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## The Lighthouse - Clean Technology

Second Quarter 2009



*A Venture Capital and M&A update on Clean Technology*

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### Key Highlights:

While Cleantech M&A and Venture Capital activity diminished during Q1 2009, Clean Technology companies witnessed renewed strength in the private markets during Q2 2009, as the effects of the Obama Administration's stimulus plan increased the attractiveness of the sector. The Lighthouse reports the metrics for these transactions when available.

### Venture Capital:

- Cleantech venture investment rebounded in the second quarter, after declining significantly in Q4 2008 and Q1 2009.
- The leading sector within Cleantech this quarter was transportation – specifically, vehicles, biofuels and advanced batteries – reflecting attention on the automotive sector and the significant government stimulus afforded to clean transportation technology.

### M&A:

- Clean technology M&A totaled an estimated 279 transactions in Q2 2009, of which figures were disclosed for 177 transactions adding up to \$13.3 billion. This is up 2.9x Q1 2009, which saw 244 M&A transactions, of which 159 were disclosed for a total of \$4.6 billion.

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## EXECUTIVE SUMMARY

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Although the U.S. economic outlook has improved noticeably since the beginning of the year - with most GDP forecasts calling for minimal, but positive growth during the second half of 2009 - there are still several headwinds the U.S. economy must navigate through before reaching full recovery.

In June, the U.S. unemployment rate reached 9.5% - a level not seen for 26 years. Overall, 7.2 million jobs have disappeared since the start of the recession in December 2007. Unless this trend is mitigated, U.S. consumers, whose wallets are already stretched beyond their means, may trigger another wave of foreclosures and commercial real estate defaults. Lenders and private investors alike, fully aware of this reality, but enticed by improving economic fundamentals, have cautiously begun to facilitate greater liquidity within the capital markets. "Cautious optimism," a phrase so eloquently coined by the Federal Reserve Chairman Ben Bernanke, describes accurately the venture capital community's enthusiasm for the clean technology sector during Q2 2009.

After two consecutive quarters of double digit declines, clean technology companies have welcomed the renewed interest from the venture capital community. 94 clean technology companies raised a total of \$1.2 billion during Q2 2009 - a 12% increase from the previous quarter. Average round size was \$12.9 million, down 63% from the same period a year ago, but up slightly from Q1 2009. Venture firms are continuing to invest strategically, reflecting the importance of presenting a sound business model and demonstrated revenue stream.

Geographically, North America continued to attract the most capital, grabbing 66% of total funding, while India showed the greatest growth. Indian clean technology companies attracted 11% of the total venture investment within Cleantech this quarter - a solid increase from the 1% captured the quarter prior.

Clean transportation technology - specifically, vehicles, biofuels, and advanced batteries/fuel cells - attracted \$607 million in venture funding or 5.3x the amount raised for solar, last quarter's leading sector in terms of capital raised. Heightened awareness stemming from the highly publicized restructurings of General Motors and Chrysler, coupled with the significant stimulus funds dedicated to the sector helped spur greater interest in several companies such as V-Vehicles, Fisker Automotive, Think Global, ETV motors, Solazyme and A123 Systems. Solar, a venture sweet spot for several quarters in the last few years, dropped to its lowest level of investment in three years with only \$114 million raised.

Although a single positive quarter does not signify a trend, there are several factors that Pharus believes bodes well for the clean technology sector for the rest of 2009:

1. **Improving Economic Fundamentals:** U.S. economic growth prospects have improved noticeably after declining 6.3%, 5.5% and 1.0% during Q4 2008, Q1 2009 and Q2 2009, respectively. Although expected to be minimal, GDP growth is

forecast to be positive during the second half of 2009, which marks a significant reversal in market sentiment from the beginning of the year.

2. **Increased Investor Appetite for Risk:** The Dow Jones Industrial Average gained 13.4%, the S&P 500 gained 17.7%, and the NASDAQ gained 22.8% in Q2 2009. Although all three major indices are still down 20% to 28% year-to-date, Q2 2009 marked a significant change in investor sentiment towards risk. With increasing confidence that the worst has passed, investors have stepped up their allocations into emerging markets, equities and in growing industries such as Cleantech.
3. **Favorable Legislative Environment:** A central component of the Obama administration's economic recovery program is the stimulation of the Cleantech industry. To do so, over \$75 billion in direct funding, loan guarantees and tax credits/subsidies have been dedicated to the sector through the American Reinvestment and Recovery Act of 2009, which was instituted in Q1 2009. Additionally, the Federal government is proposing the American Clean Energy and Security Act of 2009, which is currently in the Senate for debate. This program establishes a national cap-and-trade program, raises energy efficiency standards, and creates a renewable energy production requirement for utilities. The bill also dedicates \$90 billion in state programs to promote clean energy, \$60 billion to develop carbon capture and sequestration technologies, \$20 billion for the development of advanced clean vehicles, and \$20 billion for basic research and development into clean energy and energy efficiency.
4. **Strengthening M&A Market:** M&A activity within the Cleantech space remained resilient during the first half of 2009, despite the several headwinds facing the global economy. The number of M&A deals transacted rose during Q2 2009 to 279 from 244. Average transaction size increased sharply from \$29.1 million to \$75.3 million, reflecting rising valuations and increasing confidence in Cleantech companies. Aggregate M&A transaction value for the second quarter of 2009 was \$13.3 billion or 2.9x the value set during the quarter prior.
5. **Thawing IPO Market:** Although IPOs continue to remain sparse, hopes of a revival within the space have become stronger than they were a few quarters ago. During the second quarter of 2009, China Metal Recycling (HKG:0773) began trading on the Hong Kong Future Exchange and Duoyuan Global Water (NYSE:DGW) was listed on the NYSE and raised approximately \$186 million and \$88 million, respectively. Cleantech companies that may be planning an IPO soon include Tesla, A123 Systems, Silver Spring and Solyndra.
6. **Rising Popularity of "Green" Legislation Globally:** Sustainability has become an important political theme not only in the United States, but globally. Both developing countries such as Brazil, Chile, Peru and the Philippines and industrialized countries such as Japan, Germany, and China have legislated or are poised to introduce policies and laws fostering clean energy. The Copenhagen Meeting scheduled for this upcoming December is billed to "seal the deal" on an international climate agreement.

In this report, we review relevant industry transactions and trends. Hopefully, you will find our report interesting, informative and helpful. As you have questions, thoughts or business inquiries, please feel free to contact us at any time. Since this report will continue to be an evolving information resource, please feel free to send us any thoughts about how we might improve the report to enhance its usefulness to you.

We look forward to working and/or speaking with many of you in the coming months.

Sincerely,

Pharus Advisors, LLC

*(Sources: Wall Street Journal, Bloomberg, Reuters, Capital IQ, Greentech Media, The Cleantech Group, ZEPHYR and Pharus research)*

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**Industry News - Q2 2009**

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*Wind***A-Power Generation Raises \$40 Million Through Private Placement**

On June 18<sup>th</sup>, A-Power Energy Generation Systems, Ltd. (Nasdaq: APWR), a China-based power generator systems and micro power grid producer, announced a private placement of senior convertible notes for gross proceeds of \$40 million. The round included participation from several institutional investors. The Company will use the proceeds for expansion of their production capacity, enhancement of research and development, general corporate purposes, and securing of components for its ramp-up in its wind turbine assembly business.

**Yeong Guan Energy Technology Group Raises \$30 Million from New Investors**

On June 2<sup>th</sup>, Yeong Guan Energy Technology Group, a China-based manufacturer and distributor of wind turbine components, announced that it has received \$30 million in a round of funding led by new investor STIC Investments, Inc. The round included participation from new investor MC Capital Asia Pacific Ltd. STIC Investments, Inc made an investment of \$20 million and MC Capital Asia Pacific Ltd of \$10 million. The Company plans to use the proceeds to fund its machinery expansion along with the new manufacturing facility in LiYang City and other long-term development projects across China.

**Caliber Energy Raises \$50 Million**

On May 20<sup>th</sup>, Caliber Energy Inc. (OTCPK: CLBN), a Atlanta-based renewable energy producer, announced a private placement of promissory notes for gross proceeds of \$50 million. The Company will use the proceeds to fund the acquisition of 200 MW Xinjiang Wind Farm Project and for working capital.

**Vestas Wind Systems Raises \$1 Billion for Strategic Purposes**

On April 28<sup>th</sup>, Vestas Wind Systems A/S (CPSE: VWS), a Denmark-based manufacturer of wind turbines and wind power systems, announced a private placement of 18.5 million common shares for gross proceeds of \$1 billion. Institutional and professional investors in Denmark and internationally invested in the transaction. The shares represent 9.9% of the capital of the company. The Company will use the proceeds to further strengthen its capital resources, especially to quickly and efficiently exploit the opportunities offered by the credit crisis in a technology based industry.

