

Advanced Energy (AEIS)

\$55.60 (As of 04/30/20)

Price Target (6-12 Months): **\$58.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 04/06/20)

Prior Recommendation: Outperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

4-Sell

Zacks Style Scores:

VGM:D

Value: D

Growth: C

Momentum: D

Summary

Advanced Energy is riding on strong demand in semiconductor equipment market and rising investments in foundry/logic. These are driving the company's semiconductor revenues. Further, solid momentum across industrial embedded power products and medical device customers is a tailwind. Benefits of 5G deployment and strong momentum across enterprise computing and storage customers are contributing well. Artesyn Embedded Power buyout benefits were also positives. Further, cost optimization strategy and strong product pipelines are other positives. The company remains optimistic about its power density and deep engineering capabilities in the data center market. However, sluggish IT infrastructure investments and weak demand in industrial and auto industries in Europe and China are concerns. The stock has underperformed its industry over a year.

Data Overview

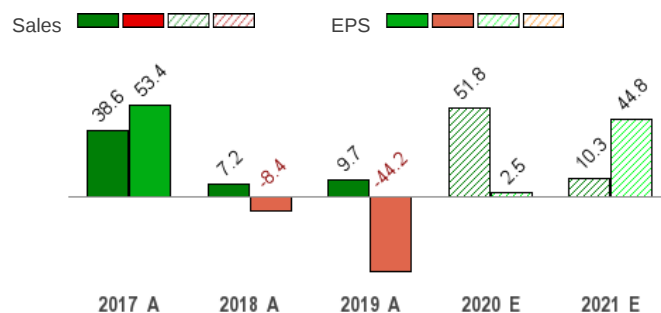
52 Week High-Low	\$78.49 - \$33.38
20 Day Average Volume (sh)	282,552
Market Cap	\$2.1 B
YTD Price Change	-21.9%
Beta	1.54
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Semiconductor Equipment - Wafer Fabrication
Zacks Industry Rank	Bottom 31% (175 out of 253)

Last EPS Surprise	24.3%
Last Sales Surprise	8.3%
EPS F1 Est- 4 week change	-27.2%
Expected Report Date	05/06/2020
Earnings ESP	-3.0%
P/E TTM	22.8
P/E F1	22.2
PEG F1	2.2
P/S TTM	2.7

Price, Consensus & Surprise



Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	298 E	314 E	332 E	355 E	1,321 E
2020	313 E	317 E	297 E	292 E	1,198 E
2019	141 A	135 A	175 A	338 A	789 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$0.68 E	\$0.84 E	\$0.97 E	\$1.12 E	\$3.62 E
2020	\$0.66 E	\$0.60 E	\$0.58 E	\$0.66 E	\$2.50 E
2019	\$0.58 A	\$0.45 A	\$0.54 A	\$0.87 A	\$2.44 A

*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 04/30/2020. The reports text is as of 05/01/2020.

Overview

Based in Fort Collins, Colorado, Advanced Energy Industries is a power technology company. The company is one of the leading suppliers of power subsystems and process-control technologies to the semiconductor industry.

Advanced Energy had undergone a major restructuring in 2015, exiting the solar inverter business.

The company now focuses primarily on power-conversion solutions, including direct current, pulsed DC, low frequency, high voltage, and radio frequency (RF) power supplies, as well as matching networks and remote plasma sources for reactive gas applications and RF instrumentation to leverage the semiconductor, flat panel display, and industrial markets.

In 2019, the company generated \$788.9 million of revenues.

