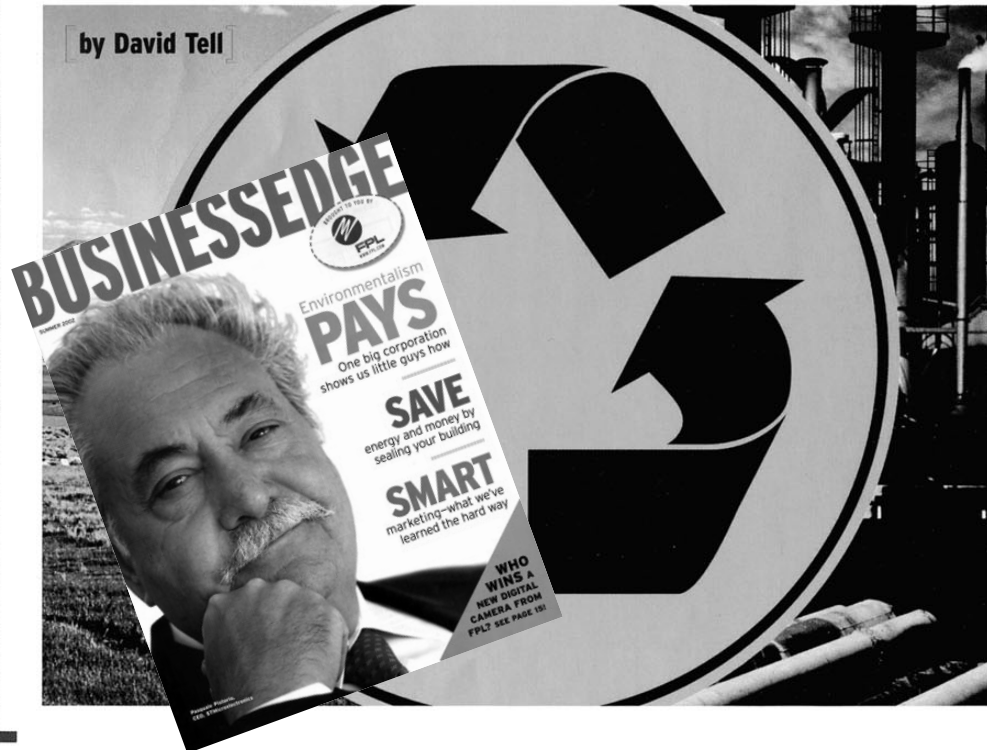


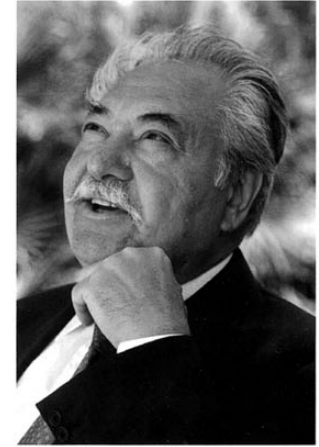
# ENVIRONMENTALISM PAYS!

## What the Big Guys can teach us all

by David Tell



**P**ASQUALE PISTORIO BELIEVES IN ENVIRONMENTALISM—not only as a boon to people and other living things, but also for the bottom lines of growing companies. As CEO of STMicroelectronics, global manufacturer of sophisticated, specialized computer chips found everywhere from automobiles to household appliances, Pistorio is not your typical environmental evangelist. But under his leadership, the policies and practices of ST have had a definite positive impact on the environment, both in this country and overseas.



### LESSONS FOR EVERYONE

You might expect a global corporation with clout and resources to take a leadership role in environmentalism. But is there anything smaller enterprises can learn from ST in matters of energy use, waste disposal or toxic substances?

Yes, says Pistorio. While he concedes that small companies might be tempted to believe any environmental effort they make would only be a drop in the bucket, Pistorio believes that the combined efforts of thousands of small- and medium-sized companies add up to a lot, ultimately affecting the quality and sustainability of all human life.

The proof, argues Pistorio, lies in the proliferation of so-called P2 (pollution prevention) programs popping up within and beyond state environmental protection departments. They aim to help small businesses meet—and then go beyond—minimum compliance with environmental laws and regulations.

