and practices. We not only want to be at the edge of regulatory and customers’ requirements, but we also want to anticipate all these needs and requirements to achieve our Principles for Sustainable Excellence.

This new version focuses on reaching the neutrality of our direct emissions, what does it mean?

ST’s objective is to approach environmental neutrality through the reduction of our total impacts. As our largest impacts arise from the release of CO2 and perfluorinated compounds (PFCs) at our manufacturing sites, we maintained the neutrality objective for our direct emissions, although we have already decreased our PFCs emissions per production unit by 60% since 1995. As regards other emissions such as volatile organic compounds, ammonia, heavy metals and acids, they are already well treated on sites, but we must continue to equip the sites where abatement systems are missing.

Aiming for a stable and sustainable FUTURE

Aiming for the environmental neutrality of our ACTIVITIES

Aiming for the environmental neutrality of our PRODUCTS
OUR APPROACH TO CLIMATE CHANGE MITIGATION AND ADAPTATION

ST has integrated climate change into its environmental policy and is actively pursuing its goal of reducing its impacts on global warming. The renewal of our Environmental, Health & Safety (EHS) Decalogue in 2010 outlines crucial targets to achieve by 2015 and 2020. ST also aims at reducing its vulnerability to the effects of climate change through programs that increase its resilience, ability to recover quickly, and by developing innovative, energy efficient technologies.

Mitigation of global warming effects

ST has implemented a multi-faceted strategy to mitigate our greenhouse gas (GHG) emissions. Since 1995, we have measured our performance through an emissions accounting system, using indicators that have been designed in accordance with the GHG Protocol and Global Reporting Initiative (GRI).

The new EHS Decalogue details our commitments and actions to minimize our impacts through a four-dimensional global warming strategy:

Energy: Reduce total emissions of CO₂ due to our energy consumption (tons of CO₂ per production unit) by 5% per year.

Since the early 1990s, ST has been working with the World Business Council for Sustainable Development (WBCSD) to define how to reduce our CO₂ and other GHG emissions. Since then, we have achieved our targeted reduction of 5% per year. Our second and third Decalogue (1999 and 2005) had defined a carbon roadmap with a CO₂ neutrality target by 2010 which proved to be too ambitious. We faced a difficult worldwide economic situation and the GHG reporting process has also evolved with stricter calculation rules. This resulted in the review of our strategy in 2010 focusing now on direct emissions neutrality by 2015. ST’s largest direct emissions result from our use of PFCs in our manufacturing processes and in a smaller extent from our use of natural gas boilers.

PFCs: Reduce absolute perfluorinated compounds (PFCs) emissions by 30% in 2020 from 1995 baseline.

The semiconductor industry uses PFCs in its manufacturing activities at a relatively low level. PFCs have a long-lasting life and high global warming potential (GWP) and ST has defined a specific program to significantly reduce their emissions. Our policy requires all new processes and tools adopted by ST sites to be equipped with abatement systems. We have also defined an environmental investment strategy to upgrade existing equipment at our manufacturing sites. Despite an overall increase in PFCs consumption to support expanded production, our emissions remain at their 1995 level in absolute values, which equates to a decrease of 60% per production unit since 1995.

We work closely with the World Semiconductor Council (WSC) and are also part of a working group within the Electronic Semiconductor Industry Association (ESIA) to define and share technical guidance and develop best practices. ST has made important progress through the optimization of process recipes, replacement of high GWP gases with lower or GWP-free gases, and point-of-use abatement systems.

Renewable energies: Adopt whenever possible renewable energy sources such as wind, hydroelectric, geothermal, photovoltaic, and thermal solar.

Reducing our impact on global warming can also be brought about by changing our traditional ways of selecting and managing our energy sources. ST has defined corporate guidelines to increase the purchase and consumption of renewable energy and encourages the deployment of similar local initiatives. Renewable energy represented 6.9% of ST’s total manufacturing requirement in 2010 through initiatives such as the building of a wind farm in the South of France in 2003 which generated 23.8 million kWh in 2010.

Carbon neutrality: Compensate the remaining direct CO₂ emissions through reforestation or other carbon sequestration methods, to reach CO₂ direct emissions neutrality by 2015.

To offset the remaining emissions, ST has developed a number of reforestation programs. Between 2002 and 2003, ST planted approximately 9,000 hectares of trees in Australia, Morocco, Texas and Italy. In 2010, we commissioned a third party assessment of CO₂ sequestration for the overall reforestation program, based on the Weibull method*. In 2010, the annual carbon sequestered amounted to 249,000 tons CO₂, compensating around 52%...
of our annual direct emissions (18% of both direct and indirect). We forecast a total CO2 sequestered from 2002 to 2015 of 2.5 million tons CO2, enabling us to reach our neutrality target of 2015.

For more information on our CO2 sequestration validation, see MWH statement

Adaptation to climate change

While reducing our impact on climate change, we must also adapt to increase our resilience. Our materiality exercise undertaken in 2010 highlighted that GHG emissions from operations and sensitivity to energy markets were important issues from a risk viewpoint. Our 12 manufacturing sites are ISO 14001 certified and EMAS validated, which means that they have evaluated their environmental risks and impacts and have integrated them into management systems. ST Corporate EHS also undertakes reviews of local practices to assess site conformity. We also work in close collaboration with supply chain partners and strongly encourage them to adopt environmental management schemes. Through the Electronic Industry Citizenship Coalition (EICC) Self-Assessment Questionnaires (SAQ), we ensure that our main suppliers implement EHS risk assessment processes and programs. In 2010, 76.2% of our suppliers and 97.7% of our subcontractors were ISO 14001 certified and/or EMAS validated.

Our Decalogue requires all our sites to comply with their national and regional regulations and adopt the most stringent standards, be they local or corporate. Legal compliance is a crucial commitment on all our sites; ST addresses and anticipates requirements that are applicable to our activities and products.

We have two key company-wide programs in terms of risk management. The company Enterprise Risk Management (ERM) program has been introduced by Corporate Compliance department. In 2010 a first exhaustive review of corporate risks was carried out with Executive Vice Presidents and their respective organizations. The program will then be deployed across the company, under the supervision of the Audit Committee.

For more information on the ERM program, see pages 9-11

Business continuity procedures established by ST’s Corporate Security department are also translated into Business Continuity Plans (BCPs) which seek to manage continuity during natural or man-made events, enabling us to identify hazards, prevent and minimize possible risks or business interruptions, and ensure business continuity and customer service.

For more information about business continuity plan, see page 60

Defining and quantifying our exposure to climate change and energy-related risks is a complex process due to market price volatility and the forecasting of CO2 emissions taxation. ST consumes mainly electricity and very low quantities of natural gas and fuel. A department is dedicated to the management of energy sourcing at global level, following and anticipating our sites’ local regulations and specific needs. When purchasing energy, we consider proposals that offer the optimum balance between cost and environmental performance. Although our purchase and generation of green energy supplies only a small proportion of our total energy, ST also encourages sites to adopt and install renewable energy sources when possible, to be less dependent on this sensitive market. ST also continues to focus on energy saving in our manufacturing activities and the construction of energy efficient buildings.

A key area where ST can make a positive impact on climate change is through the design and development of energy saving products. These both offset climate change and have the potential to create new business opportunities. Examples include the development of products and technologies that use ultra-low power and deploy built-in smart energy consumption technologies.

For more information about responsible products, see page 52

(* Annual sequestration rate during the growth period with differentiations according to the kind of trees in the plantation.

MHW WORKS WITH ST ON A CO2 SEQUESTRATION PROGRAM

In 2010 and 2011, MWH worked closely with STMicroelectronics on the assessment of CO2 emissions sequestration at three afforestation projects in Australia, Morocco and Texas.

To mitigate its direct impacts on climate change, ST has two complementary programs; afforestation and PFCs emission abatement. MWH commented that ST has set challenging goals, is committed to achieve them and also committed to public reporting of performance. These principles are mirrored in the project in which MWH collaborated. ST did not choose to buy the cheapest carbon credits, but planned and established a long term afforestation program. The program was studied and developed to be reliable and consistent. Furthermore, during the course of the project, the program was further improved by carrying out additional monitoring activities and cooperating with external consultants.

SUSTAINABLE TRANSPORT OPTIONS FOR ST GRENOBLE EMPLOYEES

ST Grenoble (France), has celebrated the 10th anniversary of its company mobility plan. As part of our Sustainable Excellence culture, it promoted local initiatives to reduce the impact of our employees’ travel to and from work and to develop on-site programs to reduce carbon emissions. Although transportation represents only 8% of our total emissions, it remains a contributor to climate change at global level it is therefore important to seize any opportunity to reduce this indirect impact.

Several green transport initiatives are deployed on-site, promoted by communication and awareness campaigns, incentives for public transport and coaches, car-pooling networks, etc. In Agrate (Italy), there is now a dedicated website to connect employees to arrange car-pooling with a reduction in tolls offered to car-poolers. At Tours (France) there are bike parks with proposals to enable employees to rent or purchase bicycles for commuting and private use and there are also now internal shuttles between our Crelves/Grenoble and Rousset sites in France.

In 2000, ST Grenoble started the development of a company mobility plan to save CO2 and other traffic-generated emissions. Employees have been encouraged to switch to greener modes of transport through incentive programs, the availability of diversified transport and by working together with local authorities e.g. city council and public transport companies. The mobility plan offers a mixture and variety of sustainable options. The take-up to date can be expressed as the percentage of users for each:

- public transport including urban (37%), extra-urban (15%), and train (13%);
- bikes and electric bikes (22%);
- car-pooling (8%);
- motorcycles (4%);
- electric or gas cars (1%).

By 2010, 1,373 employees had joined the mobility plan, meaning that 60% of the site’s population is involved. The program is audited through Grenoble site’s ISO 14001 certification and enables a saving of more than 1,000 tons of CO2 each year. ST has also supported and promoted the deployment of similar plans for its local catering, cleaning and security subcontractors.

For more information on the ERM program, see pages 9-11

TOP ISSUE

GHG EMISSIONS FROM OPERATIONS
SENSITIVITY TO ENERGY MARKETS

For more information about business continuity plan, see page 60

For more information about responsible products, see page 52

For more information on the CO2 sequestration validation, see MWH statement
Environmental performance overview 2010

Objectives 2010

- Maintain ISO 14001 certifications on all ST manufacturing sites
- Maintain EMAS validation on all ST manufacturing sites

Disclosure on management approach (10.3) (10.4)

ST Management manages its environmental performance using ISO 14001 and the Eco-Management and Audit Scheme (EMAS), both of which are widely recognized as the most rigorous relevant international standards. In 2010, 17 of our sites were certificated to ISO 14001 and 15 were EMAS validated (including our 12 manufacturing sites). Also 13 ST sites that do business with Sony received the Sony Green Partner Certificate. Since 2001, Sony has created its own environmental standards to certify suppliers that are involved in the production of environmentally sensitive products.

Our environmental reporting covers 82% of our employees, and all our manufacturing sites. At the end of 2010, the data collection process for environmental performance indicators covered 12 manufacturing sites, excluding Phoenix (US) that was sold in 2010.

For the full disclosure on management approach, see www.st.com/Internet/com/about_st/st_manage_environm.jsp

2010, an impressive production upturn

2010 was a good year in term of production as the economic crisis of 2009 was overcome (the decrease of production between 2008 and 2009 was around 30% in terms of wafers out). The increase in production in 2010 resumed 2008 levels, a 45% increase compared to 2009. For this reason we have chosen to comment on our environmental performance by comparing 2010 data with 2008.

Environmental Burden methodology (EN16) (EN20)

Since 2001, net emissions to air and water have been reported using the Environmental Burden methodology to give a complete overview of the environmental impact of ST’s activities independent of the variation in production. After the significant impact that occurred in 2008 due to the curve-out activity linked to the creation of Numonyx (sold to Micron in 2010) and despite the production growth during 2010, we saw a further reduction in these results, most notably in air emissions, both due to significant investments in this area and to the closure of our site in Phoenix, Arizona (United States).