**Catch the Wind Raises \$19.1 Million from Private Investors**

On April 28<sup>th</sup>, Catch the Wind, Ltd. (TSXV: CTW.S), a Virginia-based manufacturer of laser-based wind sensor systems, announced a private placement of 11.5 million common shares for gross proceeds of \$19.1 million. Investors were not disclosed. The Company will use the proceeds to further develop the efficient manufacture of its Vindicator laser wind sensor and other laser-based wind sensors and for general working capital purposes.

**Southwest Windpower Raises \$10 Million for Expansion**

On April 6<sup>th</sup>, Southwest Windpower, Inc., an Arizona-based wind turbine manufacturer, announced that it has raised \$10 million of funding. The round included participation from returning investors Altira Group LLC, RockPort Capital Partners, CTTV Investments LLC, NGP Energy Capital Management, and GE Energy Financial Services. The Company will use the proceeds to broaden its presence, help bring cost-effective small

wind energy to new residential, commercial, and off-grid customers, grow its sales offices in Europe, and expand in Asia, and to help expand its product line to develop more efficient wind systems.

#### *Solar*

#### **SPG Solar Raises \$13 Million in Private Capital**

On June 30<sup>th</sup>, SPG Solar LLC, a photovoltaic solar system designer and installer, announced that it has received \$13 million in a round of funding from Global Environment Fund and Robeco Group N.V. The Company will use the proceeds to support its growth both nationally and internationally.

#### **Semprius Inc. Raises \$6.4 Million during Series B**

On June 9<sup>th</sup>, Semprius, Inc., a North Carolina-based developer of concentrated photovoltaic solar modules, announced that it has raised \$6.4 million in Series B round of funding. The round included participation from existing investors ARCH Venture Partners, Applied Ventures, Illinois VENTURES, and Intersouth Partners and new investors In-Q-Tel and Global Venture Capital Inc's GVC Investment Fund. The Company will use the proceeds to complete development and begin field deployment of solar modules to selected customers.

#### **CaliSolar, Inc. Raises \$60 Million in Private Capital**

On May 26<sup>th</sup>, CaliSolar, Inc., a Sunnyvale-based manufacturer and distributor of wafer-based solar cells, announced that it has raised \$60 million in its round of funding. As part of the round, the company issued common stock, along with options, or warrants or other rights to acquire another security. The round saw participation from existing investors Hudson Clean Energy Partners, Advanced Technology Ventures, and Globespan

Capital Partners. The Company will use the proceeds for a plant that makes cells out of metallurgical-grade silicon.

#### **Bloo Solar, Inc. Raises \$7.8 Million from Accredited Investors**

On May 22<sup>th</sup>, Bloo Solar, Inc., a Sacramento-based manufacturer of nano-structured photovoltaic cells, announced a private placement of Series A Preferred Stock for gross proceeds of \$7.8 million. The securities were issued to twelve investors.

#### **Tigo Energy Inc. Raises \$10 Million via Private Placement**

On May 18<sup>th</sup>, Tigo Energy Inc., Los Gatos-based developer of solar energy systems, announced that it raised \$10 million in its round of funding. The Company's series B round was led by Israel Cleantech Ventures and also included participation from existing investors Matrix Partners, OVP Venture Partners, and Clal Energy Ltd. The Company will use a portion of the proceeds for making certain payments to its executive officers or directors.

#### **Enphase Energy, Inc. Raises \$22.5 Million from Private Investors**

On May 8<sup>th</sup>, Enphase Energy, Inc., a Petaluma-based manufacturer of solar energy management systems, announced that it has raised \$22.5 million in a round of funding led by new investor Madrone Capital Partners. The round saw participation from new investor Bay Partners and existing investors including Applied Ventures, LLC, Rockport Capital Partners, and Third Point LLC. The Company will use the proceeds to ramp up manufacturing, accelerate new product development, and to expand into new geographic markets.

#### **Skyline Solar Raises \$24.6 Million in its Series A Round**

On May 4<sup>th</sup>, Skyline Solar, a Mountain View-based manufacturer of high gain solar

arrays, announced that it has raised \$24.6 million in its Series A round of funding from New Enterprise Associates. The round included participation from financial and strategic investors.

### **Cobol Technologies Raises \$30 Million in Private Capital**

On April 30<sup>th</sup>, Cobol Technologies, an India-based solar electricity generator and distributor, announced that it has raised \$30 million in funding. The round included participation from Pangea Emerging Infrastructure fund, a fund managed by Pangea Capital Limited.

### **Ausra, Inc. Raises \$25.5 Million**

On April 21<sup>st</sup>, Ausra, Inc., a Palo Alto-based solar energy generator and distributor, announced the raising of \$25.5 million. The round included participation from existing investors Khosla Ventures, Kleiner, Perkins, Caufield & Byers, KERN Partners, Generation Investment Management LLP, and Starfish Ventures. The Company will use the proceeds for expansion and acceleration of its solar thermal energy equipment supply business.

### *Biomass/Biofuel*

### **Rentech Raises Private Capital**

On June 24<sup>th</sup>, Rentech, Inc. (AMEX:RTK), a Los Angeles-based ultra-clean synthetic fuel and chemical producer, announced a registered direct offering of 11 million common shares for gross proceeds of \$6.4 million with certain institutional investors. The Company will use the proceeds for general corporate and working capital purposes, including funding a portion of the development costs related to renewable synthetic fuels and power project in Rialto, California and for capital expenditures.

### **Energymixx Raises Capital for Solar and Wind Development**

On June 15<sup>th</sup>, Energymixx AG (DB:EM2), a

Switzerland-based renewable energy generating system builder and operator, announced a private placement of 11.6 million common shares for gross proceeds of \$8.0 million. Investors were not disclosed. Energymixx AG will use the proceeds to rapidly move ahead with the build out of its solar and wind energy concessions in Italy, and to support the growth of its business in Europe, the United States of America and Brazil.

### **Solazyme Raises \$57 Million in Series C**

On June 8<sup>th</sup>, Solazyme, Inc., a South San Francisco-based algal synthetic biology company, announced that it had raised \$57 million in its Series C round of funding co-led by existing investors Braemer Energy Ventures and Lightspeed Venture Partners. The round saw participation from new investor VantagePoint Venture Partners and existing investors including Harris & Harris Group, Inc., The Roda Group, and Jerry Fiddler, Chairman of the company. The Company has raised \$76 million in funding to date. Solazyme, Inc. will use the proceeds for commercialization of their biofuel products.

### **Agri.Capital Raises \$81 Million for Expansion**

On May 18<sup>th</sup>, Agri.Capital, a German subsidiary of United Biofuels Europe AG, raised \$81 million for organic growth, expansion of presence in Europe and to explore possible acquisition opportunities. Investors include TCW, Altima Partners, Green Partners, Halcyon Asset Management and Ludgate Investments. In addition to raising capital, Agri.Capital also entered into a \$14 million mezzanine debt facility with Ecofin.

### **Convanta Raises \$400 Million via Private Placement**

On May 18<sup>th</sup>, a New Jersey-based developer and operator of infrastructure for the conversion of waste into energy, announced

raising \$400 million through a private placement of cash convertible senior notes due 2014. Barclays Capital Inc., Citigroup Global Markets Inc., J.P. Morgan Securities Inc., Calyon Securities (USA) Inc., Avondale Partners LLC and Deutsche Bank Securities Inc. acted as the initial purchasers in the transaction. Covanta Holding Corporation will use the proceeds for working capital and general corporate purposes which may include funding a portion of the construction costs for 1,700 metric tons-per-day energy-from-waste facility in Dublin, Ireland.

#### **INFINIA Raises \$50 Million**

On May 27<sup>th</sup>, INFINIA, Kennewick-based developer of renewable energy generators and systems, announced that it received gross proceeds of \$50 million in a round of funding. The round included participation from existing investors Vulcan Capital, Khosla Ventures and other undisclosed investors.

#### **Mission Newenergy Raises \$14.9 Million**

On April 28<sup>th</sup>, Mission Newenergy Limited (ASX: MBT), an Australian builder and operator of biodiesel refineries, announced a private placement of 24.1 million units for gross proceeds of \$3.5 million with over forty accredited international investors. On June 17<sup>th</sup>, the Company announced that it has issued an additional 75.9 million units for gross proceeds of \$11 million. On June 19<sup>th</sup>, the company announced that it has issued another 93 million units for gross proceeds of \$1.4 million. Mission Newenergy Limited will use the proceeds for completing its second biodiesel facility, investment in Jatropha business, investment in lingo-cellulostic technology, and for general corporate purposes.