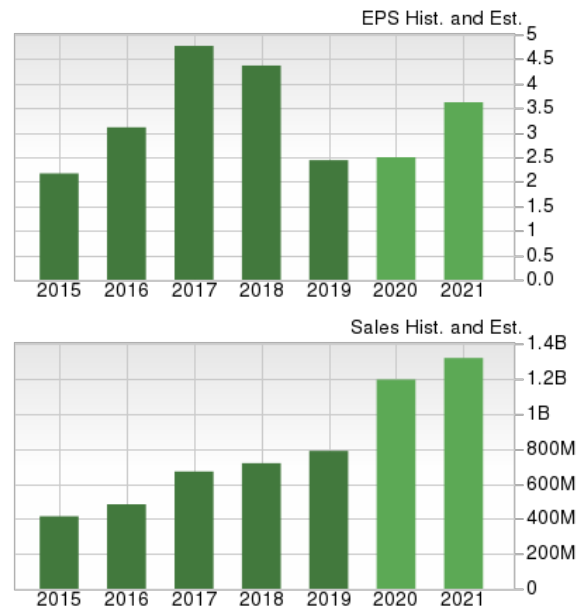
Sales Contribution by product line in 2019 was as follows—Semiconductor Equipment accounted for 51.1%, Industrial & Medical contributed 31.2%, Data Center Computing accounted for 11.6% and Telecom & Networking contributed the remaining 6.1%.

Customers in the semiconductor capital market incorporate products into equipment that make integrated circuits (ICs).

On the other hand, the industrial power capital market is comprised of products for Thin Films Industrial Power and Specialty Power applications.

Further, Advanced Energy made foray into two new growth markets – data center computing, and telecom and networking on the back of Artesyn Embedded Power acquisition.

Additionally, the company maintains its facilities throughout Asia, Europe and North America.



Reasons To Buy:

▲ A number of factors are expected to drive **Advanced Energy's semiconductor revenue** base. The most important factor is growing demand for the company's power solutions in advanced semiconductor applications. Increasing investments in complex 3D NAND devices, DRAM and logic are a big positive for the company. Moreover, NAND manufacturers focus on adding more layers. The additional layers should also drive demand for its power-control modules. Based on its portfolio strength, Advanced Energy is well positioned among the leading players, which should help the company generate strong revenues in the upcoming years.

Advanced Energy's leading market position, strong semi and industrial demand, strategic acquisitions and impressive balance sheet are major positives.

▲ Advanced Energy's **Industrial Revenues** should continue to grow in the near future. The increasing international customer base and new design wins in China and Korea, among others, present significant growth opportunity for Advanced Energy's Industrial business. Also, the acquisitions of Trek and Excelsys Holdings add to Advanced Energy's industrial portfolio, further expanding its opportunities in this market.

▲ Advanced Energy has been supplementing organizational growth with **strategic acquisitions**. When deciding on a target, management generally looks out for a particular niche expertise, which will complement one of its many product lines or round out its portfolio. Recently, the company completed the buyout of LumaSense Technologies. This has expanded the company's product portfolio with the addition of photonic-based measurement and monitoring solutions. Moreover, the deal provides a wider exposure to Advanced Energy in the power intensive industrial applications space. Further, the company's acquisition of Trek has added high voltage and electrostatic technology products to its specialty power products portfolio. In 2017, Advanced Energy acquired Excelsys Holdings, an electronics manufacturer in Ireland. In 2019, the company acquired Artesyn Embedded Power which helped it in making its foray into two new growth markets – data center computing, and telecom and networking. These deals are expected to continue aiding its top line growth in the near future.

Reasons To Sell:

- ▼ **Customer concentration** of the company is significant. Advanced Energy's growth profile highly depends on its two large original equipment manufacturers (OEMs), Applied Materials and Lam Research. Advanced Energy generated approximately 51.1% of 2018 revenues from its top two customers. Hence, customer concentration seems to be a perennial problem related to the nature of technology it offers.
- ▼ Advanced Energy is **exposed to fluctuations in foreign-currency rates** as international revenues account for a significant portion of its total revenues. The company generates a significant portion of sales internationally, and relies on international suppliers, manufacturing partners and distributors. Therefore, fluctuations in foreign-currency rates, changes in political or economic conditions and regulatory requirements, among others, could negatively impact the company's operations in the future.
- ▼ Acquisitions are part of Advanced Energy's growth strategy to supplement the top line. However, the company's inability to identify suitable acquisition candidates, unsuccessful execution and integration of new acquisitions, as well as an increase in acquisition costs due to stiff competition could negatively impact sales/margin performance. Large number of acquisitions increases risks of **integration issues**.