Emissions to air (EN16) (EN17) (EN19) (EN20)

In 2010 all the indicators relating to air emissions show a significant decrease, mainly due to investments at Tours (France), where point of use ammonia abatement systems were installed in 2010, and Agrate (Italy) where 2009 investments in VOC abatement systems have started to deliver performance improvements. Emissions of VOCs decreased by 27% for ST as a whole with Agrate decreasing by 30% and Tours by 50%. Atmospheric acidification decreased by 42% for ST as a whole (Tours by 68%) and the photochemical oxidant creation decreased by 48%, mainly due to Ang Mo Kio (Singapore) and Agrate. The only increase in this set of indicators is related to the global warming (+2.4%) which is explained by the increase in our energy consumption since both are correlated.

For more detail on the reduction in greenhouse gas emissions, see pages 44-45

Emissions to water (EN21)

Emissions to water also improved in comparison to 2008. Eutrophication and aquatic oxygen demand show a significant decrease by about 4.5% and 14% respectively. Aquatic ecotoxicity decreased by 24% and heavy metals emissions by 7.5%. This improvement is mainly related to the closure of two sites (Carrollton in 2009 and Phoenix in 2010), both of which had low wastewater treatment performance.

Environmental incidents 2010 (EN23)

A minor case of soil contamination by solvents occurred in Tours (France), in 2006. Investigations were completed in 2007 and remediation is still ongoing. A groundwater organic contamination identified at our site in Rennes (France) in 2006 has been investigated in collaboration with local authorities. A remediation plan was launched in early 2008 and is still ongoing. No new environmental incidents occurred in 2010.

Environmental awards 2009 (STEV19)

The Agrate site (Italy) won an award, sponsored by the Italian Environmental Ministry and the European Platform on Mobility Management, for its promotion of bicycle use for employees:
- Calamba (Philippines) was among 8 industries who were rewarded as part of the Philippines Environmental Partnership Program (PEPP) with recognition for their exemplary environmental performance with the DENR (Department of Environment and Natural Resources) Seal of Approval;
- Croles (France) was awarded with the Carnet Sanitaire label by Bureau Veritas for the health quality of its water and air networks, thanks to the outstanding management and control of legionella risks.

Environmental burden: net values (EN16) (EN17) (EN19) (EN20) (EN26) (STEV19) (4.1) (4.3) (4.4)

<table>
<thead>
<tr>
<th>Emissions to air</th>
<th>Units</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global warming*</td>
<td>MTCE</td>
<td>563,363</td>
<td>478,884</td>
<td>404,319</td>
<td>358,167</td>
<td>413,974</td>
</tr>
<tr>
<td>Ozone depletion</td>
<td>Kg R11 Eq</td>
<td>135</td>
<td>171</td>
<td>62</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>VOCs</td>
<td>Tons</td>
<td>290</td>
<td>262</td>
<td>244</td>
<td>170</td>
<td>178</td>
</tr>
<tr>
<td>Atmospheric acidification</td>
<td>Kg SO2 Eq</td>
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<td>58,178</td>
<td>63,142</td>
<td>55,370</td>
<td>36,581</td>
</tr>
<tr>
<td>Photochemical oxidant creation</td>
<td>Kg ethylene Eq</td>
<td>65,974</td>
<td>15,761</td>
<td>48,969</td>
<td>35,044</td>
<td>25,292</td>
</tr>
<tr>
<td>Air emission toxicity**</td>
<td>Kg PH4 Eq</td>
<td>3,737</td>
<td>4,881</td>
<td>4,720</td>
<td>4,101</td>
<td>4,484</td>
</tr>
</tbody>
</table>

| Emissions to water*** | Units | 2006 | 2007 | 2008 | 2009 | 2010 |
| Eutrophication | Kg (P+N) | 386,031 | 381,889 | 414,730 | 305,502 | 396,271 |
| Aquatic oxygen demand | Kg COD*** | 354,965 | 351,967 | 834,032 | 626,835 | 709,202 |
| Heavy metals to water | Kg heavy metals | 13,279 | 13,277 | 10,398 | 8,934 | 9,579 |
| Aquatic ecotoxicity | Kg Cu Eq | 13,964 | 10,398 | 7,598 | 6,698 | 5,774 |

(*) 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 (MTCE). Does not include GHG emissions from centralized manufacturing sites, subcontractors and facilities.

(**) 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).

46 STMicroelectronics Sustainability Report 2010
Objective 2010

Environmental accounting

Expenses
The table on page 47 presents the total costs versus savings for the three key resources used in our industrial processes (energy, water and chemicals).

The costs include all environmental expenses for water, waste water and air treatment, recycling of water and chemicals, waste transportation and disposal, as well as as costs related to environmental management systems, audits, permits and remediation.

They also include sampling and analysis of water, waste water, recycled chemicals, ground, air and external noise as well as the depreciation of equipment and investments in the upgrading of environmental facilities.

Savings
We calculate our annual savings as follows: we originally set a baseline using a 1994 model (2000 for chemicals) with the assumption that there are no installation enhancements. This baseline is projected each year and compared with the yearly value to show actual savings.

In 2010, our total accumulated savings compared to the "zero action" baseline were US$ 331m with net savings of US$ 278m once costs are deducted.

Environmental investment
The graph on page 47 shows the trend in environmental investment since 1994. The 2010 value seems relatively low compared with previous years and this is partially because environmental investments have become more and more embedded into the mainstream investments in production equipment. Indeed, ST has a dedicated policy requiring sites to ensure that equipment uses minimum quantities of chemicals, water, energy or other materials, and causes minimum air emissions, water pollution, chemical spills and waste. For example, equipment using PFCs is now automatically installed with built in abatement systems. Other specific environmental investments have been made to ensure environmental compliance (e.g. Crolles oil grid installation in the car park).

With the coming release of the fourth EHS Decalogue, ST senior management has engaged in allocating significant investments to meet these news targets, starting in 2011.

Programs for the reduction of natural resources

ST’s programs to reduce the use of energy, water and chemicals at all sites are the foundation of our long-standing eco-efficiency approach to environmental stewardship. These programs have saved the company more than US$ 1,600m over ten years. Once established at a pilot site, environmental good practices are then deployed in other manufacturing plants and building installations across the company. Most of the projects have a pay-back of less than three years, meaning that the money invested to increase equipment-related and other kinds of efficiency will be recouped within a maximum three-year period.

As part of our culture of spreading good practice across the company, many resource-efficient projects have been implemented in our sites in 2010:

- point of use ammonia abatement systems in Tours (France);
- 11 thermal processing units abatement systems for PFCs in Rousset (France);
- nitrogen consumption reduction program in all Back-end sites;
- installation of water flow control valves in Shenzhen (China);
- chiller upgrading in Muar (Malaysia).

Environmental costs versus savings

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total costs</td>
<td>35</td>
<td>28</td>
<td>41</td>
<td>48</td>
<td>53</td>
</tr>
<tr>
<td>Energy savings</td>
<td>129</td>
<td>201</td>
<td>192</td>
<td>87</td>
<td>219</td>
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<tr>
<td>Water savings</td>
<td>26</td>
<td>27</td>
<td>25</td>
<td>15</td>
<td>25</td>
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<tr>
<td>Chemical savings</td>
<td>82</td>
<td>90</td>
<td>89</td>
<td>58</td>
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<tr>
<td>Total saving</td>
<td>237</td>
<td>318</td>
<td>303</td>
<td>160</td>
<td>331</td>
</tr>
<tr>
<td>Balance (cost savings)</td>
<td>202</td>
<td>290</td>
<td>262</td>
<td>112</td>
<td>278</td>
</tr>
</tbody>
</table>

The method used to calculate the savings shown in this table is the following:

1) we set a baseline using the 1994 model with the assumption that there are no installation enhancements, except for chemicals for which the baseline is 2000;
2) this baseline is projected each year (in relation to the quantities produced);
3) each year, the actual value is compared to this projection; and
4) the result shows the theoretical benefits due to the installation improvements concerning the savings for energy, water and the use of chemicals.

Total costs cover expenditure of environmental management areas (including waste and remediation) and yearly net investment and equipment depreciation.

Environmental investments

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2006</th>
<th>2007</th>
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<th>2009</th>
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</tr>
</tbody>
</table>

% of total company investments
Objective 2010

Reduce energy consumption by 5%* (* Per unit of production/year compared to the 1994 baseline.)

Overall reduction in consumption of resources

In 2010, despite the significant production growth, consumption of resources in absolute values for all ST manufacturing sites decreased in comparison with 2008: electricity usage by 5.1%, water usage by 4.4% and usage of chemicals by 4.2%.

These positive trends are explained by a decreasing perimeter (two Front-end manufacturing sites have been sold between 2008 and 2010) and by the work completed at all our manufacturing sites to improve their efficiency despite the economic crisis of 2009.

Consumption of energy

Consumption of electricity per unit of production

In 2010 the overall figure for electricity consumption reduction was higher than the target set, compared to the 1994 baseline, but 3.4% lower than in 2008. Our EHS Decalogue target is to achieve a cumulative reduction of 5% per year (per unit of production).

Consumption of natural gas

Natural gas represents approximately 10% of our total energy use and is mainly used for air heating, for cooking on-site canteens and for abatement systems. The graph on page 48 summarizes the results of natural gas consumption per unit of production. The 2010 value versus 2008 shows a decrease of 26%.

Our global energy consumption per unit of production has also decreased by 5.6% compared to 2008 but we slightly missed our Decalogue target of 5% reduction per year, compared with the 1994 baseline.

Energy saved

The energy savings reported on page 48 are calculated as follows: a baseline is set every year and the expected consumption for the following year is determined with the assumption that no improvement actions will be taken, which means that the expected consumption will be strictly proportional to the variation of manufacturing volumes. Every year the real consumption is measured against the expected consumption to show actual savings. Based on this calculation method, in 2010 we generated 129 GWh of energy savings thanks to the progress made by each site, meaning that we met our target.

NEXT WATER CHALLENGES FOR ST

ALESSANDRO BERETTA, Water Manager of the ST Agrate site, and corporate water specialist for Front-end manufacturing facilities.

“There are two future challenges that ST will be facing from my point of view: Firstly, to understand and reduce the total water used during the life cycle of a product. The international community refers to this as ‘virtual water’. Supplying low water products challenges us to control and minimize the overall amount of water used in the entire life cycle from the generation of raw material, production and product utilization right through to final disposal. This is a very challenging goal.

The second challenge concerns the creation of integrated water management across an entire geographical area. It will involve industries, cities, farmers and communities to find common strategies to optimize consumption, improve water conservation and to increase possibilities of recycling.”

(*) The data shows that the global consumption per unit of production for 2009 was adversely affected by decreased production output during the year, as a result of the economic downturn.
CONTINUOUSly IMPROVE OUR ECO-FOOTPRINT ACCORDING TO OUR DECALOGUE TARGET

Objectives 2010

- Reduce water consumption by 5%*
- Reduce chemical consumption by 5%*

Consumption of chemicals

Our manufacturing processes require significant amounts of chemicals, especially in Front-end activities. Since some chemicals have a potential impact on the environment and also carry health and safety risks, we work hard to keep their usage as low as possible.

In 2010 the trend since 2000 for chemicals usage reduction has been maintained with an overall percentage decrease of more than 5% per year. The Decalogue target states a reduction of 5% per year.

Consumption of water

This is another area where we continue to make good progress. We have consistently exceeded our EHS Decalogue target, reducing water consumption per unit of production by more than 5% per year since 1994. The chart on page 49 shows that the reduction of water consumption per unit produced has been much faster than anticipated, even if the decrease between 2008 and 2010 has been less than 5%.

The reduction in water consumption is achieved through continuous improvements in our processes and through a reduction in water draw down. It is also affected by water recycling practices that are shared between different sites. As a company, our water recycling and reuse rate is 37.3% but reaches 43% in Agrate (Italy), 53% in Catania (Italy) and 70% in Kirkop (Malta).