#### **Huadian Power International Corp. Raises \$493.7 Million from Private Investors**

On April 8<sup>th</sup>, Huadian Power International Corporation Limited (SEHK: 1071), a

subsidiary of China Huadian Corp. and renewable energy producer, announced a private placement of 750 million shares for gross proceeds of \$493.7 million. The shares were issued to over 10 qualified investors including existing investor China Huadian Corp. The shares issued represent approximately 11% of the enlarged issued share capital of the company. Huadian Power International Corporation Limited will use the proceeds for the coal-power generation projects of Phase II Project of Huadian Ningxia Lingwu Power Generation Company Limited, the hydropower projects of Sichuan Huadian Luding Hydropower Company Limited, the wind power projects of Huadian Hebei Guyuan Wind Power Project, the heat-power co-generation projects of Huadian Luohe Power Generation Company Limited, and for working capital purposes.

#### *Smart Grid*

#### **AlertMe.com Raises \$13 Million from Private Investors**

On June 10<sup>th</sup>, AlertMe.com Ltd., UK-based intelligent system service provider, announced that it has raised \$13 million in its series B round of funding. The round saw participation from Good Energies Inc., Index Ventures, Sustainable Energy Technology Venture Partners, and VantagePoint Venture Partners. AlertMe.com Ltd. will use the proceeds to extend its product development program and to continue to ramp up its distribution strategy.

#### **Tendril Networks Raises \$30 Million in Round C**

On June 9<sup>th</sup>, Tendril Networks, a Boulder-based provider of residential energy systems, raised \$30 million for their round C financing from VantagePoint, Good Energies, RRE Ventures, Appian Ventures, and Vista Ventures. The Company will use the proceeds to increase the scale of its

TREE Platform and to expand partnerships with appliance manufacturers and utilities.

### **Powerit Solutions Raises \$6 Million from New and Existing Investors**

On May 5<sup>th</sup>, Powerit Solutions, subsidiary of Powerit Holdings, Inc. and manufacturer of energy demand response control solutions, announced that it has raised \$6 million of funding. The round included participation from new investors Siemens Venture Capital GmbH and Arcelor Mittal, Asset Management Arm's Clean Technology Venture Capital Fund, L.P. and existing investors, @Ventures and Expansion Capital Partners, LLC. Powerit Solutions will use the proceeds to accelerate its continuing growth into new industrial and commercial markets, solidify leadership in remote and on-site energy management, continue product development efforts for key industrial vertical markets, continue growth of its proprietary and timely energy management products and expanding and intensifying sales efforts worldwide.

### **Zenergy Raises \$14 Million for Expansion**

On April 29<sup>th</sup>, Zenergy (AIM:ZEN), a UK-based manufacturer of high-temperature superconductor devices and materials used to create high-efficiency power grids, raised \$14 million to expand its commercial activities in the U.S. and for R&D purposes.

### **Ember Corp. Raises \$8 Million to Expand Presence in Asia Pacific**

On April 6<sup>th</sup>, Ember Corporation, a Boston-based developer of wireless sensor and control network technologies, announced that it has raised \$8 million in a round of financing. The round saw participation from New Atlantic Ventures and existing investors Polaris Venture Partners, Inc., Stata Venture Partners, Inc., GrandBanks Capital Inc., RRE Ventures LLC, Chevron Technology Ventures L.L.C., WestLB Mellon Asset Management, Vulcan Capital, and ePlanet Ventures. The Company has

raised \$89 million in funding to date. Ember Corporation will use the proceeds to expand its sales channels in Australia, New Zealand, India and Hong Kong.

### *Transportation*

### **V-Vehicle Raises \$100 Million in Venture Capital**

On June 17<sup>th</sup>, V-Vehicle, a San Diego-based manufacturer of fuel-efficient vehicles, raised \$100 million from Kleiner Perkins Caufield & Byers and T. Boone Pickens for the retooling of a production facility in Louisiana, which will build high-efficiency, gas powered vehicles. V-Vehicle ultimately aims to raise \$400 to \$500 million through both equity and loans, including \$263 million in federal loans. The State of Louisiana has already committed \$67 million to the project.

### **FuelCell Energy Raises \$24.2 Million for Expansion**

On June 16<sup>th</sup>, FuelCell Energy, Inc. (NasdaqGM: FCEL), a Danbury-based manufacturer of fuel cells, announced a registered direct offering of 6.7 million common shares for gross proceeds of \$24.2 million. Investors were not disclosed. FuelCell Energy, Inc. will use the proceeds for product development, project financing, expansion of manufacturing capacity, and for general corporate purposes.

### **Advanced Battery Raises \$17 Million from Private Investors**

On June 12<sup>th</sup>, Advanced Battery Technologies Inc. (NasdaqCM: ABAT), New York-based manufacturer of rechargeable polymer lithium-ion batteries, announced a private placement of 7,000 shares of 0% convertible preferred stock for gross proceeds of \$7 million. This is in addition to the Company's private issuance of 10,000 shares of 0% convertible preferred stock for gross proceeds of \$10 million. The transaction included participation from

Downsview Capital, Inc., Iroquois Capital, LP, and Hudson Bay Capital Management LP. The Company will use the proceeds to provide working capital to its recently acquired subsidiary, Wuxi ZhongQiang Autocycle Co., Ltd.

#### **Daimler AG Invests \$50 Million in Tesla Motors, Inc.**

On May 19<sup>th</sup>, Daimler AG (XTRA:DCX) acquired a 10% stake in Tesla Motors, Inc., a San Carlos-based developer of electric vehicles. The financial terms of the deal were not disclosed. On July 13<sup>th</sup>, Aabar Investments PJSC (ADX:AABAR) acquired a 4% stake in Tesla Motors, Inc. from Daimler AG. The financial terms were not disclosed. Daimler AG now holds a 6% stake in Tesla Motors.

#### **A123 Systems Raises \$69 Million in Venture Capital**

On April 13<sup>th</sup>, A123 Systems, a Watertown-based manufacturer of rechargeable lithium-ion batteries and systems, raised \$69 million from GE, Espirito Santo Ventures, DTE Energy Ventures, North Bridge Venture Partners, CMEA Capital, AllianceBernstein, Qualcomm Ventures, Sequoia Capital, MIT Endowment, Conoco Phillips, and Detroit Edison. A123 Systems will use the proceeds to expand its U.S. lithium-ion battery manufacturing and smart grid capabilities. Proceeds will also be used to expand and/or build manufacturing plants in Massachusetts and Michigan.

#### **Fisker Automotive Raises \$85 Million from Venture Firms**

On April 7<sup>th</sup>, Fisker Automotive, an Irvine-based manufacturer of plug-in hybrid

vehicles, raised \$85 million in its fourth round of financing. Investors included Kleiner Perkins Caufield & Byers and Eco-Drive Capital Partners. Proceeds will be used for the development and manufacture of Fisker's Karma plug-in hybrid automobile.

#### **Lilliputian Systems Inc. Raises \$28 Million in Private Capital**

On April 2<sup>th</sup>, Lilliputian Systems, Inc., a Woburn-based micro-fuel cell developer, announced that it has raised \$28 million in funding led by new investor Altira Group LLC. The round included participation from other new investor Stata Venture Partners, Inc. and existing investors Atlas Venture LLP, Fairhaven Capital Partners, LLC, Kleiner, Perkins, Caufield & Byers, and RockPort Capital Partners. Lilliputian Systems, Inc. will use the proceeds for the timely commercial launch of its products.

*Other (Clean Coal, Water/Hydro ... etc.)*

#### **Raser Technologies Raises \$25.5 Million**

On June 30<sup>th</sup>, Raser Technologies, Inc. (NYSE: RZ), Provo-based geothermal energy producer, announced a registered private offering of 8.6 million units for gross proceeds of \$25.5 million. Investors were not disclosed for the transaction. Raser Technologies, Inc. will use the proceeds for general corporate purposes including working capital, power plant construction expenses, well-field development activities for the geothermal power plants and repayment of outstanding obligations, capital expenditures, and development costs.

