

Contents

Contents

Message from the President.....	2
STMicroelectronics at a glance	3
Our Shared Values	4
Total Quality Management.....	6

SOCIAL REPORT

The way we manage.....	14
Our people	20
ST: Citizen of the world.....	34

ENVIRONMENTAL REPORT

General principles and environmental management.....	45
Energy	56
Water	60
Emissions to air	62
Chemicals.....	64
Waste	66
Green initiatives	68
A history of environmental progress.....	72
The Environmental Decalogue.....	76



Message from the President

This report reflects the role our culture and beliefs play in our commitment to build a successful company while contributing to sustainable development. Our culture is based on our integrity, the central importance of our people and our values.

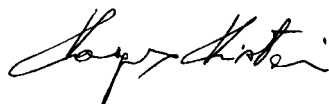
Good corporate governance has been part of our DNA from the beginning. Doing business with integrity is how we live and breathe. This means being frank, open and transparent with everyone.

Our people are our most important asset. I know this is something a lot of people say but I really do believe in the centrality of people. You can release people's creativity by empowering, training, motivating, providing the right tools and then measuring their performance to provide that essential feedback which everyone needs. This is what we do and our social report provides evidence of our successes and challenges.

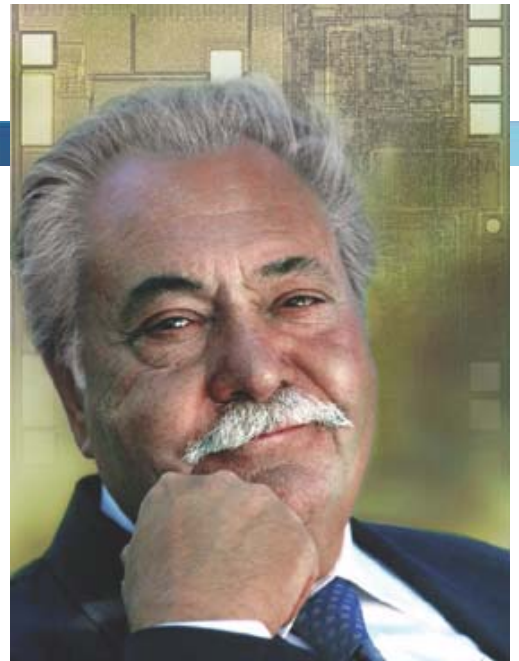
I believe too that there is no conflict between the needs of shareholders and our many other stakeholders, including our customers, suppliers, business partners and the broader society. I'm convinced that being a good corporate citizen is not only ethically correct but good for the bottom line too.

And the data we have been collecting over the past eight years on our investments for environmental protection and their return, are just an example of the validity of the concept.

The following pages provide evidence of how we live our values - acting in a way that contributes to society and makes us proud, different and successful.



Pasquale Pistorio
President and Chief Executive Officer



STMicroelectronics at a glance

- STMicroelectronics is a global, independent semiconductor company that designs, develops, manufactures and markets a broad range of semiconductor integrated circuits (ICs) and discrete devices. These are used in a wide variety of microelectronic applications, including telecommunications systems, computer systems, consumer products, automotive products and industrial automation and control systems.
- In 2002, ST's net revenues were US\$6.32 billion and net earnings were US\$429.4 million. ST was ranked among the top five semiconductor manufacturers, according to market analysts.
- ST provides more than 3,000 main types of products for more than 1,500 customers, including Alcatel, Bosch, DaimlerChrysler, Ford, Hewlett-Packard, IBM, Motorola, Nokia, Nortel Networks, Philips, Seagate Technology, Siemens, Sony, Thomson and Western Digital.
- ST directly employs more than 43,000 people, working at 16 advanced research and development units, 39 design and application centers, 17 main manufacturing sites and 88 direct sales offices in 31 countries.
- Each year the Company invests a significant proportion of sales revenues in R&D and capital expenditures. In 2002, ST spent US\$1,022.3 million (16.2%) of revenues in R&D. 762 new patent applications were added to our portfolio in 2002 thus maintaining our track record as one of the industry's most prolific inventors. ST is also active in numerous collaborative research projects worldwide as well as playing a key role in Europe's advanced technology research programs such as MEDEA+ and its predecessors, MEDEA and JESSI.
- Corporate headquarters as well as the headquarters for Europe and for Emerging Markets are in Geneva. The Company's US headquarters are in Carrollton (Dallas, Texas); those for Asia/Pacific are based in Singapore; and Japanese operations are headquartered in Tokyo.
- ST is quoted on the New York Stock Exchange (NYSE:STM), on Euronext Paris and in Milan on the Borsa Italiana.

Our Shared Values

We are fortunate to work in a unique and vital industry. All recent and future advances in commerce, industry, science, medicine and entertainment, depend on semiconductor microelectronic circuits and components.

No advanced electronics industry can ensure its economic independence without secure access to microelectronics components and technology.

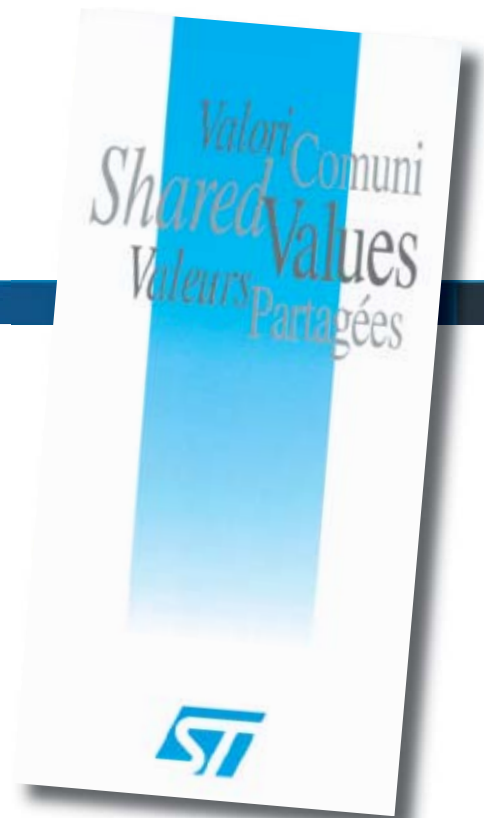
OUR MISSION is to offer strategic independence to our partners worldwide, as a profitable and viable broad range semiconductor supplier.

OUR OBJECTIVES are ambitious and specific:

- **Growth:** we will grow faster than our competitors, with a target of 5% market share. The key to profitable growth is Total Customer Satisfaction, which is our corporate priority Number 1.
- **Financial:** we will generate shareholders value and return on equity better than the average of the Top Ten semiconductor suppliers.
- **Social:** we will contribute to the well-being of our people and of every community in which we operate with a particular emphasis on environmental responsibility and sustainable development.

OUR STRATEGIES provide a decision-making framework to focus our priorities in every aspect of our company's activities.

- Manufacturing
- Globalization
- Innovation
- Strategic Alliances
- Product portfolio & Application focus



OUR GUIDING PRINCIPLES

- **Customer satisfaction:** the key to competitive success is Total Customer Satisfaction. We will listen to the voice of the customers and strive to anticipate and fulfill their needs and expectations; our future relies on strong partnerships, which we can ensure if each one of us does his/her best to provide world-class Service, Quality, Time-to-Market and Value.
- **Business integrity:** we will conduct our business with the highest ethical standards in dealing with each of our stakeholders' communities. We will dedicate ourselves to honoring our commitments, delivering on our promises, being loyal and fair, and standing up for what is right.
- **People:** we will behave with openness, trust, simplicity and humility; we will be ready to share what we know, encourage everyone's contribution and recognize achievements; we will emphasize job enrichment and personal realization through empowerment, teamwork and training. Each one of us will be loyal, hardworking, committed and personally involved in the continuous improvement and learning process.
- **Excellence:** the only "status-quo" we will accept is one of permanent change and continuous challenge, always for the better. In all aspects of our activities, we will strive for excellence, quality, competency and efficiency; we will be flexible and nimble, and we will encourage innovation and creativity in every aspect of our activities.
- **Profitability:** the profit we generate from our activities is the main source of the funds we need to prosper and grow; profit is necessary to provide security and future opportunities for each of us, and to allow the company to meet its other social and business responsibilities.

ST employees took part in an internal campaign to explain the guiding principles.



Total Quality Management

At ST our customers are our business and the true measure of success is a totally satisfied customer. Our Company deploys innovation and technology to capture the market but it is the Company values - our principles, processes and most importantly our people that make the ultimate difference.

Driving the Company forward is Total Quality and Environmental Management (TQEM). In principle and in practice, at work and within our global environment, ST is absolute in its pledge to quality. TQEM isn't just an idea at ST. It is the measure of the Company's dedication to exceptional, individual and corporate performance. A Total Quality lifestyle at ST has been achieved through careful, thoughtful and sustained effort, and driven by the daily commitment from each manager and each employee.

ST's initiatives in quality and business excellence have been recognized at the highest level across all geographic regions by some of the most prestigious national and international Quality awards: the Malcolm Baldrige National Quality Award presented to our American Team, the Singapore Quality Award, the National Quality Award in Morocco, the EPA Climate Protection Award (U.S.), the Malaysian Prime Minister Quality Award, the Malta Quality Award and the European Quality Award illustrate the success of our Company's unified Total Quality and Environmental Management philosophy.



The hallmarks of ST's industry leadership are expressed in the five key quality principles that drive the Company's successful growth:

■ **Management commitment**

Our managers should lead cultural change, indicating new directions, and creating the environment for TQM to prosper.

■ **Continuous improvement**

We should never rest on past successes but always work to better our best. In so doing, we move unceasingly from one achievement to the next.

■ **Management by fact**

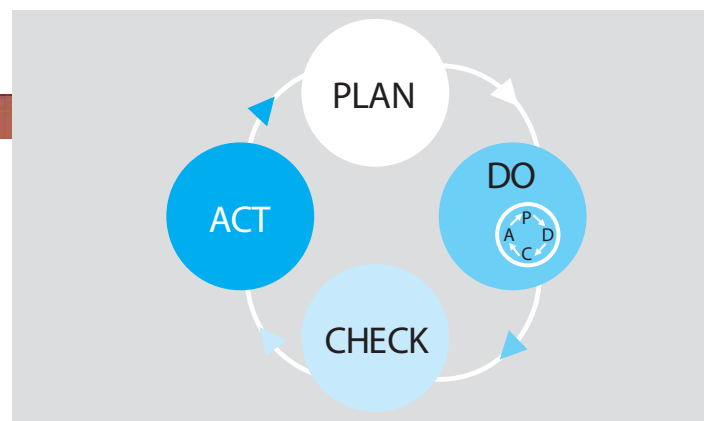
By gathering and analyzing factual data we can be sure of our conclusions. This will help us make the right decision, the first time and every time.

■ **Employee empowerment**

Everyone, no exception, has a contribution to make according to his or her skills and creativity.

■ **Customer focus**

Everyone is someone's customer. We should all - in research, design, manufacturing, marketing, sales, administration and accounting - identify our customers, listen to their needs and exceed their expectations. The customer is the starting point for all our strategies and actions, and is the vital measurement of our success.



The PDCA (Plan – Do – Check – Act) cycle of our continuous improvement process



Social Report



Social Report



Innovative



We do business in societies, not markets. We have always been committed to contributing to society - through the benefits of our innovative products and in the relationships we have with our wide range of stakeholders, which include our customers, employees, investors, business partners and local communities.

We believe that there is no intrinsic contradiction between the interests of shareholders and other stakeholders. We have always taken a long-term view and we know that the market will reward those companies that demonstrate a broad social and environmental responsibility.

In this section we outline our approach to social issues and our performance in 2002. We look at the way we treat our people, our business ethics, and how we contribute to the wider society and local communities.

We apply the same discipline to our social performance as we do to our business. Our social reporting system - based on the Global Reporting Initiative (GRI) guidelines - is in its second year of development. We are making good progress and this is reflected in the increased amount of data reported this year.

Believe

Performance

Guidelines



The background features a complex, abstract pattern of overlapping geometric shapes. The primary colors are teal and red, with black lines and shapes defining the structure. The teal areas are large and irregular, while the red shapes are smaller and more angular. Black lines form a network of paths and junctions, creating a sense of depth and movement. The overall effect is a vibrant, modern, and somewhat organic-looking composition.

The
way
manage



we

The way we manage

The way we manage

We are never completely satisfied with our performance. We constantly want to do better and we consider this persistent dissatisfaction to be the basis of our competitive advantage. Our emphasis is on keeping our customers, employees and shareholders satisfied. Our culture is moulded by our emphasis on Total Quality Management.

ST's management of social issues reflects our corporate culture and its meta-national approach where we seek to identify and nurture local strengths within local markets. Our executive leadership provides broad strategic direction and individual sites are given the independence to bring corporate strategies to life and to fulfil the corporate mission. Our management team is trained to lead, develop and empower ST people to achieve excellence in their day-to-day business, in their interactions with each other and with local communities.

Our people and their talents are the core strength of ST. We believe that we can unlock their creativity by offering training, motivation, the right tools for their job, and a way to measure their personal performance. We want to be an employer of first choice so that we can attract and retain the world's top talents. Our emphasis on people and their development helps us achieve this aim.

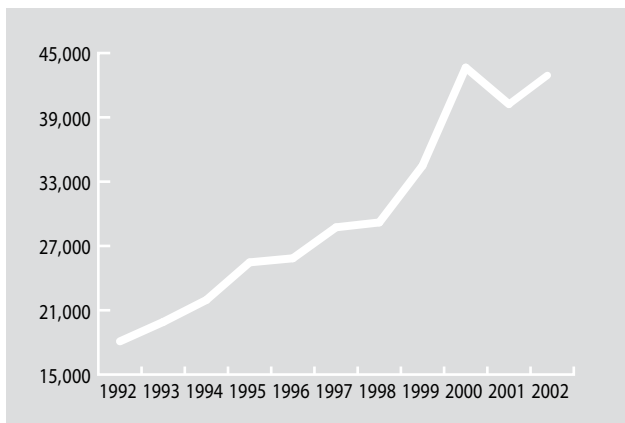
We have never attempted to export the "right" way to do things or to over-supervise from the center. Instead, we tap into the unique strengths of each local unit and leverage those strong points world-wide.

HEADCOUNT BY REGIONS

REGIONS	2001	2002
EUROPE	21,520	23,200
<i>France</i>	8,896	9,616
<i>Italy</i>	9,309	9,992
<i>Malta</i>	2,279	2,311
AFRICA	4,447	4,877
<i>Morocco</i>	4,434	4,845
AMERICAS	3,523	3,183
<i>USA</i>	3,431	3,154
ASIA (incl Japan)	10,738	11,881
<i>Singapore</i>	4,457	4,859
<i>Malaysia</i>	3,829	3,992
<i>China</i>	1,275	1,663
<i>India</i>	801	974
TOTAL ST	40,228	43,141

ST TOTAL HEADCOUNT GROWTH

In 10 years the number of people working for ST has increased by more than 25,000, a growth of more than 140%



As cultural differences become increasingly important in a shrinking world, our global approach gives us yet another advantage over our competitors. Nurturing local talents helps us to continue injecting sustained value into the societies where we operate.

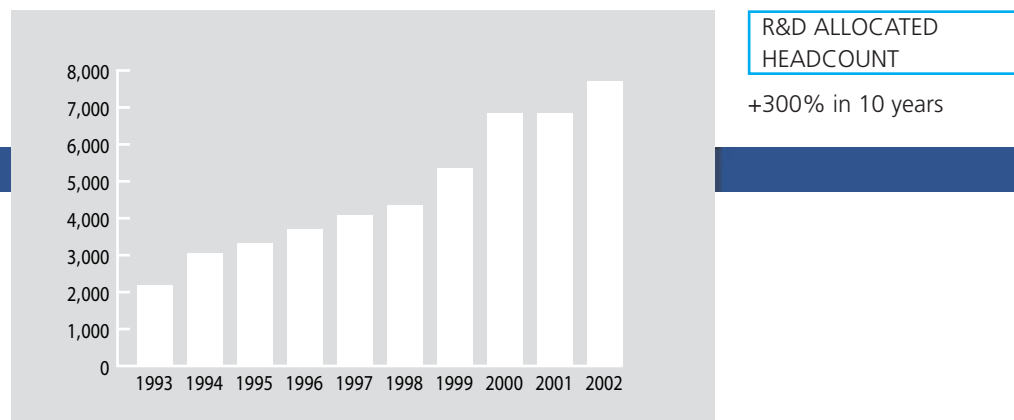
Our commitment to R&D and innovation

Despite the downturn in market conditions, we continued to invest in the future by increasing our investment in research and development (R&D) in 2002 by 4.5%, compared with 2001. We are committed to maintain our R&D spending to guarantee our future and keep ST at the forefront of leading-edge technology.

We are expanding our design capabilities in developing countries. We employ nearly 1,000 people in our IP design factory and information technology group in India, and are recruiting 300 more. In China we are expanding our application laboratories and design activity, which currently employ 300 people. We have also opened design centers in Tunisia, Morocco and the Czech Republic.

This expansion acknowledges the great pool of talent in developing countries and underlines our commitment - based on business and social reasons - to contribute, by our presence, to the development of these countries.

