FACT SHEET: C|A Clean Tech Company Performance Statistics

Cambridge Associates' Clean Tech Company Performance Statistics report evaluates the gross company-level performance of clean technology investments in Cambridge Associates LLC's Private Investments Database. These statistics will be updated quarterly and, as the sector evolves and its investments mature, we hope that these statistics will increasingly shed light on the performance of private clean tech investments.

WHY DEVELOP THESE STATISTICS?

While the investment performance of publicly traded clean tech companies is more clearly documented, public investments are only part of the clean tech story. Investments in clean tech through venture capital and private equity funds have played an important role in clean tech research, development, manufacturing, and scaling. Yet, despite tens of billions of dollars in clean tech investment from private funds, broad and representative data on the performance of these investments has been hard to find, making it challenging for investors, entrepreneurs, and others to make informed choices.

A distinctive aspect of Cambridge Associates' data is our access to the quarterly cash flows and net asset values for all investments in our sample. This is in contrast to other sources of clean tech information that focus primarily on capital raised, specific transactions, or participants in the sector. This depth of data enables us to derive the *performance* of each and every one of the clean tech investments in our sample.

METHODOLOGY

To create a meaningful sample of clean tech companies, we developed a definition of clean tech and then mined over 72,000 underlying investments in our database, identifying 1,313 distinct clean tech investments across 736 private companies. We screened underlying companies across all venture capital and private equity funds in our database to identify and create a cross-fund, pure pool of clean tech investments for performance analysis.

Investments were drawn from 449 different funds (324 venture capital funds and 125 private equity funds). We focus on company-level rather than fund-level data for two reasons. First, since most funds, even those marketed as "clean tech" funds, often have a number of investments that are not clean tech, the returns of non–clean tech investments influence overall fund-level performance and obscure true clean tech performance. Second, a fund-level clean tech benchmark would likely include only clean tech–focused funds and almost certainly exclude highly diversified funds that have invested a small portion of their capital in clean tech. Taking the traditional fund-level data analysis path therefore risks ignoring close to half of the clean tech private investment market.

ABOUT OUR SAMPLE

We divided the clean tech sector into four broad clean tech groups: renewable power manufacturing (31% of capital), renewable power development (30%), energy optimization (23%), and resource solutions (16%). In terms of geography, $17.7 billion (72% of capital) in our sample was invested in U.S.-based companies. Developed markets outside of the United States received investments of $4.5 billion (19%), while emerging markets accounted for $2.2 billion (9%). Of the deployed capital, 94% has been invested in companies that received their initial funding in or after 2005.

FACT SHEET: C|A Clean Tech Company Performance Statistics

Company-level statistics from our analysis include $24.5 billion invested in private clean tech companies, $10.6 billion in realized proceeds, and $18.5 billion in remaining net asset value through September 30, 2013. The gross total value/paid-in capital multiple is 1.2; the gross distributed/paid-in capital multiple, 0.4; and the gross internal rate of return (IRR), 6.5%. Of the 1,313 investments, 396 are fully realized (30% of total investments).

LIMITATIONS

Coverage. We estimate that our sample represents between 20% and 40% of total clean tech private investment. Our focused definition of clean tech and the fact that our database contains mainly "institutional quality" funds have likely contributed to our sample representing only a portion of the full universe. Our universe also has a bias toward U.S.-based companies, with relatively less coverage in developed countries outside the United States.

Company-Level Returns. These clean tech statistics measure gross *company-level* performance, making them different from the widely used private investment benchmarks and vintage year performance measures of *fund-level* and net-to-limited partner (LP) returns. Company-level and fund-level returns should not be viewed on an apples-to-apples basis, as fund-level LP returns are net of management and incentive fees and will therefore typically be lower than gross company-level returns. To provide some indication for the spread between gross company-level and net fund-level returns, we analyzed the difference in these returns for 229 U.S. venture capital funds in our database with return profiles similar to the clean tech investment sample. For these funds, the median spread between gross company-level and net fund-level returns has been about 440 basis points. This margin should be kept in mind when evaluating gross company-level clean tech performance.

Large Investments. Data included in the analysis incorporate investments across venture capital and private equity funds. While private equity investments increase the sample of companies included in the analysis, they also tend to be larger in size and can therefore have a disproportionate influence on performance results.

Investment Focus. For some companies, clean tech may be only part of their strategy. We attempted to include only companies whose primary focus is clean tech.