**Notable Clean Technology Private Placement Transactions**

Date Announced	Company Name	Target Company Location	Investors	Capital Raised (mm)
<b>Wind</b>				
<b>2Q09</b>				
Jun-09	A-Power Energy Generation Systems, Ltd. (NasdaqGS:APWR)	China	Capital Ventures International, L.P., Heights Capital Management, Inc., Hudson Bay Capital Management LP, Hudson Bay Fund LP, Hudson Bay Overseas Fund Ltd, Iroquois Capital, LP, Iroquois Master Fund Ltd., Ramius Advisors, LLC, Ramius Enterprise Master Fund Ltd, Ramius, LLC, RCG PB, Ltd	\$40.0
Jun-09	Yeong Guan Energy Technology Group	China	MC Capital Asia Pacific Ltd., STIC Investments, Inc	\$30.0
May-09	Caliber Energy Inc. (OTCPK:CLBN)	USA	NA	\$10.0
Apr-09	Vestas Wind Systems A/S (CPSE:VWS)	Denmark	NA	\$1,070.7
Apr-09	Catch the Wind, Ltd. (TSXV:CTW.S)	USA	NA	\$19.1
Apr-09	Southwest Windpower, Inc.	USA	Altira Group LLC, Chevron Technology Ventures L.L.C., GE Energy Financial Services, NGP Energy Capital Management, NGP Energy Technology Partners, L.P., RockPort Capital Partners	\$10.0
<b>1Q09</b>				
Mar-09	Western Wind Energy Corp. (TSXV:WND)	Canada	NA	\$3.9
Feb-09	Enfinity Management BVBA	Belgium	Waterland Private Equity Fund IV, Waterland Private Equity Investments BV	\$63.8
Feb-09	Ushdev International Ltd. (BSE:511736)	India	NA	\$26.0
Feb-09	Invenenergy Wind LLC	USA	Leaf Clean Energy Company (AIM:LEAF)	\$30.0
Jan-09	China Huadian New Energy Development Co. Ltd	China	China Huadian Corp., China Huadian Engineering Co., Ltd., Guizhou Wujiang Hydropower Development Corporation Ltd., Huadian Energy Company Ltd. (SHSE:900937), Huadian Power International Corporation Limited (SEHK:1071)	\$29.3
Jan-09	Gangwon Wind Power Co., Ltd.	Korea	Darby Hana Infrastructure Fund Management Company, Darby Overseas Investments, Ltd., Korea Emerging Infrastructure Fund, L.P.	\$26.0
Jan-09	Huayei Electric Co Ltd (SHSE:600290)	China	NA	\$43.7
<b>4Q08</b>				
Dec-08	Tecnoaranda S.L.	Spain	Ade Gestión Sodical, SGECR, S.A., Madrigal Participaciones, S.A.	\$50.6
Dec-08	SkySails GmbH & Co. KG	Germany	Zeppelin Power Systems GmbH & Co. KG	\$19.0
Nov-08	SA Valeco-SPE	France	CDC Capital Investissement	\$28.3
Nov-08	Eolia Renovables de Inversiones, SCR, S.A.	Spain	NA	\$57.6

**Notable Clean Technology Private Placement Transactions**

Date Announced	Company Name	Target Company Location	Investors	Capital Raised (mm)
<b>Solar</b>				
<b>2Q09</b>				
Jun-09	SPG Solar, Inc.	USA	Global Environment Fund, Robeco Group N.V.	\$13.0
Jun-09	Semprius, Inc.	USA	Applied Ventures, LLC, Arch Venture Partners, L.P., Global Venture Capital Inc., Illinois VENTURES, LLC, In-Q-Tel, Inc., Intersouth Partners	\$6.4
May-09	Calisolar, Inc.	USA	Advanced Technology Ventures, Globespan Capital Partners, Hudson Clean Energy Partners	\$60.0
May-09	Bloo Solar, Inc.	USA	NA	\$7.8
May-09	Tigo Energy Inc.	USA	Clal Energy Ltd., Israel Cleantech Ventures, Matrix Partners, OVP Venture Partners	\$10.0
May-09	Enphase Energy, Inc.	USA	Applied Ventures, LLC, Bay Partners, Madrone Capital Partners, RockPort Capital Partners, Third Point LLC	\$22.5
May-09	Skyline Solar, Inc.	USA	New Enterprise Associates	\$24.6
Apr-09	Cobol Technologies Private Limited	India	Pangea Capital Limited, Pangea Emerging Infrastructure Fund Ltd.	\$30.0
Apr-09	Ausra, Inc.	USA	Generation Investment Management LLP, KERN Partners, Khosla Ventures, Kleiner, Perkins, Caufield & Byers, Starfish Ventures Pty Limited	\$25.5
<b>1Q09</b>				
Mar-09	NorSun AS	Norway	Good Energies Inc., Itochu Corp. (TSE:8001), Norsk Hydro ASA (OB:NHY), Scatec ASA	\$70.7
Mar-09	Chint Solar (Zhejiang) Co. Ltd.	China	Cybernaut (China) Capital Management, Shanghai Lianhe Investment Co. Ltd.	\$50.0
Feb-09	Enfinity Management BVBA	Belgium	Waterland Private Equity Fund IV, Waterland Private Equity Investments BV	\$63.8
Feb-09	Sierra Solar Power, Inc.	USA	NA	\$40.0
Feb-09	Borrego Solar Systems, Inc.	USA	NA	\$14.0
Feb-09	Eversol Corp (GISM:3647)	Taiwan	NA	\$11.5
Jan-09	Solyndra, Inc.	USA	NA	\$219.2
<b>4Q08</b>				
Dec-08	Metalkraft AS	Norway	Black River Asset Management LLC, Capricorn Cleantech Fund, Capricorn Venture Partners	\$32.7
Dec-08	Lightwave Power, Inc.	USA	21 Ventures, LLC, The Quercus Trust	\$13.0
Nov-08	Eolia Renovables de Inversiones, SCR, S.A.	Spain	NA	\$57.6
Nov-08	Solexant Corp.	USA	NA	\$18.2
Nov-08	Calisolar, Inc.	USA	Advanced Technology Ventures, Globespan Capital Partners, Hudson Clean Energy Partners	\$101.9
Oct-08	SolarCity Corporation	USA	DBL Investors, Draper Fisher Jurvetson, First Solar, Inc. (NasdaqGS:FSLR)	\$30.0
Oct-08	Trony Solar Corporation	China	Intel Capital, Intel Capital China Technology Fund II, L.P.	\$20.0
Oct-08	Soliant Energy, Inc.	USA	Convexa, GE Energy Financial Services, Nth Power LLC, Rincon Venture Partners, RockPort Capital Partners, Trinity Ventures	\$21.0
Oct-08	Jinko Solar Co., Ltd.	China	China-Israel Value Capital L.P., Pitango Venture Capital, Shenzhen Capital Group Co., Ltd.	\$35.0
<b>3Q08</b>				
Sep-08	Solar Power Partners, Inc.	USA	Carrelton Asset Management, Dry Creek Ventures, EIF Management, LLC, Globespan Capital Partners, Silicon Valley Technology Group, United Commercial Bank	\$147.0
Aug-08	Ausra, Inc.	USA	Generation Investment Management LLP, KERN Energy Partners II, L.P., KERN Partners, Khosla Ventures, Kleiner, Perkins, Caufield & Byers, Starfish Technology Fund II, L.P., Starfish Ventures Pty Limited	\$60.6

