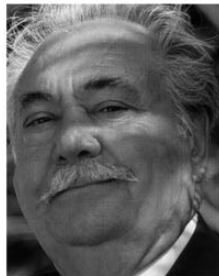


ENVIRONMENTAL Evangelist

For Pasquale Pistorio, the chips he's playing are green

WHEN WE GO TO WORK, what values do we take with us? On what principles are we willing to stake our reputations? Few CEOs, focused on next quarter's results, encourage employees—or themselves—to consider such searching questions.

Pasquale Pistorio, CEO of STMicroelectronics N.V. (STM), the eighth-largest semiconductor company, values the environment. As steward of the \$5-billion, 36,000-employee corporation with corporate offices in St. Genis Pouilly, France and Geneva, Switzerland, Pistorio insists that sustainable environmental development be treated



as a guiding tenet of STMicro's corporate mission. If any commercial activity cannot be made environmentally conservative, it has no place among the company's enterprises, no matter how lucrative in the short term it might be.

STM goes way beyond compliance. In 1993, Pistorio launched an aggressive, company-wide initiative that established environmentalism as a cornerstone of the corporation. In a series of emotionally charged entreaties, Pistorio challenged STM to become the world leader in environmental protection by the year 2000.

"STM is definitely ahead of the curve in protecting the environment," says Malcolm Penn, chairman of Future Horizons, a leading London-based semiconductor research firm. "STM's competitors are tinkering with similar programs, offering everything from lip service to some serious efforts, but only STM has made environmental neutrality absolutely key to its mission."

Protect and Serve

Pistorio has, in effect, pledged his and his firm's moral capital on the goal of protecting the earth's environment. Some of STM's accomplishments have included:



ELECTRICITY: STM has reduced by at least 5% per year the total electrical consumption per million dollars of added value per year.



CARBON DIOXIDE: STM is on track to reduce total CO₂ emissions by a factor of 10 in 2010, compared to its emissions in 1990, a 525% decrease in CO₂ emissions from 500 tons in 1990 to 80 tons in 2010.



RENEWABLE ENERGY: STM is on track to increase the utilization of wind, photovoltaics and thermal solar energy so that such renewable sources of energy represent at least 5% of total energy consumed in 2010.



WATER: STM is ahead of its goal of reducing water draw-down (per million dollars of production value) from local sources (conduits, streams and aquifers) by more than 10% per year.



RECYCLING: STM maintains a level of 90% recycled water in manufacturing operations. Also, STM maintains a level of 90% recycled paper and paper products even while reducing office and manufacturing paper consumption (pounds per employee) by at least 10% per year.

Environmental authorities all over the world have recognized these accomplishments: 1999, the Environmental Protection Agency presents STM with its Climate Protection Award; 1997, The French Ministry of the Environment validates STM's Eco-Management and Audit Scheme (EMAS); 1999, The Dow Jones Sustainability Group Index ranks STM as the world's leading semiconductor company and one of the two top sustainability-driven companies in the world (the other one is Fujitsu Ltd., Tokyo).

Late bloomer

Accolades aside, the 64-year-old Pistorio arrived rather late in life to this commitment to environmental evangelism.

In 1936, the year of Pistorio's birth in Enna, a village in the mountains of Sicily, concepts such as global warming and environmental conservation were many years in the future. He graduated with a master's degree in electronics from the Polytechnic of Turin, an institution not particularly noted for its environmental consciousness. Nothing in his 17-year career with Motorola Inc., in which Pistorio progressed from being a salesman in Milan to general manager of the company's international semiconductor division, suggests any remarkable interest in renewable energy or greenhouse gas emissions.

Pistorio's wake-up call was inspired by his eldest son, Carmello. By 1987, Pistorio had resigned from Motorola and had returned to Italy to become the CEO of the semiconductor company that would become STMicroelectronics. At that time, the green movements throughout Europe and the United States were gaining momentum, spotlighting and protesting the damage large corporations were doing to the environment. In response, many of Pistorio's counterparts dug in their heels. They claimed that business was business and that the best way they could be good corporate citizens was to generate as much value to their shareholders (and themselves) as possible.