In 2002 we added a total of 762 new patent applications to our broad portfolio, a 17% increase on 2001 filings. ST has an incentive awards policy that demonstrates its commitment to researchers and designers. Our Worldwide Patent Committee nominated 24 patents from France, Italy, UK and USA to receive exceptional patent awards in 2002.



Business integrity

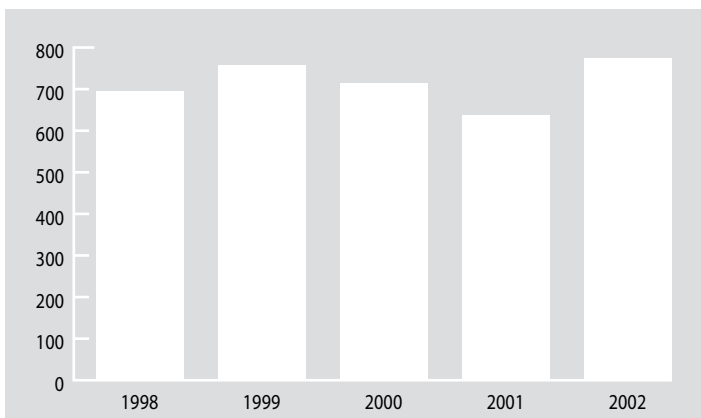
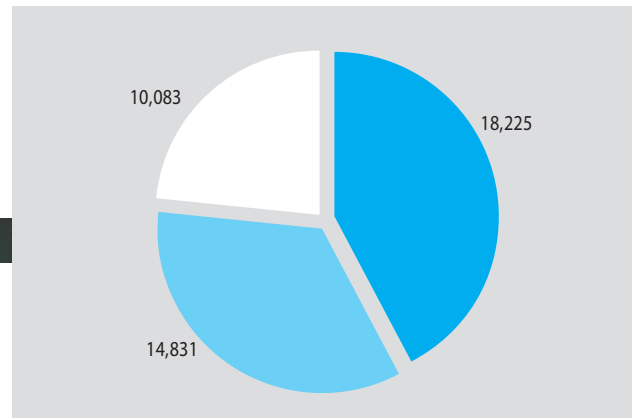
Our guiding principles provide the foundations on which our commitment to the highest standards of business integrity are based. As a minimum, we strictly observe all laws and legal requirements wherever we operate. All our employees are expected to comply with the highest standards of business ethics in their work and in their interaction with customers, suppliers and government officials. This is defined by our ethics policy, which is supplemented by local policies and procedures. All ST sites and subsidiary companies have adopted ethical standards consistent with the company policy. New employees are informed of these standards and agree to comply with our policies when they sign their employment contract. We inform all our suppliers about our ethics standards and expect them to conform to our requirements.

We are signatories to the UN's Global Compact which commits us to uphold fundamental principles on human rights, labor and the environment. We do not tolerate bribery and do not make political contributions. We are in the process of formalizing policies that will include specific references to our respect for human rights and avoidance of child labor.

CENSUS BY JOB CATEGORIES

Operators ■
 Professionals ■
 Others ■

Others = Technicians, administrative, etc.



NUMBER OF NEW PATENT APPLICATIONS PER YEAR

ST added 762 new patent applications in 2002, an increase of 17% over 2001 filings.

Human resources principles

We strive to be the employer of first choice by putting into practice three principles that promote autonomy and self-initiative. These are:

- **Fairness:** each person and every team is recognized for their performance and their contribution to company profits.
- **Transparency:** through efficient internal communication, each person can have the necessary information to fulfil his/her job.
- **Personal and professional development:** each employee is encouraged to continuously learn during his/her daily work, to develop skills through training, and to progress by changing jobs to take on new responsibilities.

Human resources standards

We have a set of human resources standards, defined as targets on selected parameters, to help us measure and constantly improve our performance.

These are given to all new employees and are also widely displayed on posters in our buildings.

Corporate standards 2002

CUSTOMER SATISFACTION

Life test 48 hours	ppm	< 5
Customer returns for quality	%	< 0.15
Complaints	million units shipped	< 1
FA cycle time	days	< 10
JIT	%	> 90
Delinquency to CD	week	< 0.15

PEOPLE SATISFACTION

Employees involved in teams	%	90
Suggestions	employee/year	4
Experienced jobs filled internally	%	70
Training – minimum	hours/employee	35
– average	hours/employee	50
Information meetings	employee/year	12
Performance appraisal	%	100
Safety incident rate improvement	% year on year	20
Productivity improvement (sales/y)	% year on year	10

MANUFACTURING

Program adherence	%	90
Cycle time – Front-End – average	days/mask level	1.6
– Front-End – 95%	days/mask level	1.9
Cycle time – Back-End – average	# theoretical	1.5
– Back-End – 95%	# theoretical	2.5
Defectiveness – Front-End	ppm/truck level	1000
– Back-End Assembly + Test	ppm	15000
Test Equipment Efficiency	%	90
Quality – Front-End	Do	< 0.006
– Back-End AIQ elect	ppm (mat-21)	< 1
– Back-End AIQ mech	ppm (mat-21)	< 5
Eco footprint (12 parameters)		< 1.30
Manufacturing variation	%	< 12

Corporate standards 2002

ST



Our people



Our people

Our people

Our achievements are based on the timely execution of our business strategies and the enthusiasm of the people who work for ST. Our people are central to our success and their talents, skills and dedication differentiate us in an increasingly competitive global market.

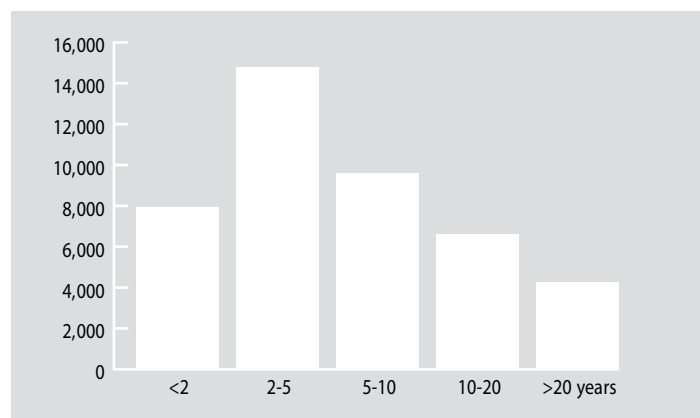
Few industries are as competitive for human talent as ours. We must not only attract and retain the very best people but we must also offer a work environment that is safe, healthy and that allows them to reach their full potential. We believe that accomplished, talented people will be more attracted to a company where they are the center of the enterprise and where ethical, social and environmental values are at the heart of the company.

This is why we spend a considerable amount of time and effort providing the necessary training, helping employees develop their talents and careers and ensuring that their work environment increases motivation. Through regular surveys, we check that our employees are satisfied with the way the company treats them.

Our business goal is to sustain a high rate of innovation in products, processes and manufacturing capabilities to better serve our customers. To do this we need to attract and retain the best people.

Attracting and retaining talent

The number of people working for ST has increased by more than 25,000 over the past decade. Despite difficult market conditions, we have continued to grow and hired 5,667 people worldwide in 2002. Even during tough economic times we strive to keep our people - our human capital. In 2001, when our



RETENTION: NUMBER OF YEARS WITH THE COMPANY

competitors were laying off thousands of employees, we chose instead to freeze salaries and reduce the pay of top managers by 5% to prevent lay-offs. In 2002, lack of demand forced us to close two small manufacturing sites in the USA but we offered to relocate all employees to other ST sites.

The popularity of ST as an employer was confirmed with 94% of all job offers accepted. In 2002, nearly half (47.4%) of our employees had worked for ST for over five years. The average career length is more than 10 years and our turnover of employees (6.4% in 2002) is less than the worldwide average.

The workplace



Health and safety

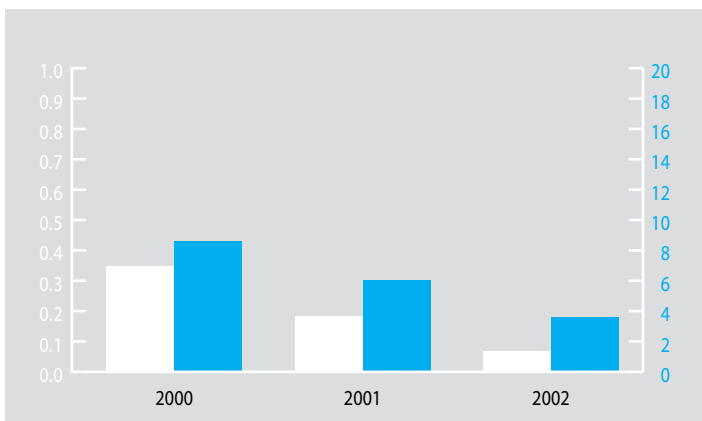
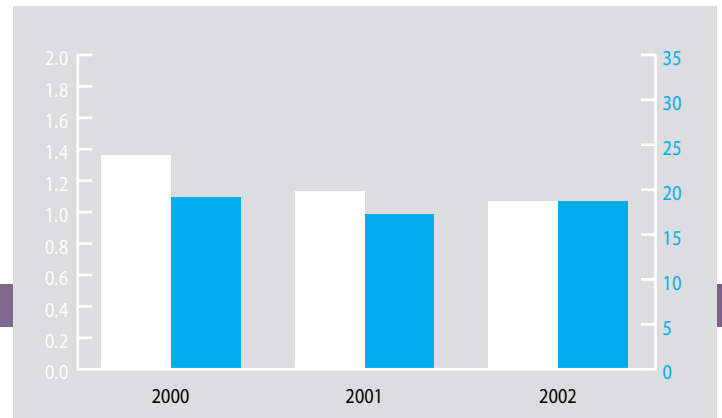
ST is committed to providing a safe and healthy workplace for our employees, contractors and visitors.

We aim to improve continually our health and safety (H&S) performance and make progress towards our goal of zero incidents, with a safety incident rate improvement of 20% year on year minimum. We are committed to being recognized as best-in-class in occupational health and safety performance.



Safety training in ST aims to raise awareness and encourage employees to perform their jobs safely.

FRONT-END MANUFACTURING

Number of incidents with Lost Working Days per 100 employees (Frequency rates) 
 Number of Lost Working Days per 100 employees (Severity rates) 



BACK-END MANUFACTURING

 Number of incidents with Lost Working Days per 100 employees (Frequency rates)
 Number of Lost Working Days per 100 employees (Severity rates)

We meet and exceed local and international legal safety requirements, as well as globally recognized standards. In 2001, we set out to achieve certification to the Occupational Health & Safety Assessment Series (OHSAS) 18001 management program at all our manufacturing sites by 2003. Three were certified in 2002 and we are on track to meet our target. We intend to obtain OHSAS 18001 certification also for our main non-manufacturing sites.

Risk evaluation and analysis, H&S performance indicators and best practice in ergonomics help to minimize hazards and risks in our manufacturing processes, operations and products. Each ST site has an OH&S Steering Committee. This includes the site manager, site safety officer and safety champions. Our policy is to record all workplace incidents and use this data to monitor and review our performance annually.

There were no work fatalities in 2002.

Working time

Company-wide averages including manufacturing across the 31 countries:

WORKING TIME	2001	2002
Employees having at least 1 day off every 7 days	100%	100%
Employees with regular work time < 48 hours per week	88%	89%
Average overtime per week (hours)	1.5	3.5

OHSAS 18001 certificates for ST sites in Kirkop-Malta, Tours-France and Agrate-Italy



Unions and freedom of association

All ST employees enjoy freedom of association and the right to join a trade union.

ST has a European Works Council, a requirement under European Union law. The aim of the council is to promote the participation of every worker in a social dialogue within the company. The Council meets annually and is composed of 21 representatives. Should exceptional circumstances occur that affect the interests of the workers and employment, extraordinary meetings can be called. The Council is informed on transnational issues that affect the interest of the workers.

Total time lost to strikes in 2002 was 0.1% of time worked.

Diversity and opportunity

We are global in outlook and know that our strength and competitiveness is built on respect for cultural differences. This is reflected in the 86 nationalities represented in ST. Although our company's roots are French and Italian, 40% of our top managers are from other cultures.

We want our people to reflect the diversity of the societies in which they work, while offering them the broadest opportunities possible. This is why we recruit solely on ability and promote on merit, regardless of gender, ethnicity, religion, age or disability. We are working on a diversity policy and ways to measure our progress at promoting greater diversity across ST.

We recruit people who have technical qualifications, an area where historically, and particularly in Europe, there is a higher proportion of men. However, we are determined to improve our gender balance. Women make up 41.2% of our workforce and of these 18% hold professional positions.

In 2003, we will formalize policies and programs to help us be even more effective in preventing discrimination and encouraging diversity.

REGIONS	NUMBER OF NATIONALITIES
EUROPE	70
<i>France</i>	50
<i>Italy</i>	35
AFRICA	13
AMERICAS	40
ASIA (incl Japan)	32
TOTAL ST	86

REGIONS	MEN	WOMEN
EUROPE	16157	7043
<i>France</i>	6460	3156
<i>Italy</i>	7464	2528
AFRICA	1284	3593
AMERICAS	2309	874
ASIA (incl Japan)	5621	6260
TOTAL ST	25371	17770

Career development and training - a lifetime of learning -

Microelectronics is the world's fastest growing and most strategic industry. The rapid advance of technology and the sheer volume of knowledge accumulated make education essential to the industry and our company. Continuous education has been a fundamental part of ST's history and has helped to define its success. It will continue to play a vital role in our future.

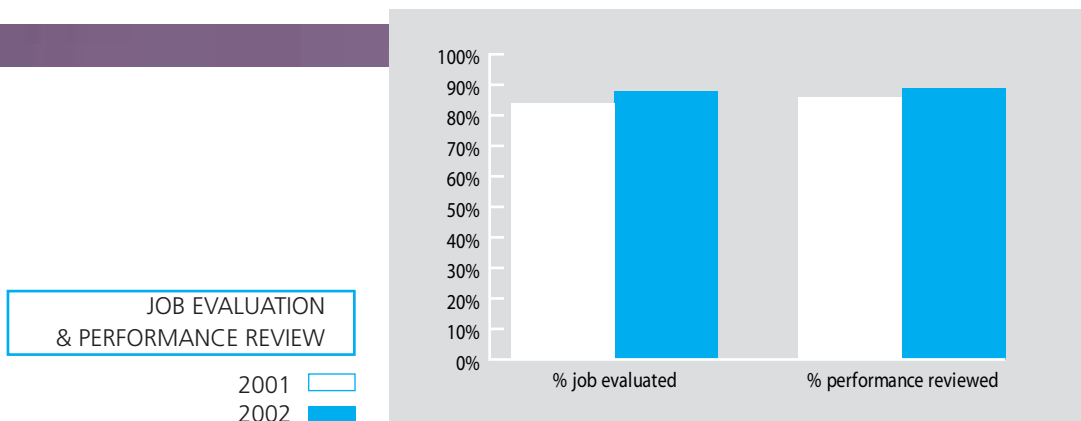
In 1994 we established the ST University. Besides formal education and STU courses, on-the-job training takes place at all levels and within all functions. ST continues to invest in people training even during the tough economic periods. In 2002, the average number of training hours per employee was 44.

All operators at manufacturing plants are certified before being authorized to run any kind of equipment on their own. They are re-certified every 15-18 months on more than one type of equipment.

All employees undergo an induction program (newcomer's seminar) that gives an overview of the company, including ST culture, shared values and practices, organization, strategy, perspectives and results. Throughout their careers, employees receive additional training based on their professional needs and aspirations. Our employees are encouraged to develop their abilities and self-confidence in an environment of lifelong learning.

We monitor the effectiveness of our training using the training industry standard Kirkpatrick model. This can provide evidence that the investment made in developing people's skills is cost-effective. Training is even more effective when skills and knowledge gained are shared throughout the company. To this effect, several tools have been developed and are promoted to foster knowledge sharing.

We have a formal policy to help our people develop their careers. Annual reviews lead to highlighting employees' strengths and weaknesses, a comparison of existing skills with those required and a plan to train or recruit to fill any gaps.



Discussions on personal development are an important part of these reviews. They identify career development possibilities that meet individual aspirations and help define the steps needed to reach personal goals. Professional employees all have a job description which is benchmarked each year against one or more external surveys.

In 2002, 89% of all technicians, engineers and managers had their performance reviewed and 69% of our employees discussed their individual development plans in their annual performance appraisal.

Mobility

We constantly expose employees to new situations, cultures and jobs that develop their strengths and skills and broaden their experience and adaptability.

We encourage our employees to achieve their career ambitions within the company. Our policy is to make all job vacancies available to internal applicants. This encourages mobility, giving employees the opportunity to work in different parts of the world. Our HR standard, regarding experienced job vacancies, is to have 70% of them filled internally. In 2002, 61% of positions requiring experience were occupied by ST employees.

The Career Path Project

ST offers a broad range of career opportunities: over 100 types of job functions ranging from engineering and integrated circuit design to research and development, marketing, sales and finance. Our Career Paths Project aims to give ST employees a clear picture of all the different career options available to them within the company, based on their current position and experience.

The idea is that employees can climb one of three career "ladders": technical; program / project; and management. Employees can bridge these ladders at various points in their career.