**Notable Clean Technology Private Placement Transactions**

Date Announced	Company Name	Target Company Location	Investors	Capital Raised (mm)
<b>Biomass / Biofuel</b>				
<b>2Q09</b>				
Jun-09	Rentech, Inc. (AMEX:RTK)	USA	CIBC Asset Management Inc., Dow Chemical Co, Pension Arm, Dow Employees Pension Plan, Goldman Sachs JBWere Asset Management Pty Ltd, Government of British Columbia, J. & W. Seligman & Co., New York State Nurses Association Pension Plan, Oregon Public Employees' Retirement System, Radian Group Inc., SEI Investments Global Limited, SEI Investments Management Corporation, Seligman, Vantagepoint Investment Advisers, LLC, Wellington Management Company L.L.P.	\$6.4
Jun-09	Energymixx AG (DB:EM2)	Switzerland	NA	\$8.0
Jun-09	Solazyme, Inc.	USA	Braemar Energy Ventures, Harris & Harris Group, Inc. (NasdaqGM:TINY), Lightspeed Venture Partners, The Roda Group, VantagePoint Venture Partners	\$57.0
May-09	Agrisoma Biosciences Inc.	Canada	Growth Works, GrowthWorks Canadian Fund Ltd.	\$3.1
May-09	Covanta Holding Corporation (NYSE:CVA)	USA	NA	\$400.0
May-09	agri.capital GmbH	Germany	Altima Partners LLP, Halcyon Asset Management LLC, Ludgate Environmental Fund Ltd (AIM:LEF), Ludgate Investments Limited, Investment Arm, TCW Energy & Infrastructure Group, The European Clean Energy Fund, L.P.	\$81.0
May-09	INFINIA CORP.	USA	Khosla Ventures, Vulcan Capital	\$14.1
Apr-09	Mission Newenergy Limited (ASX:MBT)	Australia	NA	\$28.0
Apr-09	Rollcast Energy, Inc.	USA	Atlantic Power Corporation (TSX:ATP)	\$3.0
Apr-09	Huadian Power International Corporation Limited (SEHK:1071)	China	China Huadian Corp.	\$493.7
Apr-09	Thenergo (ENXTBR:THEB)	Belgium	Participatiemaatschappij Vlaanderen NV	\$13.2
<b>1Q09</b>				
Mar-09	BiEAG Biomasse Energie AG	Switzerland	Centralschweizerische Kraftwerke AG (SWX:CKWN)	\$3.4
Mar-09	Biomethanol Chemie Nederland B.V.	Netherlands	Waterland Private Equity Investments BV	\$45.1
Mar-09	New Generation Biofuels Holdings, Inc. (NasdaqCM:NGBF)	USA	2020 Energy, LLC	\$3.2
Feb-09	KL Energy Corporation	USA	NA	\$4.0
Feb-09	OPX Biotechnologies, Inc.	USA	Altira Group LLC, Braemar Energy Ventures, MDV-Mohr Davidow Ventures, Seed Capital Management	\$17.5
Feb-09	Magellan Aerospace Corp. (TSX:MAL)	Canada	NA	\$33.6
Feb-09	Maxxtec AG	Germany	Siemens Venture Capital GmbH	\$12.8
Jan-09	ZeaChem, Inc.	USA	Firelake Capital Management, LLC, Globespan Capital Partners, MDV-Mohr Davidow Ventures, PrairieGold Venture Partners, Valero Energy Corp. (NYSE:VLO)	\$34.0
Jan-09	Agrisoma Biosciences Inc.	Canada	Business Development Bank of Canada, Calyx Bio-Ventures Inc. (TSXV:CYX), Canadian Medical Discoveries Fund	\$2.3
<b>4Q08</b>				
Dec-08	Biofuel Advanced R&D LLC	USA	NA	\$40.0
Dec-08	Electrawinds NV / SA	Belgium	DG Infra, L.P., GIMV NV (ENXTBR:GIMB), Infran NV/SA	\$42.9
Dec-08	agri.capital GmbH	Germany	Ludgate Environmental Fund Ltd, Ludgate Investments Limited, Investment Arm	\$13.7
Dec-08	NC12, Inc.	USA	C-Change Investments	\$30.0
Dec-08	Voltaia Guyane S.A.	French Guiana	Caisse des Dépôts et Consignations	\$3.9
Nov-08	Orient Green Power Pte Limited	Singapore	Bessemer Venture Partners, Olympus Capital Holdings Asia, Shriram EPC Limited (BSE:532945)	\$55.0
Nov-08	Carbon2Green Developments Ltd.	Canada	NA	\$1.8
Nov-08	Methaneo	France	Capenergie, Crédit Agricole Private Equity, Demeter 2 Fund, Demeter Partners	\$3.8
Nov-08	Coskata, Inc.	USA	Advanced Technology Ventures, Globespan Capital Partners, GreatPoint Ventures, Khosla Ventures, The Blackstone Group, Private Equity Group	\$40.0
Nov-08	Solix Biofuels Inc.	USA	I2BF, I2BF Venture Capital Fund, L.P., Infield Capital, Shanghai Alliance Investment Ltd., Southern Ute Growth Fund, Valero Energy Corp.	\$16.8
Nov-08	BioTherm Energy Pty Ltd.	South Africa	Denham Capital Management LP	\$147.3
Oct-08	Avantium Technologies B.V.	Netherlands	Aescap Venture, Capricorn Cleantech Fund, Capricorn Venture Partners, ING Corporate Investments Participaties B.V., NAVITAS Capital	\$23.2
Oct-08	Sriya Innovations, Inc.	USA	Kleiner, Perkins, Caufield & Byers	\$15.0
Oct-08	Cobalt Technologies, Inc.	USA	@Ventures, Burrill Venture Capital, Harris & Harris Group, Inc. (NasdaqGM:TINY), Life Sciences Partners BV, Malaysian Life Sciences Capital Fund L.P., Malaysian Technology Development Corporation Sdn Bhd, Pinnacle Ventures, VantagePoint Venture Partners	\$25.0
Oct-08	Plantation Energy Limited	Australia	Denham Capital Management LP	\$80.0
Oct-08	Morvus Technology Ltd.	UK	Stephens Capital Partners	\$8.9

**Notable Clean Technology Private Placement Transactions**

Date Announced	Company Name	Target Company Location	Investors	Capital Raised (mm)
<b>Smart Grid</b>				
<b>2Q09</b>				
Jun-09	Watteco SAS	France	NA	\$8.5
Jun-09	AlertMe.com Ltd.	UK	Good Energies Inc., Index Ventures, Sustainable Energy Technology Venture Partners, VantagePoint Venture Partners	\$13.0
Jun-09	Xtreme Power, Inc.	USA	NA	\$5.0
May-09	OutSmart Power Systems, LLC	USA	Bainco International Investors LLC, Clean Energy Venture Group, Manifold Products LLC	\$2.0
May-09	Tendril Networks, Inc.	USA	Appian Ventures Inc., Good Energies Inc., RRE Ventures LLC, VantagePoint Venture Partners, Vista Ventures	\$30.0
May-09	Hexaformer AB	Sweden	InnovationsKapital, Sustainable Technologies Fund, Sustainable Technologies Fund I, L.P.	\$4.4
May-09	Powerit Solutions, LLC	USA	@Ventures, Arcelor Mittal (ENXTAM:MT), Expansion Capital Partners, LLC, Siemens Venture Capital GmbH	\$6.0
Apr-09	Zenergy Power PLC (AIM:ZEN)	UK	NA	\$14.1
Apr-09	EnergyHub, Inc.	USA	.406 Ventures, LLC, Physic Ventures, LLC	NA
Apr-09	Ember Corporation	USA	Chevron Technology Ventures L.L.C., ePlanet Ventures, GrandBanks Capital Inc., New Atlantic Ventures, Polaris Venture Partners, Inc., RRE Ventures LLC, Stata Venture Partners, Inc., Vulcan Capital, WestLB Mellon Asset Management	\$8.0
<b>1Q09</b>				
Mar-09	GridPoint, Inc.	USA	Craton Equity Partners, Craton Equity Partners, L.P.	NA
Mar-09	SynapSense Corporation	USA	American River Ventures, DFJ Frontier, Emerald Technology Ventures AG, Nth Power LLC, Robert Bosch Venture Capital GmbH, Sequoia Capital	\$7.0
Jan-09	Sentilla Corporation	USA	Claremont Creek Ventures, Onset Ventures	\$7.5
<b>4Q08</b>				
Dec-08	Positive Energy, Inc.	USA	New Enterprise Associates	\$14.0
Nov-08	Power Plus Communications AG	Germany	Climate Change Capital Asset Management, Climate Change Capital Private Equity fund	\$13.0
Nov-08	Ambient Corporation (OTCBB:ABTG)	USA	NA	\$8.0
Nov-08	Resin Systems Inc. (TSX:RS)	Canada	NA	\$8.2
Nov-08	Future Power PA, Inc.	USA	Immersive Media Corp. (TSXV:IMC)	\$5.0
Oct-08	Eco Power Solutions (USA) Corp.	USA	Altira Group LLC, Altira Technology Fund V L.P.	\$7.0
Oct-08	Ice Energy, Inc.	USA	Energy Capital Partners, Second Avenue Partners	\$33.0
Oct-08	Beacon Power Corporation (NasdaqCM:BCON)	USA	NA	\$7.9
Oct-08	Silver Spring Networks, Inc.	USA	Foundation Capital, Green Growth Fund I, L.P., Kleiner, Perkins, Caufield & Byers, Northgate Capital Group, L.L.C.	\$90.0
<b>3Q08</b>				
Sep-08	GridPoint, Inc.	USA	Goldman Sachs Group, Merchant Banking Division, New Enterprise Associates, Perella Weinberg Partners LP, Robeco Group N.V., Susquehanna Private Equity Investments, LLC	\$100.0
Sep-08	Telvent Git S.A. (NasdaqGS:TLVT)	Spain	Abengoa SA (CATS:ABG), Ivy Investment Management Company, Ivy Science and Technology Fund (NasdaqGM:WSTY.X), Waddell & Reed Advisors Science and Technology Fund (NasdaqGM:UNSC.X), Waddell & Reed Investment Management Co.	\$103.0
Aug-08	Trilliant Incorporated	USA	MissionPoint Capital Partners, Zouk Ventures Ltd	\$40.0
Aug-08	EnOcean GmbH	Germany	3i Group plc (LSE:III), Atmos S.p.A, BayTech Venture Capital, Emerald Technology Ventures AG, Siemens Technology Accelerator GmbH, Siemens Venture Capital GmbH, Wellington Partners Venture Capital GmbH	\$6.6
Aug-08	BPL Global, Ltd.	USA	Cross Atlantic Capital Partners, El Dorado Ventures, International Financial Advisors, K.S.C. (KWSE:IFA), Morgan Stanley Private Equity, Novitas Capital	\$23.0
<b>2Q08</b>				
Jun-08	Global DataCenter Management Ltd.	UK	Balderton Capital	NA
Jun-08	EKA Systems, Inc.	USA	Flybridge Capital Partners, RockPort Capital Partners, The Westly Group	\$18.5