We monitor our complete water cycle, which consists of a number of stages. Water is drawn from relevant sources and is used, reused and recycled for use in our manufacturing processes and our site services. During these processes, some water is lost through evaporation and the remaining water is discharged in waste water sewage systems or as part of liquid waste (such as salt water solutions, solvent solutions or sludge).

All of our water is treated either internally with a waste water treatment plant or externally. Since 2008, we have disclosed the percentage of waste water treated internally. It is however important to mention that several ST sites have also contributed to their community by participating in the building of municipal waste water treatment plants that are adapted to industrial water discharges.

For more information on our sites’ initiatives in water management, see page 41

While none of our manufacturing sites is located in sensitive biological areas, or in any special wetland environments, every care is taken to keep the environmental impact of our activities on our surroundings to a minimum. | EN12 |

Total water discharge | EN21 |

<table>
<thead>
<tr>
<th>Units</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water discharge (1,000m³)</td>
<td>17,934</td>
<td>14,931</td>
<td>12,887</td>
<td>14,000</td>
</tr>
<tr>
<td>Treated in ST waste water treatment plant</td>
<td>%</td>
<td>54</td>
<td>76</td>
<td>75</td>
</tr>
<tr>
<td>Treated in external waste water treatment plant*</td>
<td>%</td>
<td>59</td>
<td>51</td>
<td>43</td>
</tr>
</tbody>
</table>

(*) 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.

Recycled and reused total water | EN10 |

<table>
<thead>
<tr>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total water used (1,000m³)</td>
<td>29,567</td>
<td>27,791</td>
<td>25,622</td>
</tr>
<tr>
<td>Water recycled and reused rate (%)</td>
<td>26.51</td>
<td>34.53</td>
<td>36.20</td>
</tr>
</tbody>
</table>

(*) Per unit of production/year compared to the 1994 baseline.

Consumption of chemicals (per unit of production): normalized values | EN1 | STEV64 | 2.3 |

Consumption of water (per unit of production): normalized values | EN8 | STEV56 | 2.2 |

(*) The data shows that the global consumption per unit of production for 2009 was adversely affected by decreased production output during the year, as a result of the economic downturn.
Environmental performance overview 2010

CONTINUOUSLY IMPROVE OUR ECO-FOOTPRINT ACCORDING TO OUR DECALOGUE TARGET

Objectives 2010

- 80% of waste to be reused or recycled
- <5% landfill waste versus total waste
- Reduce pollution from evaporative condensation by 10%*
- Reduce pollution from heavy metals by 10%*
- Reduce pollution from acidification by 5%*
- Reduce pollution from eutrophication by 5%*
- Reduce our eco-footprint below 0.95*

(*) Note that the five objectives: reduce pollution from evaporative condensation, reduce pollution from heavy metals, reduce pollution from acidification, and reduce our eco-footprint will not be published in a graph. The five items will be summarized in one comment.

Waste

In 2010, the total waste production was reduced by 12% compared to 2008, with only 2.8% of this waste sent to landfill. All other waste was reused, recycled or burnt to produce energy. The reduction of landfill waste has been achieved by selecting appropriate waste recycle and reuse activities. We organize regular audits to control the waste recycling conducted by our subcontractors.

As a result of our program to reduce landfill waste, reused and recycled waste (measured as a percentage of total waste) has increased steadily over the years. In 2010, we reused or recycled about 89% of waste generated. Recycled and reused waste at our sites varies between 76% in Tours to 100% in Malta according to the local technologies available and specific waste characteristics.

The hazardous waste, in very general terms, is the waste resulting from the production process, which can include such things as chemical substances, some contaminated plastics and light-bulbs. This waste showed a reduction of about 11% in comparison with 2008.

Most hazardous waste is recycled or reused and the remaining waste is disposed of safely by specially authorized companies. Most of our hazardous waste is treated in the same country that it was produced, unless there is no authorized treatment plant. The safe transportation of hazardous waste to a location where it can be treated can then occur in full accordance with the Basel Convention. In 2010 none of our sites had to transport such waste.

ST’s eco-footprint

In 2009, we decided to stop publishing our eco-footprint results because this complex composite indicator was too difficult to explain and its real added value is its internal use, as it allows our sites to evaluate themselves against corporate targets and other manufacturing sites.

Through this indicator, we follow our pollution from VOC, acidification, evaporative condensation and heavy metals. In 2010 our Decalogue targets for VOC, evaporative condensation and heavy metals reduction were achieved. For acidification, a major reduction was achieved thanks to Tours (France) site who conducted a large program during 2010 with the objective of improving its ecological footprint and more specifically reducing its ammonia air emissions. As a result, ST’s acidification target was almost achieved, and Tours won a silver award in our internal annual recognition program (STAR).

Our 2011 objectives

- Deploy our fourth EHS Decalogue.
- Initiate ISO 14064 certification.
- Launch our sustainable procurement initiative.
- Maintain our commitment toward greener products.

ST's eco-footprint

[Graph showing waste reduction over years]

Waste | EN22 | STEV72

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total hazardous waste</td>
<td>15,647</td>
<td>13,205</td>
<td>12,756</td>
<td>9,391</td>
<td>11,365</td>
</tr>
<tr>
<td>Total waste</td>
<td>44,364</td>
<td>43,628</td>
<td>46,367</td>
<td>33,439</td>
<td>40,775</td>
</tr>
</tbody>
</table>
Objectives 2010

Achieve carbon neutrality on our direct emissions by 2012

Summary of greenhouse gas emissions

We consider global warming as a critical issue and work hard to decrease the level of greenhouse gases (GHG) released into the atmosphere through our manufacturing activities. In the previous 2005 version of the EHS Decalogue, we defined an ambitious carbon roadmap which targeted CO₂ neutrality for ST by 2010.

Due to changes in ST’s reporting and the worldwide economic downturn, we had to redefine our strategy in order to target neutrality for direct emissions only, first by 2012 and finally by 2015, as reported in the new edition of our EHS Decalogue.

We are now confident in our ability to meet this objective thanks to the planned installation of abatement equipment for perfluorinated compounds (PFCs) and to the reforestation program started in 2002 that includes programs in Texas, Australia, Morocco and Italy.

In order to improve our reforestation projects, ST contracted MWH to provide a study with the purpose of checking the methodology used to estimate the annual carbon sequestration and reviewing the parameters used as inputs. The reforested areas and the sequestered values since 2002 have been revised and modified accordingly (as reported in table page 51).

In 2010, 11 thermal processing units (TPU) systems have been installed in Rousset (France), while new important projects are forecasted for 2011.

Despite these efforts, in 2010 net emissions of PFCs increased by 155 kTons of CO₂ compared to 2008, mainly due to the high production increase (approximately 50%).

**Summary of net CO₂ emissions**

<table>
<thead>
<tr>
<th>EN16</th>
<th>EN17</th>
<th>EN18</th>
<th>EN29</th>
<th>EN3</th>
<th>STEV37</th>
<th>STEV38</th>
<th>STEV47</th>
<th>STEV48</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>2007</td>
<td>2008</td>
<td>2009</td>
<td>2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct emissions</td>
<td>792</td>
<td>532</td>
<td>482</td>
<td>337</td>
<td>485</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEV46 Direct emissions due to PFCs</td>
<td>728</td>
<td>481</td>
<td>439</td>
<td>296</td>
<td>453</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEV46 Direct emissions due to boilers</td>
<td>64</td>
<td>51</td>
<td>43</td>
<td>41</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect emissions</td>
<td>975</td>
<td>1,029</td>
<td>882</td>
<td>876</td>
<td>907</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEV48 (purchased electricity)</td>
<td>242</td>
<td>107</td>
<td>89</td>
<td>104</td>
<td>126</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total emissions**</td>
<td>2,009</td>
<td>1,668</td>
<td>1,453</td>
<td>1,317</td>
<td>1,518</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEV52 (purchased electricity)</td>
<td>86</td>
<td>133</td>
<td>176</td>
<td>215</td>
<td>249</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total direct net emissions</td>
<td>706</td>
<td>399</td>
<td>306</td>
<td>122</td>
<td>236</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(*) The transportation emissions value is a global computation of employees’ transportation and transportation of goods.

(**) Transportation emissions are integrated in the total emissions.

(***) Our sequestered values since 2002 have been reviewed in 2010 after a revision of our methodology used to estimate the annual carbon sequestration and justifying the parameters used as input to the model.

Initiatives and changes resulting in a reduction in GHG

<table>
<thead>
<tr>
<th>EN18</th>
<th>STEV38</th>
<th>STEV40</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>2008</td>
<td>2009</td>
</tr>
</tbody>
</table>

| Related to PFCs direct emissions reduction per IPCC guidelines | 235 | 50 | 155 |
| Saving electricity | 189 | 295 | 195 |
| Used green electricity | 24 | 17 | 41 |
| Electricity produced by windfarm | 9 | 8 | 8 |
| Total GHG gas emissions reduction | 457 | 370 | 398 |

However our CO₂ emissions by wafer out decreased by more than 6% in 2010 versus 2008.

The increase in our electricity consumption resulted in a slight increase in our indirect emissions (absolute values), by less than 3% compared to 2008. The increase was minimized by the update of the emission factor used by sites’ electricity suppliers.

Emissions from the transportation of goods are complex data to consolidate at corporate level. In 2010 we engaged our transportation logistics suppliers to declare the emissions which led to a better estimation. We have started to work on the reliability of this data and will continue this work in 2011. Total transportation emissions in 2010 were about 126 kTons CO₂.

Green energy

Our wind farm located in the south of France produced 23.8 GWh in 2010. This represents a 5% increase compared to 2009 and this was achieved despite significant damage on one of our turbines which lasted several months.

The total green energy used by ST consists of electricity that is either purchased or generated by renewable sources and accounts for about 6% of total energy consumption, much better than 2009 but still far from our 15% target. Our efforts to increase this percentage have been hampered by difficulties negotiating an acceptable price with green energy suppliers.

The electricity produced by ST’s windfarm accounts for about 1% of total energy consumption, while the small contribution of photovoltaic and solar thermal energy accounts for about 0.01%. In addition to this, the electricity purchased from nuclear sources is about 24%.

**CO₂ emissions: normalized values**

<table>
<thead>
<tr>
<th>EN16</th>
<th>STEV37</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>2007</td>
</tr>
</tbody>
</table>

| Direct and indirect energy consumption by primary source | EN3 | EN4 | STEV37 |
|------|-----|-------|
| 2006 | 2007 | 2008 | 2009 | 2010 |

<table>
<thead>
<tr>
<th>Breakdown of energy consumption (GWh)</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity consumption</td>
<td>2,462</td>
<td>2,482</td>
<td>2,127</td>
<td>1,986</td>
<td>2,018</td>
</tr>
<tr>
<td>Natural gas consumption</td>
<td>274</td>
<td>279</td>
<td>234</td>
<td>214</td>
<td>171</td>
</tr>
<tr>
<td>Others</td>
<td>41</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total energy consumption</td>
<td>2,777</td>
<td>2,762</td>
<td>2,361</td>
<td>2,200</td>
<td>2,189</td>
</tr>
</tbody>
</table>

| Percentage of energy consumption due to electricity | 88.68 | 89.86 | 90.09 | 90.27 | 92.19 |

<table>
<thead>
<tr>
<th>Breakdown of energy sources (%)</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green electricity purchased</td>
<td>9.51</td>
<td>3.01</td>
<td>2.04</td>
<td>2.63</td>
<td>5.79</td>
</tr>
<tr>
<td>Electricity produced by ST’s windfarm</td>
<td>0.96</td>
<td>1.10</td>
<td>0.92</td>
<td>1.03</td>
<td>1.09</td>
</tr>
<tr>
<td>Photovoltaic and thermal solar electricity produced by ST</td>
<td>0.004</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Electricity purchased from nuclear (CO₂ free)</td>
<td>29.84</td>
<td>25.60</td>
<td>28.78</td>
<td>22.15</td>
<td>23.72</td>
</tr>
<tr>
<td>Electricity purchased from fossil fuel sources</td>
<td>48.35</td>
<td>60.18</td>
<td>58.34</td>
<td>64.48</td>
<td>61.57</td>
</tr>
<tr>
<td>Natural gas</td>
<td>9.87</td>
<td>10.10</td>
<td>9.91</td>
<td>9.70</td>
<td>7.81</td>
</tr>
<tr>
<td>Other fuels</td>
<td>1.47</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
In 2010, ST launched a new microcontroller family that offers specific features for applications in needs of energy savings. These products are member of the branded EnergyLite™ platform and respond to several market trends; new national and international norms to reduce energy consumption, the increasing number of battery-powered applications, development of green technologies and commitment to environmentally-friendly products.