So far, career path maps have been produced to illustrate all the jobs available in design, applications, Computer Aided Design (CAD), manufacturing, sales and marketing. In 2003, we will map the support functions – human resources, finance and communication.

STAFFING PERFORMANCE	2002
Job offers accepted by candidates	94%
External recruitment fresh-outs / total hiring	60%
Experienced-level jobs filled internally	61%

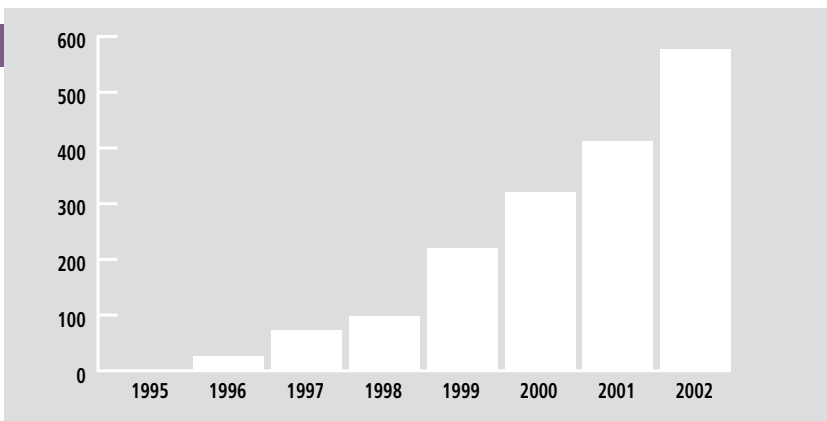
ST University

We established the ST University (STU) in 1994 to help us make ST a permanent learning organization. Since then, 20,000 people have attended an STU course. A core team of 30 professionals work with outside experts to offer a flexible and comprehensive curriculum of more than 100 courses. ST also uses remote or e-learning programs that reduce the cost of training and permit continued learning in a downturn period of the industry.

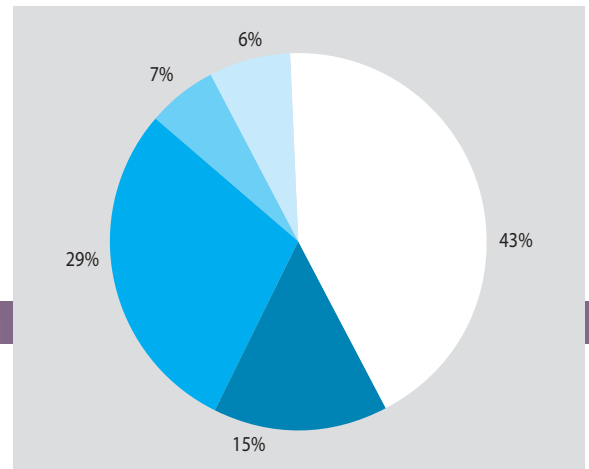
Over the last five years, 15,300 students have been trained at campuses in France, USA, Singapore and Italy. Courses offered by STU include:

- Management - covering the skills needed to manage a business and its people.
- Job-specific programs.
- Tools and methodologies - such as business process management, team problem solving and cycle time management.
- Personal development - general business knowledge, company culture, communication and personal skills.
- Degree courses - we have developed a masters degree in microelectronics technology and manufacturing management, an associate degree in semiconductor manufacturing technology and a masters in microelectronics and systems in conjunction with a number of universities and other academic institutions.

26



CERTIFIED STU TRAINERS



% TOTAL TRAINING HOURS PER COURSE TYPE 1995-2002

- Management
- Job Specific
- Personal Development
- Schooling
- Tools & Method

In June 2002 STU received an Excellence Award from the Corporate University Xchange in recognition of innovation in developing strategic learning alliances. This is a New York based education research and consulting firm that specializes in establishing benchmarks for corporate universities.

Courses are taught at the central STU campus in Fuveau, France, near our plant at Rousset. The university has regional branches in Catania, Italy; Phoenix, USA and Singapore. On-site courses are also taught by STU lecturers and associate trainers.

Courses are open to all employees and the Masters is also made available to employees of our business partners.

We have developed the "ST-trains-ST" program, to build a network of ST employees who are qualified to provide training for others. In 2002 nine percent of our employees were certified trainers at corporate or local level.



STU campus in Fuveau, France

Compensation and benefits

Job evaluation and performance review

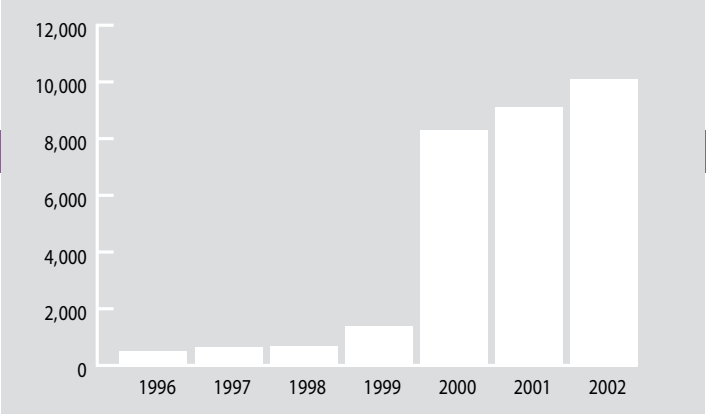
It is our aim to describe and evaluate all jobs. We use the same methodology throughout the company to guarantee fairness and transparency. Our policy is to evaluate and benchmark all our jobs to ensure that they meet the industry standard.

We want ST to remain a company of highly-motivated entrepreneurs. Our remuneration packages are fair, benchmarked and individualized. We offer a wide range of benefits, including variable incentive pay, health insurance, savings and retirement plans. We also have a dedicated Employee Stock Purchase Plan (ESPP) that enables all employees to buy company stock twice a year at a 15% discount on the market price. Senior employees are offered stock option plans as part of their remuneration package.

No one receives less than the legal minimum wage.

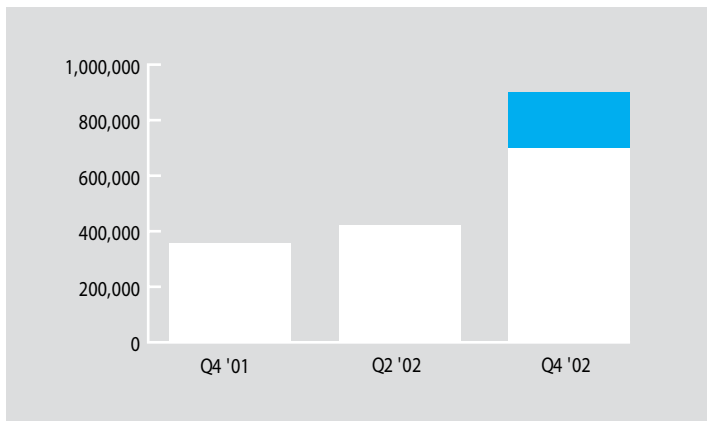
COMPENSATION AND BENEFITS	2001	2002
Employees with medical coverage benefits	100%	100%
Jobs benchmarked on compensation practices	85%	86%
Technical/engineers/managers with variable incentive pay	36%	37%

STOCK OPTION:
NUMBER OF BENEFICIARIES



ESPP - NUMBER OF SUBSCRIBED SHARES

- Subscribed
- Oversubscribed



Communication and empowerment

We have developed a range of different ways to support all our operations in 31 countries with the communications systems they need to work effectively. This enables our people to develop their abilities and be fully involved in our business plans. We use a number of tools, including:

- **Formal knowledge-sharing:** half of our professionals are involved in self managed knowledge-sharing teams. We have over 60 Communities of Practice that bring together people working in the same areas of expertise to solve problems and share experience. In 2002, our corporate recognition process awarded the 26 best practices in knowledge sharing.
- **Intranet:** we make wide use of our internal computer communications network that is accessible to all personal computers. Over 90% of technicians, engineers and managers have access to the ST intranet. For example, our human resources intranet site, called Dolphin, provides information on job opportunities and how to apply, performance appraisals, compensation, benefits strategy and the employee stock purchase plan. A portal technology is being implemented to facilitate access to information according to individual needs and function. This will increase efficiency.
- **Flash Info:** regular updates on company news are sent in three languages to all ST personal computers worldwide.
- **Magazines:** our quarterly corporate magazine, World Class, is published in three languages. It provides company news for employees and their families and promotes the ST multicultural community. It is supplemented by local magazines with specific news from the relevant site.
- **Total Quality Management (TQM) corners:** special TQM notice boards at all sites are updated regularly ensuring that those employees who may not have daily access to a computer are kept informed.
- **Satellite broadcast:** every year we broadcast the CEO's address to employees, highlighting the achievements of the past year and goals for the current year. This is followed by a question and answer session with our CEO.

RECOGNITION	AWARDS	EMPLOYEES
Excellence teams	16	165
Project teams	20	494
Best suggestions	11	20
ABCD	20	117
Knowledge sharing	26	210
Total	93	1006

CORPORATE RECOGNITION

In 2002 more than 1000 employees received a corporate recognition award.

Teams

Teamwork is an essential element - together with a strong corporate culture, common goals and a sense of personal empowerment - in the success of a widely-distributed organization such as ours.

Over a third of ST employees are involved in Excellence or Project Teams and we assess team performance in our employees' annual appraisals. Half of our professional employees are part of an incentive or recognition program that is based on team results.

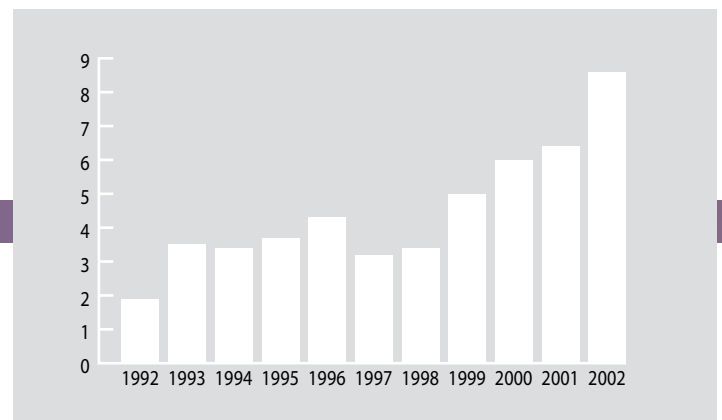
Employee Suggestions

We have run an employee suggestion program for over 10 years, to stimulate innovation and problem-solving. All employees are encouraged to find solutions to problems and identify opportunities to improve our products and processes. The program helps promote job satisfaction, improve internal communications and increase the efficiency and effectiveness of the company. In 2002 each ST employee made an average of three to four suggestions. Over half (53%) of these were accepted by the committee and subsequently implemented.

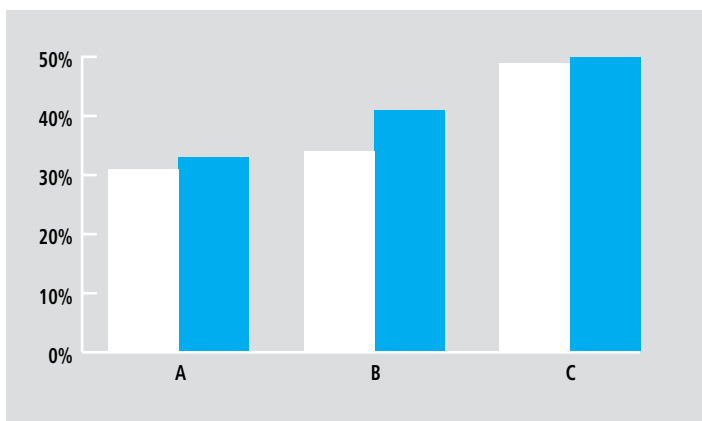
Recognition

We recognize and award team work, suggestions, knowledge sharing and outstanding individual performance. This is done at corporate and local recognition ceremonies that underline the company's commitment to excellence. In 2002, 650 employees (36 teams) across all functions were recognized for their excellent team performance. Eleven awards were made for the best suggestions. Every year, employees who have gone beyond their normal call of duty are nominated to receive the A.B.C.D. award (Above and Beyond the Course of Duty). In 2002, 20 received awards.

SUGGESTIONS PER EMPLOYEE IN ALL ASSEMBLY AND TEST LOCATIONS



30



TEAMS

2001
2002

A: Employees involved in teams
B: Performance appraisals that cover teams participation
C: Non operators with an incentive/recognition based on team results

Employee Satisfaction

Ensuring that employees are satisfied with their work and treatment is a top management objective. Every 18 months we provide our employees with the opportunity to express their views, using a questionnaire that contains 80 questions. These cover issues relating to management practices, career opportunities, strategies and employee satisfaction. Participation rate is always higher than 80%; 86% in last run.

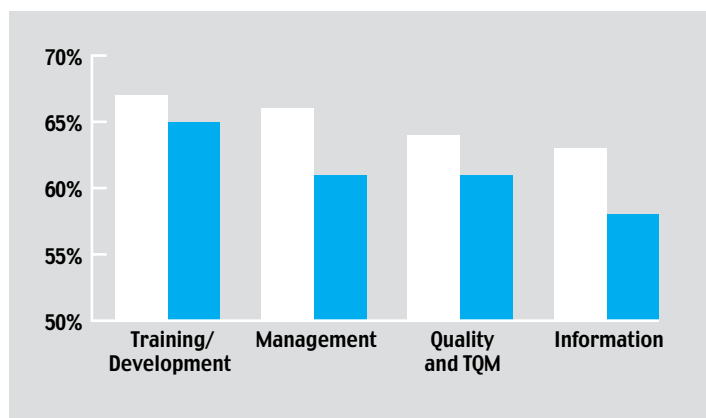
The questionnaire, named Dialogue, is completed anonymously and is given a high priority by the company that sets aside time for every employee to complete it. Consolidation is done by independent consultants. ST produces improvement programs and action plans in response to the findings. We have initiated 267 plans as a direct result of the survey.

We will conduct the next survey in 2003, including a question seeking the view of employees on corporate social responsibility.



EMPLOYEE SATISFACTION RATES

2001/02 ST 
2001/02 Industry 





ST:
Citizen
world



of the

ST: Citizen of the world

ST: Citizen of the world

Economic impact

Our primary economic contribution is to generate wealth by adding value, using our intellectual property and expertise. This value is distributed to our various stakeholders in form of dividends, salaries and taxes. Some is retained and re-invested in our business.

Global partnership

As a leading global company, we believe we have an obligation to conform to international standards and promote technological development worldwide. This has led to a number of global partnerships, such as:

- **The Global Compact:** we are a signatory to this UN initiative that promotes responsible corporate citizenship, based on the Universal Declaration of Human Rights, the International Labour Organisation's core standards and the Rio Principles on the environment. Companies that form part of the Global Compact make a commitment to advance the principles of the Compact within their spheres of influence by undertaking activities jointly with the United Nations.
- **Global, regional and trade organizations:** ST is an Executive Committee member of the World Business Council for Sustainable Development, chairs the European Union delegation to the World Semiconductor Council, and is a member of numerous national and international trade associations.
- **United Nations Information & Communication Technologies Task Force:** we are working with corporations, governments, humanitarian and non-profit associations to find ways to narrow the digital gap that separates those with access to modern digital technologies from those who do not.

SOCIAL ADDED VALUE		2001	2002
Total Labor Costs	US\$ (Millions)	1,493	1,593
Income Taxes	US\$ (Millions)	61	89
Other Taxes (property, professional, other)	US\$ (Millions)	54	64
5 year Capital Expenditure	US\$ (Millions)	8,348	8,317
<i>Asia Pacific</i>		22%	22%
<i>Europe</i>		62%	65%
<i>Emerging Markets</i>		2%	1%
<i>North America</i>		14%	12%

STMicroelectronics Foundation

The STMicroelectronics Foundation is a Geneva-based non-profit organization created to promote and coordinate the company's contribution to sustainable development. The Foundation has three main objectives:

- Make known the vital importance of microelectronics and how it can contribute to sustainable development
- Promote the ideals of Total Quality and Environmental Management
- Coordinate ST's charity initiatives worldwide

A prime focus, within the first objective, is to narrow the gap between those who have access to modern digital technologies and those who do not - known as the "Digital Divide" - by improving information technology literacy.

This is being done through a training program (Informatics and Computer Basics - ICB), aimed at ST people (where appropriate), their families, school teachers, local governments, small enterprises and ultimately at communities in developing countries.

In 2002, 18 ST employees from Italy and 14 from Malta took a "train the trainers" course at STUniversity. They then trained 20 employees at ST's site in Catania, Italy, and 20 teachers in a local school, using the ICB program.

Eighty ST employees from Italy, India and Morocco have volunteered to take the "train the trainers" course in 2003, while 140 people have been identified in Italy, Malta and Morocco, to take the ICB training in the first half of 2003.

The Foundation's goal is to use the ICB program to train 1,000,000 people within 10 years.

ST in the Community

We are committed to be good corporate citizens, contributing to the well-being of the communities in which we operate. We believe that companies who do this well fulfill their ethical obligations and also maximize returns to shareholders. Dealing with local issues is the responsibility of local management who are part of the community and are encouraged to take an active role in local affairs. This is part of our meta-national culture.

