INVESTOR PRESENTATION 2014

Q1 2014 Earnings Call May 6, 2014

Safe Harbor

The company's expectations with respect to guidance to financial results for the second quarter ending June 30, 2014, anticipated cost savings, profitability, market performance, demand for products, future charges, positioning of the company and other statements that are not historical information are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934.

Forward-looking statements are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. Such risks and uncertainties include, but are not limited to: (a) the effects of global macroeconomic conditions upon demand for our products; (b) the volatility and cyclicality of the industries the company serves, particularly the semiconductor industry; (c) the volatility and seasonality of renewable energy projects and inverter sales; (d) the acquisition of Solvix, REFUsol, the Power Control Modules product line from AEG Power Solutions GmbH ("PCM"), and HiTek Power Group (collectively, the "Acquisitions") including the successful integration of the operations of such Acquisitions, the retention of key employees of such Acquisitions, expectations surrounding the benefits of the Acquisitions' products, the total available market and expected sales of such products, and product cost expectations surrounding the fabless manufacturing models for REFUsol and PCM; (e) with regard to the renewable energy market, the continuation of feed-in-tariffs and other incentives in Europe and elsewhere for inverters, including the RPS (renewable portfolio standards) and the timing and availability of grant programs in North America and Europe; (f) renewable energy project delays resulting from solar panel price changes and increased competition in the solar inverter equipment market, (g) the timing of orders received from customers, (h) the company's ability to realize benefits from cost improvement efforts including avoided costs, any restructuring plans and any inorganic growth, (i) the ability to obtain materials and manufacture products; and (j) unanticipated changes to management's estimates, reserves or allowances.

These and other risks are described in Advanced Energy's Form 10-K, Forms 10-Q and other reports and statements filed with the Securities and Exchange Commission. These reports and statements are available on the SEC's website at www.sec.gov. Copies may also be obtained from Advanced Energy's website at www.advancedenergy.com or by contacting Advanced Energy's investor relations at 970-407-6555.

Forward-looking statements are made and based on information available to the company on the date of this presentation. As reiterated previously, aspirational goals and targets discussed on the conference call or in the presentation materials should not be interpreted in any respect as guidance. The company assumes no obligation to update the information in the press release or this presentation.

INVESTOR PRESENTATION 2014

Garry Rogerson CEO

Q1 2014 Highlights

- Total Revenue of \$140.9M (+26% y/y)
- Non-GAAP* EPS of \$0.43 and GAAP EPS of \$0.35
- Operating profit grew 119% y/y, down 16% q/q
- Ended quarter with \$123M in cash
- Shenzhen-manufactured products produced strong margins and advantageous tax rate
- 1MW and 3-phase string in transition to Shenzhen produced lower margins
- Impact of harsh winter weather impacted inverters

*Non-GAAP EPS excludes restructuring charges, stock based compensation, and intangible amortization.

Expanding Product Lines

- Ramping production and increased efficiencies to reduce manufacturing inverter costs next 2-3 quarters
- Products well received
 - Pulsed RF and bi-polar DC expanding applications
 - Increasing shipments of 1MW and 3-phase string inverters
 - Large inverter supply contracts with key customers
- Manufacturing & R&D model integral to success
- Winning designs; gaining share



Driving to New Aspirational Goals

- 4 Acquisitions complete
 - >Adding products
 - Diversifying applications
 - Expanding geographies
- Cash generation for acquisitions, buybacks
- Revenue growth from multiple channels
- Potential Taiwan panel and solar cell import duties could impact utility business

INVESTOR PRESENTATION 2014

Yuval Wasserman President, Precision Power Products

Precision Power Products Highlights

- Revenues up 34% y/y to \$82.9M
- Strength in industrial applications
- 2 Acquisitions add product lines
 - HiTek Power Group
 - New semiconductor applications
 - New industrial applications
 - >AEG's Power Control Modules
 - Precision power control in industrial applications

POWER CONVERSION APPLICATIONS











Precision Power Applications

- Semiconductor down modestly with industry
 - Close to recent peak levels
 - End of first phase investment cycle
 - Pause in capex spending
 - Growing presence in high demand applications
- Flat Panel pause after large 2H13 purchases
 - Cyclical return to growth outside of LCD capex
 - Touch panel share gains
- Renewables decline delayed glass purchases in China
- Industrials growth in base business and new product lines
- Service volumes temporary customer budget constraints

New Precision Power Products

Won 86% of designs pursued in quarter

- 16 of 19 in Semiconductor Etch, advanced 3D etch, VNAND, and MEMS
- 41 of 47 in Industrials Glass coating, additional hard coatings, and new FPD touch panels

Powerful, distributed R&D driving share gains

- RF power sub-systems
- DC power sub-systems
- Remote plasma sources

INVESTOR PRESENTATION 2014

Danny Herron CFO

Q1 Financial Highlights

- Total Revenues \$141M, +26% y/y
- Non-GAAP adjusted net income of \$18M, +55% y/y
- GAAP EPS \$0.35; Non-GAAP EPS \$0.43