Everything from the design, architecture and technology of these new products is performed with the objective of reducing energy consumption and extending the life time of battery-operated products. In practical terms, these products allow energy saving through sleep modes, closing down unused parts of chips with advanced ultra-low power modes, and unique ultra-low-leakage technology (proprietary of ST) that saves power when the device is active.

These products are particularly adapted to portable devices such as medical equipment e.g. glucose meters, insulin pumps, heart monitors or electronic cholesterol monitors but also gaming accessory and security peripherals. Some customers in the medical sector have already shown an interest and have partnered with us to benefit from our low-power technology and design.

Internally, the ST organization that develops this product range, Microcontrollers Memories & Secures MCUs (MMS), is also working with other product groups to explore ways of incorporating the technology into a broader array of components.

ST is investing significantly in ultra-low power technologies and design with the ambition of being a global leader in this market.
Advances in semiconductor technology offer exciting opportunities to address global sustainability issues. Environmental and safety challenges are often mentioned but there are other growing societal challenges arising from an ageing population and the need for more affordable and accessible healthcare.

ST has a long-term commitment to be both responsible and innovative. This combination of values creates a strong catalyst for responsible product development. In 2010 our CEO, Carlo Bozotti, has put a strong emphasis on the new promising areas where our technologies and products could help to address global challenges such as energy saving, healthcare, medical applications, security and data protection. These business priorities are now firmly integrated into our Sustainability strategy: to create high-quality, innovative, eco-designed products that support our customers in improving end-users’ quality of life, with a focus on energy-saving, health, safety, and applications that enable new environmental technologies.

In the field of medicine, semiconductor technology presents many varied opportunities to make healthcare more flexible, accessible and affordable. The specific challenges facing this sector include aging population, growing incidence of cancers and chronic health problems, escalating cost of equipment, unequal access to healthcare, to name a few. ST is able to supply this market with innovative and complete solutions, leading edge technology, state-of-the-art products and a strong commitment to quality and reliability. We are progressively moving to this new market with a double approach; supplying ‘standard’ electronic components based on our main area of expertise; and supplementing this by offering specific medical devices, created through partnerships with medical companies.

The main healthcare segments we have identified are: diagnosis and therapy (e.g. electrocardiographs, pacemakers), imaging (e.g. X-ray, magnetic resonance imaging), medical instruments (e.g. blood analysis systems, dialysis system), patient monitoring, consumer products (e.g. remote monitoring, insulin pump, heart-rate monitor) as well as wellness equipment (e.g. pedometers, cardio trainers).

Various ST organizations are taking an interest in and an active role in this healthcare market. Considering the Product Group Microcontrollers, Memories & Secure MCUs (MMS) it is responding to many needs of this sector with its low and ultra-low power technologies (for portable devices), high performance memory capacity (for complex products) and connectivity (for traceability and remote monitoring). It is also partnering with key electronic medical companies to co-develop health products. To illustrate this, in 2010 MMS helped to develop a best-in-class breathing device for sleep apnea. Adults suffering from this sleep disorder can stop breathing for anything from a few seconds to more than one minute and this can occur up to hundreds of time a night. This mainly causes fatigue and poor concentration during the day but, if not treated, can increase health risks such as heart attack or diabetes. Thanks to this partnership, MMS and our customer have improved the quality of life of these persons by providing a bedside device that gently delivers pressurized air via a mask to keep the upper airway open and prevent obstruction. MMS technology provides sensing support to help automatically control the air pressure needed by the patient; it also allows for extensive data logging, and an easy-to-use LCD screen interface.

Through these fruitful partnerships, ST is leveraging its experience on the medical market which is key to keep on developing and introducing new products and solutions for these demanding customers.

(*) Extract from ST press release from October 25th 2010.
ST’s product responsibility has been integral to the business since its first Environmental Decalogue in 1995. It has been progressed against a backdrop of increasing development of electronic goods and more stringent environment, health and safety requirements for products. This context reinforces our ambition to guarantee a high level of built-in environmental compliance and confidence for our products and the devices they are used in, through a process of assessing and minimizing impacts at each stage of their life cycle. We define eco-design as the systematic design of products taking into consideration the environmental impacts of the device during its whole life cycle.

**ST’s commitment to eco-design**

Since 1993 and the first stages of its environmental strategy, ST has been fully and publicly committed to reducing any negative effects of its activities and its products on humans and the planet as a whole. ST has been developing a sustainable management approach within its manufacturing operations, covering consumption of resources, emissions and waste reduction. Through ‘low energy conscious’ design and energy efficiency programs, ST had originally focused its device design on reducing energy consumption in the final application. Further on, the company also focused on removing polluting and hazardous substances from its manufacturing lines and products by implementing the ECOPACK® program in 2000. In 2009, we conducted pilot Life Cycle Assessments (LCAs) to identify and define product life phases and flows which had the greatest impacts. The objective now, integrated in our new EHS Decalogue and in line with our Sustainability strategy, is to eco-design all new ST products by 2015.

**Our progress to achieve eco-design**

In 2010, ST teams worked on different aspects of LCA and eco-design to successfully integrate this approach within the company. Two PhD students, working within the Corporate Sustainable Development department, have been specializing in product and process in Research and Development since 2009 and new projects have been initiated in several of ST’s internal organizations. In the meantime, ST has put in place some initial communications to enhance the consciousness of employees in eco-design and encourage them to explore innovative opportunities.

In 2010, LCAs have focused on the environmental benefits of selecting greener materials in the product and have highlighted the potential for major ecological improvements. A joint team composed of Packaging and Test Manufacturing (PTM), Technology Research and Development (TR&D), ST Groups and ST-Ericsson members has introduced a method of replacing gold with copper in the wire bonding process, an improvement that has received an internal gold award from the CEO. In selecting a more eco-friendly material (due to heavier extraction processes for gold), changing the package composition and modifying processes, these LCAs have shown a decrease of the environmental impact of device manufacturing by 5%. This material change across 10% of our product range generated economical benefits and represented a saving of 311 tons of CO₂ equivalent. We plan to substitute up to 70% by the end of 2013. 30% of devices are currently unable to be converted and further development is needed to address this remaining proportion.

(1) Wire bonds are elements making the connections between the die and the package. See also the 3D chip illustration on page 55.

**How to Eco-design a ST semiconductor device?**

- **Green procurement of materials**
  - Select suppliers, subcontractors and foundries compliant with our EHS requirements
  - Involve suppliers, subcontractors and foundries in LCA and eco-design approach

- **Conceive greener technologies through selection of materials and manufacturing processes**
  - Decrease surface area

- **Conceive greener technologies through selection of materials and manufacturing processes**
  - Increase size, mass and volume

- **Decrease consumption (water, energy, chemicals)**
  - Reduce emissions (to air, to water)
  - Minimize waste

- **Decrease consumption (water, energy, chemicals)**
  - Apply the 3R philosophy (Reduce, Reuse and Recycle) to continually decrease sites’ eco-footprints

- **Conceive and optimize greener packing through 100% recyclable and PVC-free packing materials**
  - Improve and optimize logistics, transportation and distribution processes
  - Reduce transport flows

- **Die**
  - Create less energy-demanding circuits
  - Adapt concept and functionalities to the final application’s needs
  - Select suitable sustainable design schemes

- **Electric circuit**
  - Decrease consumption (water, energy, chemicals)
  - Reduce emissions (to air, to water)

- **Assembly line and final test**
  - Minimize waste
  - Apply the 3R philosophy (Reduce, Reuse and Recycle) to continually decrease sites’ eco-footprints

- **Distribution & Retail**
  - Improve and optimize logistics, transportation and distribution processes
  - Reduce transport flows

- **End of life**
  - Improve customer and consumer information through eco-tools such as LCA results or eco-profiles
  - Enhance customer relationship management

- **Usage by consumer**
  - Improve customer and consumer information through eco-tools such as LCA results or eco-profiles
  - Enhance customer relationship management

- **Partnering for better recycling and disposal**

- **The life of the device**
  - Raw materials procurement
  - R&D Conception & Design
  - Manufacturing Front-end and Electrical Wafer Sorting
  - Assembly line and final test Back-end
  - Distribution & retail
  - Usage by consumer
  - End of life

**Life Cycle Thinking:** Consider the impacts of each action on the whole Life Cycle of the device, and prevent impacts transfer.
Our journey towards 100% eco-design

Our challenges to address

Eco-design is an innovative area in the semiconductor industry, and eco-designing a chip is an intricate process. ST adopts a continuous and dynamic approach through the integration of a combination of awareness, knowledge and performance.

The complexity comes from the high level of technology, the very small size and shape of the products, their diversity (more than six thousand), complex process flows and long and variable cycle times. Another challenge is to achieve the shift change in the mindset of those involved in the marketing, design and development of these products so that life cycle thinking is integrated into each stage of decision-making. Our Eco-design program applies to all products of the company and involves a wide range of parties (see graph).

In 2010, ST defined five pillars that needed to be integrated in the design and development of any new product to reach our eco-design objective:

- Improve the eco-efficiency of devices by looking for solutions that increase their value during use, and/or decrease their environmental impact;
- Avoid the relocation of environmental impact from one phase of a product life cycle to another. To avoid this relocation, a holistic life cycle approach must govern each decision-making step;
- Integrate environmental requirements within other areas and factors into decisions e.g. technical feasibility, customers’ expectations or product costing;
- Consider the environment and life cycle analysis as early as possible to maximize potential benefits;
- Coordinate eco-design and sites’ Environmental Management Systems to reduce environmental impacts of both sites and products.

Future steps

Over the coming year, ST will continue to build its leadership in eco-design. The implementation strategy will be updated through the preparation of the eco-design roadmap, the integration of key indicators into ST’s internal processes and the development of a methodology to disclose the LCA results of ST’s products. This will entail the input of a dedicated engineer. Our Sourcing department has also produced guidelines to implement a Green Procurement policy into our supply chain in 2011.

Another major point will be the launch of working groups on three dedicated topics: the integration of environmental parameters in technology and product design, greener material selection and greener packing. Ongoing internal training and improved employee information on eco-design will be deployed and we also plan to further develop our collaboration with stakeholders.

ST’S LIFE CYCLE ASSESSMENT METHODOLOGY

In 2009, we performed four pilot LCAs that were completed in 2010 along with LCAs on three Micro-Electro-Mechanical System (MEMS) devices for mobile phones and video games. Results have confirmed that there are opportunities for improvement in the manufacturing phase. These complementary assessments have resulted in the development of a bespoke methodology to perform LCAs on assembled devices, as the first stage of eco-design. Our LCA procedure includes the collection of necessary data across key ST organizations where applicable.

The four main stages of this method are in accordance with ISO 14040 and ISO 14044:

- The definition of goal and scope - The functional units and the system boundaries have been clarified, data for Front-end manufacturing refers to a single real wafer production, and for Packaging and Test Manufacturing refers to a single die production. The final LCA result is expressed per chip.
- The Life Cycle Inventory (LCI) analysis - This involves procedures for data collection and calculation to quantify the inputs and outputs of a product system. The entire life cycle requires the capture of data relating to the material procurement, Front-end and Back-end manufacturing, transportation, use and disposal.
- The Life Cycle Impact Assessment (LCIA) - Results of the previous life cycle inventory are converted into quantified impacts on climate change, eco-systems quality, resources conservation and human health, using a dedicated software package to calculate impacts.
- The Life Cycle Interpretation - This step involves the identification of the significant issues based on the previous results (LCI and LCIA) and the evaluation of the checks for completeness, sensitivity and consistency. Finally, conclusions, limitations and recommendations are developed and communicated.

