

The greener the better

Eco-efficiency aligns with financial success

Semiconductor companies that take a proactive approach toward preserving the environment not only reduce bottom line costs but also create opportunities for top-line revenue, according to Innovest Strategic Value Advisors, a New York-based financial services company. Whether measured as return on investment (ROI), return on equity (ROE) or total stock market return, firms that pay attention to green issues rack up better performance statistics than those that don't. In a comparison of 14 international and North American-based semiconductor-industry companies, Innovest found that companies with better environmental performance (eco-efficiency) outperformed laggards by a maximum of 172% in the stock market from December 1997 to March 2000.

Environmental finance—the intersection of financial and environmental analysis—is a rapidly growing field that for the first time demonstrates the eco-efficiency premium in the semiconductor sector. Eco-efficiency leaders such as STMicroelectronics NV, Texas Instruments Inc., Intel Corp. and Advanced Micro Devices Inc. outperform competitors seen to lag behind in commitment to environmental sustainability. Tightening regulations, tougher disclosure requirements and competitive pressures are expected to increase the financial consequences of companies' eco-efficiency even further.

"Everything in the Innovest Strategic Value Advisors report on the global semiconductor industry is consistent with the results of analyses of other industrial sectors we have surveyed, including chemicals, utilities and pharmaceuticals," said Hewson Baltzell, chief operating officer at Innovest. "We are on the brink of an 'Eco-Industrial Revolution'—a worldwide industrial restructuring in which companies' eco-efficiency and environmental performance are becoming far more critical to their competitiveness, profitability and even survival."

The most eco-efficient firm, St. Genis Pouilly, France-based STMicroelectronics, has an extensive approach to environmental management (see *ELECTRONIC BUSINESS*, September 2000 cover story: "Environmental Evangelist: For Pasquale Pistorio, the chips he's playing are green"). Not only does it have enviable control over costs—in 1998, the company reported savings of \$12 million in energy and \$5 million in water consumption—STMicro also pursues innovative activities such as marketing its wastes as resources for other industries. Innovest gave STMicro the only AAA rating it awarded.

Ever since the Exxon Valdez incident, in which Irving, TX-based Exxon Mobil Corp.'s total stock market capitalization fell by 5% on news of the company's exposure to additional legal damages from the disastrous Exxon Valdez oil spill, financial analysts have struggled with how to discount a company's exposure to environmental risks. What has been missing is a robust and credible set of analytical models capable of assessing that risk systematically, translating it into financial terms and identifying hidden value potential and investment opportunities in individual companies. The EcoValue 21 analytics platform crafted by Innovest provides that capability, say Innovest officials.

—John Kador

TOPS IN ECO-LEADERSHIP

companies ranked by environmental performance

Rank	Company	Ticker	Rating
1	STMicroelectronics NV	ST	AAA
2	Texas Instruments Inc.	TXN	AA
3	Intel Corp.	INTC	AA
4	Advanced Micro Devices Inc.	AMD	AA
5	National Semiconductor Corp.	NSM	A
6	Xilinx Inc.	XLNX	A
7	Altera Corp.	ALTR	A
8	LSI Logic Corp.	LSI	A
9	Applied Materials Inc.	AMAT	BBB
10	Conexant Systems Inc.	CNXT	BB
11	Maxim Integrated Products Inc.	MXIM	BB
12	Micron Technology Inc.	MU	B
13	Analog Devices Inc.	ADI	B
14	KLA-Tencor Corp.	KLAC	CCC

SOURCE: INNOVEST STRATEGIC VALUE ADVISORS

JANUARY 2000 SEMICONDUCTOR SALES BY REGION

In billions of \$



SOURCE: WORLD SEMICONDUCTOR TRADE STATISTICS, SEMICONDUCTOR INDUSTRY ASSOCIATION

ENVIRONMENTAL STRATEGY GRADES*

on a scale of 1 to 10, 10 being the best

Name	Score
STMicroelectronics NV	9.6
Texas Instruments Inc.	8.7
Advanced Micro Devices Inc.	8.0
Intel Corp.	7.5
National Semiconductor Corp.	7.4
LSI Logic Corp.	6.9
Applied Materials Inc.	6.7
Conexant Systems Inc.	6.1
Xilinx Inc.	5.7
Altera Corp.	5.5
Micron Technology Inc.	4.4
Analog Devices Inc.	2.5
Maxim Integrated Products Inc.	2.5
KLA-Tencor Corp.	2.4
Average	6.0

*One of 65 categories making up a total grade
SOURCE: INNOVEST STRATEGIC VALUE ADVISORS