The forex headwinds, customer concentration, integration issues and end-market uncertainty may somewhat hamper its revenue growth.

Last Earnings Report

Advanced Energy Beats on Q4 Earnings & Revenues

Advanced Energy Industries reported fourth-quarter 2019 non-GAAP earnings of 87 cents per share, beating the Zacks Consensus Estimate by 24.3%. Further, the figure was higher than management's guided range of 56-80 cents.

Further, the bottom line improved 19.2% on a year-over-year basis and 61.2% sequentially.

Revenues of \$338.3 million surpassed the Zacks Consensus Estimate by 8.3% and management's guided range of \$295-\$325 million. Further, the figure soared 119.4% from the year-ago quarter and 93.2% from the prior quarter.

The top line was driven by strengthening demand in semiconductor equipment market, which led to acceleration in semiconductor revenues during the reported quarter. Further, the company witnessed solid momentum in data center computing market, which is a positive.

Additionally, positive contributions from Artesyn Embedded Power buyout contributed to the results.

However, the company bore the brunt of macro-economic headwinds especially in the industrial and telecom markets throughout the fourth quarter.

Nevertheless, strong cost optimization strategy, new product design wins and robust product pipelines are likely to help the stock recover in the near term.

Further, the company remains optimistic regarding its power density, deep engineering capabilities and strong application knowledge in the data center market. Moreover, the company's position in the telecommunication market will aid it in capitalizing on 5G related prospects.

Top-Line in Detail

Product revenues increased 149.2% year over year to \$311.6 million (92.1% of total revenues) in the fourth quarter. This can primarily be attributed to growing semiconductor product revenues and multiple product design wins.

Services revenues declined 8.5% from the prior-year quarter to \$26.7 million (7.9% of revenues). This was primarily due to sluggish semiconductor service business. Further, divestiture of U.S. central inverter business affected the results.

Product Line in Detail

Semiconductor Equipment revenues improved 16.5% year over year to \$125.1 million (37% of the total revenues). The company witnessed growing investments in foundry/logic, which remained a tailwind. Further, solid memory demand and positive contributions from prior design wins contributed to the product line's revenues. Additionally, strong momentum across semiconductor power solutions was a tailwind.

However, softness in North America impacted the performance of semiconductor service business during the reported quarter.

Industrial & Medical revenues improved 106.8% year over year to \$96.7 million (28.6% of revenues). This was driven by momentum of the company's industrial embedded power products across 3D printing, robotics, food processing, motion control and horticulture applications. Moreover, growing presence in the medical equipment market and solid momentum across medical device customers acted as tailwinds. Additionally, accretive nature of the previous design wins benefited the top line of this product line.

However, weak demand across industrial production and auto industries especially in the Europe and China remained a headwind.

Telecom & Networking revenues were \$38.5 million (11.4% of revenues), which increased from \$10.02 million in the previous quarter. The company continued to gain from 5G infrastructure and deployment.

However, sluggish IT infrastructure investments led to weak demand from both telecom infrastructure and networking equipment OEM.

Data Center Computing revenues were \$77.9 million (23% of revenues), up significantly from \$13.5 million in the previous quarter. Strengthening momentum across hyperscale customers aided the company in securing multiple design wins during the reported quarter. Additionally, the company gained traction across key enterprise computing and storage customers. All these factors drove the top line of this product line in the reported quarter.

Operating Results

In fourth quarter, non-GAAP gross profit was 35.9%, which contracted significantly from 49.4% in the year-ago quarter due to acquisition related costs and facility expansion expenses.