We have adopted this approach when responding to customer requests and when setting up a product dashboard. We also use it as a decision-making tool for a ‘life cycle conscious’ approach.

OPTIMIZING PACKAGE DESIGN AND TRANSPORTATION

Conceiving and developing greener packing is one of ST’s eco-design priorities. In 2010, ST launched an ambitious Lean Packing program at its manufacturing sites, generating benefits for ST and its logistics suppliers by decreasing costs, air freight space and CO2 generation. The program covers both the third (outer box) and fourth (container) levels of our four-level packing scale, and aims at re-designing and optimizing packaging and also the efficiency of its use and transportation.

ST’s Global Logistics Warehousing Organization (GLWO) firstly carried out an inventory review covering local practices and performance in order to understand and share good practices and define individual action plans for sites. These encompassed the following areas: availability of box formats; instructions for box filling; usage of bar coding for traceability and various other initiatives.

GLWO now tracks logistics across sites on a quarterly basis, using a suite of indicators e.g. number and type of parcels, volumetric weight and destinations. Also, ST’s corporate packing guidelines have been refined with new packing criteria in terms of quality, safety and environment, and new rules for the use and reuse of boxes. In parallel, we ran an awareness campaign to communicate changes to employees. These new specifications have been deployed internally and also to our main subcontractors.

By the end of 2010, this program had delivered an increase of 10% in packing density and an estimated saving (freight cost) of US$ 50k. It has also resulted, in the fourth quarter (Q4), in the saving of the equivalent to 30 containers which has environmental benefits in terms of transportation CO2 emissions. The aim is to achieve a 10% additional increase in packing density by Q4 2011.
2010, A YEAR OF DRIVING SUSTAINED IMPROVEMENTS IN QUALITY

In 2010, ST created a dedicated corporate function to drive quality improvement throughout the company, with a specific focus on the Automotive Product Group (APG) which is the most stringent product line in terms of quality.

Quality is a top priority at ST with a culture of Sustainable Excellence firmly embedded throughout the Company. Product quality and customer satisfaction are cornerstones of ST’s values and business strategies. ST aims to be ‘best-in-class’ and in early 2010, it further strengthened the focus on quality with the announcement that Georges Auguste would take direct responsibility for Automotive quality alongside his Corporate quality responsibility, within a new organization, Product Quality Excellence (PQE).

Through this new function, ST intends to continue to enhance customer satisfaction through rigorous adherence to quality and consistent zero-failure performance.

Could you explain what has motivated this reorganization and what have been its main effects?

Quality is a most powerful enabler for the sustained success of a company like ST. That is why ST is continuously striving for the highest levels of quality excellence and customer satisfaction, as stated in our Principles for Sustainable Excellence. This is particularly true in the automotive market where quality requirements are even more stringent than in other product sectors. So, in early 2010, we saw an opportunity to re-structure the quality function of the Automotive Product Group in order to adapt to the market situation and better respond to customers’ expectations.

These new responsibilities enabled me to meet customer needs regularly, which was a great opportunity to fully understand their expectations and share with them any specific constraints or challenges we may have. Internally, we can then use this new visibility in both corporate and product group quality management to make adjustments to our systems and enhance the overall quality tools and programs.

In short, 2010 was really focused on driving consolidated improvements in quality.

So what have been the main achievements of this strong focus?

A few months after this re-structure, I further strengthened the Corporate Quality department with the creation of two new functions dedicated to quality incident prevention and quality problem-solving analysis. The main objective of these new corporate departments is to gain a global view of the practices within ST’s product groups and organizations and to capitalize on everyone’s good and bad experiences and lessons learnt. Cross-fertilization was the key aim throughout the year.

In this context, I have really pushed to strengthen communication and the sharing of ideas and good practices. A dedicated person in my organization is now in charge of publishing a monthly Quality Excellence Bulletin as well as a quarterly Quality Magazine. The first publication focuses on corporate level programs and the second gives a voice to people on the ground who are developing quality programs and driving improvements. These documents are designed for quality professionals to bring them real value in their daily activities.

But the main quality event in 2010 was the Quality Convention organized in September in Annecy, France. More than 80 ST managers spent two days sharing their experience and ideas. In many cases they realized that their problem had already been faced by someone else in ST and that a solution had been developed, which gave them ideas for solving their own problem. We all know the power of sharing ideas and experience, but we do not always take enough time to practice it. In 2010 we made a commitment to hold a Quality Convention at least annually.

How do you ensure that quality messages reach every employee?

We are developing different ways to help all employees whose responsibilities require quality competences and awareness. Firstly, we translated our Quality Policy into five languages (Chinese, English, French, Italian and Malay) and made it accessible to everyone through a worldwide distribution. It is really important that all employees are aware of this key document.

Then, in 2008, we deployed a Quality Excellence in Practice (QEP) campaign to raise employees’ awareness on the importance of quality excellence for our customers, and enhance knowledge and competences relating to quality tools, methods and procedures. Within the framework of the ‘ST School of Quality’ we have also launched an important training program, Quality Excellence through Skills Training (QUEST). Quality courses and workshops have been tailored to fulfill the expectations and requirements of ST organizations and to match each job-specific environment.

And to come back to sharing ideas and experience, in 2010, I also took the opportunity of some site visits to organize ‘quality round tables’ with small groups of very diverse profiles (from different organizations and with different responsibilities). These two-hour meetings gave participants the chance to have open discussions about quality strategy, corporate or local quality issues, etc. The exchanges were really fruitful and brought to the table local, organization-specific and corporate views. It is often necessary to hear these views together to better understand how things go wrong and how to find solutions.

Did your new appointment bring real changes and benefits?

Yes, I think that there have been positive effects from both internal and external perspectives. In 2010, I spent a lot of time in meetings and discussions with automotive customers. They really appreciated the personal attention and time devoted to their products’ quality requirements and the responses we were able to provide to their questions.

Internally, through our link with the Automotive Product Group, it seems that new quality programs and locating corporate quality teams closer to field matters have facilitated collaboration between corporate and on-site departments to address everyday quality challenges.

And it seems that 2011 will bring more changes for quality again…?

Yes, indeed, there won’t be another re-organization, but a new Corporate Vice President will head PQE: Fabio Guagliardi, coming from Micron Technology. Fabio will work with me to transition to this post in early 2011 before I leave to Asia where I will take on new responsibilities as Executive Vice President, General Manager of Packaging and Test Manufacturing for Back-end sites.
Quality Excellence
ST strives to enhance the quality of products and constantly seeks to improve customer satisfaction.

The customer complaints and customer returns indicators are good barometers of overall customer satisfaction and, since 2004, these results have shown positive trends. In 2010, this continued performance is due to several factors:
- an automatic improvement in the ratio because of high level of sales in Q4 2010 (number of complaints or returns per million units shipped);
- an economic market characterized by high demand and low supply, meaning that in case of problems, customers tended to check our products internally rather than return them to ST for re-screening;
- an emphasis on preventing, as well as detecting, non-conformities and on improving lot traceability along the value chain.

In terms of cycle time to process failure analysis, ST’s objective is to improve the quality of our failure analysis and corrective action plans while maintaining our current level of performance. The benefits include improved ability to meet our customers’ short-term expectations, receiving quick responses to their requests and also reduced non-conformities. Through its School of Quality, ST pursued the deployment of quality awareness (Quality Excellence in Practice, QEP) and practical (Quality Excellence through Skills Training, QUEST) training. The deployment of the QEP program commenced in 2008 has now been delivered to the following employees:
- quality methods and tools: 65% of eligible population;
- quality processes: 68% of eligible population.

We have also built a quality network to support practitioners in their use of a specific quality tool and/or method (QUEST program). The network is composed of quality trainers who develop the skills and knowledge of fellow employees, and quality specialists who provide mentoring and on-the-job support. At the end of the year there were 370 trainers and more than 30 quality specialists.

In 2010, the QUEST program focused on fundamental tools and methods such as problem solving and prevention. Objectives for 2011 are to start addressing more specific tools & methods.

Looking forward into 2011, the Product Quality Excellence organization will strengthen its interactions among operations, namely manufacturing, R&D, Product Groups, Supply Chain and sales support to be better aligned with the needs of our company and our customers.

(*) Customer complaints and returns received at a given moment are compared to the number of products shipped at this moment but are generally relative to product sent several months ago. Therefore these indicators are influenced by previous levels of production.

Product responsibility
Growing sustainability challenges at a worldwide level present ST with many opportunities in terms of responsible product innovation. In 2010, ST has placed an emphasis on three main areas: energy-saving, healthcare and medical applications, and security. These priorities are aligned with ST’s Sustainability strategy which was recently renewed to focus on our most material issues. This new strategy covers five key issues related to product responsibility:
- Design for environment - Designing and developing products and manufacturing processes for reduced environmental life cycle impacts; including water, energy, materials, hazardous substances, air emissions, recyclability, interoperability and reduced obsolescence.
- Product energy efficiency - Measures taken during the design process to continuously reduce the energy used by our components.
- Environmentally responsible products - The design, development, sale and marketing of products that enable customer applications to reduce their energy consumption and/or are intended to provide new environmental solutions.
- Socially responsible products - The design, development, sale and marketing of products that are intended to provide new social solutions and improve end-user quality of life e.g. health related products, safety applications, etc.
- Product communications - Ensuring the integration of key environmental and social attributes of products into marketing and product communications, including existing ECOPACK® labeling and new flagship products.

Many initiatives are already underway within ST Product Groups and our ambition for 2011 is to harmonize these existing approaches and define common ambitious objectives.

For more information about ST’s traceability program, see Corporate Responsibility report 2009 page 65

Use of our products in military application
STMicroelectronics’ position on the military use of its products is stated in the Principles for Sustainable Excellence: “We will not sell products that we know are to be included in weapons.”

In 2007, our Corporate Ethics Committee (CEC) published a position paper detailing the definition of what we consider as a weapon and how we can check the end uses of our products. The committee is aware that situations may be complex or sometimes very specific, and in case of doubt the CEC provides advice when sales representatives require specific guidance or a high level decision on this issue.

ECOPACK® and Materials Declaration programs
In response to increasing legal and customer requirements regarding chemical composition of delivered products, ST has two dedicated programs in place. Since 2000, ST has developed a wide voluntary and strategic program called ECOPACK® to devise and implement solutions leading to environmentally friendly chip-packaging. ST’s products have been classified into three specific ECOPACK® categories:
- Non ECOPACK®: 8% of products in 2010 (compared to 13% in 2009);
- ECOPACK®1 (compliant with the Restriction of Hazardous Substances (RoHS) directive and ‘lead free’**: 58% (compared to 61% in 2009);
- ECOPACK®2 (ECOPACK®1 + free of brominated and chlorinated flame retardants): 34% (compared to 26% in 2009).

Our Materials Declaration process which commenced in 2006, allows us to provide customers with a chemical composition identity card for each product, defining how we report the material composition of products and trace levels of banned, exempted or declarable substances according to the International IPC 1752 standard.

Thanks to support from several organizations, including sourcing and product groups, we can effectively respond to our customers’ enquiries, for example, by the end of 2010, we have doubled the number of specific Materials Declarations forms available online, compared to 2009.

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

WEEE | EN72 |
As a supplier of components to the electronics industry (and not manufacturers of electronic equipment), we are not directly affected by the European Directive 2002/96/ EC Waste of Electrical and Electronic Equipment (WEEE).

Use of water, energy, materials, hazardous substances, air emissions, recyclability, manufacturing processes for reduced environmental life cycle impacts; including existing ECOPACK® labeling and new flagship products.
Since 2005, ST has been a member of the Electronics Industry Citizenship Coalition (EICC), a group of leading companies from the electronics industry and its supply chain, dedicated to developing tools and programs to produce higher standards of corporate social responsibility. In 2010, the number of members increased from 43 to 59 including more and more of ST’s key customers and suppliers.