Evolution. The clean tech private investment sector remains young, and investors must therefore be cautious about drawing forward-looking conclusions from the data at this time. As the sector evolves and private investment managers engaging in the sector adapt their strategies, we will continue to measure company-level performance of clean tech investments across all funds on a quarterly basis.

KEY FINDINGS

On a total investment basis as of September 30, 2013, all four clean tech groups achieved a positive gross IRR. Renewable power development had the strongest performance in gross IRR terms, returning 10.3%.

Early stage investments have produced a gross IRR of 1.6% and total value/paid-in capital multiple of 1.1. Later stage investments have generated a gross IRR of 11.3% and total value/paid-in capital multiple of 1.3.

Geographically, U.S.-based companies have produced a gross company-level IRR of 4.7% and total value/paid-in capital multiple of 1.2, while companies based outside the United States have generated a gross IRR of 19.2% and multiple of 1.3.

September 30, 2013

Cambridge Associates LLC
Clean Tech Company Performance Statistics

CAMBRIDGE ASSOCIATES LLC

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Clean Tech Sector and Subsector Definitions

"Clean Tech" is an umbrella term for a wide range of technologies and services. Cambridge Associates includes companies and projects in the clean tech sector if they (1) develop non-fossil fuel energy sources, (2) promote industrial efficiency by conserving resources and replacing existing processes with less-polluting alternatives, (3) recycle waste effectively and efficiently, or (4) provide a product or service that creates an environmental improvement.

GROUP	SUBSECTOR	DEFINITION
Renewable Power Manufacturing	Solar Power Manufacturing	Technologies and processes that directly convert solar radiation into electricity or hot water
	Wind Power Manufacturing	Technologies and processes that convert kinetic energy from the wind into electricity
	Other Power Generation Manufacturing	Technologies and processes that generate electricity from other renewable inputs, fuel cells, or waste capture
	Biofuels & Biomaterials	Technologies and processes that produce fuels and materials from non–fossil fuel, biomass-based sources
Renewable Power Development	Renewable Power Development	Processes that allow for the financing, installation, management, operation, or ownership of renewable power generation projects
Energy Optimization	Energy Efficiency and Management	Technologies and processes that allow for more control over energy use and reduce energy consumption
	Lighting	Technologies and processes that reduce energy use through more efficient lights and lighting systems
	Smart Grid	Technologies and processes that work to optimize electricity transmission and distribution from the point of origin to the end consumer
	Sustainable Mobility	Technologies that contribute to the increased efficiency and electrification of transport
	Energy Storage	Technologies and processes that increase the efficiency of or reduce the cost, weight, or environmental problems associated with devices that store energy for use at a later time
Resource Solutions	Waste and Recycling	Technologies and processes that repurpose old materials into new products and reduce or eliminate the quantity and impact of undesired material
	Water and Wastewater	Technologies and processes that lead to the more efficient purification, recycling, and management of water and wastewater
	Advanced Materials	Technologies and processes that use biochemicals and substances to improve resource efficiency or serve as substitutes for more polluting materials
	Environmental Services and Agricultural Solutions	Technologies and processes that protect and allow for the restoration of natural ecosystems or contribute to more sustainable agricultural practices and techniques. Also includes companies focused on educating consumers about environmental topics
	Emissions Markets and Controls	Technologies and processes that reduce, measure, or control the release of greenhouse gases into the atmosphere

Description of Performance Measurement Methodology

To monitor the gross company-level returns of clean tech investments made by venture capital and private equity partnerships, Cambridge Associates LLC (CA) screened over 72,000 investments held by the over 5,800 funds in its Private Investments Performance Database to identify clean tech investments. The resulting clean tech sample analyzed in this report includes 1,313 investments in 736 companies across 449 funds as of September 30, 2013. Users of the analysis may find the following descriptions of the data sources and calculation techniques helpful to their interpretation of information presented in the report:

1. All returns included in the clean tech performance statistics are **gross company-level returns and are not net of any fund management or incentive fees that may be incurred by limited partners.** To approximate the difference between net-to-limited partner fund-level IRRs and clean tech gross company-level IRRs, Cambridge Associates compared the gross and net returns of 229 U.S. venture capital funds with a gross company-level return range of 0 to 10% and found the median return spread for these funds to be approximately 4.4% (440 basis points).
2. Partnership financial statements are the primary source of information concerning cash flows and ending residual/net asset values for portfolio company investments.
3. Recognizing the alternative asset community's sensitivity to the distribution of information pertaining to individual fund investments, as a matter of policy CA only releases aggregated figures in its company performance statistics report.
4. Certain exhibits are grouped by years of initial investment. Year of initial investment is defined as the first year in which a company received an investment cash flow as noted in a fund's financial statement. Companies receiving initial investment in 2013 were not included in this analysis, as performance is considered too young to be meaningful.
5. CA uses the internal rate of return (IRR) performance calculation in its statistics reports. The IRR is a since inception calculation that solves for the discount rate that makes the net present value of an investment equal to zero. The calculation is based on cash-on-cash returns over equal periods modified for the residual value of the partnership's equity or portfolio company's net asset value (NAV). The residual value attributed to each respective group being measured is incorporated as its ending value. Transactions are accounted for on a quarterly basis, and annualized values are used for reporting purposes. Please note that all transactions are recorded on the 45th day or midpoint of the quarter.
6. Additional Definitions:
    a. **Distributed/Paid-In Capital Multiple** divides the total distributed gross proceeds for portfolio company investments by the total invested capital in those investments.
    b. **Total Value/Paid-In Capital Multiple** sums the total distributed gross proceeds and total ending residual/net asset value for portfolio company investments and then divides this sum by the total invested capital in those investments.
    c. **Pooled Gross IRR** aggregates all cash flows and ending NAVs in a sample to calculate a dollar-weighted return.
7. These performance statistics attempt to include only those investments generally categorized by the venture and private equity community as clean tech and do not imply that all technologies or services in the sample are equally "clean" or "high-tech." For those seeking a better understanding of the environmental cost-benefit analysis of the technologies included in this report, the National Renewable Energy Laboratory (NREL) has done research in this area (http://www.nrel.gov/).

Summary of the Data

1. Peak investment in new clean tech companies occurred in 2008; since then there has been a significant decline in the amount of first-time capital invested in new clean tech companies.

2. Cambridge Associates' company performance statistics include $24.5 billion invested in private clean tech companies, $10.6 billion in realized proceeds, and $18.5 billion in remaining net asset value through September 30, 2013. These numbers create a gross total value/paid-in capital multiple of 1.2x, a gross distributed/paid-in capital multiple of 0.4x, and a gross internal rate of return (IRR) of 6.5%.

3. Investments were drawn from 449 different funds (324 venture capital funds and 125 private equity funds).

4. Across the four major clean tech investment groups, 30.8% of capital has been deployed in renewable power manufacturing investments, 30.4% in renewable power development investments, 22.6% in energy optimization investments, and 16.2% in resource solutions investments. On a total investment basis as of September 30, 2013, all four clean tech groups have achieved a positive gross IRR. Renewable power development had the strongest returns in gross IRR terms, returning 10.3%.

5. Geographically, $17.7 billion (72.5% of capital) in the Cambridge Associates sample was invested in U.S.-based companies. Developed markets outside of the United States received $4.5 billion of investment (18.5% of total clean tech investment), while emerging markets accounted for $2.2 billion of investment (9.0% of total clean tech investment). United States-based companies have generated a gross company-level IRR of 4.7%, while companies based outside the United States have generated a gross IRR of 19.2%. A limited sample of emerging markets investments (125) have performed better than United States and global developed ex U.S. investments.

6. The clean tech private investment sector remains young, and investors must therefore be cautious about drawing forward-looking conclusions from the data at this time. As the sector evolves and matures, Cambridge Associates will continue to measure company-level performance of clean tech investments across all funds on a quarterly basis.

Questions should be directed to cleantechdata@cambridgeassociates.com.

Clean Tech Company Performance Statistics

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Summary Analysis

Performance Statistics	Number of Investments	Paid-In Capital ($B)	Gross Distributed/ Paid-In Capital Multiple	Gross Total Value/ Paid-In Capital Multiple	Gross Pooled IRR (%)
Cambridge Associates Global Clean Tech	**1,313**	**24.5**	**0.4**	**1.2**	**6.5**
By Geography					
U.S. Clean Tech	1,008	17.7	0.4	1.2	4.7
Ex U.S. Clean Tech	305	6.7	0.6	1.3	19.2
By Stage					
Early Stage Clean Tech[1]	818	8.9	0.2	1.1	1.6
Late Stage Clean Tech[2]	495	15.6	0.6	1.3	11.3
By Subsector Group					
Renewable Power Manufacturing[3]	463	7.5	0.4	1.0	1.3
Renewable Power Development[4]	132	7.4	0.5	1.3	10.3
Energy Optimization[5]	482	5.5	0.6	1.2	9.1
Resource Solutions[6]	236	4.0	0.2	1.2	6.0