Over the years our considerable capital investment on five continents has created many thousands of jobs and contributed significantly to the growth of the communities that play host to our plants. An important contribution we make to local economies is through our purchasing budget. In 2002, we purchased more than 33% of our goods locally.

Besides providing jobs, we contribute to communities through donations of cash, products and a broad range of employee volunteering activities. In 2002, 18,000 volunteering hours were spent on environmental projects. We do not collect data on the total amount of cash donated.

Local projects support communities and improve our relationship with our stakeholders. They also help us recruit and retain the best young talent and motivate our employees, generating more value for our stakeholders and our shareholders.

We have developed strong links with universities and research institutes to pursue common goals in research and development.

Our partners include:

- **Belgium:** Interuniversity Micro Electronics Center
- **France:** LETI/CEA; France Telecom R&D
- **Italy:** Consiglio Nazionale delle Ricerche; Istituto Nazionale per la Fisica della Materia and Ente per le Nuove Tecnologie, l'Energie e l'Ambiente

We also have partnerships with universities, including Bordeaux, Grenoble, Lille, Limoges, Lyon, Montpellier, Orsay, Paris, Toulon and Toulouse in France, Catania, Genoa, Lecce, Milan, Modena, Naples, Padua, Turin, Verona and Udine in Italy and Carnegie-Mellon, Stanford and MIT in the USA.

In 2002, ST strengthened its presence in China through an agreement with the Shenzhen graduate school at the University of Tsinghua. The aim is to set up a joint center for research and development of application-specific circuits. This is of particular interest to China which is developing its own standards in areas such as 3G cell phones, smart cards and digital TV broadcasting.

Case Studies

Carrollton and Phoenix

Our sites in Carrollton, Texas, and Phoenix, Arizona, are an integral part of their communities, contributing to a wide range of educational, civic, and environmental initiatives. As with all our sites around the world, the emphasis is on many small-scale initiatives that, when combined, help to improve the vitality of community life. Some examples include:

EDUCATION

The Carrollton site supports the local school district's mathematics and science curriculum. We also co-sponsor an initiative to promote and strengthen a program of voluntary advanced courses that could qualify students for college credit. The enrollment and success rate has almost doubled within the first year.

Our Technology Internship Program (TIP) enables high school students to earn high school credit while working at ST. In 2002, our Phoenix site was recognized for its support and participation in Arizona State University's Microelectronics Teaching Factory.

CIVIC

Since 2000 we have been involved in 55 different community initiatives in Phoenix. These include support for a campaign to bring mass transportation to the city, contributing to the local community center, participating in fund-raising for a diabetes charity, working for the Huger House Alzheimer's program and supporting the American Red Cross blood donors program.

Every year ST employees in Carrollton have dedicated hundreds of hours of volunteer time to the community. Our partnership with the local Metrocrest Social Services has given us the opportunity to collect and distribute much-needed school supplies to more than 700 local children.

Carrollton employees have been involved for the past four years in the National Multiple Sclerosis 150-mile bike ride. This was started by one dedicated cycling enthusiast and has grown into "Team ST" composed of 30 employees and their partners.

ENVIRONMENT

For the past six years the Carrollton site has supported the Trinity River Clean Up project where employees clear debris along the riverbanks near the ST site. Our Phoenix site has been recognized with awards for conserving water and being the first business in the city to use solar power.

Back-end manufacturing and Subsystems group

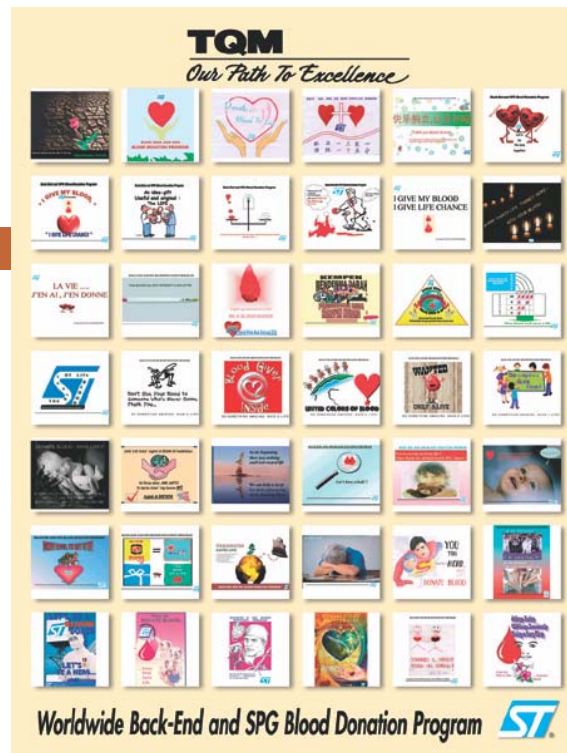
BLOOD DONATION CAMPAIGN

In 2002 a dedicated campaign boosted the number of employees donating blood by 600%.

Our Ain Sebâa Moroccan plant, where the initiative began in 1993, recorded a 770% increase in 2002, collecting enough blood to supply the city of Casablanca for five days. There was a similar response in other Moroccan plants, in Malaysia and Malta. In Shenzhen, China, 225 people donated blood, 95% for the first time.

The campaign emphasised the benefits of socially responsible individuals taking action to help their communities. Information about donating blood was carried in all employee publications. A worldwide competition was held to design the best poster to publicise the campaign. The top three entries - judged by a committee of employees - won awards and the images were displayed in the plants. Donors were presented with a distinctive pin (badge) to demonstrate their participation.

The blood donation program continues and further promotions are planned to build on the success of 2002.



Singapore

Donating home-grown vegetables to charity, maintaining trees in a park and contributing part of their pay to local charities are part of a comprehensive community program at ST Singapore.

ST's Singapore plants at Toa Payoh and Tuas run the CARE@ST Program, standing for: Community; Acts of; Responsible; Employees. The two sites have adopted the Red Cross Home for the Disabled and provide a range of services to the residents. These include the donation of vegetables grown by employees in their own time at the factories. Because of limited land at the Toa Payoh plant, employees are using the roof to grow vegetables hydroponically.

Regular visits are made to the Home to support residents and maintain the facilities. Residents are also invited to visit the plant and eat in the canteen.

A park has been "adopted" by employees who have volunteered as forest rangers, tending 1,000 trees.

Employees can also make donations via a payroll-giving program. The money goes to Singapore's Community Chest, a fund raising division of the National Council of Social Services.



Farming at ST-Tuas



India

A number of small but highly targeted programmes by the employees of ST India contribute to the communities around its operation in Noida, Uttar Pradesh.

The company supports two non-governmental organisations (NGOs) working with disabled children. The groups are supported with donations and by employee fund-raising.

One of the recipients, Astha, is a trust that has been providing help to children with multiple and severe physical disabilities and their families since 1993. Astha provides services such as physiotherapy, medicine, speech therapy, counselling and special education.

The other NGO, Anchal, specialises in helping mentally-challenged children and those from deprived families.

ST India offers space to display and sell handicrafts made by the children, including candles, plaster models and greeting cards. Over \$1,200 was raised from the last exhibition. Employees are encouraged to donate unwanted clothes and make cash donations to the NGOs.

ST people also support environmental improvements in Noida, especially tree planting. Over 200 Ashoka longifolia trees have been planted on the central verge outside the ST plant, improving the aesthetics and providing much-needed shade. A children's painting competition with an environmental theme is organised every year. In 2002, the competition was sponsored by the Hindustan Times. Children who entered were given a young tree to plant in their neighbourhood.

A close-up photograph of green leaves with prominent veins, serving as a background for the text. The leaves are in sharp focus, showing their texture and color variations from light to dark green. A white text overlay is centered on the image.

Environment Report



mental

Environmental Report

Feedback from 2001

"The best corporate statement I have ever read."

ST shareholder

"Thank you for the report. I wish other corporations did something similar."

ST shareholder

"The report was extremely readable as well as informative. I had no idea that ST is so very dedicated to our environment."

ST shareholder

"I would be interested to see the results of your employee satisfaction survey and find out what your employees think of your environmental and social strategy."

ST shareholder

"We are most impressed with your comprehensive commitment to social and environmental responsibilities and the ST corporate culture. These are the key to the release of human potential relative to both social and business objectives. Congratulations!"

ST shareholder

"I would like to see ST doing more on renewable energy – wind and solar."

Financial analyst and ST shareholder

"I am a fairly recent stockholder, receiving my shares as a gift from my father. I knew nothing about your company until I received your report. Now I know I will keep this stock for quite a while – despite the current downturn. Please keep up the good work. I look forward to your 2002 review to see how well you are meeting your lofty goals."

ST shareholder

"I would have liked to see some absolute figures rather than values expressed per person or as a percentage."

ST employee and shareholder

"I think ST should set up a commitment review system that gathers opinions from a wide range of people on the way ST 'walks the talk'."

ST employee and shareholder

Highlights of Progress to carbon neutrality

600 hectares of forest planted to offset ST carbon emissions

General Principles

The ST Environmental Policy is based on the strong conviction that the global environment preservation and its continuous improvement are the main goals of mankind as well as our industry business.

We are therefore committed to always respect the global environment, and thus continuing to meet the expectations of our customers, shareholders, employees and society in general, through initiatives and programs based on our Environmental Decalogue: a set of ten quantified, timed and measurable targets created to guide the Company towards achieving environmental neutrality.

Far from being a passive statement of principles, this document is part of the Company's basic operating principles and helps breed a culture where employees at all levels are encouraged and rewarded for being environmentally aware.

OUR VISION

To be recognized by all our stakeholders as a leader in environmental care by fulfilling our Environmental Decalogue.

OUR MISSION

To strive for sustainable development in minimizing the impact of our processes and products aiming at environmental neutrality.

OUR POLICY

To aim for ambitious improvement of our environmental performance with a view to reducing our impact on the environment to levels which do not exceed those corresponding to the Economically Viable Application of the Best Available Technology (EVABAT).

External verification

for the first time, the environmental data has been verified
by PricewaterhouseCoopers.

2002

OUR OBJECTIVES

- to ensure management commitment to a culture of environmental protection throughout the Company;
- to design products and processes to minimize their environmental impact from “cradle to grave” and to inform customers on recycling and safe disposal of ST products at the end of their life;
- to strive for continuous reduction of waste and pollution and in the consumption of water and energy, in a quest for sustainable development and as proof that ecological methods are both responsible and profitable;
- to benchmark ST against leading companies the world over, so as to equal or exceed the best performing companies;
- to apply the most advanced statistical and environmental tools to environment parameters so that environmentally responsible manufacturing processes are developed and implemented;
- to promote an open dialogue with workers and the communities in which ST operates; cooperate in a positive spirit with industrial and scientific communities, governments and non-governmental organizations to develop laws, regulations and guidelines for the continuous improvement within these communities, promoting a global and healthy competitiveness.

Highlights of

Waste

landfilled waste at a record low of 10.7% in the last quarter of 2002

Environmental management

Environmental protection is a key element of our corporate culture. In a fast-changing world our global success depends on our ability to react quickly. We do this through independent operational units that are bonded by a strong common culture of Total Quality Management. Teamwork, the empowerment of individuals and a focus on continuous improvement, help us pursue our Decalogue goals across the company.

Organization

Environmental care is a high-level concern. It is among the responsibilities of our Executive Total Quality Committee (ETQC) chaired by our CEO. A Corporate Vice-President heads our Total Quality Environmental Management organization.

It is the responsibility of the Corporate Environment Support Group to develop and monitor plans and strategies to help us meet our Decalogue goals. Its role is to:

- drive the company towards CO₂-neutrality using the ST energy and PFC roadmaps.
- use corporate environmental auditing and quarterly environmental reporting to ensure that the environmental policy and management systems are understood and implemented.
- appoint cross-team environmental working groups of skilled technical experts.
- ensure compliance with environmental legislation and regulation in every country in which ST operates.
- keep the company list of banned and restricted chemical substances in line with worldwide regulations and promote best practice in chemical use across ST.

Locally, an Environmental Steering Committee and a Site Environmental Champion (SEC) are active in all environmental initiatives. They provide a link between the Corporate Environment Support Group, Site Management (for instance purchasing and general Services), and other functions such as R&D and Operations.

Renewable energy

10.5 MW wind farm being built in France

2002

Energy efficiency

improved by 15% per production unit

By the end of 2002, 17 of ST's 18 manufacturing sites were EMAS validated and ISO 14001 certified. Our new plant in Bouskoura, Morocco will be certified in 2003. As a prerequisite to obtaining EMAS validation, every site prepared and published a detailed environmental statement outlining its consumption of natural resources and releases. All sites update this statement annually, as required by EMAS.

To maintain ISO 14001 certification and EMAS validation, all sites are independently audited. EMAS revalidation and ISO recertification occurs every three years and the third verification cycle is currently underway at all our accredited sites.

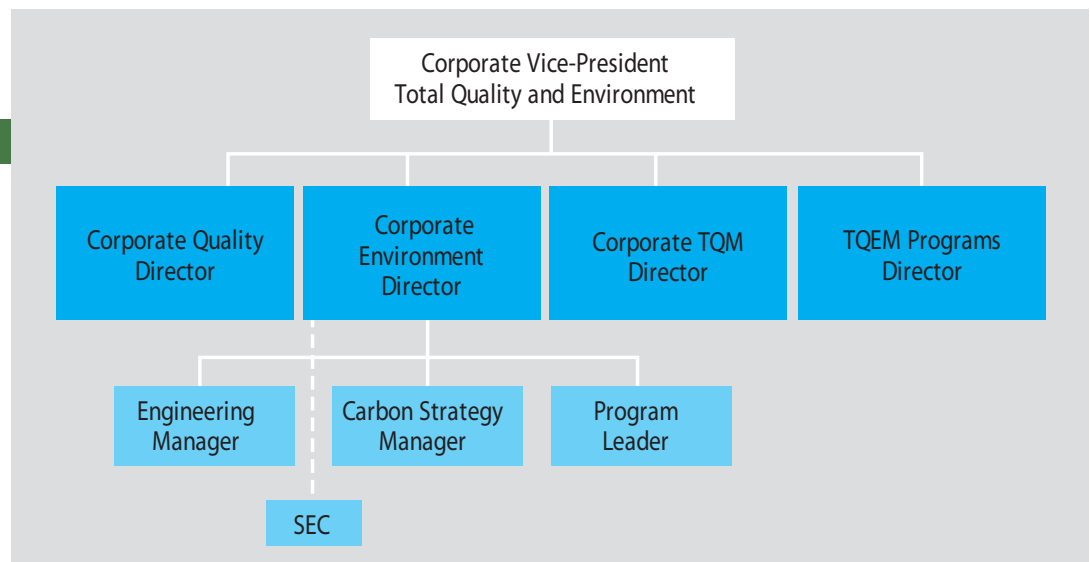
Regulations

We closely monitor environmental regulations worldwide to keep our environmental standards current.

Measurement

Measuring drives behavior. Without measuring our performance, we cannot achieve excellence. Environmental data from each site is measured against the relevant Decalogue target. This is managed through the environmental database, a benchmarking tool, which enables environmental indicators to be compared site by site. In this way we share best practice across the company.

ST has worked closely with the World Business Council for Sustainable Development (WBCSD) to define and implement eco-efficiency indicators. We are using the environmental burden approach to indicate the impact of air and water emissions.



We also use Ecofootprints to allow a fast, fact-based evaluation and a comparison of sites. The ratio of actual performance versus standard (typically the best-in-class) is plotted on a radar chart to indicate the “footprint”. A footprint equal or below ‘one’ means we are performing well. The smaller the footprint, the better the performance. The charts below illustrate changes in our environmental indicators from 2001-2002.

Environmental burden

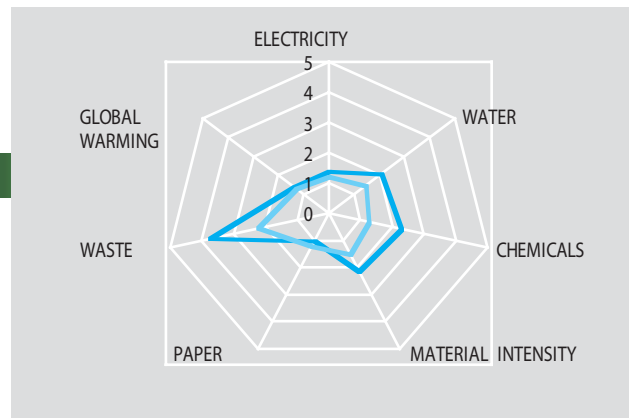
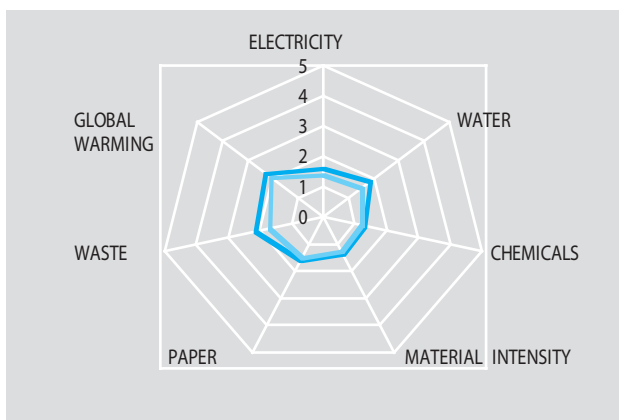
In 2001 we began to use the environmental burden method to estimate the potential environmental impact of emissions and wastes, rather than just stating quantities against local legislation limits. This is an informative and scientifically sound way of quantifying the environmental performance of a global company. It can be used to set and monitor targets for improvement. We use 10 impact categories - six dealing with emissions to air and four to water.

