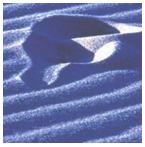




# 2005 ANNUAL REPORT



Advanced Energy develops, markets, and supports process-centered technologies essential to manufacturing plasma-based products. Our beginnings were revolutionary. Our approach is evolutionary—sometimes step-by-step, sometimes by leaps and bounds.

Our products power critical steps in the manufacture of semiconductors, flat panel displays, data storage products, compact and digital video discs, high-end servers, laser and medical equipment, and large expanses of architectural glass. Our solutions represent advancements in creativity, technology, design, and function.

AE's products continue to advance power, flow, thermal instrumentation and temperature control, and source technology. We operate in regional centers in North America, Asia, and Europe—and we provide global sales and support through direct offices, representatives, and distributors.

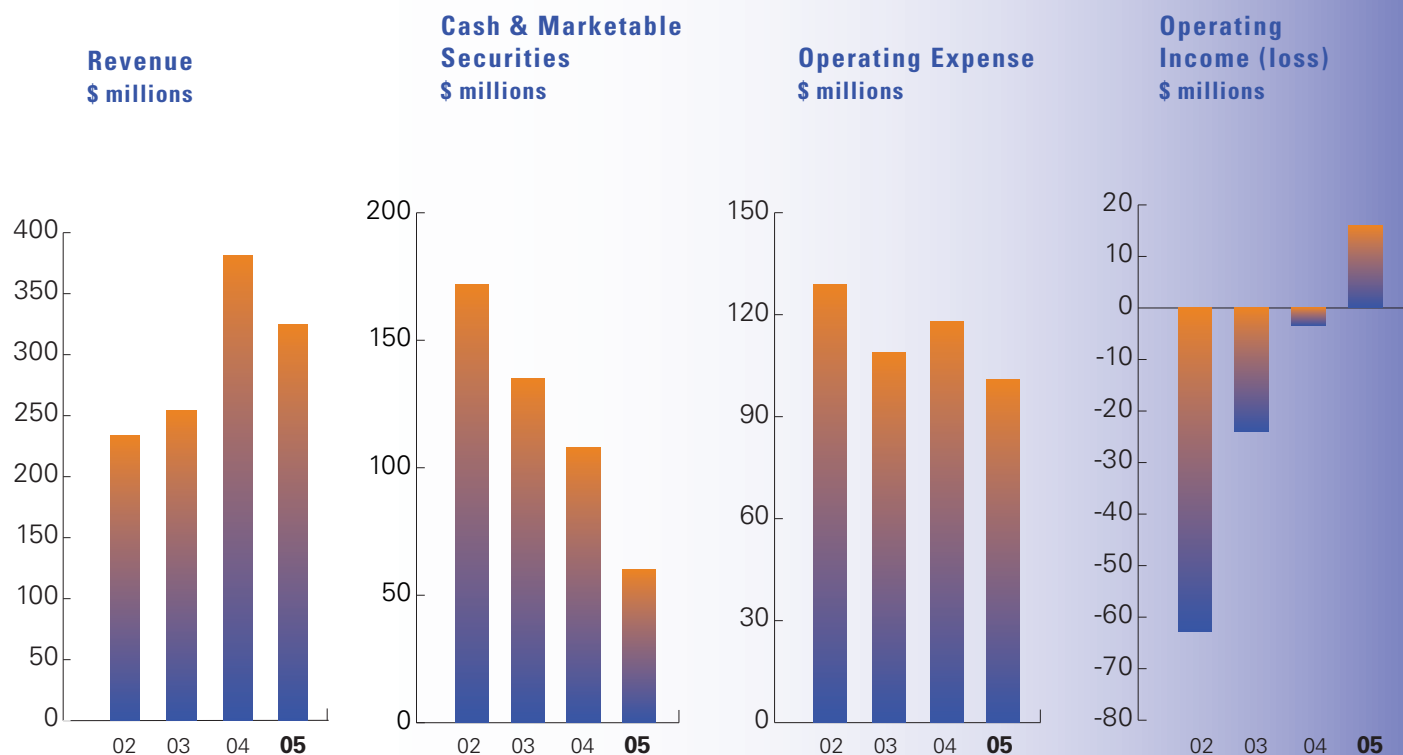
Wherever there are applications that require precise thin-films, AE's solutions augment process impact, improve productivity and throughput, and lower the cost of ownership for OEMs and end users.