**Notable Clean Technology Private Placement Transactions**

Date Announced	Company Name	Target Company Location	Investors	Capital Raised (mm)
<b>Transportation</b>				
<b>2Q09</b>				
Jun-09	V-Vehicle	USA	NA	\$62.3
Jun-09	FuelCell Energy Inc. (NasdaqGM:FCEL)	USA	NA	\$24.2
Jun-09	Advanced Battery Technologies Inc. (NasdaqCM:ABAT)	USA	Cranshire Capital L.P., Downsview Capital, Inc., Hudson Bay Capital Management LP, Hudson Bay Fund LP, Iroquois Capital, LP, Iroquois Master Fund Ltd.	\$7.0
Jun-09	Valence Technology Inc. (NasdaqCM:VLNC)	USA	Berg and Berg Enterprises, LLC	\$2.5
Jun-09	ZAP (OTCBB:ZAAP)	USA	Banks Group Llc	\$2.0
Jun-09	Medis Technologies Ltd. (NasdaqGM:MDTL)	USA	Volation Capital Partners LLC	\$2.4
Jun-09	Xtreme Power, Inc.	USA	NA	\$5.0
May-09	Advanced Battery Technologies Inc. (NasdaqCM:ABAT)	USA	Cranshire Capital L.P., Downsview Capital, Inc., Hudson Bay Capital Management LP, Hudson Bay Fund LP, Hudson Bay Overseas Fund Ltd, Iroquois Capital, LP, Iroquois Master Fund Ltd.	\$10.0
May-09	UltraCell Corporation	USA	BASF Venture Capital GmbH, Espírito Santo Ventures - Sociedade de Capital de Risco, SA, Miami Valley Venture Fund, OnPoint Technologies	\$3.8
May-09	EEStor, Inc.	USA	ZENN Motor Company Inc. (TSXV:ZNN)	\$5.0
May-09	Tesla Motors, Inc.	USA	NA	\$50.0
May-09	Morphic Technologies AB (OM:MORP B)	Sweden	Foundation for Baltic and East European Studies, Investment Arm	\$4.2
May-09	Sustainable Energy Technologies Ltd. (TSXV:STG)	Canada	Doughty Hanson & Co. Technology Ventures	\$7.9
May-09	P21 GmbH	Germany	Conduit Ventures Limited, Target Partners GmbH, Yellow&Blue Investment Management B.V.	\$13.4
May-09	Capstone Turbine Corp. (NasdaqGM:CPST)	USA	NA	\$12.5
May-09	Heuliez New World	France	Conseil Régional Poitou-Charentes, Investment Arm	\$6.7
May-09	Letao Inc.	China	NA	\$10.0
Apr-09	ETV Motors Ltd.	Israel	21 Ventures, LLC, The Quercus Trust	\$12.0
Apr-09	Heliocentris Fuel Cells AG (XTRA:H2F)	Germany	Conduit Ventures Limited	NA
Apr-09	A123 Systems	USA	AllianceBernstein L.P., CMEA Capital, DTE Energy Ventures, Inc., Espírito Santo Ventures - Sociedade de Capital de Risco, SA, GE Energy Financial Services, GE Equity, Massachusetts Institute of Technology, Endowment Arm, North Bridge Venture Partners, QUALCOMM Ventures, Sequoia Capital	\$69.0
Apr-09	Fisker Automotive	USA	Kleiner, Perkins, Caufield & Byers; Eco-Drive Capital Partners	\$85.0
Apr-09	Lilliputian Systems, Inc.	USA	Altira Group LLC, Atlas Venture LLP, Fairhaven Capital Partners, LLC, Kleiner, Perkins, Caufield & Byers, RockPort Capital Partners, Stata Venture Partners, Inc.	\$28.0
<b>1Q09</b>				
Mar-09	Ceramic Fuel Cells (ASX:CFU)	Australia	Australian Ethical Investment Ltd. (ASX:AEF)	\$14.5
Feb-09	Bloom Energy, Inc.	USA	Advanced Equities, Inc.	\$150.0
Feb-09	Medis Technologies Ltd. (NasdaqGM:MDTL)	USA	Ascendant Capital Group Inc, Asset Management Arm	\$6.0
Feb-09	Self Energy	Portugal	Inovcapital - Sociedade de Capital de Risco, SA	\$3.3
Jan-09	Bright Automotive, Inc.	USA	NA	\$11.0
Jan-09	Better Place Denmark A/S	Denmark	NA	\$136.0
Jan-09	Raser Technologies, Inc. (NYSE:RZ)	USA	NA	\$3.4
Jan-09	Fallbrook Technologies, Inc.	USA	NGEN III, L.P., NGEN Partners, LLC, Robeco Group N.V.	\$25.4
Jan-09	Superprotonic, Inc.	USA	CMEA Capital, Energy Capital Management AS, Nth Power LLC, OnPoint Technologies, U.S. Venture Partners	\$8.0
<b>4Q08</b>				
Nov-08	RECUPYL S.A.S.	France	AGF Private Equity, S.A., Aloe Private Equity SAS, INPG Entreprise SA, LESS Ltd.	\$18.7
Nov-08	Celennium (Thailand) Co., Ltd.	Thailand	MFC Asset Management Public Co. Ltd. (SET:MFC), MFC Energy Fund	\$10.1
Nov-08	Raser Technologies, Inc. (NYSE:RZ)	USA	Fletcher Asset Management Inc.	\$20.0
Nov-08	Miles Electric Vehicles, Inc.	USA	Angeleno Group, LLC	\$13.0
Nov-08	Tesla Motors, Inc.	USA	Draper Fisher Jurvetson, VantagePoint Venture Partners	\$40.0
Nov-08	Oxford Catalysts Group PLC (AIM:OCG)	UK	NA	\$15.3
Nov-08	ACAL Energy Ltd.	UK	Carbon Trust Investments, Co-Investment Fund, Enterprise Ventures Limited, Honda Motor Co. Ltd. (TSE:7267), NorthStar Equity Investors Limited, Porton Capital Limited, Rising Stars Growth Fund, Solvay SA (ENXTBR:SOLB), Synergis Technologies Ltd	\$4.9
Oct-08	Kotak Urja Pvt. Ltd.	India	Applied Ventures, LLC, Kleiner, Perkins, Caufield & Byers, Sheralo Ventures	\$8.0
Oct-08	NxtGen Emission Controls Inc.	Canada	Altira Group LLC, Altira Technology Fund V L.P., B.C. Advantage (VCC) Funds Ltd., Growth Works, Itochu Finance Corp., Working Opportunity Fund Ltd., L.P., Yaletown Venture Partners Inc.	\$17.0

**Notable Clean Technology Private Placement Transactions**

Date Announced	Company Name	Target Company Location	Investors	Capital Raised (mm)
<b>Other (Clean Coal, Water/Hydro ... etc.)</b>				
<b>2Q09</b>				
Jun-09	Raser Technologies, Inc. (NYSE:RZ)	USA	NA	\$25.5
May-09	Carnegie Corporation Limited (ASX:CNM)	Australia	NA	\$4.7
Apr-09	Sea Breeze Power Corp. (TSXV:SBX)	Canada	NA	\$3.2

**Notable Clean Technology M&A Transactions**

<b>Date Announced</b>	<b>Target Company Name</b>	<b>Target Company Location</b>	<b>Acquirer Name</b>	<b>Enterprise Value (mm)</b>	<b>EV / Revenue</b>
<b>Wind</b>					
<b>2Q09</b>					
Jun-09	Parque Eólico Penha da Gardunha, Lda.	Portugal	Martifer Renewables SGPS	\$10.5	NA
Jun-09	Gamesa Corporación Tecnológica S.A. (CATS:GAM)	NA	NA	\$5,608.8	1.1x
May-09	Greentech Energy Systems A/S, Monte Grighine Wind Energy Project	Italy	EDF Energies Nouvelles S.A. (ENXTPA:EEN)	\$168.8	NA
<b>1Q09</b>					
Feb-09	Babcock & Brown, Wind Project in Australia, New Zealand, US, and Minority Interest in Wind Farms	Australia	Infigen Energy (ASX:IFN)	\$18.9	NA
Feb-09	Industrias Metalurgicas Pescarmona S.a.i.c. Y F., 3 Wind-Energy Projects in Northeast Brazil	Brazil	Cia Energetica de Minas Gerais (BOVESPA:CMIG4)	\$190.8	NA
<b>4Q08</b>					
Nov-08	Thanet Offshore Wind Limited	NA	Vattenfall AB (Buyer)	\$54.9	NA
Nov-08	Greater Gabbard Offshore Winds Ltd.	NA	Npower Renewables Limited	\$996.8	NA
Oct-08	Renovatio Group Limited, 85% stake in Renovatio Power SRL and Cernavoda Power SRL	NA	EDP Renováveis (ENXTLS:EDPR)	\$11.3	NA
Oct-08	Ridgeline Energy, LLC	USA	Veolia Environnement SA (ENXTPA:VIE)	\$72.0	NA