“Every company can save energy and materials, whether they’re big or small. Of course, small companies will not have savings on the same scale. But they should do the same things we are doing,” Pistorio says. “For example, just in your buildings you can have energy conservation very easily. We had an organization assess us, and they told us ‘your buildings are not suitable for this and this,’” Pistorio says. “The new building we designed in Geneva for our headquarters uses 50 percent less energy than a conventional building, and it didn’t cost much more to build.”

ST even takes its corporate concern down to the level of individual employees, offering to everyone—from corporate executive to line worker—incentives to drive, for example, fuel-economizing cars.

But more significantly, ST has become something of a model for corporations large and small by demonstrating that enlightened environmentalism can and will pay. Unlike most corporations, ST believes that there are business advantages in going beyond minimal compliance with environmental rules and regulations.

“As of 1993, we were doing what everybody does—comply with the law,” Pistorio says. “We realized that we must change; we must become proactive. So we started a worldwide campaign, announced our principles and goals, and became a member of the World Business Council for Sustainable Development, headquartered in Geneva.”

It was at this point that ST’s aggressive environmentalism took on a more proselytizing turn.

“In 1995, we created the first version of our ‘Environmental Decalogue,’” Pistorio says. “Prior to that, our environmental policies had been qualitative. Expressing goals that way was wishful thinking, not a commitment.”

So ST attached measurable quantitative targets to each of its goals. But even that wasn’t enough for Pistorio.

“In 1999, we updated it—set more aggressive targets,” he said. (See [www.st.com](http://www.st.com).)

Whether in matters of environmentalism or broader business accomplishments, Pistorio’s can-do attitude is more than a cliché. A 20-year career with Motorola and leadership positions in Italy’s SGS Group represent achievements on which anyone could rightly rest—and maybe even coast a bit. But for Pistorio, they were just the beginning. In 1987, he engineered the merger between SGS and France’s Thomson Microelectronics. Their successful integration and complementary strengths enabled the new company to become seventh in the industry and the fastest-growing of the top 10 players.

## BOTTOM LINE DRIVEN

Pistorio believes any company's decision about environmental programs shape—and are shaped by—its bottom-line. So, before such programs are launched, he advises beginning with an energy audit. Most states or utilities offer energy audits to corporate and business consumers. The audit should identify any step, large or small, that a company can take to cut its energy use. Typically, some will be low-cost fixes; others will require a higher up-front investment. But in any case, the payback period should be clearly calculated.

An energy audit is just one type of outside assistance available to smaller businesses. Around the country, state environmental departments, often working in conjunction

thousands. "The basic business is environmentally friendly: its service is to extend the use of things in the marketplace, keep things working rather than being discarded.

"We'd never thought of it as being an environmental thing, but as being a good business," Torry says. "We don't think of ourselves as environmentalists, but as good stewards of things we use in our business and personal life. We don't like to be throwing things in the landfill. For example, as one of Mike's hobbies, he likes to refinish old furniture. He creates new things, but also extends the life and usefulness of older items."

So, how do the Torrys' attitudes and philosophies play out in the real world? What they did in their operations



**T**HE TEMPTATION for small companies is to regard anything they could do as a drop in the bucket. But when those drops combine with thousands of other small companies, they can make an ocean of difference to the quality of everyone's daily life.

with academic institutions, increasingly offer private businesses "partnering" help to identify how they can better comply with environmental regulations to increasingly prevent pollution in the first place. P2 is the new buzzword. Such partnerships are offered on a strictly confidential basis, so a company does not risk being tarred with being a violator of environmental laws just by seeking compliance help.

But for Mike and Diane Torry of MLT Associates, confidentiality wasn't an issue. After working with University of Nevada-Reno's Business and Environmental Program to make their operations less wasteful and reduce environmental impact, they were glad to talk about their successes.

Maybe that's because they were neither environmental villains nor ideologues in the first place—just good people, or more to the point, good business people.

"Our basic business always has been repairing and making useful—extending the life of—equipment," says Diane Torry, who joined her husband in the business he built after a previous career in banking. MLT, with about 20 employees, repairs and refurbishes point-of-sale electronic swipe card terminals for the companies that use or lease them by the hundreds or

can be taken as a model of sound practice—business and environmental.