Our products have the power to thrust our customer industries forward. Our solutions are links to their success.

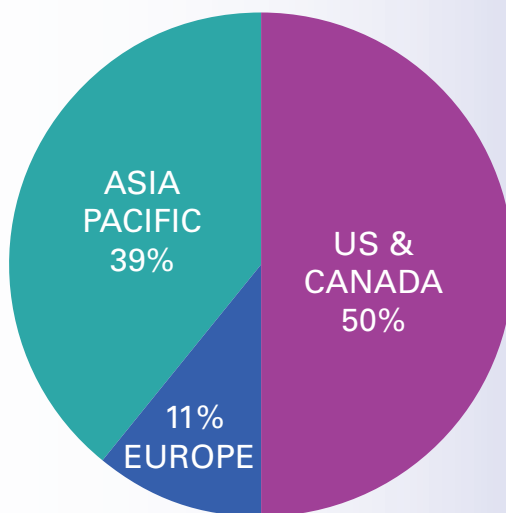
# FINANCIAL HIGHLIGHTS

In thousands except per share data

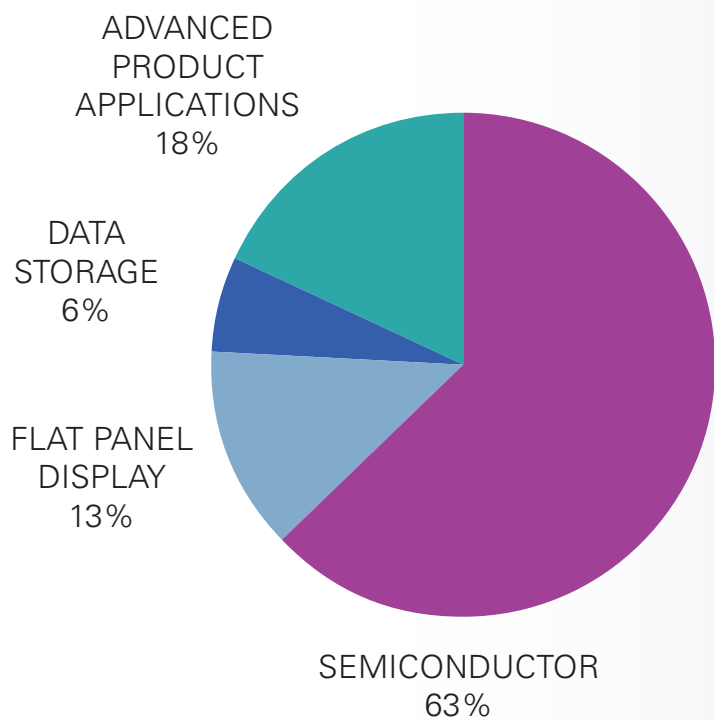
FISCAL YEAR ENDED	2005	2004	2003	2002
Net Sales	\$325,482	\$380,537	\$253,536	233,730
Gross profit	117,081	114,626	84,319	66,192
Operating expenses	101,107	118,093	108,746	128,891
Income (loss) from operations	15,974	(3,467)	(24,427)	(62,699)
Income (loss) from continuing operations	3,622	(14,670)	(45,536)	(42,113)
Net income (loss)	12,817	(12,747)	(44,241)	(41,399)
Income (loss) from continuing operations per share	0.10	(0.45)	(1.41)	(1.31)
Net income (loss) per share diluted	0.34	(0.39)	(1.37)	(1.29)
Cash, cash equivalents, and marketable securities	59,685	107,982	134,892	172,347
Working capital	143,633	206,915	205,835	247,942
Total assets	310,117	394,407	414,731	455,733
Total debt	4,190	196,123	202,468	213,580
Stockholders' equity	257,430	144,978	151,834	183,339
Diluted weighted-average common shares outstanding	37,434	32,649	32,271	32,026