This year, EICC membership requirements were strengthened to ensure all members are effectively deploying the EICC compliance program within their company and also directing it to their first tier suppliers, to foster continuous improvement.

At the end of the year, ST was among the 20% of members that met these requirements.

The internal deployment of the EICC compliance program is managed by the Corporate Responsibility department which supports sites in the completion of Self-Assessment Questionnaires (SAQs), follow-up of action plans and preparation for audit, in line with the EICC Validated Audit Process.

By 2010, 75% of ST sites had uploaded their SAQs, resulting in an overall score of 91.7%. Despite ST occupying a ‘low risk’ position, there are still major areas for improvement which is why the Corporate Responsibility department decided to deepen the analysis of ST sites’ SAQ results. Going beyond EICC requirements, ST has deployed an internal EICC audit program focusing on ‘critical non-conforming questions’ i.e. questions with high weight and low score. In 2010, it helped prepare ST Shenzhen and ST Muar* for site audits through a very detailed analysis of their results, the definition and follow-up of action plans and sharing of good practices. The objective for 2011 is to continue to support Muar until its audit in April and to prepare Calamba for an audit planned for the second half of the year. This program will be progressively extended to cover all our sites.

For more information on how ST sourcing and purchasing departments involve suppliers and subcontractors in the EICC program, see page 63

For more information on the Shenzhen EICC audit, see page 25

(*) Muar audit is planned for April 2011.
Context and positioning

The issue of ‘conflict mineral’ refers mainly to the mining and trade of minerals (and the associated refined metal) controlled, supported or financed by illegal armed groups, causing serious human rights violations and environmental damage in the region of conflict within the Eastern Democratic Republic of the Congo (DRC) and neighboring countries. The minerals of concern are columbite-tantalite, cassiterite, wolframite and gold. They are refined into metals to produce tantalum, tin and tungsten, collectively known as the ‘3Ts’, and gold. They can all be found at the end of the electronics industry supply chain in consumer products such as laptops, processors or disk drives.

As a producer of electronic components, ST needs to ensure that its supply chain is free of conflict minerals. ST has a sourcing policy to prevent illegal and unethical sourcing of minerals from conflict areas and their use in its products.

Position on legislation

ST believes that legal enforcement supported by industry initiatives can drive the elimination of conflict minerals from supply chains and encourage demand for conflict-free products. ST has been involved in many industry initiatives to track minerals back to the mine of origin. The minerals are known as conflict minerals and are associated refined metal. ST has been in the supply chain and corporate responsibility programs since 2007. We continuously and consistently apply our sourcing policy to prevent illegal and unethical sourcing of minerals from conflict areas and their use in ST’s products.

Through our membership within the Electronics Industry Citizenship Coalition (EICC) and Global e-Sustainability Initiative (GeSi), we are closely following the development of the conflict minerals issue and have supported the conclusions of the report entitled ‘Social and Environmental Responsibility in Metals Supply to the Electronics Industry’ published in 2008. Also in 2008, we decided to extend the metals restriction to tin and cobalt, and asked all our material suppliers to certify that products supplied to ST did not contain any of these three metals if they originated from the DRC. Each answer has been collected and analyzed and, to date, no non-conformity has been reported.

In December 2009, we extended the restriction to two additional metals, gold and tungsten. It has been enforced and generates visibility and traceability on the origin of all relevant metals, including detailed information on our first tier suppliers’ smelters and mine of origin, wherever such information was accessible.

Actions in 2010

In 2010, ST endorsed a further public statement on conflict minerals, detailing the overall company commitments and actions undertaken.

Our policy toward conflict metals has also been fully integrated in our internal ‘Banned, Exempted and Declarable Substances list’. We have strengthened our policy on the tracking of minerals located in conflict areas known to be controlled by illegal armed groups by requiring our suppliers and subcontractors to provide detailed information on their own metal supply chain. We have also reinforced our internal processes to detect in all our supplied devices, those containing at least one of these metals. To help our customers in the tracing of their entire supply chain, we completed an internal analysis to detect any potential use of these metals in our final products, either because they enter in the direct composition of our products, or because they indirectly participate in our manufacturing processes.

In parallel, we have participated in the activities of the EICC’s smelter audit program, which will provide certified and independent information on conflict-free status, firstly for major tantalum smelters, and then for the other metals of concern. If we are faced with a risk of conflict metals in our supply chain, we have a follow-up process to implement corrective action plans with our supplier, which can lead to supply source delisting.

Challenges

Our main challenges now include the implementation of a complete mapping and tracing system throughout our entire supply chain and the obtaining of evidence of our suppliers’ declarations, to achieve total sourcing visibility. Also, to provide a degree of assurance on compliance of our metal sourcing operations with the EICC guidelines and to verify the conflict-free status of the smelters used by our first tier suppliers, we will follow up on the first results of the EICC and GeSi third-party smelter audit process.

We are also working to integrate new criteria into our suppliers’ purchasing specifications to ensure the management of materials part number that potentially contain one of these metals of interest at the beginning of the component development process.

ST also supports the Industrial Technology Research Institute (ITRI) traceability process, to put tracking systems in place from ore mines and to develop legitimate trade sources from DRC and surrounding countries.
As a global company with locations and suppliers around the world, ST faces a wide range of potential threats to its supply chain. To reduce and mitigate the occurrence and consequences of supply chain risks, we developed and integrated a risk management approach into our key management activities to protect our employees, support business continuity and meet customer demand. To fulfill our commitments towards customer service excellence, not only do we search to continuously improve our programs, but we also increase our capacity to enable us to react rapidly and effectively to major disturbances in our operations.

CUSTOMER DEMAND DRIVEN SUPPLY CHAIN

As the global financial crisis emerged in late 2008, ST experienced a sharp decline in revenue, followed by an equally sharp recovery over a very short time period. Such wide swings in demand imposed unprecedented stress levels on our global supply chain and presented a variety of new challenges.

In order to increase our flexibility through the market cycle, and our ability to meet our customers’ demand for our products, we have defined and implemented action plans which strengthen our customer demand management.

In 2009, we undertook an end-to-end evaluation of our supply chain processes to reveal potential improvement areas in our demand, supply and fulfillment processes.

As a result of this evaluation, significant improvement opportunities have been identified in various fields such as:
- governance and people;
- data quality;
- planning process;
- demand management;
- cycle-time;
- capacity planning;
- inventory management.

ENSURING BUSINESS CONTINUITY AND CUSTOMER SERVICE

In order to test these areas, we have run a proof of concept exercise on a limited scale to confirm feasibility, identify gaps and assess the risks of the proposed approach. During a collaborative workshop with all supply chain functions, we have improved and validated the future supply chain model. A demand-driven supply chain journey is starting with tangible results expected as soon as 2011. Thanks to this program, conducted over the past two years, we will re-discover a better balance between demand and capacity for most of our product categories. This will contribute to bringing our service performance back to peak level.

In the face of unpredictable or catastrophic events, ST’s Corporate Security organization has developed and integrated a range of business continuity measures that will be deployed in ST sites and organizations to ensure business continuity, providing support for business activities in order to maintain our service to customers. Business Continuity Plans (BCPs) protect critical business processes from the effect of such major failures or disasters. ST’s BCPs are based on risk assessments, adapted to each specific area of the business structure, and aimed at reducing and mitigating the potential severity of consequences and probability of occurrence.

During the Icelandic volcano crisis in April 2010, ST’s Global Logistics and Warehousing organization (GLWO) deployed a BCP team to assess the full impacts of the crisis on ST’s supply chain. They worked together with our logistics service providers and carriers to develop and implement a successful strategy that incorporated a number of fast-response measures. These included diversion routings and planning activities to cover the whole crisis period.

A key element of the planning was to put into effect, regular and effective communications between ST’s supply chain stakeholders, via a twice-daily bulletin to manufacturing, regional sales, product groups, suppliers, strategic partners, key customers and logistics service providers. This enabled us to provide and share timely and accurate information. It minimized delays in the forwarding of materials and finished goods, and ultimately prevented any interruptions in our customers’ operations. Thanks to a strong relationship and network with our major Middle Eastern carriers, ST was able to secure vital priority uplink capacity.

Finally, despite the heavy disruption to the European air network, the BCP teams monitored and tracked distribution flows to ensure business continuity. One of our key priorities was to sustain our supply chain. Due to the strength of ST’s BCP, we were asked to extend our emergency logistics services to both customers and suppliers who did not have such strong emergency planning.

During this period, GLWO diverted 132 tons of freight and limited the cost of diversion to US$ 685k, in doing so avoiding a potential business impact that could have cost over US$ 50m. Lessons learnt were consolidated after the crisis had subsided, establishing diversion processes as a standard feature of ST’s Logistics network design. GLWO’s experience also assisted other BCP teams during heavy flooding in Casablanca in October 2010 and during exceptionally heavy snow falls that hit France, Switzerland and Germany, also in late 2010.
Objective 2010

Re-attain the 2008 level (measured as on-time delivery vs customer request and vs ST commitment) while keeping inventory under control (measured as inventory turns)

Customer service performance
After a year of economic downturn, the market cycle has been dominated by strong demand growth with constrained supply availability in 2010. While in 2009 the objective of the entire supply chain was to decrease inventory to minimize financial exposure, in 2010 the goal has been to catch up with the market opportunities. The broad growth across all end markets and business segments has been fueled both by refilled customer inventories, following drastic inventory reductions in the previous year, and by end user demand.

For ST, as for our peers, the combination of demand outstripping supply and the work to reshape the inventory profile during 2009 had a profound impact on performance in terms of on-time delivery and service level to our customers. Within this context, our 2010 service performance has made good ground compared to 2009, but has not yet reached the expected level.

Our operations have performed exceptionally well in responding to the strong increase in demand; for instance, in Front-end manufacturing sites the wafers out production plan has been rising steadily quarter after quarter. But, as demand has been considerably outstripping supply, lead times for our products have generally become extended.

We have been working to increase investment in strategic points of the supply chain (Diffusion, Assembly and Testing), but the effects of such investments have been considerably limited by the long delivery times from our suppliers, who suffered from a shortage of components and raw materials.

To catch up with the demand, the solution has been to always produce at or above 100% of the capacity of all manufacturing sites – especially for some critical bottlenecks. Implementing this solution to meet this specific challenge did not always allow us to optimize production and also reduced our flexibility to protect demand for critical products. In response to that, we have reinforced our demand and inventory management programs e.g. by deploying additional investments, higher productivity and efficiency, and have also increased our reservation capacity in foundries and with subcontractors.

We are working to improve the visibility of customer demand to confirm or forecast any future trends in order to better respond to future demand dynamics.

Customer requirements on corporate responsibility
Our customers continue to demonstrate a marked interest in our corporate responsibility policies and performance, covering social, ethics, environment, health and safety (EHS).

The table below shows the number of social, ethical and EHS requirements that have been addressed by ST’s Customer Requirement Review process.

In 2010, social and ethical requirements increased by 16% compared to 2009, with a total of 65 customer requirements. The majority of these requirements (63%) referred to labor and ethics standards and management systems, with significant interest in human rights and our engagement with suppliers. In this category, 54% of the requirements were EICC-oriented. This trend clearly confirms that the Electronic Industry Citizenship Coalition (EICC) Code of Conduct, management systems, shared methods and tools on labor and EHS are recognized by our customers and also more widely by the electronic industry as a whole. In 2010, four of our major customers went beyond these standard requirements and asked us to carry out second and third party corporate responsibility audits. The EICC audit program, launched on our Packaging and Test Manufacturing sites this year, will enable us to meet these requirements.

As the result of the new USA legislation on conflict minerals sourcing, adopted in July 2010 by the Security and Exchange Commission (SEC), the proportion of ST’s customer requirements relating to conflict minerals have proliferated. About 26% of social and ethical requirements in 2010 referred explicitly to how ST manages this issue. In order to standardize our approach and to anticipate the coming release of new SEC laws in April 2011, ST has formalized a statement describing its policy and actions on conflict minerals.