**Notable Clean Technology M&A Transactions**

Date Announced	Target Company Name	Target Company Location	Acquirer Name	Enterprise Value (mm)	EV / Revenue
<b>Solar</b>					
<b>2Q09</b>					
Jun-09	Solar Thin Power, Inc.	USA	Solar Thin Films, Inc. (OTCBB:SLTN)	\$16.9	NA
Jun-09	Solibro GmbH	Germany	Q-Cells SE (XTRA:QCE)	\$245.5	NA
Jun-09	CardioDynamics International Corp. (NasdaqCM:CDIC)	USA	SonoSite Inc. (NasdaqGS:SONO)	\$11.0	0.5x
Jun-09	Arco Energy srl	Italy	Premier Power Renewable Energy, Inc. (OTCBB:PPRW)	\$11.9	NA
Jun-09	Kinmac Solar Corporation	Taiwan	Solargiga Energy Holdings Ltd. (SEHK:757)	\$38.2	0.9x
May-09	Three Solar Parks in Cataluña	Spain	Hannover Leasing GmbH & Co. KG	\$46.3	NA
May-09	Wuxi Jiacheng Solar Energy Technology Co., Ltd.	China	Zhejiang Yuhui Solar Energy Source Co. Ltd.	\$17.3	NA
May-09	Porvair plc (LSE:PRV)	UK	GGG S.p.A	\$64.0	0.7x
<b>1Q09</b>					
Feb-09	Foresta Private Equity II, S.C.R., S.A, Talayuela And Noblejas Solar Plants	Spain	Impax Group plc (AIM:IPX)	\$57.0	NA
Jan-09	Asia Silicon (Qinghai) Co. Ltd.	China	Suntech Power Holdings Co. Ltd. (NYSE:STP)	\$64.8	NA
Jan-09	Alhama Solar S.L.	Spain	Fotowatio	\$55.3	NA
<b>4Q08</b>					
Dec-08	NexPower Technology Corporation	Taiwan	United Microelectronics Corporation (TSEC:2303)	\$270.9	NA
Dec-08	Geosol Beteiligungsgesellschaft mbH	Germany	Kokusai Europe GmbH	\$29.0	NA
Dec-08	Cordobesa de Energias Renovables S.L.	Spain	KG Allgemeine Leasing GmbH & Co.	\$88.4	NA
Nov-08	Fine Silicon Co. Ltd.	China	Yingli Green Energy Holding Co. Ltd. (NYSE:YGE)	\$77.6	NA
Oct-08	REgrid Power, Inc.	USA	Real Goods Solar, Inc. (NasdaqGM:RSOL)	\$16.3	1.1x
Oct-08	Systaic AG, Spanish Solar Plants	Spain	Eurovoltaic Plc	\$98.2	NA
<b>3Q08</b>					
Sep-08	Helium Energy S.L.U.	Spain	Hudson Clean Energy Partners	\$140.7	NA
Sep-08	Solar Technologies Group Limited	UK	GB Gas Holdings Ltd.	\$5.2	NA
Sep-08	Suntech Energy Solutions, Inc.	USA	Suntech Power Holdings Co. Ltd. (NYSE:STP)	\$6.8	NA
Sep-08	BeyondPV Co. Ltd.	Taiwan	EFUN Technology Co. Ltd. (GISM:3523)	\$18.8	NA
Sep-08	Sky Global Solar S.A, Two Photovoltaic Plants	Spain	Fomento de Construcciones y Contratas, S.A. (CATS:FCC)	\$200.8	NA
Sep-08	City Solar Kraftwerke Ag, Kettershhausen and Thierhaupten Solar Projects	Germany	Renewagy A/S (CPSE:REN)	\$45.9	NA
Aug-08	Ecoware S.p.A.	Italy	Kerself S.p.A. (CM:KRS)	\$26.1	1.8x
Jul-08	Xantrex Technology Inc.	Canada	Schneider Electric S.A. (ENXTPA:SU)	\$484.7	1.7x
Jul-08	Isotofón S.A.	Spain	Bergé y Cía, S.A. (Buyer)	\$917.4	1.9x
<b>2Q08</b>					
Jun-08	Acro Electric, Inc.	USA	Acro Energy Technologies Corp. (TSXV:ART)	\$7.2	1.1x
Jun-08	Jiangsu Yangguang Solar Technology Co. Ltd.	China	Solarfun Power Holdings Co. Ltd. (NasdaqGS:SOLF)	\$107.6	NA
Jun-08	EtSol Solar Energy AG (XTRA:ES6)	Germany	Robert Bosch GMBH	\$1,794.9	6.0x
May-08	Somont GmbH	Germany	3S Industries AG (BRSE:SSS)	\$109.4	NA

**Notable Clean Technology M&A Transactions**

Date	Target Company	Target Company Location	Acquirer Name	Enterprise Value (mm)	EV / Revenue
Announced	Target Company Name	Location	Acquirer Name	Value (mm)	Revenue
<b>Biomass / Biofuel</b>					
<b>2Q09</b>					
Jun-09	Steinmüller Engineering Gmbh	Germany	Siemens Power Generation, Inc.	NA	NA
Jun-09	Turboden s.r.l.	Italy	Pratt & Whitney Power Systems, Inc.	NA	NA
Jun-09	New Kingdom (Nantong) Petrochemical Co., Ltd.	China	Biolum Biofuel (Hong Kong) Limited	NA	NA
Jun-09	ClearFuels Technology, Inc.	USA	Rentech, Inc. (AMEX:RTK)	NA	NA
Jun-09	nextEnergies	France	Frey Nouvelles Energies SAS	NA	NA
Jun-09	NTech Industries Inc.	USA	Trimble Navigation Ltd. (NasdaqGS:TRMB)	NA	NA
Jun-09	Broseley Fires Ltd.	UK	Be Modern Ltd.	NA	NA
May-09	Miro Radici Energia SpA	Italy	Volteo Energie S.r.l.	NA	NA
May-09	Blackhawk Biofuels LLC	USA	Renewable Energy Group, Inc.	NA	NA
May-09	Northeast Biofuels LLC	USA	Sunoco Inc. (NYSE:SUN)	NA	NA
May-09	Vapo Oy	Finland	EPV Energia Oy	\$1.0	15.2x
Apr-09	Watertown Renewable Power LLC	USA	EIF Management, LLC; United States Power Fund III, L.P.	NA	NA
Apr-09	Shriram Non Conventional Energy Ltd	India	NA	NA	NA
Apr-09	Czech Heat AS	Czech Republic	CEZ, a.s. (SEP:BAACEZ)	NA	NA
Apr-09	AFWG Ausseer Fernwärme GmbH	Austria	Energie Steiermark AG	NA	NA
Apr-09	Huppe Landscape Company, Inc.	USA	Jensen Corporate Holdings, Inc.	NA	NA
Apr-09	Biomass Energy Corporation	Japan	Transcu Green Tech Pte Ltd.	NA	NA
Apr-09	Econergy Limited	UK	GB Gas Holdings Ltd.	\$1.1	NA
<b>1Q09</b>					
Mar-09	Biotricity Corporation	USA	Global Wind Corp. (OTCPK:GWND)	NA	NA
Mar-09	NexGen Biofuels Ltd., Substantially All Assets	USA	MAC Bioventures, Inc.	NA	NA
Mar-09	NexGen Biofuels Ltd. (OTCBB:NXGN.F)	USA	World Venture Management, Inc.	NA	NA
Mar-09	New Generation Biofuels Holdings, Inc. (NasdaqCM:NGBF)	USA	2020 Energy, LLC	\$292.8	NA
Mar-09	Pax Clean Energy, Inc. (OTCPK:PXCE)	Canada	Mobile Video Development, Inc.	NA	NA
Feb-09	Endesa SA (CATS:ELE)	Spain	Enel SpA (CM:ENEL)	\$2.5	8.1x
Feb-09	Telogia Power, LLC	USA	Leaf Clean Energy Company (AIM:LEAF)	NA	NA
Feb-09	Tegra Group	Switzerland	Nordostschweizerische Kraftwerke AG	NA	NA
Feb-09	US Green Energy, Inc.	USA	Monogram Energy, Inc. (OTCPK:MGRN)	NA	NA
Jan-09	Kreido Biofuels, Inc., Substantially All Assets	USA	Four Rivers BioEnergy, Inc. (OTCBB:FRBE)	NA	NA
Jan-09	Essent N.V.	Netherlands	RWE AG (XTRA:RWE)	\$1.0	6.2x
Jan-09	Snowflake White Mountain Power, LLC	USA	AZ Biomass LLC	NA	NA
<b>4Q08</b>					
Dec-08	EuroFlames Limited	UK	Flamagas S.A.	NA	NA
Dec-08	Thenergo (ENXTBR:THEB)	Belgium	Hestiun Limited	\$2.3	15.1x
Dec-08	Eco-Sponge Sdn. Bhd.	Malaysia	Asia Bioenergy Technologies Berhad (KLSE:ASIABIO)	NA	NA
Dec-08	Biopower S.P.A.	Italy	Volteo Energie S.r.l.	NA	NA
Dec-08	Amel Inc.	USA	PerkinElmer Inc. (NYSE:PKI)	NA	NA
Nov-08	Theolia (ENXTPA:TEO)	France	GAMA Enerji AS	NA	NA
Nov-08	Westway Terminal Company, Inc. And Westway Feed Products, Inc.	USA	Westway Group, Inc. (OTCBB:WTWG)	\$1.0	NA
Nov-08	NRG Energy, Inc. H.O. Clarke Electric Generating Station	USA	Biofuels Power Corporation (OTCBB:BFLS)	NA	NA
Nov-08	NORESCO, LLC	USA	Carrier Corporation	NA	NA
Nov-08	Guangxi COFCO Biofuel Co., Ltd	China	China Petroleum & Chemical Corp. (SEHK:386)	NA	NA
Nov-08	Rithwik Energy Systems Limited and Clarion Power Corporation	India	Agri Gold Projects Ltd.	NA	NA
Nov-08	NC12, Inc.	USA	C-Change Investments	NA	NA
Nov-08	Velocys, Inc.	USA	Oxford Catalysts Group PLC (AIM:OCG)	NA	NA
Oct-08	Choi Biofuel Indonesia PT	Indonesia	Haein Corp. (KOSE:A003010) (Buyer)	NA	NA
Oct-08	Boorim Corporation	South Korea	Biomass Korea Co., Ltd (KOSE:A046350)	NA	NA
Oct-08	Synthetic Genomics, Inc.	USA	Genting Overseas Holdings Limited	NA	NA
Oct-08	MAN Ferrostaal AG	Germany	International Petroleum Investment Company	\$0.1	0.5x