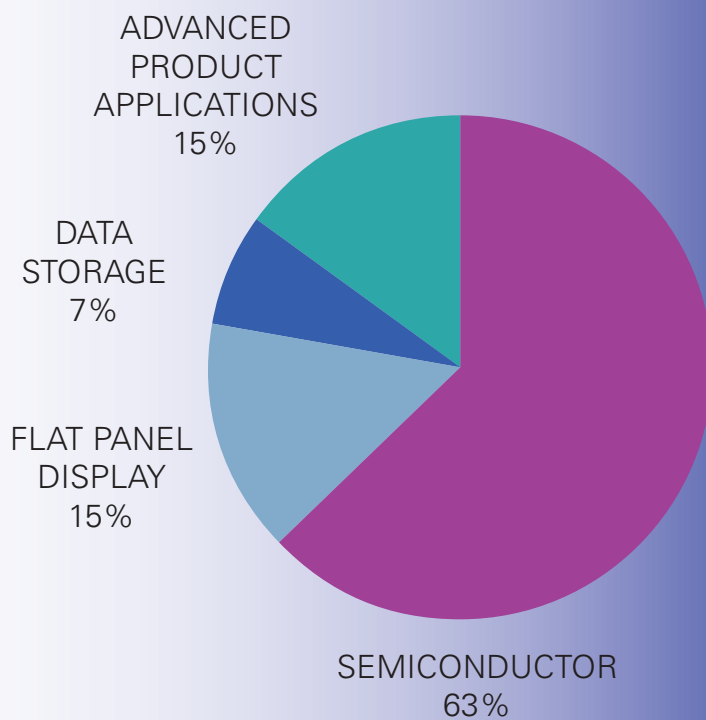
2005 Markets by Geographic Area



2005 Revenue Mix by Industry



2004 Revenue Mix by Industry



### *Dear stockholders, customers, employees, suppliers, and friends,*

In the English language, only one letter separates revolution from evolution. Only one letter and a whole world of difference.

First, let's consider revolution. By definition, it is a momentous, radical change. Some might think of it as a *shift* in power. Next, consider evolution. The dictionary says that it is a progressive change into a more significant, sophisticated form. You might call it a *rise* to power.

And now consider Advanced Energy. We were born of a revolutionary idea. And we are evolving into the industry's fittest survivor.

A look at our financial results of 2005 demonstrates our progress. Following that, a discussion of what we've done and where we're going will help explain it.

Year 2005 results. Net sales in 2005 decreased nearly 15% to \$325.5 million from \$380.5 million for the year 2004. Yet, our net income for the year was \$12.8 million, or \$0.34 per diluted share, compared with a net loss of \$12.7 million, or \$0.39 per share, in 2004. Gross profit increased to \$117.1 million in 2005 from \$114.6 million in 2004. And gross margin was 36.0% of sales in 2005, compared with 30.1% of sales in 2004.

SG&A expense, was \$55.7 million, or 17.1% of sales, in 2005 compared with \$61.9 million, or 16.2% of sales in 2004.

As a percentage of sales, we held R&D expenses fairly steady at \$39.7 million, or 12.2% in 2005, compared to \$49.0 million, or 12.9% in 2004. Income from operations in 2005 rose to \$16.0 million, or 4.9% of sales, from a loss of \$3.5 million in 2004.

With our refinancing in 2005, our balance sheet reflects the strength we need to move forward.

We ended 2005 with cash, cash equivalents, and marketable securities of \$59.7 million. And we had \$144.4 million of working capital, \$310.1 million of total assets, and \$257.4 million of stockholders' equity.

After some difficult years, we are profitable once again. And we are positioned to achieve progressive, sustained growth through the whole range of industry cycles.

***A revolution in technology.*** Please permit me to dwell in history for a few moments. As the new CEO of AE, it is my great honor to recognize the achievements of Doug Schatz, our founder and chairman, whose technical brilliance revolutionized the power supply components of the semiconductor equipment industry in the 1980s.

Doug's ideas were the proverbial big bang—a pivotal change in the design and performance of power delivery and management systems. And to this day, AE remains the technology leader in our industry. We engineer and manufacture products that enable our customers to make strides in their own technologies—to move their products toward greater yield with improved performance at lower cost.

From our auspicious beginning, AE has developed—at rates both fast and slow. Both impulsively and adaptively. Both instinctively and selectively. Today we can point to both growth and maturity. Today we stand upright—strong, focused, and intent.

***An evolution in business.*** So, what have we done to reach our current form and how will we continue to *transform* as our customers and the industry progress?


Most importantly for our stockholders, we achieved profitability, generating \$36 million in cash from operations and posted a net profit of \$12.8 million in 2005. We reduced our breakeven point from \$95 million to \$66 million—well ahead of our target date for doing so. And we reduced inventory by \$17 million since 2004. This came as a result of a lot of hard work and important decisions. These will continue to support our growth and profitability strategy over the long term through both up and down cycles.