Air

- Global Warming: includes direct greenhouse gas emissions from our plants and indirect emissions from energy consumption and transport, reported in Metric Tonnes of Carbon Equivalence (MTCE).
- Ozone Depletion: deals with marginal releases of ozone-depleting substances measured in R11 equivalence.
- Total VOC Emissions: reported as net volatile organic compounds emissions in tonnes.
- Atmospheric Acidification: total acidic emissions expressed in sulphur dioxide (SO₂) equivalence.
- Photochemical Ozone Creation: deals with potential to form low-level ozone.
- Air Emission Toxicity: emissions of substances are considered with threshold limit values below 3 ppm, expressed in Phosphine equivalent.

ECOFootprint
ASSEMBLY SITES

2001 ■
2002 ■



ECOFootprint
WAFER FABRICATION SITES

2001 ■
2002 ■

Water

- Aquatic Oxygen Demand: total Chemical Oxygen Demand (COD)
- Eutrophication: deals with Phosphorous and Nitrogen emissions
- Heavy Metals: total heavy metals emissions
- Aquatic Eco-toxicity: includes mass emissions of various metals expressed in copper equivalent.

In 2002, we surveyed all our manufacturing sites for the second time as shown in the following table.

BURDEN	POTENTIAL EFFECTS	UNITS	2001 (baseline)	2002
Global Warming	Climate change	MTCE/M\$ AV	100.6	107.2
Ozone Depletion	Climate and health	Kg R11 Eq/M\$ AV	0.13	0.12
Total VOC emissions	Urban smog; health & safety	Tonnes VOC/M\$ AV	68.3	74.7
Atmospheric acidification	Acid rain; health	Kg SO ₂ Eq/M\$ AV	5.42	7.9
Photochemical Ozone Creation	Urban smog; health	Kg Ethylene Eq/M\$ AV	6.46	21.3
Air Emission Toxicity	Air pollution; health	Kg Phosp Eq/M\$ AV	0.71	1.39
Aquatic Oxygen Demand	Threat to fish and aquatic life	Kg COD/M\$ AV	154.2	61.6
Eutrophication	Removes oxygen from water	Kg (P+N)/M\$ AV	76.2	109.1
Heavy metals	Accumulate in food chain	Kg /M\$ AV	4.5	3.5
Aquatic Eco-toxicity	Impact on organisms	Kg Cu Eq/M\$ AV	4.5	2.6

M\$ AV: Million dollars of added value

The environmental burden of our air emissions increased for five of our six indicators. This was due to a large increase in production volumes. We made good progress reducing the burden of our emissions to water for three of our four indicators. All ST sites are compliant with their environmental permits.

Supply management

We can improve our performance by helping our customers and suppliers reduce their impact on the environment. We strongly encourage our suppliers and subcontractors to become EMAS validated or ISO 14001 certified and assist them to do so. At the end of 2002, 72% of our materials suppliers were certified, with certification in progress at a further 16%. The levels were 36% and 55% respectively for our equipment manufacturers.

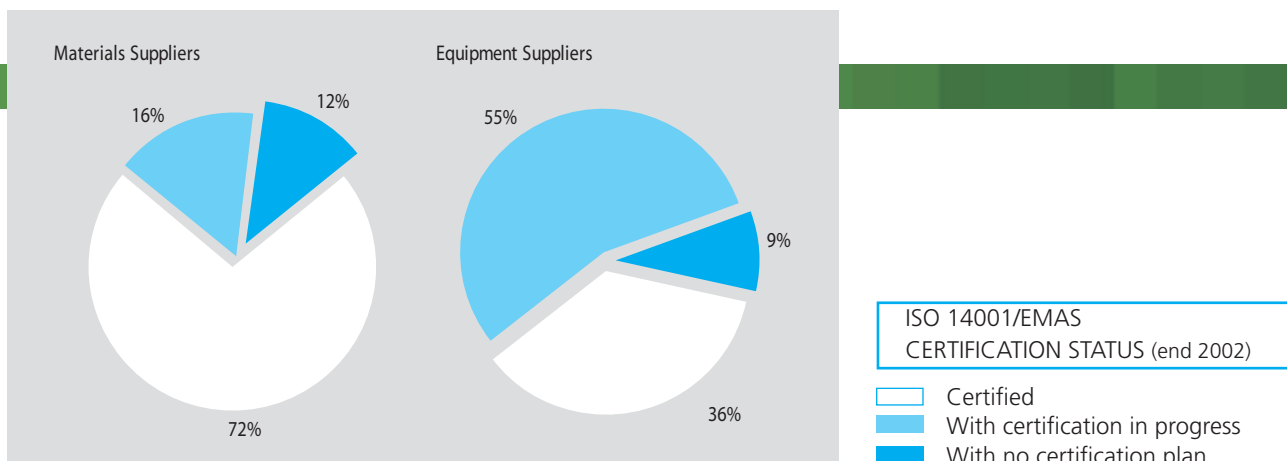
Environmental awareness and training

Training is provided at all ST sites to raise environmental awareness among our employees and contractors. Specific attention is paid to people whose work may have a significant impact on the environment.

All new employees are given a detailed introduction to ST's Environment Policy, Environmental Decalogue and their responsibilities in the site's environmental management system.

Local trainers offer specific instruction to people operating, monitoring or maintaining environmental equipment, such as wastewater treatment, scrubbers and chemical stores. This teaches them to maximize the performance of the equipment and eliminate the potential of non-compliance with environmental laws or company environmental standards. This training is part of our job certification program. Employees are given a refresher course at least every two years.

Some external contractors are also required to attend training courses. An advanced environmental seminar on a CD-ROM, developed at ST University, is available to ST's suppliers and customers.



ST Environmental Network

ST Environmental Network was set up to improve communication across ST offices and sites world-wide. A network of regional representatives participate in national and international organizations and events where they share information and identify opportunities to improve our environmental performance.

Investing in environmental protection

We strongly believe that any investment in environmental protection will be repaid if production processes are pollution free and the use of natural resources and energy is reduced.

We have proved that business can be both environmentally responsible and profitable. All of our investments in energy conservation have been repaid within three years, many within two years. Despite the recent downturn in the semiconductor market, environmental measures represented 1.2% of ST's capital investments in 2002.

Environmental accounting

Costs related to environmental activities include laboratory monitoring, waste treatment and disposal, water and wastewater management, air treatment and maintenance of our environmental management system. Savings arise from using less energy, chemicals, water and other resources and the money raised from recycling activities.

Since 2000 our environmental improvements have saved on average almost 1.5 times what they cost:

ECOLOGY IS FREE	2000 M\$	2001 M\$	2002 M\$
TOTAL COST	29	30	32
Energy saving	38	5	8.2
Water saving	8	4.5	6.1
Chemicals saving	31	19.5	19.4
Total	77	29	33.7

Note: These figures reflect the dramatic downturn in the semiconductor market since 2001.

Payback from environmental initiatives

Good environmental and social performance indicates a forward looking company that is actively managing its reputation. Environmental improvements can attract new investment from socially responsible funds in addition to saving money through efficiency gains.

ST continues to be highly ranked among the leading companies pursuing sustainability. In 2002 we were recognized by the Dow Jones Sustainability Group Indexes (DJSGI) for excellent overall sustainability performance. We are represented in the following main financial indexes based on sustainable development and ethical issues:

- SAM - DJSGI, includes about 200 companies worldwide.
- ASPI - Advanced Sustainable Performance Index, includes 110 Euro-zone companies.
- FTSE4GOOD - we are in both FTSE4GOOD Global 100 index and in FTSE4GOOD Europe 50 Index.
- ETHIBEL Sustainability Indexes - we are in both the ESI global and ESI Europe indexes.

Stakeholder dialogue

We want our neighbors to know about our environmental successes and challenges. Good community relations - built on excellent performance, genuine dialogue and trust - bring benefits to our stakeholders and our company.

We participate in a range of national and international organizations and associations to share our experiences with other businesses and help ensure the sustainability of the semiconductor industry. These include ESIA (European Semiconductor Industry Association) and the International Semiconductor Conference on Environment, Safety and Health, the World Semiconductor Council ESH Task Force and the World Business Council for Sustainable Development.

Energy



The image features a blue-tinted background with a classical architectural scene. On the left, a portion of a white column is visible. A horizontal band of a slightly darker blue color runs across the middle of the image. The word "Energy" is written in white text on the right side of this band.

Energy

Energy

We believe that the most pressing environmental threat is climate change, caused by increased levels of greenhouse gases (GHGs) in the atmosphere. Carbon dioxide (CO₂) is the main greenhouse gas and is produced when fossil fuels - gas, coal and oil - are burned.

Although our total contribution to climate change is small in global terms, we are determined to do all we can to reduce our impact. Our ambitious target is to become CO₂ neutral by 2010. We have developed an energy roadmap to help us achieve this goal. It is composed of an Energy Management Program and our Carbon Offset Program.

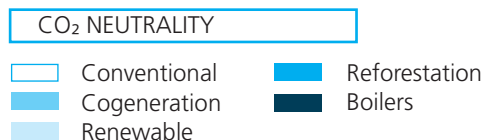
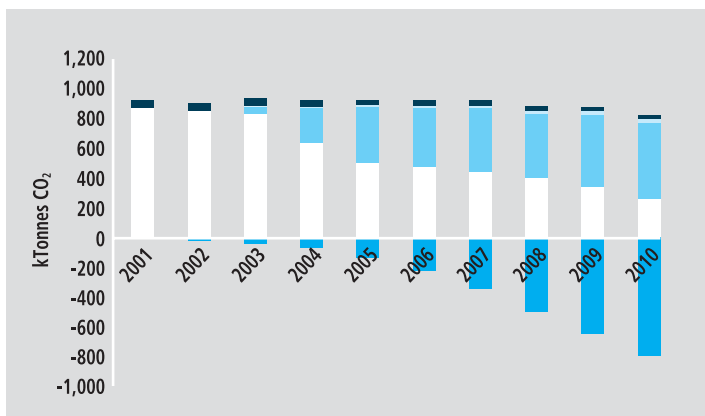
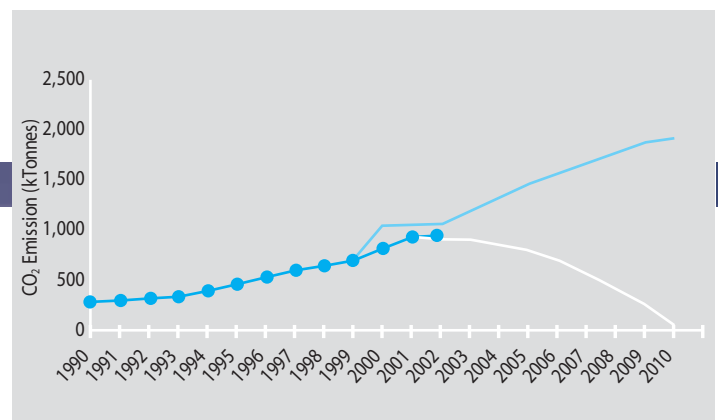
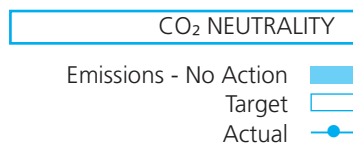
Our Energy Management Program covers energy efficiency and alternative/renewable energy.

■ Energy efficiency

Our target is to reduce total energy consumption by at least 5% a year for each million dollars of added value (i.e. sales revenue minus purchasing costs).

■ Alternative/Renewable energy

We plan to source a greater percentage of our energy from combined heat and power (cogeneration) plants, which are more efficient and emit less CO₂ per unit of energy, and from renewable energies such as wind and solar, which emit no CO₂.



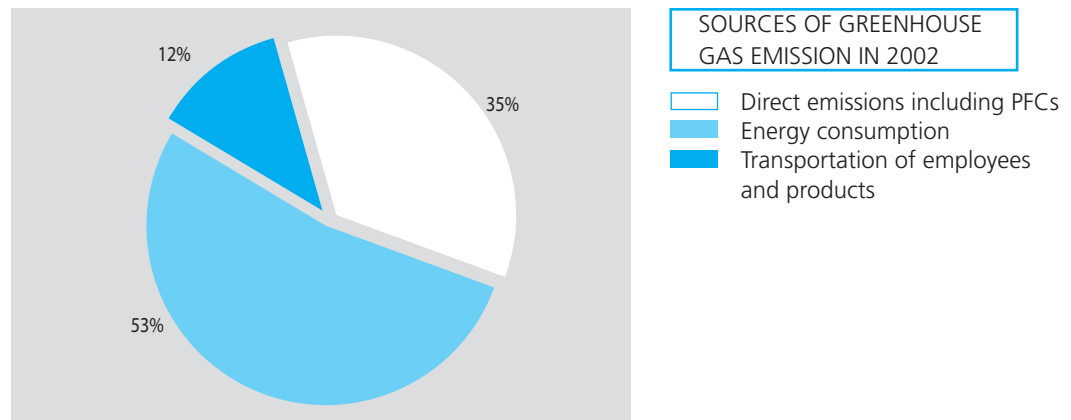
By 2010 we aim to have an energy mix of 65% cogeneration, 30% conventional, 5% renewable. This will save a total of six million tonnes of CO₂ from 2001 to 2010. Our Carbon Offset Program aims to neutralize the remaining carbon emissions. It will allow us to sequester three million tonnes of CO₂ between 2001 and 2010, through reforestation projects worldwide.

In 2002 our GHG emissions totaled about 1800 ktonnes of CO₂ equivalent. This includes direct emissions from our facilities and manufacturing processes, and indirect emissions from energy consumption and transportation of employees and products.

Energy efficiency

The dramatic market slow-down and fall in the price of our products, which began in 2001, is keeping our added value still 15% below 2000 levels. This has affected our total energy consumption indicator which is measured in kWh per k\$ of added value. However we have made improvements in energy efficiency, cutting electricity consumption by 15% per production unit versus 2001.

We continue to implement energy efficiency improvements identified in our 2001 Energy Conservation Self Assessment Survey of all ST sites. More than 350 energy efficiency actions were identified and will be implemented by the end of 2005. This will save more than \$11 million a year.



DECALOGUE REFERENCE	KEY PERFORMANCE INDICATORS	YEAR				
		1998	1999	2000	2001	2002
Energy	Electricity consumption - MWh/M\$ AV	412	372	292	391	407

M\$ AV = Million dollars of Added Value

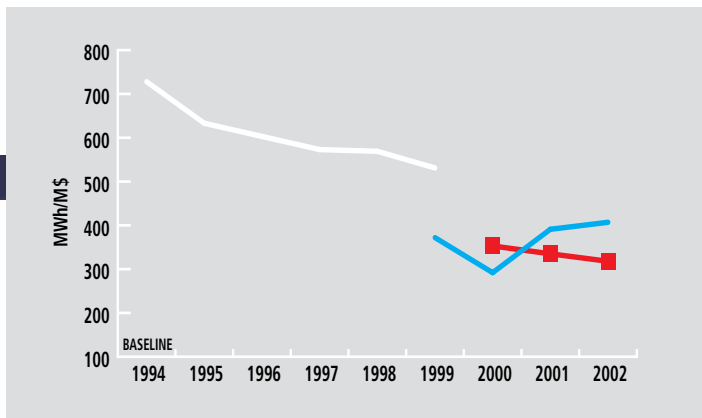
Examples

- Compressed air used in manufacturing is responsible for about 25% of a plant's total energy consumption. A three-stage air compressor can significantly increase efficiency and reduce energy use, compared with a two-stage machine. We introduced a three-stage compressor at our Toa Payoh site in Singapore. We invested \$140,000 and will save \$42,000 a year with a payback period of about three years.
- We have upgraded our Air Handler Unit equipment at our Ang Mo Kio site in Singapore. Total energy savings will be 623 MWh a year and we expect our investment of \$110,000 to be repaid within two years.

Alternative/Renewable energy

Conventional power stations that burn fossil fuels give off a lot of heat, which wastes as much as 70% of the energy consumed. We are planning to use more efficient generating technology, known as combined heat and power (CHP) or cogeneration, that turns the waste heat into steam or uses it to provide heating. ST aims to source 65% of its electricity from CHP by 2010.

Wind and solar energy are clean and renewable sources of power but are more expensive than fossil fuel technologies at current prices. Wind power can be competitive in certain windy areas. The cost of solar power is falling as the technology improves and demand increases. Pilot projects are underway and in 2003 we expect to be generating double the amount of wind and solar energy anticipated in our roadmap.