[1] Includes seed, start-up, and early stage investments.
[2] Includes expansion, growth, and private equity investments.
[3] Example investments include solar, wind, biofuel, and fuel cell manufacturing.
[4] Example investments include the financing, management, operation, and ownership of clean power generation projects.
[5] Example investments include smart grid, energy efficiency, energy management, lighting, energy storage, and sustainable mobility.
[6] Example investments include waste & recycling, water & wastewater, advanced materials, environmental services, sustainable agriculture solutions, and emissions controls.

Performance includes 1,313 investments in 736 companies from 449 funds and reflects gross deal level returns from 2000 to 2013.
Funds are distributed across U.S. venture capital (257 funds), non-U.S. venture capital (67 funds), U.S. private equity (59 funds), and non-U.S. private equity (66 funds).

Clean Tech Company Performance Statistics

Data as of
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Company Analysis by Years of Initial Investment
By Geography

Total Paid-In Capital ($B) of Companies Receiving Initial Investment In:				
	2000 - 2003	2004 - 2007	2008 - 2012	Total (2000–12)
U.S. Clean Tech	0.8	7.7	9.2	17.7
Ex U.S. Clean Tech	0.2	1.4	5.2	6.7
Cambridge Associates Global Clean Tech	**0.9**	**9.1**	**14.4**	**24.5**
Gross Distributed / Paid-In Capital Multiple of Companies Receiving Initial Investment In:				
	2000 - 2003	2004 - 2007	2008 - 2012	Total (2000–12)
U.S. Clean Tech	0.7	0.5	0.2	0.4
Ex U.S. Clean Tech	0.6	1.8	0.2	0.6
Cambridge Associates Global Clean Tech	**0.7**	**0.7**	**0.2**	**0.4**
Gross Total Value / Paid-In Capital Multiple of Companies Receiving Initial Investment In:				
	2000 - 2003	2004 - 2007	2008 - 2012	Total (2000–12)
U.S. Clean Tech	1.5	1.2	1.1	1.2
Ex U.S. Clean Tech	0.8	2.1	1.1	1.3
Cambridge Associates Global Clean Tech	**1.4**	**1.3**	**1.1**	**1.2**
Gross Pooled IRR (%) of Companies Receiving Initial Investment In:				
	2000 - 2003	2004 - 2007	2008 - 2012	Total (2000–12)
U.S. Clean Tech	6.4	5.6	3.2	4.7
Ex U.S. Clean Tech	(6.0)	167.4	2.1	19.2
Cambridge Associates Global Clean Tech	**5.1**	**12.2**	**2.8**	**6.5**

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Funds are distributed across U.S. venture capital (257 funds), non-U.S. venture capital (67 funds), U.S. private equity (59 funds), and non-U.S. private equity (66 funds).

Clean Tech Company Performance Statistics

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Company Analysis by Years of Initial Investment
By Stage

Total Paid-In Capital ($B) of Companies Receiving Initial Investment In:				
	2000 - 2003	2004 - 2007	2008 - 2012	Total (2000–12)
Early Stage Clean Tech[1]	0.7	3.6	4.6	8.9
Late Stage Clean Tech[2]	0.2	5.5	9.8	15.6
Cambridge Associates Global Clean Tech	**0.9**	**9.1**	**14.4**	**24.5**
Gross Distributed / Paid-In Capital Multiple of Companies Receiving Initial Investment In:				
	2000 - 2003	2004 - 2007	2008 - 2012	Total (2000–12)
Early Stage Clean Tech[1]	0.5	0.2	0.1	0.2
Late Stage Clean Tech[2]	1.1	1.0	0.3	0.6
Cambridge Associates Global Clean Tech	**0.7**	**0.7**	**0.2**	**0.4**
Gross Total Value / Paid-In Capital Multiple of Companies Receiving Initial Investment In:				
	2000 - 2003	2004 - 2007	2008 - 2012	Total (2000–12)
Early Stage Clean Tech[1]	1.4	1.0	1.0	1.1
Late Stage Clean Tech[2]	1.1	1.5	1.1	1.3
Cambridge Associates Global Clean Tech	**1.4**	**1.3**	**1.1**	**1.2**
Gross Pooled IRR (%) of Companies Receiving Initial Investment In:				
	2000 - 2003	2004 - 2007	2008 - 2012	Total (2000–12)
Early Stage Clean Tech[1]	5.3	1.0	0.6	1.6
Late Stage Clean Tech[2]	3.8	30.6	3.9	11.3
Cambridge Associates Global Clean Tech	**5.1**	**12.2**	**2.8**	**6.5**