It was not a peaceful time, and the arguments extended to



the Pistorios' dinner table. The children tested their father's celebrated listening skills. The son asked what it was, exactly, that the father really valued. Carmello pushed his father to acknowledge that corporate leaders had a higher duty than to simply make money. Gradually, ignited by his son's passion, Pistorio began to develop an environmental consciousness. The arrival of Pistorio's first grandchildren helped underscore his realization that the behavior of companies such as STM had a perhaps permanent impact on the world his grandchildren would inherit.

"Over time," Pistorio recalls with evident pride, "Carmello challenged several values or, should I say, the lack of values of the industrial society I represented. He said that, if I were serious about making the company's economic model benefit humanity, rather than to destroy humanity, then the company might have to consider a commitment to sustainable environmental development."

Throughout his career, Pistorio's colleagues have noted his fiery negotiating style combined with his remarkable ability to listen to views and opinions outside his comfort zone. "He argues loud, but he listens well," says Glen Madland, chairman of Integrated Circuit Engineering Corp. (ICE) in Scottsdale, AZ. Madland, who worked with Pistorio at Motorola in the 1960s, remembers him as a manager who went out of his way to get divergent opinions. Despite an often tempestuous negotiating style, Pistorio earns the respect of everyone from shop-floor workers to senior government officials. "He can be tough and demanding, but he always listened and he always delivered," says Madland.

Wally Raisanen, also an ex-Motorola colleague and now president and CEO of ICE, shared an office wall with Pistorio. "His idea of negotiating was to stand about two inches from the other guy and scream at the top of his lungs. Then the other guy would scream. And

| STMICROELECTRONICS N.V. AT-A-GLANCE | | | |
|---|---|---|---|
| Headquarters: St. Genis Pouilly, France | | | |
| Founded: 1987 | | | |
| Former Name: SGS-Thomson Microelectronics, changed in 1998 | | | |
| CEO/President: Pasquale Pistorio | | | |
| Chairman Supervisory Board: Jean-Pierre Noblanc | | | |
| Number of Employees: 36,000 | | | |
| Ticker Symbol/Exchange: STM/NYSE | | | |
| Business: STMicroelectronics is a global semiconductor company that designs, manufactures and markets a wide variety of semiconductor IC's and discrete devices used in many different microelectronic applications. | | | |
| | July 1, 2000 (six months ended) | December 31, 1999 (fiscal year ended) | December 31, 1998 (fiscal year ended) |
| Revenues | \$3.58 billion | \$5.06 billion | \$4.25 billion |
| Net income | \$575 million | \$547 million | \$411 million |
| ROA | 6.5% | 6.9% | 6.4% |
| ROE | 10.8% | 12.0% | 10.1% |
| SOURCE: COMPANY REPORTS | | | |











"[My son] said that, if I were serious about making the company benefit humanity—then the company might have to consider a commitment to sustainable environmental

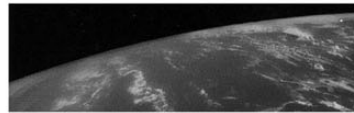
Pistorio quick takes

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|---|--|---|
| <p>Q What is the behavior you most deplore in yourself? My inability to control my weight.</p> <p>A</p> | <p>Q When and where were you happiest? The period [the 1980s] I spent in Phoenix.</p> <p>A</p> | <p>Q Complete this sentence: "I believe it is heroic to..." Stick to your credo and never compromise on your principles.</p> <p>A</p> |
| <p>Q What is the behavior you most deplore in others? Lack of integrity.</p> <p>A</p> | <p>Q What living person do you most admire? My father.</p> <p>A</p> | <p>Q "History teaches us..." Never say never.</p> <p>A</p> |
| <p>Q What is your most prized possession? My lucky pen (a modest retractable ballpoint in Pistorio's constant possession since the 1960s).</p> <p>A</p> | <p>Q What quality do you most admire in your friends? Loyalty.</p> <p>A</p> | <p>Q "I am in the very early stages of..." Learning.—J.K.</p> <p>A</p> |

STM's Environmental Decalogue

STM BELIEVES THAT ECOLOGICAL COMMITMENT is inseparable from total quality management (TQM), not only for ethical and social reasons, but also for financial returns, and the ability to attract the most responsible and motivated people. The 10 points of the Decalogue, excerpts of which follow, are aligned to make STM as environmentally neutral as possible. The complete Decalogue may be found at <http://us.st.com/stonline/company/environm/report/appen2.htm>.