Non-GAAP operating expenses came in \$78 million, up 64.4% year over year.

Further, non-GAAP operating margin was 12.8%, contracting from 580 basis points (bps) from the prior-year quarter.

Balance Sheet & Cash Flow

As of Dec 31, 2019, cash, cash equivalents and Marketable securities were \$349.1 million compared with \$341.1 million Sep 30, 2019.

During the fourth quarter, cash flow from operations was \$19 million compared with \$10.5 million in the third quarter.

Quarter Ending **12/2019**

Report Date	Feb 18, 2020
Sales Surprise	8.25%
EPS Surprise	24.29%
Quarterly EPS	0.87
Annual EPS (TTM)	2.44

Capital expenditure during the reported quarter stood at \$9.5 million, up from \$8.9 million in the prior quarter.

Guidance

For first-quarter 2020, Advanced Energy expects non-GAAP earnings between 40 cents and \$1 per share.

Revenues are anticipated in the range of \$280-\$340 million.

The company expects demand in semiconductor equipment market to be up in the mid-teens in the current quarter on a sequential basis owing to strong bookings.

However, macro headwinds are likely to impact demand across industrial and medical verticals, which is expected to be down sequentially.

Recent News

On **Jan 7, 2020**, Advanced Energy's Artesyn Embedded Power unveiled a new 1300-watt quarter-brick dc-dc converter, BDQ1300. The latest converter is likely to aid the company's momentum across 48-volt data center and communications network equipment as it is capable of accepting an input voltage range from 40 to 60 volts.

On **Dec 10, 2019**, Advance Energy announced the opening of its Advanced Materials Processing (AMP) Showcase Lab near Frankfurt for plasma deposition and materials characterization.

On **Oct 22, 2019** Advanced Energy introduced AE's PowerInsight, a big data analytics enabling solution for critical power delivery systems.

Valuation

Advanced Energy shares are down 29.2% in the year-to-date period and 12.1% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are down 8.5% and 2.3% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry is up 30.1% and the sector is up 6.9%.

The S&P 500 index is down 9.6% in the year-to-date period and 0.4% in the past year.

The stock is currently trading at 19.36X forward 12-month earnings, which compares to 21.07X for the Zacks sub-industry, 23X for the Zacks sector and 20.71X for the S&P 500 index.

Over the past five years, the stock has traded as high as 33.89X and as low as 8.04X, with a 5-year median of 17.26X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$58 price target reflects 20.19X forward 12-month earnings.

The table below shows summary valuation data for AEIS

Valuation Multiples - AEIS					
		Stock	Sub-Industry	Sector	S&P 500
P/E F 12M	Current	19.36	21.07	23	20.71
	5-Year High	33.89	22.46	23	20.71
	5-Year Low	8.04	12.36	16.71	15.19
	5-Year Median	17.26	17.19	19.23	17.44
P/S F 12M	Current	1.72	6.05	3.51	3.28
	5-Year High	5.58	6.45	3.59	3.44
	5-Year Low	1.03	3.63	2.32	2.54
	5-Year Median	3.16	4.84	3.1	3.01
EV/EBITDA TTM	Current	19.9	24.77	11.33	10.66
	5-Year High	32.12	30.6	12.85	12.87
	5-Year Low	3.75	9.4	7.56	8.27
	5-Year Median	12.3	19.77	10.63	10.78

As of 04/30/2020

Industry Analysis Zacks Industry Rank: Bottom 31% (175 out of 253)



Top Peers

Company (Ticker)	Rec	Rank
Applied Materials, Inc. (AMAT)	Neutral	3
AMETEK, Inc. (AME)	Neutral	3
ASML Holding N.V. (ASML)	Neutral	3
KLA Corporation (KLAC)	Neutral	4
Lam Research Corporation (LRCX)	Neutral	3
MKS Instruments, Inc. (MKS)	Neutral	3
Teradyne, Inc. (TER)	Neutral	3
Brüel & Kjær Corporation (BRKR)	Underperform	4