[1] Includes seed, start-up, and early stage investments.
[2] Includes expansion, growth, and private equity investments.
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Company Analysis by Years of Initial Investment

By Subsector Group

Total Paid-In Capital ($B) of Companies Receiving Initial Investment In:				
	2000 - 2003	2004 - 2007	2008 - 2012	Total (2000–12)
Renewable Power Manufacturing[1]	0.3	2.9	4.3	7.5
Renewable Power Development[2]	NA	2.6	4.8	7.4
Energy Optimization[3]	0.5	2.2	2.8	5.5
Resource Solutions[4]	NA	1.4	2.5	4.0
Cambridge Associates Global Clean Tech	**0.9**	**9.1**	**14.4**	**24.5**
Gross Distributed / Paid-In Capital Multiple of Companies Receiving Initial Investment In:				
	2000 - 2003	2004 - 2007	2008 - 2012	Total (2000–12)
Renewable Power Manufacturing[1]	0.4	0.6	0.2	0.4
Renewable Power Development[2]	NA	0.8	0.3	0.5
Energy Optimization[3]	0.7	1.1	0.2	0.6
Resource Solutions[4]	NA	0.2	0.2	0.2
Cambridge Associates Global Clean Tech	**0.7**	**0.7**	**0.2**	**0.4**
Gross Total Value / Paid-In Capital Multiple of Companies Receiving Initial Investment In:				
	2000 - 2003	2004 - 2007	2008 - 2012	Total (2000–12)
Renewable Power Manufacturing[1]	1.7	1.2	0.9	1.0
Renewable Power Development[2]	NA	1.4	1.2	1.3
Energy Optimization[3]	1.2	1.6	1.0	1.2
Resource Solutions[4]	NA	1.1	1.3	1.2
Cambridge Associates Global Clean Tech	**1.4**	**1.3**	**1.1**	**1.2**
Gross Pooled IRR (%) of Companies Receiving Initial Investment In:				
	2000 - 2003	2004 - 2007	2008 - 2012	Total (2000–12)
Renewable Power Manufacturing[1]	8.9	9.8	(5.0)	1.3
Renewable Power Development[2]	NA	11.5	9.3	10.3
Energy Optimization[3]	2.7	31.2	(0.3)	9.1
Resource Solutions[4]	NA	3.1	8.8	6.0
Cambridge Associates Global Clean Tech	**5.1**	**12.2**	**2.8**	**6.5**

NA Indicates Inadequate number of companies in sample. Companies in NA columns will contribute to Total (2000 - 2012).

[1] Example investments include solar, wind, biofuel, and fuel cell manufacturing.

[2] Example investments include the financing, management, operation, and ownership of clean power generation projects.

[3] Example investments include smart grid, energy efficiency, energy management, lighting, energy storage, and sustainable mobility.

[4] Example investments include waste & recycling, water & wastewater, advanced materials, environmental services, sustainable agriculture solutions, and emissions controls.

Performance includes 1,313 investments in 736 companies from 449 funds and reflects gross deal level returns from 2000 to 2013.