Diane Torry cites three examples of changes—improvements—they made to their business that are environmentally friendly. As part of their refurbishing work, MLT had added a repainting service for the terminal cases.

"As we expanded the painting division, there were, of course, regulations as to air quality and waste disposal," Torry says. "The folks in the program at UNV were fabulous in helping us in making sure we were doing things right, and not emitting or disposing of things improperly.

"Through that process, we learned we needed to address disposal of the paint water waste," Torry says. "Mike developed an evaporation process that added heat to accelerate the evaporation instead of just sunshine and air. That distills it down so that the waste left can be disposed of through regular trash pickup—safely and at much less volume.

"The reduced volume makes storage and disposal cheaper for us," she says. "The investment of resources was in creating the heat evaporator."

Torry described how Mike worked with another small

business owner in the sheet metal business to design that equipment. "It took time and resources, but we recovered that investment very quickly," she says.

As MLT's business grew, it also increased the number of shipping boxes it received. So, MLT purchased a cardboard shredder to reduce all those extra boxes to a packing material that reduced the need for bubblewrap. Bottom line: a cost savings of about 30 to 40 percent—not to mention the trees. And here's where Pistorio's "domino effect" comes in:

"Our customers are reusing the shredded cardboard we sent them. We're seeing it come back to us. And a couple of customers called us and asked where we found this kind of material, and we have told them how to move to our system themselves," Torry says.

Finally, there's the approximately 15 percent of terminal housings that MLT can't refurbish.

"So, we generate waste," Torry admits. But then came "a decision that really was driven by our not wanting to throw these into the landfill, where we know they'll never deteriorate," Torry says. "It seemed not right to us.

"It took us about a year to find someone to recycle them. A company out of L.A. was willing to come pick up the plastic—if it was chipped."

So, Mike redesigned the cardboard shredder, and reinforced it to handle the plastic.

"It's too soon for us to tell the economic impact," Torry says. "We want to at least break even, and we think we will."

Says Tamara Niles of the UNV-Reno program, "The Torrys maintained their 'design for environment' mindset."

That mindset can become infectious, spreading from one conscientious person or organization to another.

That's another benefit for small enterprises, says Ralph Kummeler, Ph.D. He's director of the hazardous waste management program at Wayne State University in Detroit, where he's also professor of chemical engineering, and in 2001, interim dean of WSU's College of Engineering.

"Retirees from large companies get involved in advising small companies," Kummeler says. "Michigan has a program called RETAP, in which retirees who have been hotshot environmental engineers offer their time at an affordable hourly rate."

Kummeler also points to the National Center for Manufacturing Systems, which helps small business in a big way.

"The important point is that usually, preventing pollution pays," Kummeler says. "EPA has a P2 program. Our program here at WSU is P3—P cubed—because it's profitable pollution prevention."

Pistorio agrees.

"There can be compatibility between environmental responsibility and economic results," he says. "The world will not wait. We can produce wealth, and at the same time change the priorities by which we operate."

For more on P2 programs and resources nationwide, check out [www.p2.org](http://www.p2.org). ■

## THE 'RELIGION' OF AN ENVIRONMENTAL 'EVANGELIST'

In November 2001, STMicroelectronics' Pasquale Pistorio was named the third recipient of Arizona State University's Engineering Excellence Award at its symposium on "Microelectronics Manufacturing: Technology for a Sustainable Environment."

Pistorio believes in corporate environmentalism for three good reasons: It's the responsible thing to do for stockholders and society; it's the wave of the future and a way of attracting young talent; and, most fundamentally, it's simply good business.

"It's Economics 101," insists Pistorio. "Using less resources, less energy, less materials is to be more cost effective, more competitive. It is the same with environmental responsibility as it was with the quality movement," he says, referring to the TQM and ISO 9001 efforts of the mid-'80s through mid-'90s—for example, on the part of auto manufacturers. "They could not afford the cost of not doing it," Pistorio says.

"As a global manufacturing company with 40,000 people, 18 plants, we can do a lot about pollution," he adds. "I don't know of any similar company that has taken the challenge to reach zero CO<sub>2</sub>-equivalent emissions by 2010."