**Notable Clean Technology M&A Transactions**

Date Announced	Target Company Name	Target Company Location	Acquirer Name	Enterprise Value (mm)	EV / Revenue
<b>Smart Grid</b>					
<b>1Q09</b>					
Mar-09	GE Energy, Oil Testing Labs	USA	Weidmann Electrical Technology Inc.	NA	NA
<b>4Q08</b>					
Aug-08	Kelman Ltd.	UK	GE Energy	NA	NA
Jul-08	DemandDirect LLC	USA	ConsumerPowerline, Inc.	NA	NA
Apr-08	Plan B Solutions LLC	USA	BPL Global, Ltd.	NA	NA

**Notable Clean Technology M&A Transactions**

<b>Date Announced</b>	<b>Target Company Name</b>	<b>Target Company Location</b>	<b>Acquirer Name</b>	<b>Enterprise Value (mm)</b>	<b>EV / Revenue</b>
<b>Transportation</b>					
<b>2Q09</b>					
Jun-09	Cobasys LLC	USA	SB LiMotive Co. Ltd.	NA	NA
Jun-09	DPoint Technologies Inc.	Canada	Angelwest Capital Corp. (TSXV:AWC.P)	NA	NA
Jun-09	ERSE S.p.A	Italy	GSE S.p.A.	NA	NA
May-09	Tesla Motors, Inc.	USA	Daimler AG (XTRA:DCX)	NA	NA
May-09	Zhejiang Kan Battery Co., Ltd.	China	Zhejiang Kan Specialties Material Co., Ltd. (SZSE:002012)	NA	NA
May-09	Electric Motors Corporation, Prior To Merger With Optimax Industries, Inc.	USA	Electric Motors Corporation (OTCPK:EMCO)	NA	NA
May-09	Pressure Products Industries, Inc.	USA	Milton Roy Company	NA	NA
Apr-09	VIASPACE Inc., Humidity Sensor Business	USA	Landtec North America, Inc.	NA	NA
Apr-09	Axeon Holdings Plc	UK	Ironshield Capital Management LLP	NA	NA
<b>1Q09</b>					
Mar-09	Pacific Heat and Power Pty Ltd.	Australia	Greenearth Energy Limited (ASX:GER)	NA	NA
Feb-09	Cyclonatrix, Inc.	USA	Ingen Technologies, Inc. (OTCPK:IGNT)	NA	NA
Feb-09	US Green Energy, Inc.	USA	Monogram Energy, Inc. (OTCPK:MGRN)	NA	NA
Jan-09	Odyne Corporation, Substantially All Assets	USA	Dueco, Inc.; Utility Equipment Leasing Corporation	NA	NA
Jan-09	NICE Car Company Ltd.	UK	Aixam Mega Ltd.	NA	NA
Jan-09	Coastal Maritime Stevedoring, LLC	USA	ICS Logistics, Inc.	NA	NA
Jan-09	ePower Synergies, Inc.	USA	Ultimate Sports, Inc. (OTCPK:USPS)	NA	NA
<b>4Q08</b>					
Dec-08	White Door, Inc.	USA	Critical Solutions, Inc. (OTCPK:CSLI)	NA	NA
Dec-08	Tank Devils Ltd.	UK	Taurus Aerospace Group, LLC	NA	NA
Nov-08	Realty Associates Oak Park III L.P	USA	Grubb & Ellis Realty Investors, LLC	NA	NA
Nov-08	Applied Mesh Technologies, LLC	USA	SmartSynch, Inc.	NA	NA
Oct-08	Hyundai Rotem Co., Ltd., Hybrid Electric Vehicle Components Business	South Korea	Hyundai Mobis (KOSE:A012330)	NA	NA
Oct-08	Wuxi Angell Autocycle Co. Ltd.	China	Advanced Battery Technologies Inc. (NasdaqCM:ABAT)	\$4.7	NA
Oct-08	BluWav Systems, LLC	USA	Magna Electronics	NA	NA
Oct-08	Plug Power Inc. (NasdaqGM:PLUG)	USA	The JSC "Third Generation Company of the Wholesale Electricity Market " (RTS:OGKC)	NA	0.3x
Oct-08	100% stake in Mostec and 63.4% stake in EIWA	Japan	Sumida Corp. (TSE:6817)	NA	NA

**Notable Clean Technology M&A Transactions**

<b>Date Announced</b>	<b>Target Company Name</b>	<b>Target Company Location</b>	<b>Acquirer Name</b>	<b>Enterprise Value (mm)</b>	<b>EV / Revenue</b>
<b>Other (Clean Coal, Water/Hydro ... etc.)</b>					
<b>2Q09</b>					
Jun-09	Weining County Jieli Coke Tar Co., Ltd.	China	DongGuan Winnerway Industrial Zone Ltd. (SZSE:000573)	NA	NA
Jun-09	Weining County Jieli Coke Tar Co., Ltd.	China	Guangdong Geology & Mineral Products Co., Ltd.	NA	NA
<b>1Q09</b>					
Jan-09	Alaska Industrial Development and Export Authority, Healy Clean Coal Project	USA	Golden Valley Electric Association, Inc.	NA	NA
<b>4Q08</b>					
Dec-08	Asia Special Situation Acquisition Corp. (AMEX:CIO)	NA	BCBC Singapore Pte Ltd.	NA	NA

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## Pharus Advisors, LLC Overview

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### **Introduction**

Pharus Advisors, LLC ("Pharus") is a boutique investment bank providing focused merger & acquisition, financing, and restructuring advisory services in a variety of industries. Our industry practice areas are:

- Enterprise and Systems Management Software
- Business Process Outsourcing and IT Services
- Media / Broadcasting Technology and Services
- Financial Technology
- Clean Technology
- Selected Traditional Industries

Pharus' principals established the firm with a commitment to provide clients a high level of attention, independent and objective advice, and creative solutions in challenging environments. With significant expertise our team can help investors, Boards of Directors, and executives evaluate challenging situations and develop defined strategies to maximize value on an expedited basis.

### **Broad and Deep Knowledge of Sectors**

Pharus prides itself in maintaining a deep understanding of sectors in which we serve clients. We feel greater level of strategic understanding allows for added creativity.

### **Highly Customized Approach for Each Client**

Pharus takes additional steps to develop an in-depth understanding of our clients' businesses and marketplaces, and designing and deploying a tailored transaction approach that best meets the needs and sensitivities of each client.

### **Strong Network of Key Relationships**

Clients benefit from the firms' key executive level contacts at relevant companies, private equity, venture capital firms, and debt capital providers.

### **Highly Experienced and Senior Transaction Team**

The Pharus team brings depth and complementary experience of senior professionals to each engagement including: mergers and acquisitions, private and public financings, business development, restructurings, operational turn-arounds, equity research, operations, management consulting and private equity transactions.

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