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|---|--|
|  <p>1. REGULATIONS STM is committed to meeting the most stringent environmental regulations of any country in which it operates in all of its facilities.</p> |  <p>7. PRODUCTS AND PROCESSES Commitments to design "green" products, perform environmental impact studies and publish information about the chemical content of STM products.</p> |
|  <p>2. CONSERVATION Measurable commitments in the areas of conserving energy, water and paper.</p> |  <p>8. PROACTIVITY Measurable commitments to provide incentives to suppliers and subcontractors to be EMAS or ISO 14001 validated; support activities to promote ecology.</p> |
|  <p>3. GREENHOUSE GAS EMISSIONS Measurable commitments in reducing CO₂ and perfluorocarbons (PFCs) and promoting renewable and alternative energies.</p> |  <p>9. MEASUREMENT Commitments to measure and improve environmental metrics.</p> |
|  <p>4. POLLUTION Measurable commitments to reduce levels of noise, contaminants and ozone depleting substances.</p> |  <p>10. VALIDATION Commitments to maintain ISO 14001 and EMAS validation at existing facilities and certify new facilities within 18 months of start-up.—J.K.</p> |
|  <p>5. CHEMICALS Measurable commitment to reduce consumption of six chemicals.</p> | |
|  <p>6. WASTE Measurable commitments to reduce landfill contributions and improve materials re-use and recycling.</p> | |



then they would both come out hugging. He talked straight to people, a trait not common in Europe in the 1980s," Raisanen says.

No tree hugger

At some point, the son's passion was exceeded by that of his father. Starting in the early 1990s, Pistorio staked his personal reputation on a short list of objectives and values that would define STM. Foremost among these values is a determination to achieve environmental responsibility and sustainable development.

After engaging the company in a worldwide dialogue about STM's commitment to taking a leading role in the protection of the planet's environment, STM summarized its main environmental policies and objectives in one document. Unlike most corporate environmental statements, which are as long in platitudinous blather as they are short in measurable targets, STM's Environmental Decalogue defines a precise set of quantifiable outcomes (see sidebar this page).

But don't mistake Pistorio for an ideological tree-hugger. He is a businessman, and it is as a businessman that he justifies STM's extraordinary commitment to the environment. Pistorio believes that environmental responsibility makes STM more profitable. The company offers three broad justifications for its investment in ecology.

In the first place, STM has an ethical mandate to the environment that stems from its responsibility as a corporate citizen in the society in which it operates. "[Our] value is [to be] a strong contributor...and deliver results," Pistorio says. "We have done a lot, but at the same time there is much more that can be done to create an economy that is compatible with the environment, without hurting the bottom line."

Secondly, Pistorio knows that STM's future increasingly depends on its ability to attract and retain the most motivated and energetic young talent. He is convinced that the best talent will want to be associated with a company that generates wealth without destroying the environment. In an economy where talent—more than access to markets, raw materials or even capital—determines success, the value of being able to attract the best candidates cannot be underestimated.

"The third reason," Pistorio notes, "terminates any debate even by the most conservative critics: environmental responsibility is not only compatible with financial results, but it amplifies financial results." Companies that are involved in environmental protection gain a significant competitive edge by adopting more efficient technologies from both an industrial and economic viewpoint, Pistorio argues. "In the end, environmentally friendly companies are simply more profitable than ones which are not," he states.

"Only STM has made environmental neutrality absolutely key to its mission."