Let's look at a few of the most meaningful highlights.





We completed the manufacturing transition to China. We now manufacture over 85% of our total product volume there. And we have qualified Pac-Rim suppliers for more than 75% of our parts. We've reduced labor, overhead, and material costs as a result. And we can better manage our freight costs, which are considerable with fuel costs as they are.

But the success of our China transition is not only apparent in our improved gross margins, response time, and turnaround. It is reflected in the respect and confidence of our major customers, who consider our operations to be a benchmark for other suppliers—as well as for themselves.

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We made design wins. In our key product areas we made—or set the stage for—further penetration into our existing semiconductor, data storage, and architectural glass, and flat panel display markets. We have made sales into the fast growing market of solar cells, and we are participating in a number of pilot projects in such promising, untraditional markets as food packaging and organic light-emitting diodes (OLEDs). In addition, we broadened our support, consulting, and educational services, growing service revenue by over 20% over 2004.
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We refinanced. In August, we raised approximately \$106 million on the sale of 11.5 million shares. We redeemed our convertible debt for approximately \$190 million. This brings our balance sheet into the condition we believe is necessary to meet our critical objectives and growth plans. And it provides the flexibility we need to meet the cyclical nature of our markets. This was critically important for our stockholders, our customers—and our employees.
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We divested the company of two U.S.-based operations that we determined were outside our core-product focus areas of DC and RF power generation and mass flow control. We streamlined the operations at our Fort Collins, Colorado, headquarters to concentrate on research and development, new product introductions, low volume manufacturing, and global customer support. And we reduced headcount accordingly. We are truly a global company with design and product launch centers in the U.S., Germany, and Japan, and volume manufacturing in China.
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We planned. At the end of 2005, we got very tough about setting clear, corporate objectives for 2006 and beyond. We've supported these goals with an operating plan that is strongly customer-centric. The plan empowers—and holds accountable—each employee at every level for achieving his or her contributions to the objectives. Already, their enthusiasm, energy, and commitment are obvious.

I need to take a moment here to commend our employees for their persistence and endurance through some hard times and difficult transitions. This company's strength and resolve is manifest in its people. Many were first attracted to the stimulating culture that Doug shaped. Today they persevere in dedication to AE's principles of service excellence, profitability, and technological superiority. We know our team is right for the job at hand.

**Best of breed.** Without question, we will continue our technology leadership. Our customers expect it. But today our traditional customers are not looking for revolutionary inventions that surpass their requirements. They are seeking smaller, more inventive improvements that precisely meet their needs. And so we are talking often, listening harder, thinking smarter, and setting business-based priorities that will grow our market share. The payoff is consistent, sustainable growth and increasing market influence.

One of our key strategies is to diversify by ramping up our exploration of new markets. A technological edge is no longer enough to sustain us during the fickle cycles of our industry. We must apply our technology soundly, smartly, and profitably to applications that create new opportunities for growth. As mentioned earlier, there are several of these that appear promising. We are working closely with our prospects to create appropriate solutions.

Customer focus is a precondition for entering new markets. We have programs in place to strengthen our relationships and confirm our commitment to all of our customers. Exceptional solutions beget enduring loyalty. Many of our new products are already standard components of our customers' tools.

We will continue to find ways to reduce our costs and increase our margins without compromising the integrity of our products and services. That will take vigilance and commitment on the part of all of us. But we are resolute. Our goal for 2006 is to bring our quarterly break-even point down to the \$60 million revenue level and to improve our incremental gross margins to \$0.50 for every sales dollar above that break-even point.

In 2006, our job is to pay attention and stay focused—on our customers, on our costs, on our commitments. I believe that we know the way—and that we have the will.

It is not only survival that goes to the fittest. It is dominance. At AE, we see that as our destiny.

On behalf of everyone at AE, I thank you for your continuing interest and support.

**Hans-Georg Betz**  
President and CEO

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**STOCK LISTING**

The Company's common stock is traded on the Nasdaq National Market under the symbol **AEIS**.

**ANNUAL MEETING**

The Year 2006 annual meeting of AE stockholders will be held at 10:00 a.m. Mountain Time on May 3, 2006 at the Company's headquarters, 1625 Sharp Point Drive, Fort Collins, Colorado.

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**GENERAL COUNSEL**

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