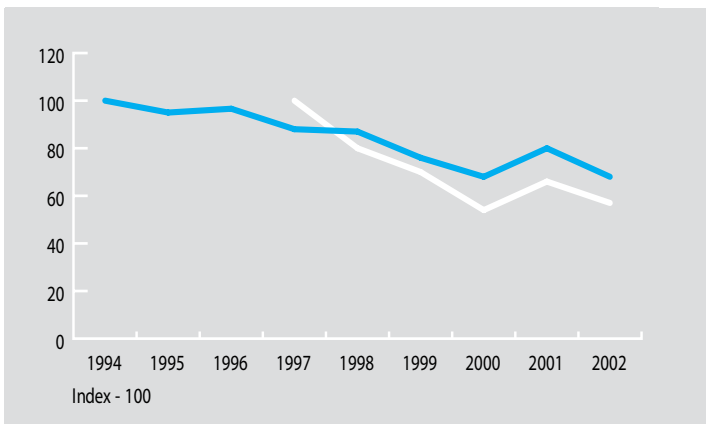


ELECTRICITY CONSUMPTION

- Consumption per M\$ of Production Value
- Consumption per M\$ of Added Value
- Target - Reduction target (> 5% per year)

ELECTRICITY CONSUMPTION

- Consumption per wafer
- Consumption per pin (pin is the external lead connection of our finished products)



Example

- In 2002, work began in France on a 10.5 MW wind farm that will provide us with 33,450 MWh of electricity a year. Start up is anticipated for March 2003. We are investigating potential wind farm sites in India, Italy, Morocco and the USA and plan to expand our wind portfolio to meet our Decalogue target.

Carbon sinks

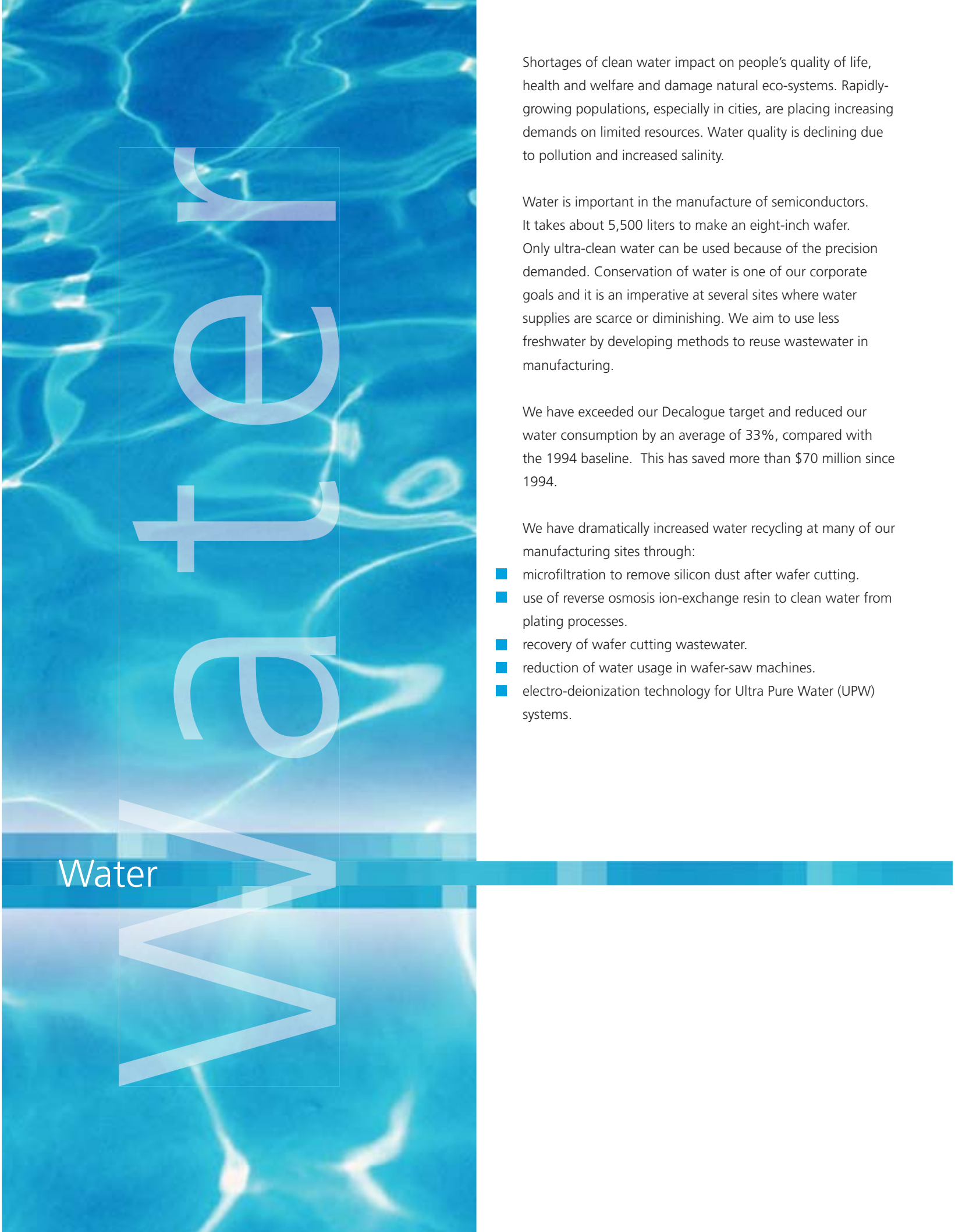
Plants use carbon from the atmosphere in photosynthesis, as part of their life support process. Because forests sequester carbon, it is generally recognized that they can be used in global efforts to combat climate change. Reforestation also encourages the sustainable production of timber and can help conserve biodiversity, soil quality and natural habitats.

By the end of 2003 our Carbon Offset Program will cover about 3,000 hectares of planted area.

Examples

- ST signed an agreement with the Moroccan Government in May 2002 to plant 10,000 hectares of forest over the next six years. This will fix (sequester) 5,800 ktonnes of CO₂ over the next 40 years. ST will pay all costs associated with the planted forests and will be the owner of associated carbon credits. So far 500 hectares are in the planting phase.
- We are exploring a potential 10,000 hectares reforestation project in Australia, which would offset about 5,400 Ktonnes of CO₂ during the lifetime of the forest.
- Almost 600 hectares have been planted in 2002 in USA, France and Italy.





Shortages of clean water impact on people's quality of life, health and welfare and damage natural eco-systems. Rapidly-growing populations, especially in cities, are placing increasing demands on limited resources. Water quality is declining due to pollution and increased salinity.

Water is important in the manufacture of semiconductors. It takes about 5,500 liters to make an eight-inch wafer. Only ultra-clean water can be used because of the precision demanded. Conservation of water is one of our corporate goals and it is an imperative at several sites where water supplies are scarce or diminishing. We aim to use less freshwater by developing methods to reuse wastewater in manufacturing.

We have exceeded our Decalogue target and reduced our water consumption by an average of 33%, compared with the 1994 baseline. This has saved more than \$70 million since 1994.

We have dramatically increased water recycling at many of our manufacturing sites through:

- microfiltration to remove silicon dust after wafer cutting.
- use of reverse osmosis ion-exchange resin to clean water from plating processes.
- recovery of wafer cutting wastewater.
- reduction of water usage in wafer-saw machines.
- electro-deionization technology for Ultra Pure Water (UPW) systems.

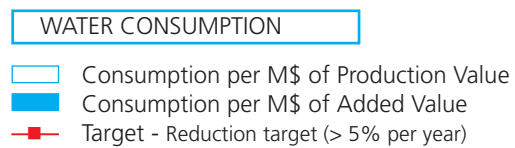
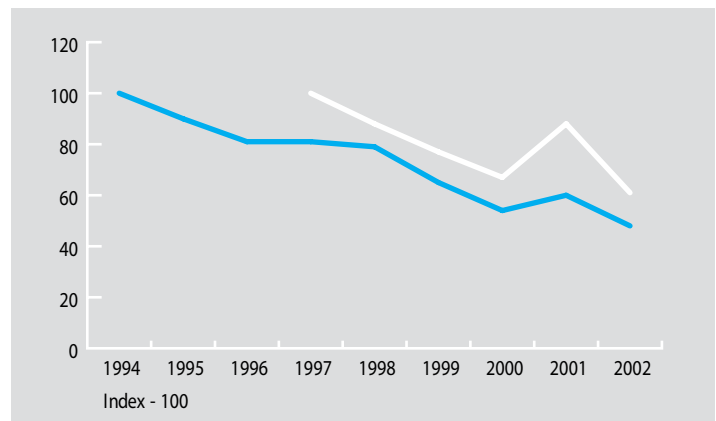
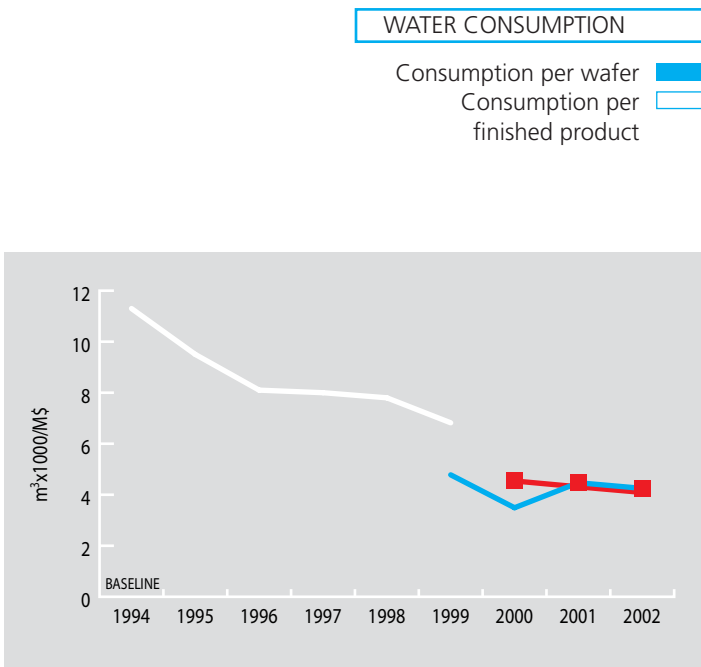
Water

Example

- Our Ang Mo Kio site in Singapore has introduced an Ultrapure Rinse Water Reclaim System to reuse Ultrapure Rinse water in the site's cooling tower. This saves 18m³ of water an hour and the cost of the new equipment was recovered in less than eight months.

Wastewater treatment

We are working to improve wastewater treatment at our sites. Our plant at Crolles in France, for instance, has introduced a new wastewater treatment plant based on the "greenfab" concept. This uses maximum drain segregation to enhance recycling and highly efficient water treatment facilities designed for specific process areas



DECALOGUE REFERENCE	KEY PERFORMANCE INDICATORS	YEAR				
		1998	1999	2000	2001	2002
Water	Raw water consumption (m ³ x 1000)/M\$ AV	5.66	4.78	3.49	4.48	4.24

M\$ AV = Million dollars of Added Value

Emissions to air

Emissions to air

Perfluorinated compounds (PFCs)

PFCs are greenhouse gases, which trap heat in the earth's atmosphere and contribute to climate change. The unit used to measure their impact is known as the global warming potential. PFCs are very stable and have a long life in the atmosphere. However they are not toxic and do not damage the ozone layer.

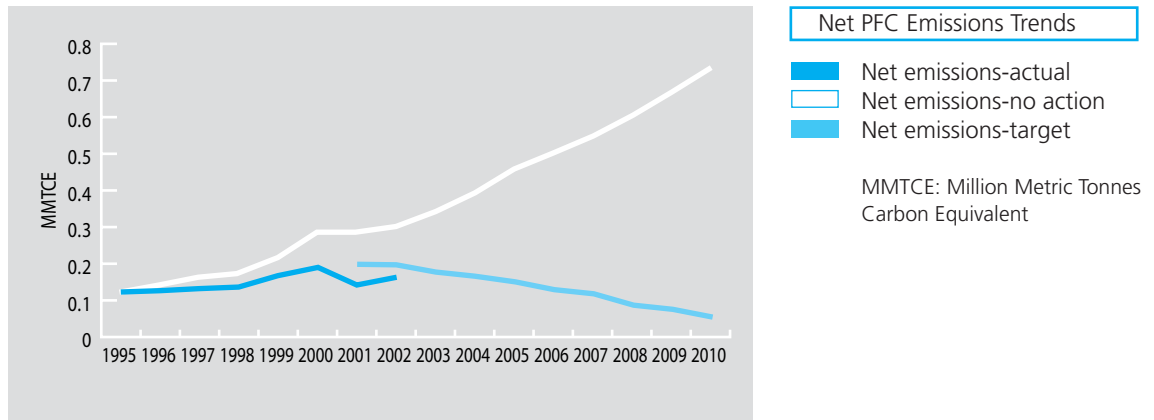
PFCs are widely used in the semiconductor industry for CVD chamber cleaning and etching processes. Several types of PFCs are used with global warming potentials ranging from 6,500 to 23,900-times the CO₂ equivalent. The World Semiconductor Council (WSC), in which ST leads the European participation, has set a challenging goal of reducing the aggregate absolute PFC emissions to 10% below 1995 levels by 2010. This target is expressed in absolute emissions (rather than emissions per unit) to assess the real environmental benefits. ST will contribute to this program by reducing its emissions to 10% below 1995 levels by 2008, two years before the WSC deadline.

We have established company-wide and individual site road maps for all our front-end plants to set out how we will achieve this goal. Measures include more efficient equipment, improving our manufacturing processes and using alternative gases where possible. We have already cut our emission rate, expressed in kg of carbon equivalent per wafer, by roughly half, compared with the 1995 baseline.

Examples

- PFC alternatives such as C_3F_8 and NF_3 are now used in many of our sites. Our site in Carrollton, USA, for example, now uses C_3F_8 for all CVD tools rather than C_2F_6 , reducing emissions of all PFCs by 47%. Our advanced front-end manufacturing sites have introduced new equipment that uses NF_3 , and can reduce emissions by more than 95%. In 2002 NF_3 and C_3F_8 made up 36% of our total PFC use, compared with 2% in 1995.
- We are researching a range of other potential replacements for PFCs such as plasma abatement technologies and catalytic absorption systems.

ST is an active participant in the European Semiconductor Industry Association (ESIA) PFC task force. We have committed to share all our technical information on PFCs with other companies and report our results according to the international standards developed by the Intergovernmental Panel for Climate Change (IPCC).



DECALOGUE REFERENCE	KEY PERFORMANCE INDICATORS	YEAR				
		1998	1999	2000	2001	2002
Greenhouse Gas Emissions	CO ₂ direct and indirect emissions (energy) (*) ktonnes	643	701	822	929	940
	PFCs direct emissions ktonnes of carbon equivalent	138	165	188	145	164

M\$ AV = Million dollars of Added Value

(*) direct emissions represent about 6% of the total emissions



Chemicals

We aim to minimize our use of chemicals to improve our environmental and safety performance and save resources. This is being achieved through substitution, process optimization, hardware modifications, on-site generation, recycling for reuse, and the installation of a Total Chemical Management (TCM) system in partnership with key suppliers.

Engineers working on wet processes (wafer cleaning processes using chemicals) are at the forefront of our efforts. The chemicals we target are photoresists, developers, sulfuric acid, hydrogen peroxide, hydrofluoric acid and solvents.

In 1999 ST formalized a corporate chemical saving road map based on best practice.

Particular emphasis is given to the following programs:

- modifying spray processors to use diluted chemicals.
- using de-ionized water (DI) H_2O and Ozone (O_3) for resist removal processes rather than sulfuric acid.
- standardizing pre-diffusion cleaning recipes to use very diluted chemicals for our existing wet benches.
- replacing old wet benches with new equipment that uses less chemicals.
- developing advanced cleaning sequences that reduce the amount of chemicals needed for wet-cleaning processes.

Examples

- Our Catania plant in Italy has introduced new equipment and manufacturing processes that use chemicals more efficiently. The site has reduced consumption of the solvent Isopropyl Alcohol (IPA) by 108 kg and saved \$392 a day.
- Catania L1 in Italy has introduced new dispensing equipment that uses less developer. The site has saved 80,000 kg of developer a year, equivalent to \$850,000. Further savings of \$1.9 million a year have been achieved by introducing manufacturing processes that use photoresists more efficiently.
- Our Muar back-end plant in Malaysia has eradicated the use of H₂SO₄ in its manufacturing processes. This saves 81,200 liters of H₂SO₄ and \$15,000 a year. Improvements to the de-ionized water system at the plant have achieved an additional annual saving of \$21,000.
- Our plant in Shenzhen, China, has reduced chemical consumption at its tin-plating operation by 13% and reduced costs by 42%. This was achieved by adapting equipment to use chemicals at lower concentrations.

In 2002, the rate of chemical consumption increased, on 2001 levels, by 0.3 tonnes per million dollars of added value. This is largely the result of lower added value due to the market downturn since 2001. Since 1998 we have reduced chemical consumption per manufacturing unit from 6.28 to 4.29 kg per 8" wafer.