Industry Comparison Industry: Semiconductor Equipment - Wafer Fabrication				Industry Peers		
	AEIS	X Industry	S&P 500	KLAC	MKSI	TER
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	4	-	-	4	3	3
VGM Score	D	-	-	B	C	B
Market Cap	2.14 B	41.34 B	20.61 B	25.72 B	5.50 B	10.42 B
# of Analysts	5	7	14	7	5	8
Dividend Yield	0.00%	1.27%	2.11%	2.07%	0.80%	0.64%
Value Score	D	-	-	D	C	D
Cash/Price	0.18	0.11	0.06	0.06	0.10	0.08
EV/EBITDA	23.55	18.42	11.87	16.59	16.87	15.03
PEG Ratio	2.02	1.30	2.47	1.48	NA	1.54
Price/Book (P/B)	3.15	6.72	2.67	9.57	2.70	6.72
Price/Cash Flow (P/CF)	18.63	16.55	10.66	16.74	14.62	17.07
P/E (F1)	20.25	19.42	19.01	16.85	19.69	20.31
Price/Sales (P/S)	2.71	3.45	2.10	4.87	2.79	4.16
Earnings Yield	4.50%	5.26%	5.05%	5.94%	5.08%	4.92%
Debt/Equity	0.61	0.58	0.72	1.26	0.43	0.29
Cash Flow (\$/share)	2.98	5.81	7.01	9.80	6.86	3.66
Growth Score	C	-	-	C	C	C
Hist. EPS Growth (3-5 yrs)	14.90%	26.99%	10.88%	29.49%	33.93%	22.47%
Proj. EPS Growth (F1/F0)	2.46%	7.04%	-7.32%	15.08%	12.61%	7.65%
Curr. Cash Flow Growth	-35.66%	-30.45%	5.92%	18.14%	-27.42%	9.31%
Hist. Cash Flow Growth (3-5 yrs)	8.19%	14.24%	8.55%	18.07%	24.72%	3.50%
Current Ratio	2.71	2.72	1.23	2.55	4.51	3.31
Debt/Capital	37.83%	36.54%	43.84%	55.85%	30.11%	22.29%
Net Margin	8.23%	20.32%	11.08%	21.55%	9.99%	21.80%
Return on Equity	13.49%	28.82%	16.44%	50.92%	13.76%	38.16%
Sales/Assets	0.65	0.72	0.54	0.58	0.58	0.91
Proj. Sales Growth (F1/F0)	51.79%	10.04%	-1.42%	26.02%	6.90%	13.09%
Momentum Score	D	-	-	A	D	A
Daily Price Chg	-6.73%	-7.65%	-2.39%	-6.71%	-7.15%	-7.10%
1 Week Price Chg	-8.50%	-3.59%	-1.74%	2.30%	-0.41%	-2.87%
4 Week Price Chg	23.15%	16.19%	17.07%	23.90%	28.83%	17.05%
12 Week Price Chg	-23.99%	-21.24%	-18.53%	-4.45%	-11.86%	-12.37%
52 Week Price Chg	-3.07%	18.55%	-9.82%	28.02%	12.04%	27.74%
20 Day Average Volume	282,552	1,467,079	2,641,413	1,204,765	388,603	2,259,255
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	-0.12%	0.00%
(F1) EPS Est 4 week change	-27.21%	-4.76%	-6.62%	-2.91%	-14.66%	0.74%
(F1) EPS Est 12 week change	-25.97%	-12.63%	-13.28%	-2.42%	-17.42%	-6.17%
(Q1) EPS Est Mthly Chg	-32.37%	-7.41%	-11.97%	-1.07%	-15.17%	41.15%

Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we have an excellent balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

Value Score	D
Growth Score	C
Momentum Score	D
VGM Score	D

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

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