Effective tax rate of 12.5%

Ended quarter with \$123M of cash & investments

\$30M used for acquisition of AEG's Power Control Modules



Revenues by Application

Market (\$ in millions)	Q1′14	Q4′13	Q1′13
DS & Industrial	\$11.0	\$7.9	\$7.4
Flat Panel Display	\$2.2	\$3.7	\$8.7
Inverters	\$58.1	\$64.9	\$50.0
Renewables	\$1.6	\$4.4	\$0.5
Semiconductor	\$56.3	\$59.4	\$32.7
Service	\$11.8	\$12.3	\$12.5
TOTAL	\$140.9	\$152.6	\$111.8

P&L Review

(\$ in Millions, except GM% & EPS)	Q1'14	Q4'13	Q1'13
Revenues	\$140.9	\$152.6	\$111.8
Gross Margin \$	\$52.7	\$58.8	\$41.8
Gross Margin %	37.4%	38.6%	37.4%
Operating Income*	\$16.9	\$20.0	\$7.7
Net Income	\$14.7	\$34.4	\$6.8
EPS	\$0.35	\$0.83	\$0.17
Non-GAAP EPS**	\$0.43	\$0.67	\$0.29

*Excludes restructuring charges.

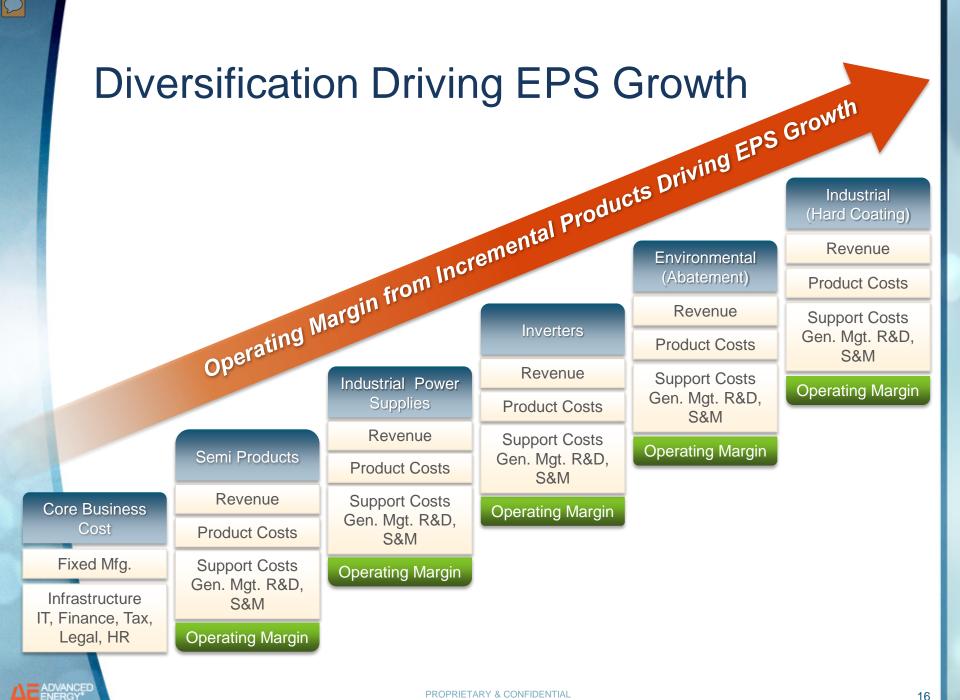
ADVANCED

**Non-GAAP EPS excludes restructuring charges, stock based compensation, intangible amortization, acquisition-related costs and nonrecurring discrete tax benefits.

Balance Sheet

- Ended quarter with \$123M
- Inventory largely flat
- Trade working capital increase of \$4M from Q4

(\$ in Millions)	Q1'14	Q4'13	Q1'13
Cash & Investments	\$122.7	\$149.7	\$182.3
Accounts Receivable	\$137.0	\$125.8	\$96.7
Inventory	\$109.7	\$109.8	\$79.5
Total Assets	\$666.2	\$653.0	\$551.5
Liabilities	\$190.1	\$188.5	\$146.7
Shareholders Equity	\$476.1	\$464.5	\$404.8



Q2'14 Guidance*

	Q1 (as reported)	Q2 Guidance Range	
Revenue (in millions)	\$140.9	\$135	\$145
GAAP EPS**	\$0.35	\$0.26	\$0.31
Non-GAAP EPS***	\$0.43	\$0.34	\$0.40

* Estimates as of Q114 earnings conference call. The company assumes no obligation to update guidance.

- ** Excludes restructuring.
- ***Non-GAAP EPS excludes restructuring charges, stock based compensation and amortization of intangibles. Q2 non-GAAP guidance assumes stock based compensation of \$1.8M and amortization of intangibles of \$1.8M, approximately \$2 to \$3 million, and acquisition-related costs of approximately \$400,000. PROPRIETARY & CONFIDENTIAL



INVESTOR PRESENTATION 2014

Thank You