—Malcolm Penn, chairman, Future Horizons

Silicon Sicilian

Pistorio's independent thinking was encouraged at an early age. The Pistorio family didn't have much money, but young Pasquale's education was its top priority. And, Pistorio's father, still alive and well at 92, gave his precocious young son a large measure of responsibility. The local school educated children only up to the seventh grade, so, at the age of 13, Pistorio went to school on his own in Catania, a seaside city 40 miles from his home. All the out-of-town students stayed in a rooming house supervised by a housemother who served in loco parentis. But Pistorio's father made it clear to both the housemother and the dean of the school that Pasquale was mature enough to make his own decisions and that she would have no authority over him. No other student had Pistorio's degree of autonomy.

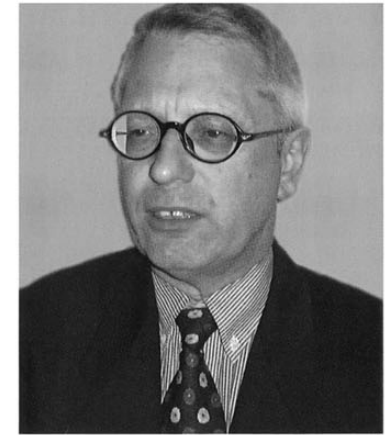
Pistorio went to college in Turin, and, after obtaining his graduate degree in electronics, Pistorio worked as a semiconductor salesman for Motorola's Turin distributor. He had neither a driver's license nor a car, so he called on customers on his bicycle.

Selling conditions were abominable. The distributor wouldn't let Pistorio make long distance telephone calls to Motorola. Even Telexes were deemed too expensive. At one point, the distributor did not have money to pay for one of Pistorio's orders to clear customs. It was hard for Pistorio to go to the customer for the money to get its order cleared, but with his commission on the line, he did. By virtue of this attitude, Pistorio made good. When Motorola opened an office, Pistorio came on board.

It was a tough time for the European semiconductor industry. Although Motorola dominated the industry in every way and should have served to unite the European players, national jealousies kept the European companies at odds and years behind U.S. and Asian competitors.

With many years of experience working with both U.S. and European electronics firms, Pistorio was uniquely prepared to organize the European semiconductor industry to better meet the challenge of international competition. In 1980, Pistorio was lured away from Motorola, then at the top of its game, to take on an opportunity that few analysts thought had a prayer of success. He became president and CEO of the SGS Group, the Italian-owned microelectronics company. In 1987, SGS joined forces with the French-owned Thomson Semiconducteurs to create STM Microelectronics, with Pistorio at the helm. Ever since, analysts have watched Pistorio's achievements with mouths agape in admiration.

"If I had to single out anyone who turned the European semiconductor industry around, it would have to



be Pasquale Pistorio," says Future Horizons' Penn. Nothing short of a miracle could have made a lean fighting machine out of the two lumbering nationalized entities seething with centuries-old nationalistic jealousies.

"Pasquale is perhaps the only manager I know who could have succeeded with the Italian/French alliance," says ICE's Madland.

Succeed he did. With revenues last year of \$5 billion and earnings of \$547 million, STM was the eighth largest player in the global semiconductor industry. Critics may say that, sure, Pistorio has led STM with great confidence, but the fortunes of a 36,000-employee company cannot be laid at the door of any single individual. No doubt Pistorio would agree with this perspective.

But for evidence to the contrary, one has only to look at the corresponding performance of Motorola since Pistorio's departure. When you map STM's performance against Motorola—in 1980 on the short list of the best-managed companies in the world—STM has outperformed Motorola on just about every conceivable measure, from innovation to earnings.

For example, in 1980 Motorola's global semiconductor revenues were a little over \$1 billion. By contrast, those of STM were just \$100 million. But in 1999, Motorola's global semiconductor revenues were \$7.32 billion and STM's had grown to a whopping \$5.06 billion. So STM, environmental mandates and all, has grown its sales at a compound annual growth rate of 22.9% since 1980, more than twice the growth rate of Motorola.

What's more, the company's growth rate during that period was almost twice that of the worldwide semiconductor market (Motorola lagged the market). At STM, environmental principals are in harmony with corporate performance.

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