DECALOGUE REFERENCE	KEY PERFORMANCE INDICATORS	YEAR				
		1998	1999	2000	2001	2002
Chemicals	Chemicals consumption Tonnes/M\$ AV	3.29	2.78	2.34	2.57	2.81

M\$ AV = Million dollars of Added Value

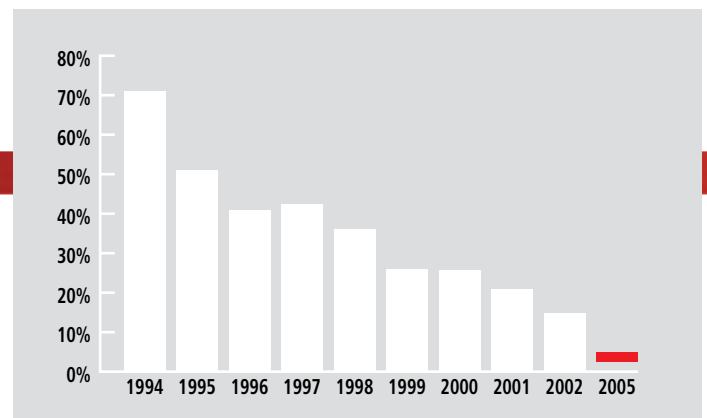
Waste

Waste can be harmful to the local environment and its disposal is subject to legislation. Landfilling waste is becoming more expensive because of tougher legislation and the increasing scarcity of landfill sites. Recycling and recovery of waste are important ways to protect the environment and can generate revenue. The EU's Strategy for Waste Management states that recycling and recovery are preferable to landfill as a way to manage waste. At ST we separate our waste into more than 30 different categories to facilitate reuse and recycling.

In 1994, 70% of waste generated by ST was landfilled. Today we have successfully reduced this to 14.9%. In the last quarter of 2002 we reached our best ever performance with only 10.7% of waste sent to landfill. The proportion of manufacturing waste that is reused or recycled has increased from 25% in 1994 to over 65% in 2002.

Examples of reuse and recycling activities include:

- sludges produced by the waste water treatment plants are used by the cement and brick industry.
- deflashing waste powders are sent for precious metals recovery.
- gloves and overshoes are cleaned and reused where possible.
- waste silica (a by-product of our epitaxial growth processes) is sold as raw material to the optical fiber industry.
- reject silicon wafers are increasingly used in solar panels.
- silicon scrap from all sites is sold, generating an average income of \$0.5 million per year.



LANDFILLED WASTE

- Landfilled vs Total Waste
- Target

Waste

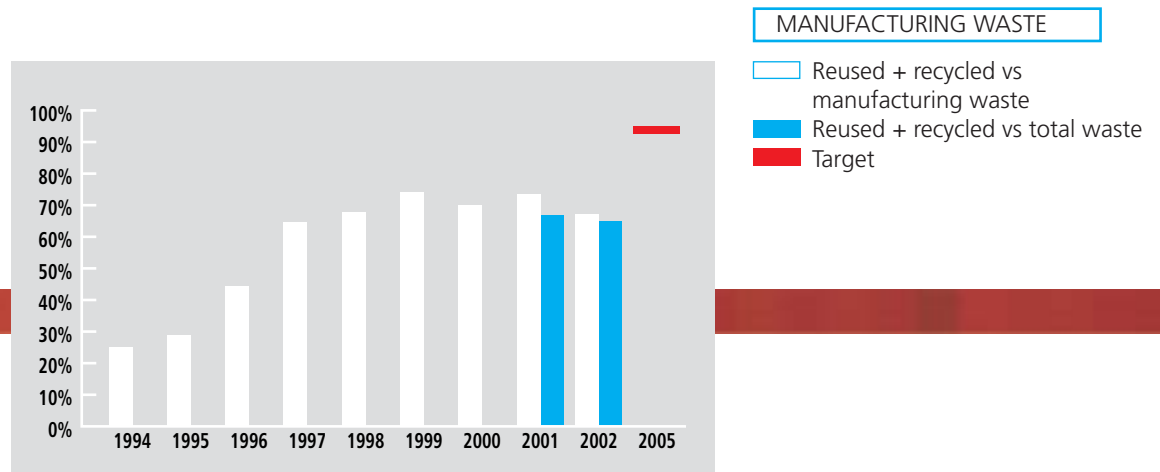
Since April 2002 the waste resin from our assembly sites has been used to manufacture floor tiles and bricks. This has enabled three of our assembly sites to reduce landfilled waste to less than 5%. One site no longer landfills waste.

Hazardous chemicals

We launched the ECOPACK program in 1997 to identify environmentally friendly packaging materials and eliminate hazardous materials (lead, antimony and bromine) in the manufacturing of integrated circuits and discrete packaging. We plan to phase out the use of lead in most packing by 2004.

European Union Strategy for Waste Management Ladder Concept Synthesis

LEVEL OF PREFERABILITY	END OF LIFE TREATMENT	ECONOMIC IMPACT
1	Prevention - avoid waste	++ Saving at source
2	Reuse - use again for original purpose	+ Replacement reduction
3	Recycle - recover for alternative use	+ Material recovery
3a	Recycle - organic conversion (aerobic or anaerobic)	+ Possible compost or methane
4	Combustion - with recovery of energy	+ Energy recovery
5	Incineration - no recovery of energy	- Consumes energy
6	Landfill	-- Land consumption/contamination



DECALOGUE REFERENCE	KEY PERFORMANCE INDICATORS	YEAR				
		1998	1999	2000	2001	2002
Waste	Landfilled waste As a percentage of total waste	36.2	26	25.8	21	14.9

Green initiatives

Products and technologies

We are committed to responsible product development. Our goal, as stated in our Environmental Decalogue is to continually improve our products so that they consume less energy and can be used in energy efficient applications. Low-power products can play an important role in helping our customers to reduce their energy use.

ST engineers take into account the need for energy efficiency at all stages of product development, from initial idea through to manufacturing. ST works to raise awareness among its employees and give them the tools, such as Computer Aided Design (CAD) and training to create low power products.

Our Advanced System Technology (AST) group uses innovative design technologies to create low power next generation multimedia portable devices. By making energy efficiency a priority from the design phase, we can successfully solve the trade-off between performance and power, and create leading edge low-power products. For instance, the group has created an integrated circuit (IC) for multimedia audio and video processing that uses 10 times less power than the traditional design solution.

The AST group contributes to a large number of international scientific publications and patents in the field of low power design. In addition, we are a member of the technical program committees of several IEEE conferences.

Power conscious design

We have developed an innovative education and training project on power conscious design in partnership with leading European companies and research establishments. The project, named INTRALED, aims to:

- increase competence and skills in design for low power.
- accelerate the take-up of low-power technology, vital for next generation products.
- set-up and run systematic training for industrial engineers.
- exploit the available know-how within the European research community.

We organise conferences, presentations and tutorials where ST employees can learn about low-power technology from ST and external experts.

ST OPTIMWATT™

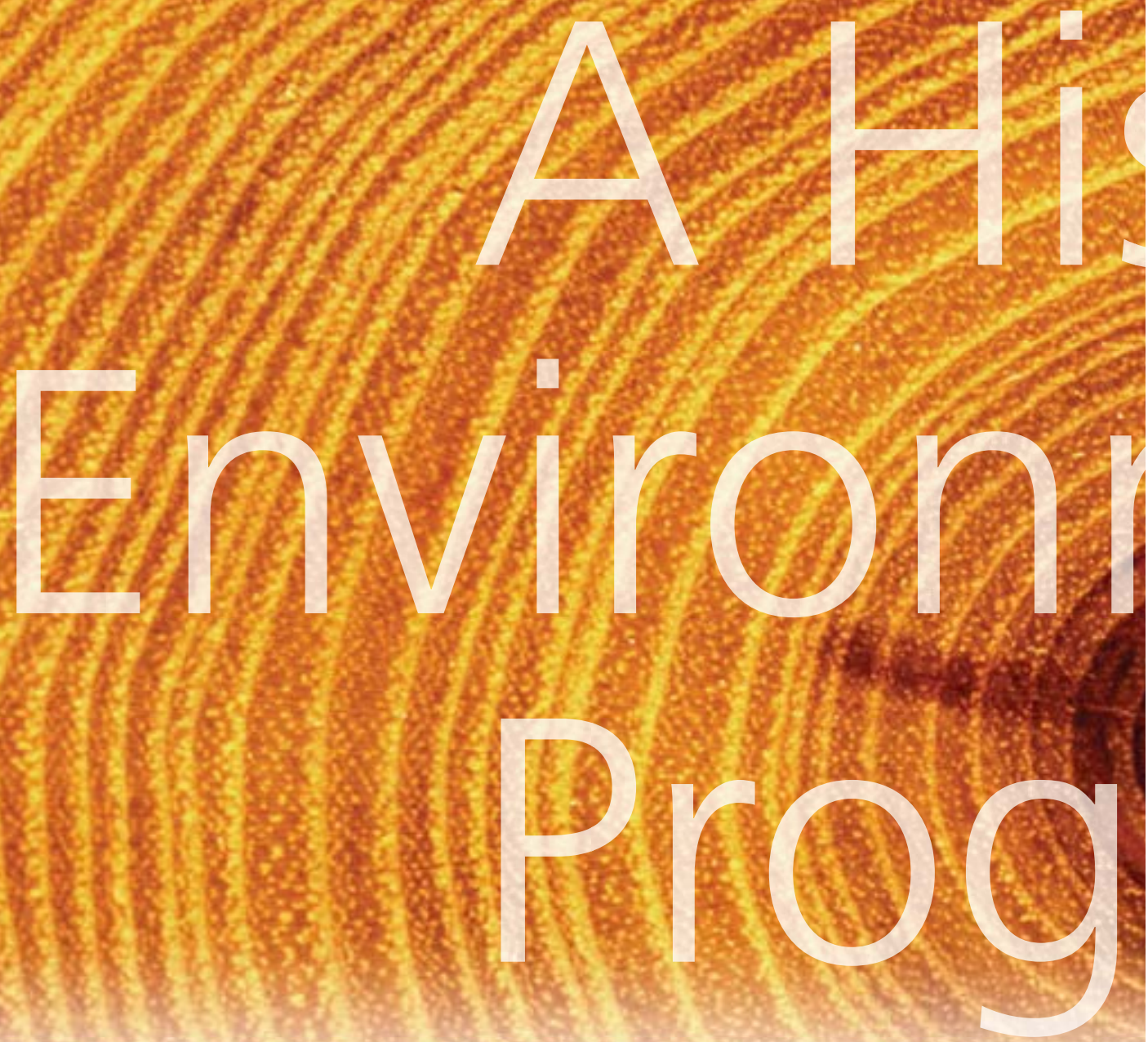
To promote our low-power products among ST customers and raise awareness internally we have developed the ST OPTIMWATT™ trademark. This will be used to highlight energy efficient features on ST products.

Transportation

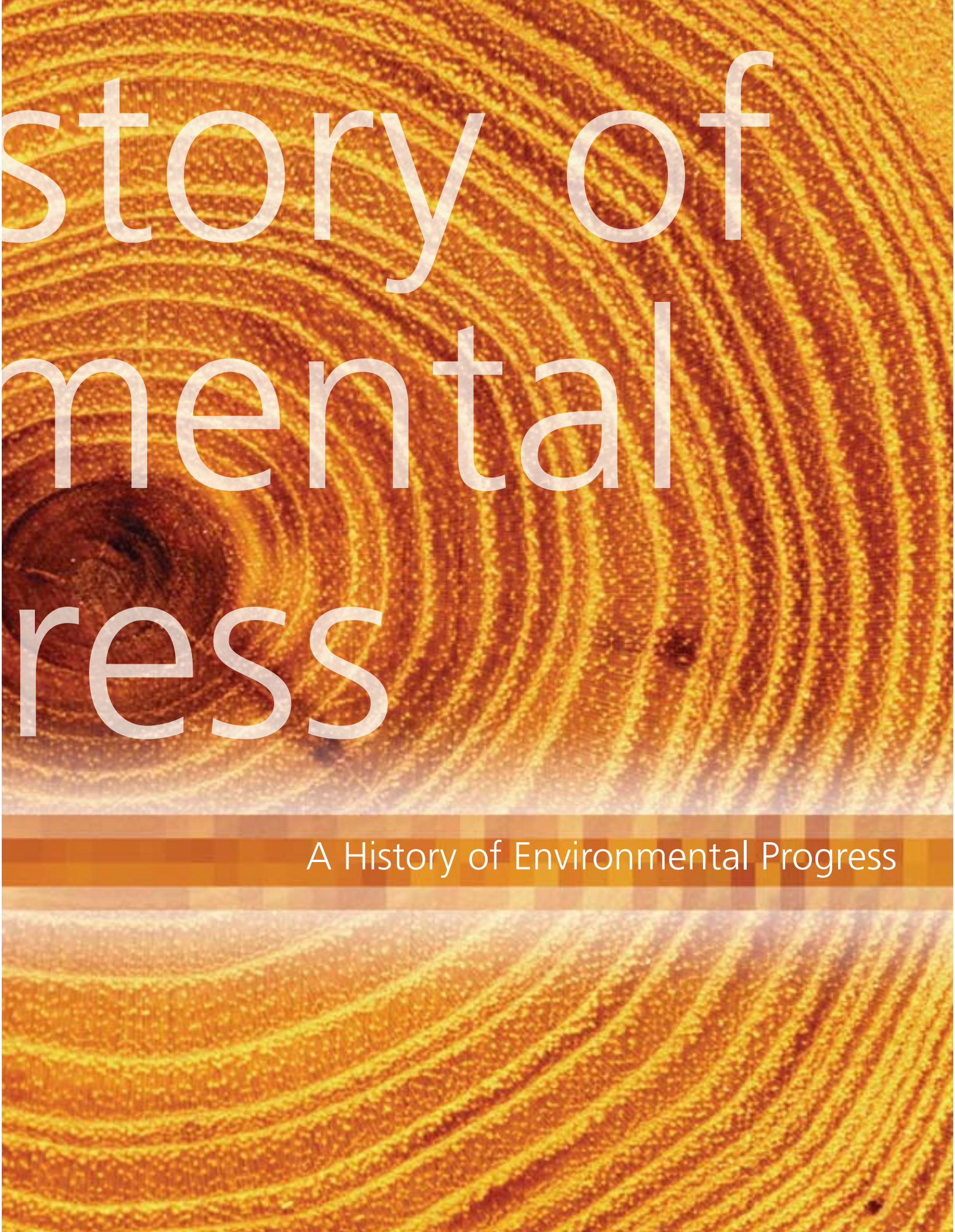
Our site in Grenoble, France, adopted a five-year transportation plan in 2000. The plan aims to cut air pollution, energy consumption and CO₂ emissions, by reducing employee car use. It will improve access to the site and make it easier and more cost effective to use alternative means of transport. The target is for half of employee journeys to be undertaken by alternative transport by 2005. In 2002 we reached 45%.

Examples

- We have doubled parking space for cycles, introduced showers for cyclists and installed a cycle track to connect the site to the main street. Cyclists have been given a tool kit with an armlet reflector and crash helmet and there is now a cycle mechanic available on site for small repairs.
- For employees who use the rail and bus network we have provided a covered walkway to the nearest bus stop and a free shuttle connection to and from the railway station.
- There are financial incentives for employees using public transport and those who buy an electric vehicle or convert their car to run on gas.

The background of the image is a close-up of a wood grain, showing concentric rings of varying shades of yellow, orange, and brown. A horizontal band of a different wood grain pattern, appearing more like a checkerboard or a different wood species, runs across the middle of the image. The text is overlaid on the top portion of the image.

A His Environm Prog

The background of the entire page is a close-up, high-resolution image of a tree trunk's growth rings. The rings are concentric and curve slightly, creating a sense of depth and texture. The colors range from deep, dark brown in the center to bright, golden-yellow at the edges, with a fine, fibrous texture throughout.

History of Environmental Progress

A History of Environmental Progress

A History of Environmental Progress

These key environmental events are a testimony to our proactive environmental approach.

1993

- Change in attitude: from compliance with international and local regulations to a proactive mode.
- Created the Corporate Environment Strategies Management organization; issued the Environmental Policy.
- Launched a long range company-wide initiative with the goal of establishing ST as the world leader in environmental protection by the year 2000.
- Complete elimination of the ODS Class 1 from our processes.

1994

- Initial environmental review of all manufacturing sites and decision to apply for EMAS validation.
- Adherence to ICC Business Charter for Sustainable Development.

1995

- First Corporate Environmental Day.
- Issued first Environmental Decalogue with environmental objectives (distributed worldwide to all employees, customers, suppliers and partners).
- First site EMAS validated.
- First worldwide Environment Meeting (all sites represented).

1996

- Environmental training for top management and start up of the "train the trainers" sessions.

1997

- All manufacturing sites both EMAS validated and ISO 14001 certified (all 7 European sites EMAS registered by the European Commission).
- ODS Class 1 elimination from facilities.

1998

- First Life Cycle Inventory on a finished product.
- Publication: Chemical Content of a Semiconductor Package.
- Environmental training for suppliers (through CDRROM).

1999

- Second Environmental Decalogue issued setting an aggressive goal of making ST a zero CO₂ equivalent emission Company by the year 2010.
- Energy, PFC and chemicals road maps defined.
- More than 50% of ST key suppliers gained environmental certification.

2000

- In 2000, at equal production rate, electricity and water consumption were reduced by 29% and 45% respectively compared with the 1994 baseline.

2001

- First global worldwide Energy Survey on all ST manufacturing sites.
- First non-manufacturing site EMAS validated and ISO 14001 certified.

2002

- Construction started on our first wind farm (10.5 MW).
- First big reforestation campaign (600 hectares planted).
- First site achieved zero landfilled waste (another three reduced landfilled waste to less than 5%).