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(*) This data includes only customers’ corporate responsibility requirements (Social, Ethics and EHS) received by our corporate level departments for review and approval. Day-to-day customer requests arriving in the course of business between ST and the customer are not included.

Regarding EHS requirements, the figures in the table suggest a slight increase in customers’ demands in 2010. We have noticed an increase of 3% in EHS requirements in comparison with 2009. Moreover, the number of EHS customers’ requirements (treated at corporate level) remains significant with more than 100 of our customers involved in 2010. These EHS requirements also represent 76% of global demands on corporate responsibility related subjects. In addition, most of the environmental demands, linked to specific product Materials Declaration (specifying the precise chemical content of our products), are managed by ST’s Product Groups. This specific data is not included here.

Our processes for managing customer requirements on corporate responsibility topics also gives rise to improvements in efficiency and cycle time. We focus on two key drivers to continually improve our process: the integration of corporate responsibility topics into our management systems and a continual and more precise measure of customer satisfaction.

For more information on STMicroelectronics Statement on conflict minerals, see page 59

For more information on our customer service approach, see page 60

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(*) This data includes only customers’ corporate responsibility requirements (Social, Ethics and EHS) received by our corporate level departments for review and approval. Day-to-day customer requests arriving in the course of business between ST and the customer are not included.

For more information on STMicroelectronics Statement on conflict minerals, see page 59

Customer CR requirements | STSC9 |
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Number of customer requirements*</td>
<td>2006</td>
</tr>
<tr>
<td>144</td>
<td>157</td>
</tr>
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For more information on STMicroelectronics Statement on conflict minerals, see page 59

Customer CR requirements | STSC9 |
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For more information on STMicroelectronics Statement on conflict minerals, see page 59

Customer CR requirements | STSC9 |
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For more information on STMicroelectronics Statement on conflict minerals, see page 59

Customer CR requirements | STSC9 |
<table>
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<tr>
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</tbody>
</table>

(*) This data includes only customers’ corporate responsibility requirements (Social, Ethics and EHS) received by our corporate level departments for review and approval. Day-to-day customer requests arriving in the course of business between ST and the customer are not included.
Objectives 2010

Continue to encourage our suppliers and subcontractors to be certified ISO 14001 and OHSAS 18001

Full compliance to REACh program by all our suppliers and subcontractors

Progressively integrate additional EHS indicators in the supply chain evaluation based on customers’ needs

Chemicals and minerals management

ST’s requirements regarding its suppliers and subcontractors are increasingly stringent in terms of chemicals and minerals management in order to respond to increasingly rigorous legislation and customer requirements. In 2010, our main regulatory focus concentrated on the expanded scope of the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and the US Dodd-Frank act on conflict minerals.

For more information about the new US legislation on conflict minerals, see page 58

The Sourcing department in charge of these issues has been strengthened to ensure the appropriate follow-up of legislation, supplier and subcontractor compliance as well as responses to customers’ requests for more information and detailed specific information.

All these legal and customer requirements are continuously updated in ST’s list of banned, exempted* and declarable** substances. Corporate and local sourcing departments are responsible for communicating this corporate policy to every supplier and subcontractor. Partners are expected to sign a Statement of Acknowledgement of ST’s requirements and provide analysis data to demonstrate they comply with the list of banned, exempted and declarable substances. In 2010, an important focus has been done on tantalum, tin, tungsten gold and cobalt to ensure our suppliers and subcontractors will be in line with new US legislation, to be introduced in 2011. At the end of the year, 96% of suppliers and Back-end subcontractors had signed the statement ensuring they do not supply minerals coming from conflicts areas:

- 53% provided evidence of the origin of these minerals;
- 9% declared minerals come from national stockpiles;
- 13% declared minerals come from recycling channels;
- 25% did not provide exact mining information for confidential reasons.

We started addressing our Front-end subcontractors in October 2010, and, by the end of the year, 42% had provided their minerals origin. We will continue to deploy this program in 2011. Although our requirements are more and more complex, we obtained more numerous and comprehensive responses from our suppliers and subcontractors in 2010, reaching a compliance rate above 96%.

We also have a structured and comprehensive Materials Declaration process to provide our customers with product chemical identity cards. Sourcing departments are involved in this program through the collection of suppliers’ data certificates (based on the list of banned, exempted and declarable substances) and subcontractors’ Materials Declaration forms (IPC 1752). 100% of Front-end and Back-end subcontractors had completed their Materials Declaration forms by the end of 2010.

Certifications

ST is committed to work with suppliers and subcontractors that are compliant with stringent Environment, Health and Safety (EHS) standards. Through bi-annual performance evaluation (Supplier Performance Evaluation and Score Cards), ST strongly encourages and supports its partners to be ISO 14001 (or EMAS) and OHSAS 18001 (or equivalent) certified.

ST is progressively extending this recommendation to a larger part of its suppliers and subcontractors. In 2010, we have included our spare part suppliers because of the significant business volume we have with these partners.

At the end of 2010, 76.2% of suppliers were EMAS or ISO 14001 certified (81.6% excluding spare part suppliers), as well as 97% of Back-end subcontractors and 100% of Front-end subcontractors.

OHSAS 18001 or equivalent certifications remained high for Back-end and Front-end subcontractors (87% and 84%), but we recorded only 32.6% of suppliers certified. The reason for this low rate is that there are several local or industry-specific health and safety standards that are not recognized internationally.

In addition to that, it is important to highlight that most of our key suppliers are also members of Semiconductor Equipment and Materials International (SEMI) and have signed the SEMI Global Care Initiative***.

Our 2011 objectives

- Customers
  - Obtain best-in-class performance in on-time delivery.
  - Reach our targets in meeting customer demand (see graphs page 61).

- Suppliers & subcontractors
  - Continue to engage our suppliers and subcontractors towards our EHS policies and objectives.
  - Progressively integrate additional EHS indicators in the supply chain evaluation based on customers’ needs.

(*) Starting 2008, total Front-end subcontractors can change from one year to another, because to be reactive versus the market evolution, we implement the ‘active foundry’ concept. This list is updated each quarter versus planning data in order to give an interactive overview.

(**) Substances meeting the criteria set out in the banned substances list but allowed only for one special use due to a proven lack of a technical alternative.

(*** Substances not banned but subject to potential future restriction or specifically requested to be declared to customers if contained in their product.

(****) The Global Care Initiative provides a framework to build and strengthen commitment to the environment, health and safety.

Supplier 2011 performance overview

<table>
<thead>
<tr>
<th>Suppliers’ and subcontractors’ environmental performance</th>
<th>STSC1</th>
<th>STEV17</th>
<th>8.3.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of suppliers/subcontractors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006 2007 2008 2009 2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suppliers of materials</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>108 112 107 108</td>
<td>104</td>
<td>73.0</td>
<td>82.0</td>
</tr>
<tr>
<td>Suppliers of equipment</td>
<td>61</td>
<td>61</td>
<td>40</td>
</tr>
<tr>
<td>Suppliers of spare-parts</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Total</td>
<td>169</td>
<td>173</td>
<td>147</td>
</tr>
<tr>
<td>Subcontractors Back-end</td>
<td>56</td>
<td>59</td>
<td>65</td>
</tr>
<tr>
<td>Subcontractors Front-end</td>
<td>22</td>
<td>11</td>
<td>10</td>
</tr>
</tbody>
</table>

(*) Starting 2008, total Front-end subcontractors can change from one year to another, because to be reactive versus the market evolution, we implement the ‘active foundries’ concept. This list is updated each quarter versus planning data in order to give an interactive overview.

<table>
<thead>
<tr>
<th>Suppliers’ and subcontractors’ health and safety performance</th>
<th>STSC2</th>
<th>8.3.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of suppliers/subcontractors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007 2008 2009 2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suppliers of materials</td>
<td>112</td>
<td>107</td>
</tr>
<tr>
<td>Suppliers of equipment</td>
<td>61</td>
<td>40</td>
</tr>
<tr>
<td>Suppliers of spare-parts</td>
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</tr>
<tr>
<td>Total</td>
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<td>56</td>
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</tr>
<tr>
<td>Subcontractors Front-end</td>
<td>22</td>
<td>11</td>
</tr>
</tbody>
</table>

(*) Starting 2008, total Front-end subcontractors can change from one year to another, because to be reactive versus the market evolution, we implement the ‘active foundries’ concept. This list is updated each quarter versus planning data in order to give an interactive overview.
ST has been a full member of the Electronics Industry Citizenship Coalition (EICC) since 2005 in order to benefit from and support a shared and standardized approach to corporate responsibility management within the electronic industry supply chain.

The EICC approach, is composed of four steps:

**Phase 1:** Introduction – EICC Code of Conduct introduction and Risk Assessment level 1 (RA1);

**Phase 2:** Self-assessment – Risk Assessment level 2, Self-Assessment Questionnaire (SAQ) and use of E-TASC, the industry online database;

**Phase 3:** Validated assessment – Validated Audit Process (VAP) with standardized audit tools and resources;

**Phase 4:** Corrective action and continuous improvement – training and capability-building efforts.

In our road map to comply with the EICC program, we are committed to progressively extend the number of suppliers and subcontractors involved. In 2010, we decided to launch phase one with our 35 key spare parts suppliers** (in terms of business volume). In 2009 we invited our logistics service providers but these suppliers serve so many industries that they cannot engage in signing every industry’s code of conduct. For other suppliers and subcontractors engaged in phase one, we had an increase in the number of engagement letters signed.

We deploy the RA1 for the companies involved in the EICC program. We then move to step two for companies identified as high risk by RA1, and that represent significant business volumes for ST. In 2010, a total of 99 SAQs has been completed by our suppliers and subcontractors, compared with 60 in 2009. Five years of constant awareness have been fruitful since we are now able to reach our annual objective in terms of assessments. By 2010 we had engaged more than 80% of our suppliers in an EICC designed e-learning about corporate responsibility and EICC program. This initiative was very well received and we will continue rolling it out to our partners in 2011.

ST’s Sourcing department provided each supplier who filled in the SAQ with a detailed report on their results and action plans for improvement. As evidenced in our new graph below, we are very pleased to see that this program helps our suppliers and subcontractors improve their management of corporate responsibility. In 2010, the objective was to halve the number of critical questions in the SAQs and that target was met (from an average of 7.3 to 2.9).

Concerning phase three, five of our suppliers have been audited by other parties through the EICC VAP. The EICC recommend the use of audits for suppliers who remain in the overall high risk category or have more than five sections in high risk; none of these suppliers in fact fell into this category.

Each of ST’s sites has engaged their top 30 local suppliers (not managed at corporate level) with 60% of them having signed the EICC engagement letter in 2010. An internal task force was formed in 2010 to adapt the EICC SAQs to these local suppliers. We expect to see implementation on pilot sites during 2011.

We also continue to deploy the EICC e-learning to our internal purchasing managers in order to reinforce their knowledge of the EICC framework and requirements. An additional 100 managers were trained in 2010.

(*) Once modules are fully available.

(**) Suppliers of replaceable components, assembly or sub-assembled industrial equipment.

<table>
<thead>
<tr>
<th>Suppliers’ compliance with EICC</th>
<th>Phase 1 - Introduction</th>
<th>Phase 2 - Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target Number</td>
<td>Agreement to comply with EICC (%)</td>
</tr>
<tr>
<td>STMicroelectronics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suppliers of materials</td>
<td>117 108 108 104</td>
<td>52.0 81.5 82.4 89.0</td>
</tr>
<tr>
<td>Suppliers of equipment/facilities/IT</td>
<td>104 104 104 104</td>
<td>34.0 41.4 50.0</td>
</tr>
<tr>
<td>Suppliers of spare-parts</td>
<td>NA NA NA 35</td>
<td>NA NA NA 71.0</td>
</tr>
<tr>
<td>Subcontractors Back-end</td>
<td>28 40 39 32</td>
<td>69.0 97.0 98.5 98.0</td>
</tr>
<tr>
<td>Subcontractors Front-end**</td>
<td>22 11 10 19</td>
<td>0 86.4 90.0 95.0</td>
</tr>
</tbody>
</table>

(*) The total Front-end subcontractors can change from one year to another, based on our response to the market evolution. This list is updated each month versus planning data in order to give an interactive overview.