Awards and Accolades

Since 1991 the Company has received more than 70 awards, of which 41 were for environmental issues.

Listed below are the main awards over the last five years:

1998

French Ministry of the Environment and French Chamber of Commerce prize for Gestion Environnementale	All ST sites, France
Award and special commendation from the Jury: European Better Environmental Award for Industry: Managing for Sustainable Development	All ST sites, France
Winner: Waste Reduction Award Program (WRAP) California Environmental Protection Agency Integrated Waste Management Board	Rancho Bernardo, California (USA)
Trophy: Trophée Enterprise Environnemental Catégorie Grandes Entreprises by Enjeux-Les Echos and Price Waterhouse Coopers	All ST sites, France

1999

President Bill Clinton's letter to CEO congratulating ST on efforts to reduce greenhouse gases emissions	P. Pistorio- ST CEO
Winner: Waste Reduction Award Program (WRAP) California Environmental Protection Agency Integrated Waste Management Board	Rancho Bernardo, California (USA)
Winner: United States Environmental Protection Agency's (EPA) Climate Protection Award	All ST, Corporate
Winner: Hassan II Environment Award	ST, Morocco
Dow Jones Sustainability Global Index (DJSGI) Ranking: ST World's Leading Semiconductor Company for Sustainability	All ST, Corporate
Financial Times / Corporate University Xchange Award for Innovative Marketing	ST University, Rousset, France
Cahners In-Stat Group Award for Exemplary Performance during Semiconductor Industry Tough Times	All ST, Corporate
Arthur Andersen and Il Sole 24 Ore Customer Satisfaction Award	All ST, Corporate
Malcolm Baldrige National Quality Award	STMicroelectronics, Inc, USA
Singapore Quality Award for Business Excellence	STMicroelectronics Asia Pacific, Singapore
Co-winner of L'Expansion Magazine award for Innovation	All ST, Corporate

2000

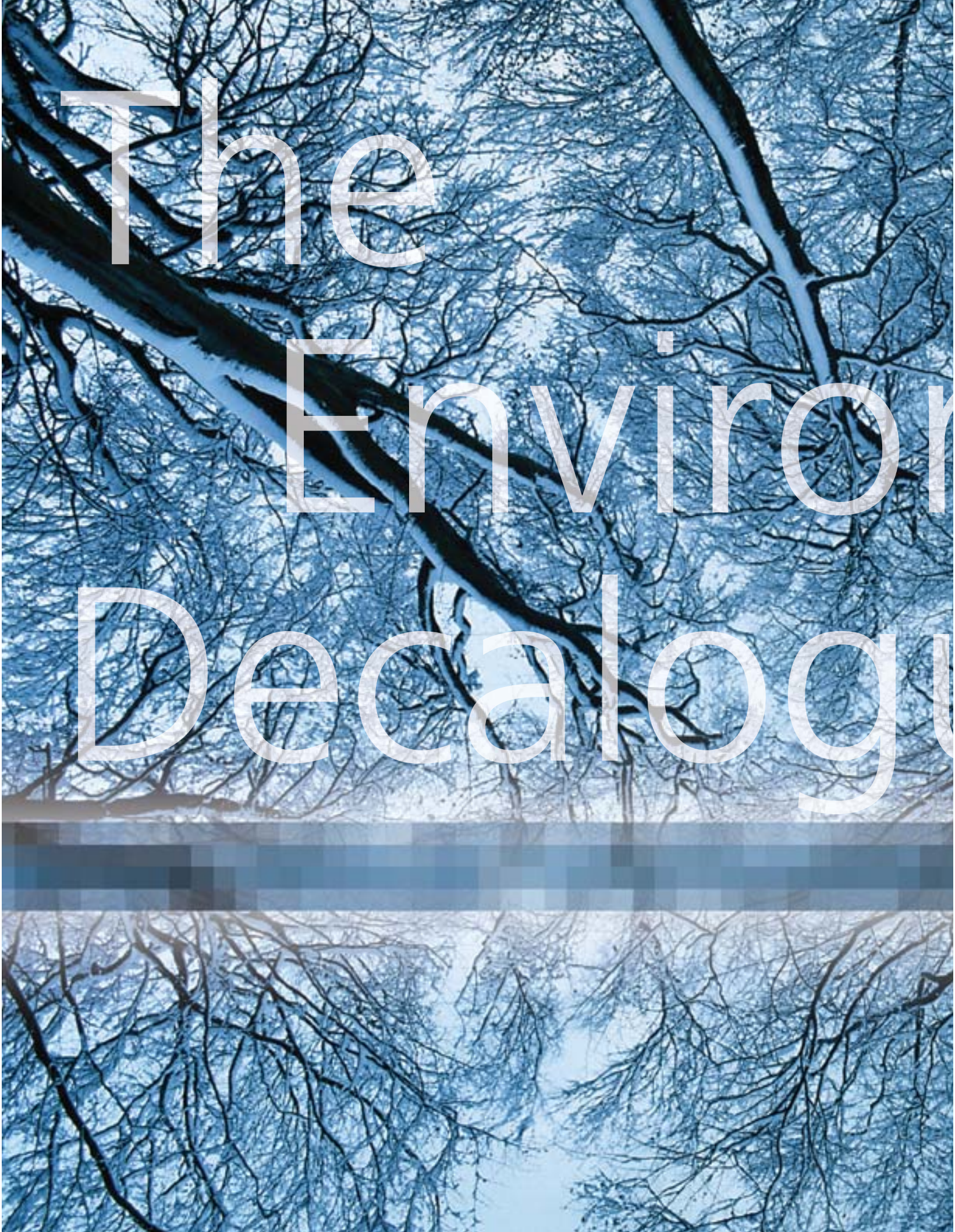
Winner: Quality Award from Ministry of Trade and Industry, Morocco	ST, Morocco
Italian Environmental Ministry Award for EMAS registered sites	All ST sites, Italy
Innovest Environmental Research (AAA rating)	All ST, Corporate
Akira Inoue Award for Outstanding Achievement in Environment, Health & Safety	P. Pistorio - ST CEO
Best Financial Communications Strategy and Best Financial Communications via Internet from Paris Bourse	All ST, Corporate

2001

Tomorrow Magazine Environmental Leadership Award	P. Pistorio - ST CEO
Seal of Sustainability from Sustainable Business Institute (SBI)	All ST, Corporate
"Innovazione Amica dell'Ambiente" Award from Legambiente and Milan Politechnique	ST, Italy
Environmental Ministry Award	Kirkop, Malta
Arthur Andersen and Il Sole 24 Ore Customer Satisfaction Award	All ST, Corporate
IMPRESA Europe Award for Best European Practices in India	Noida, India
L'Expansion Magazine Award for Best French Company	All ST, Corporate
Arizona State University College of Engineering and Applied Sciences Engineering Award for contributions to the engineering profession, the university and society at large	P. Pistorio - ST CEO

2002

Management award for Sustainable Development from European Commission Directorate	ST Kirkop, Malta
Seal of Sustainability from Sustainable Business Institute (SBI)	All ST, Corporate
Individual Climate Protection Award (EPA)	F.Borri - ST former Corporate Environment Director
The Mrs Aruna Bhorgava Eco-challenge trophy from the Fluoriculture Society	Noida, India



The

Environment

Decalogue



Environmental Decalogue

The Environmental Decalogue

The Environmental Decalogue

(Second edition - August 1999)

At STMicroelectronics we believe firmly that it is mandatory for a TQM driven corporation to be at the forefront of ecological commitment, not only for ethical and social reasons, but also for financial return, and the ability to attract the most responsible and performing people. Our “ecological vision” is to become a corporation that closely approaches environmental neutrality. To that end we will not only meet all environmental requirements of those communities in which we operate but, in addition, we will strive to comply with the following ten commandments:

1.0 Regulations

- 1.1 Meet the most stringent environmental regulations of any country in which we operate, at all of our locations.
- 1.2 Comply with all international protocols at least one year ahead of official deadlines at all our locations.

2.0 Conservation

- 2.1 Energy: Reduce total energy consumption (kWh per k\$ of added value) by at least 5% per year, through process and facilities optimization, conservation and building design.
- 2.2 Water consumption: continue to reduce water draw-down (cubic meters per k\$ of added value) by at least 5% per year, through conservation, process optimization and recycling.
- 2.3 Water recycling: reach a minimum of 90% recycling ratio in two pilot sites by end 2005.
- 2.4 Trees: reduce office and manufacturing paper consumption (kg per employee) by at least 10% per year, and use at least 95% recycled paper, or paper produced from environmentally certified forests.

3.0 Greenhouse gas emissions

- 3.1 CO₂: reduce total emissions due to our energy consumption (tonnes of carbon equivalent per M\$ of added value) by at least a factor of 10 in 2010 versus 1990, which is a goal five times better than the average of the industries meeting the Kyoto Protocol goal.
- 3.2 Renewable energies: increase their utilization (wind, photovoltaics and thermal solar) so that they represent at least 5% of our total energy supplies by end 2010.
- 3.3 Alternative energies: adopt, wherever possible, alternative energy sources such as cogeneration and fuel cells.
- 3.4 Carbon sequestration: compensate the remaining CO₂ emissions due to our energy consumption through reforestation or other means, aiming at total neutrality towards the environment by 2010.
- 3.5 PFC: reduce emissions of PFC (tonnes of carbon equivalent per M\$ of added value) by at least a factor of 10 in 2008 versus 1995.

4.0 Pollution

- 4.1 Noise: meet a “noise-to-neighbors” below 60dB(A) at any point and any time outside our property perimeter for all sites, or comply with local regulations (whichever the most restrictive).
- 4.2 Contaminants: handle, store and dispose of all potential contaminants and hazardous substances at all sites, in a manner to meet or exceed the strictest environmental standards of any community in which we operate.
- 4.3 ODS: phase out all remaining Class 1 ODS included also in closed loops of small equipment before end 2001.

5.0 Chemicals

- 5.1 Reduce the consumption of the six most relevant chemicals by at least 5% per year (tonnes per M\$ of added value), through process optimization and recycling (baseline 1998).

6.0 Waste

- 6.1 Landfill: reduce the amount of landfilled waste below 5% of our total waste by 2005.
- 6.2 Reuse or recycle at least 80% of our manufacturing and packing waste by end 1999, and 95% by end 2005.
- 6.1 Use the "Ladder Concept" as a guideline for all actions in waste management.

7.0 Products and processes

- 7.1 Design products for decreased energy consumption and for enablement of more energy efficient applications.
- 7.2 Contribute to global environmental control by establishing a database of Life Cycle Assessment of our products.
- 7.3 Systematically include the environmental impact study in our development process.
- 7.4 Publish and update information about the chemical content of our products.

8.0 Proactivity

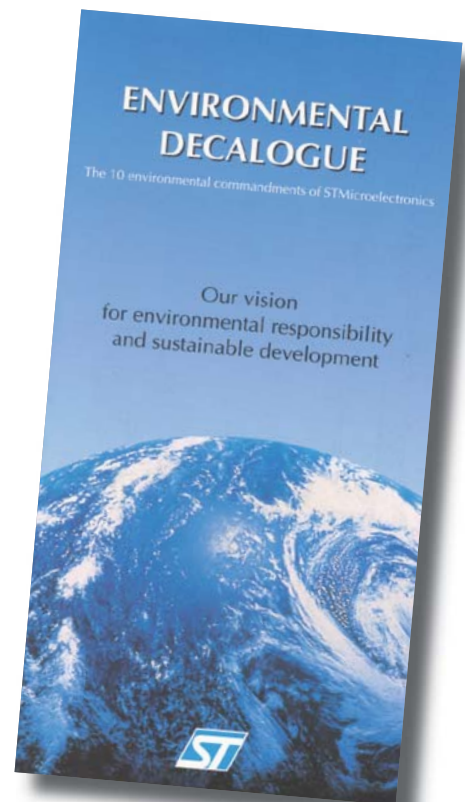
- 8.1 Support local initiatives for sponsoring environmental projects at each site where we operate.
- 8.2 Sponsor an annual Corporate Environmental Day, and encourage similar initiatives in each site.
- 8.3 Encourage our people to lead/participate in environmental committees, symposia, "watch-dog" groups etc.
- 8.4 Include an "Environmental Awareness" training course in the ST University curriculum and offer it to suppliers and customers.
- 8.5 Strongly encourage our suppliers and subcontractors to be EMAS validated or ISO 14001 certified, and assist them through training, support and auditing.
At least 80% of our key suppliers should be certified by end 2001.

9.0 Measurement

- 9.1 Continuously monitor our progress, including periodic audits of all our sites worldwide.
- 9.2 Cooperate with international organizations to define and to implement eco-efficiency indicators.
- 9.3 Measure progress and achievements using 1994 as a baseline (where applicable) and publish our results in our annual Corporate Environmental Report.

10.0 Validation

- 10.1 Maintain the ISO 14001 certification and EMAS validation of all our sites worldwide.
- 10.2 Certify new sites within 18 months of their operational start-up, including regional warehouses.



Verification statement

Introduction

We were asked by STMicroelectronics to independently review the Corporate Environmental Report 2002 (the "CER"). The CER has been prepared by, and is the responsibility of, STMicroelectronics Corporate Environment Support Group ("CESG") and follows the principles of the Decalogue.

Our objectives

The overall objectives of our work were to assess:

- The appropriateness of the procedures used by STMicroelectronics to gather and aggregate environmental data from Group sites for inclusion in the CER ;
- The existence of external and internal controls over the data gathering process;
- The accuracy of the Group level consolidation of 2002 Key Performance Indicators (KPI) published on pages 57/61/63/65/67 of the CER.
- The application of the Group's data gathering procedures at one industrial site

Our approach

There are no generally accepted international standards for the preparation or assurance of environmental reports. We have therefore based our approach on emerging best practice and the underlying principles within international standards for assurance engagements. We planned and performed our work to obtain reasonable, rather than absolute, assurance on the information reviewed. We believe our work provides a reasonable basis for our findings. Our review comprised:

1. At corporate level (Agrate - Italy):

- Interviews with the CESG to understand the Group's environmental management framework, including governance, roles and responsibilities and reporting lines;
- Examination of the procedures for collecting and reporting environmental data and review of internal documents comprising the audit trail for the reported data.
- Assessment of the external and internal controls surrounding the data gathering process including review of site level environmental management system certification to EMAS and ISO 14001 and internal controls such as benchmarking procedures, internal review and data analysis methodologies.
- Examination of the basis of calculation of Key Performance Indicators (KPIs), as defined in the Decalogue and confirmation that the underlying data used to generate the KPIs are properly entered into the data reporting system.
- Examination of the completeness and year-to-year consistency and comparability of data reported by sites to Group
- Re-performance of Group level aggregation of site level data to confirm the arithmetical accuracy of the consolidated data and the accurate consolidation of KPIs published on pages 57/61/63/65/67 of the CER.

2. At site level (Rousset - France):

- Review of the implementation of the Group's environmental requirements in the following areas:
 - * Establishment of a site level environmental management system;
 - * Existence of external certification to EMAS and ISO 14001;
 - * Existence and consistency of the environmental data & information management system.
- Review of the 2002 environmental data reported to CESG, comparison with data sent to local authorities and data sampling to confirm the reliability of the underlying information sources.

Our findings

Our findings must be understood, taking into consideration the inherent limits regarding accuracy and completeness of environmental data.

On the basis of the work described above and taking into consideration that the 17 non visited sites are all EMAS/ISO 14001 certified, we have reported to management the following:

- STMicroelectronics has established an appropriate and reliable framework for gathering and reporting environmental data from Group sites;
- The Group has implemented a system of external certification (EMAS, ISO 14001) and internal controls which appear to be reliable;
- The site level data serving as a basis for calculating STMicroelectronics 2002 KPIs published on pages 57/61/63/65/67 of the CER have been properly aggregated and consolidated at Group level;
- The Group's environmental requirements in respect of data collection, processing and reporting have been properly implemented at an industrial site (Rousset - France). The data reported by this site are not materially misstated.

More generally, we believe that the information reported in STMicroelectronics 2002 CER has been generated by an appropriate and reliable framework of procedures and controls, in line with the Decalogue.

Thierry Raes - Partner
PricewaterhouseCoopers Audit





Feedback

ST tries to improve the quality of social and environmental reporting each year.

Readers are invited to participate in this process with their feedback.

1. How much of this report did you read?

- All of it Most of it Some of it

2. Which section(s) was(were) most interesting?

SOCIAL REPORT

- The way we manage
 Our people
 ST: Citizen of the world

ENVIRONMENTAL REPORT

- General Principles and Environmental Management
 Energy
 Water
 Emissions to Air
 Chemicals
 Waste
 Green initiatives

3. Are there topics of interest that were not covered?

4. Please indicate to which group(s) you belong:

- Employee Regulator/authority Shareholder
 Financial analyst Academia Other (please specify)
 Neighbors Customer _____

5. General comments or suggestions:

May 2003

Thank you for your feedback!

STMicroelectronics
 Corporate Environment Support Group
 Via C. Olivetti, 2 - I-20041 Agrate Brianza - Italy

Telephone: +39 039 603 5848 Telefax: +39 039 603 6576

Cut and mail



STMicroelectronics

Corporate Environment Support Group
Via C. Olivetti, 2
20041 Agrate Brianza - Italy

Printed in May 2003