(**) The number of SAQs is not the number of suppliers/subcontractors that have filled-in SAQs. One supplier or subcontractor has to fill-in one company level SAQ and SAQs for all their manufacturing sites that produce materials/equipment/products for ST.

Our 2011 objectives:

**Suppliers & subcontractors**

- Enlarge the population for equipment and spare-parts suppliers to comply with EICC (target 70%).
- Continue to enroll suppliers and Back-end subcontractors to reach 120 completed SAQs.
- Obtain commitment to the EICC from our Front-end (FE) newcomer subcontractors, and completion of SAQs by 2 additional FE subcontractors.
- Decrease the number of SAQ non-conformities to an average of 2.7.

- Review FE subcontractors’ SAQ results and support their action plan.
- Engage identified suppliers to undertake third party audits.
- Maintain an overall score of more than 85%** (SAQ based) for all suppliers and subcontractors.
- Continue to enroll suppliers and subcontractors in EICC corporate responsibility training.

(*) Suppliers of replaceable components, assembly or sub-assembled industrial equipment.
Introduction
Det Norske Veritas Certification France S.A.R.L. (‘DNV’) has been commissioned by the management of STMicroelectronics NV (‘the Company’) to carry out an assurance engagement on the ‘2010 Sustainability Report’ (‘the Report’) in its printed format. The Corporate Departments of the Company are responsible for the collection, analysis, aggregation and presentation of information within the Report. Our responsibility in performing this work is to the management of STMicroelectronics NV only and in accordance with terms of reference agreed with the Company. The assurance engagement is based on the assumption that the data and information provided to us is complete and sufficient.

Scope of Assurance
The scope of work agreed upon with STMicroelectronics NV includes the following:
- Key Performance Indicators for Health, Safety, Social and the Environment as reported for 2010 within the Report as well as statements on Social and Health & Safety performance. Verification of baseline data was not included in the scope.
- Visits to the Headquarters as well as two other sites (Crolles & Agrate). Interviews with external stakeholders were not included. The verification was conducted during April 2011.

Verification Methodology
- DNV is a leading service provider of sustainability solutions, including verification of sustainability reports. Our assurance engagement was planned and carried out in order to review adherence to the principles of Materiality, Completeness, Reliability, Comparability and Accuracy. The application level has been reviewed by the GRI Report Services and found to be in line with the requirements of the application level A+.
- As part of the verification we have:
  - Challenged the Environmental, Social and Health & Safety statements and claims made in the Report 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 by the Company; Conducted interviews with an excess of 30 company’s representatives in two sites and the company’s headquarter (including data owners and decision-makers from different divisions and functions); Performed sample-based audits of the mechanisms for implementing the Company’s own policies, as described in the Report; Performed sample-based audits of the processes for generating, gathering and managing the quantitative and qualitative data included in the Report.

Conclusions
Based on the assurance work we performed on both the Key Performance Indicators as well as the narratives in the Company’s ‘2010 Sustainability Report’ we are not aware of anything causing us to believe that there may have been any material mistake or omission. The organization has carried out a review of its material sustainability issues the outcome of which shall be implemented to improve future sustainability reporting.

We believe STMicroelectronics NV efforts to embed its sustainability approach into the business and management processes are progressing steadily towards an advanced level. We welcome the Company’s continuous improvement activities and in particular the dedicated commitment shown at all levels of management.

Principal Considerations
Materiality
Based on our review, we consider that the Report includes the major material aspects concerning the Company’s performance. The process to determine material issues and indicators, as well as their inclusion in the Report, shall be formalized and rolled out across all the Company, and be reviewed over time to allow improvements over the long term.

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 2010. The exceptions relate to potential under reporting for some indicators due to varying parameter as well as a limited materiality check.

Reliability
Overall, we found that the information and processes are sufficiently collated, recorded, compiled, analyzed and disclosed in a manner that allowed us to examine and establish the quality of the information; the exceptions relate to some environmental data being extrapolated with a limited number of intermediary checks.

Comparability
We consider that stakeholders have sufficient information that is adequately selected and compiled in order to analyze the changes in the Company’s performance over time. However, rates of improvements are in some instances calculated over different period of times making comparisons more difficult.

Accuracy
We consider that the reported information is reasonably accurate and balanced for stakeholders to assess the company’s performance. We are not aware of any misstatements in the assertions made.

DNV’s Independence
DNV was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. DNV expressly disclaims any liability or co-responsibility for any decision a person or entity would make based on this Verification Statement.

Jean-Christophe CARRAU
Lead Verifier, DNV Certification France

Antonio ASTONE
Technical & Quality reviewer, DNV Global Service Responsible

Det Norske Veritas, Lyon, May 2011

Social, H&S, Environment indicators verified by DNV Certification France.
ST Microelectronics is a leading semiconductor company involved in the development, production, and sale of a wide range of products. The company's operations span across various industries including automotive, industrial, telecommunications, and consumer electronics. This page provides a brief overview of the company's value chain, emphasizing how they create a chip.

**Value Chain**

The value chain includes several steps: conception, design, manufacturing, testing, and delivery. The diagram illustrates the flow from initial ideas to the final product.

**ST Microelectronics**

- **In the office**: The shift towards a green office space with energy-efficient practices.
- **In the lab**: Advanced research and development facilities dedicated to innovation.
- **On the go**: Mobile applications and connected devices leveraging IoT technology.
- **At work**: Workshops for continuous learning and professional development.

**Supply Chain**

- **Raw materials**: Silicon from several countries is used in the manufacturing process.
- **Equipment**: Advanced machinery is crucial for the production of high-quality chips.
- **Energy**: Sustainable energy practices are integrated into the production processes.

**R&D Conception Design**

- **New products conception** is the result of circuit drawings and other infotainment.
- **Silicon** is a key material used in the manufacturing process.

**Manufacturing Front-end**

- **Wafer**: A wafer is used as the starting material for creating a chip.
- **Implantation**: Implantation processes are used to create a circuit on the wafer.

**Electrical Water Sorting**

- **Wafer sort**: This is the operation of electrically testing the die on the wafer.
- **Implantable devices**: Devices such as defibrillators and pacemakers are created using this process.

**Assembly Back-end**

- **Die**: The die are cut from the silicon wafer and prepared for packaging and testing.
- **Assembly workshops**: These workshops are involved in the final stages of chip production.

**Business customers**

- **On the go**: Advanced infotainment systems and automotive electronics.
- **At work or school**: Office equipment, printing, and networking solutions.

**2010 Key Performance Indicators**

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<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross profit as a percentage of sales (%)</td>
<td>35.80</td>
<td>35.40</td>
<td>36.20</td>
<td>30.90</td>
<td>38.80</td>
</tr>
<tr>
<td>Earnings per share (diluted) (US$)</td>
<td>0.83</td>
<td>(0.53)</td>
<td>(0.88)</td>
<td>(1.29)</td>
<td>0.94</td>
</tr>
<tr>
<td>R&amp;D expenditures (US$m)</td>
<td>1,668</td>
<td>1,802</td>
<td>2,152</td>
<td>2,365</td>
<td>2,350</td>
</tr>
<tr>
<td>Percentage of employees having completed the annual e-PA</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>78.36</td>
<td>67.59</td>
</tr>
<tr>
<td>Supply Chain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landfill waste (% of total waste)</td>
<td>4.8</td>
<td>5.5</td>
<td>3.6</td>
<td>3.3</td>
<td>2.8</td>
</tr>
<tr>
<td>Cycle time to process failure analysis (in days)</td>
<td>62.6</td>
<td>71.9</td>
<td>62.2</td>
<td>65.4</td>
<td>71.1</td>
</tr>
<tr>
<td>Severity rate</td>
<td>8.80</td>
<td>6.70</td>
<td>5.50</td>
<td>4.50</td>
<td>2.60</td>
</tr>
<tr>
<td>Recordable cases rate</td>
<td>0.59</td>
<td>0.49</td>
<td>0.39</td>
<td>0.35</td>
<td>0.29</td>
</tr>
<tr>
<td>CO2 emissions (PFC+energy+transportation) (kTons)</td>
<td>2,009</td>
<td>1,668</td>
<td>1,453</td>
<td>1,317</td>
<td>1,518</td>
</tr>
<tr>
<td>Customer returns (as a percentage of billings) (baseline 100 in 2004)</td>
<td>38.3</td>
<td>40.0</td>
<td>33.7</td>
<td>30.8</td>
<td>20.0</td>
</tr>
<tr>
<td>Percentage of eligible employees who signed the Business Conduct Pledge</td>
<td>77.390</td>
<td>50,171</td>
<td>38,805</td>
<td>38,373</td>
<td>36,697</td>
</tr>
<tr>
<td>Percentage of employees who have achieved zero waste</td>
<td>77.390</td>
<td>50,171</td>
<td>38,805</td>
<td>38,373</td>
<td>36,697</td>
</tr>
</tbody>
</table>
This book is printed on Creator Silk 350 g/m², a sustainable printing paper produced by a manufacturer that is certified its culture of Sustainable Excellence into its business. The paper uses chlorine-free pulp which enables both recycling and links the production chain from source of raw material to final printing process.

To be recognized as world leader in innovation for sustainable development through excellence in our people, our products, the environment and the community, STMicroelectronics gratefully grate its culture of Sustainable Excellence into its business. The specific examples we use to illustrate this culture of Sustainable Excellence reflect the Program of Endorsement for Forest Stewardship Council (FSC ") which certifies the paper manufacturer’s chain of custody. This certified chain of custody ensures that the forest management practices are sustainable and the paper used in our products is made from certified wood, containing no material from illegal sources. The program also includes STMicroelectronics’ responsibility to ensure that all manufacturing processes, from raw materials to finished products, conform to the highest global environmental, social and economic standards, and that they are regularly audited by third-party organizations. STMicroelectronics’ responsibility for the raw materials used in its products is reflected in the ST Sustainability Mission (see page 3). STMicroelectronics is committed to the Forest Stewardship Council (FSC ") as its benchmark standard for responsible forest management. STMicroelectronics is committed to the Forest Stewardship Council (FSC ") as its benchmark standard for responsible forest management.

STMicroelectronics has set up a program of Endorsement for Forest Stewardship Council (FSC ") which certifies the paper manufacturer’s chain of custody. This certified chain of custody ensures that the forest management practices are sustainable and the paper used in our products is made from certified wood, containing no material from illegal sources. The program also includes STMicroelectronics’ responsibility to ensure that all manufacturing processes, from raw materials to finished products, conform to the highest global environmental, social and economic standards, and that they are regularly audited by third-party organizations. STMicroelectronics’ responsibility for the raw materials used in its products is reflected in the ST Sustainability Mission (see page 3). STMicroelectronics is committed to the Forest Stewardship Council (FSC ") as its benchmark standard for responsible forest management. STMicroelectronics is committed to the Forest Stewardship Council (FSC ") as its benchmark standard for responsible forest management.

For more information on ST’s Sustainability strategy, see the paragraph on STMicroelectronics’ sustainability responsible management on the STMicroelectronics website. For more information on ST-Ericsson’s sustainability strategy and performance, see the paragraph on ST-Ericsson’s sustainability responsible management on the STMicroelectronics website. For more details on the GRI Application Level check Statement, see the online version of the report at www.st.com/sustainability or contact the STMicroelectronics Sustainability Department at sustainability@st.com. For more information on the GRI indicator prefixes, see the online version of the report at www.st.com/sustainability or contact the STMicroelectronics Sustainability Department at sustainability@st.com.
ST Sustainability Mission
To be recognized as world leader in innovation for sustainable development through excellence in our people, our products, the environment and the community.

Our culture of Sustainable Excellence in Practice