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Exhibits

Clean Tech Company Performance Statistics

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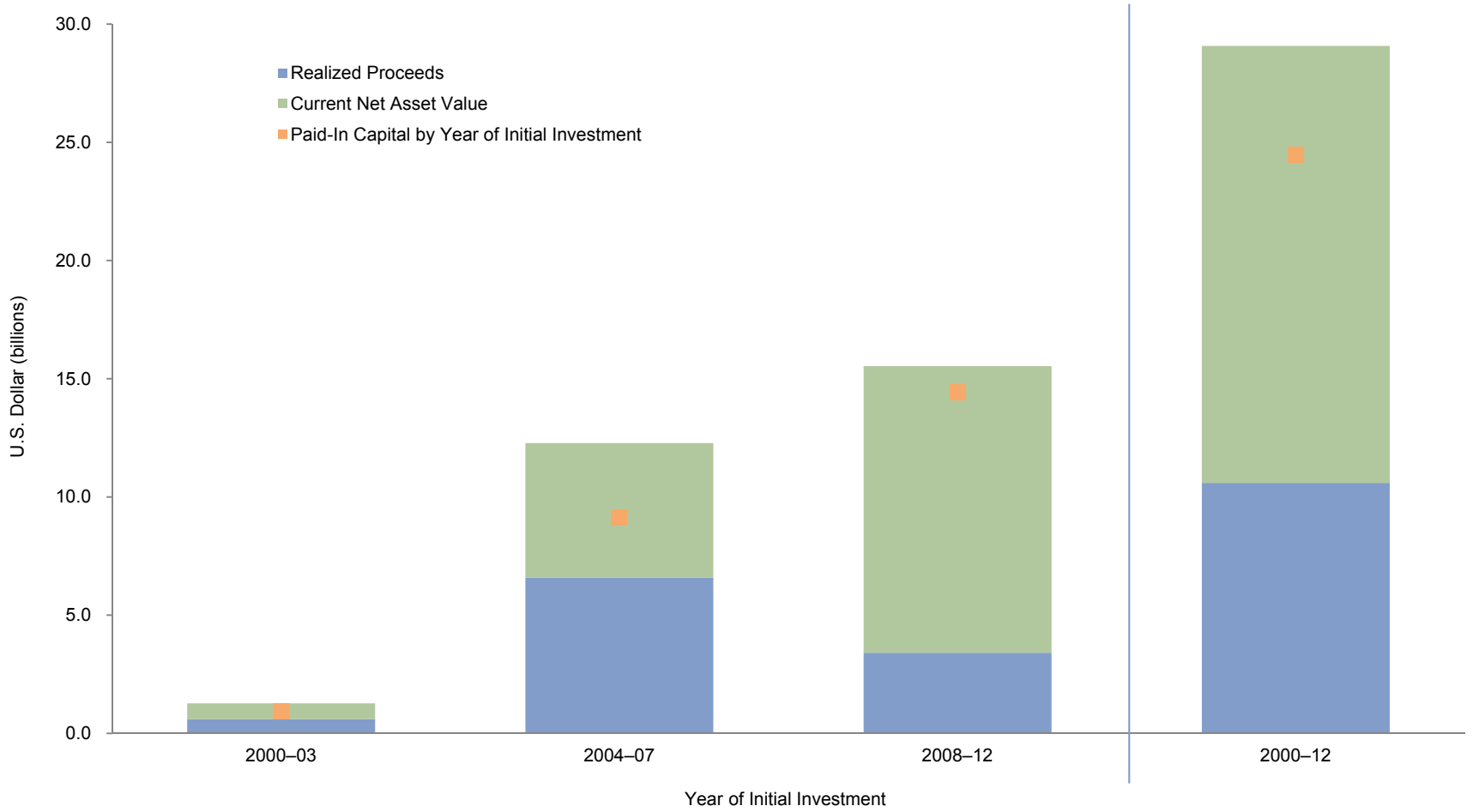
Company Analysis: Performance by Years of Initial Investment



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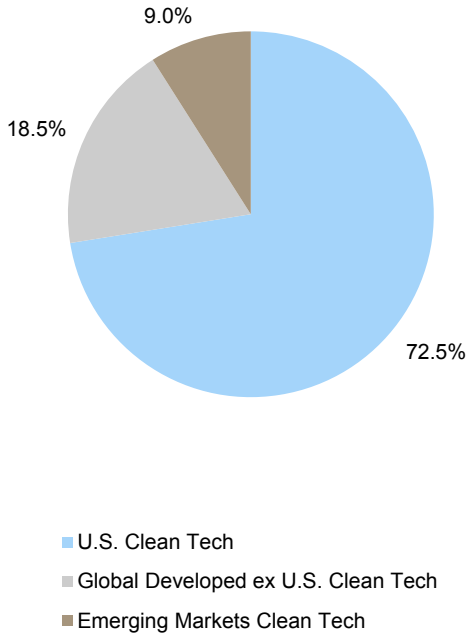
Notes: Performance includes 1,313 investments in 736 companies from 449 funds and reflects gross deal level returns from 2000 to 2013. Funds are distributed across U.S. venture capital (257 funds), ex U.S. venture capital (67 funds), U.S. private equity (59 funds), and ex U.S. private equity (66 funds). All returns included in the clean tech statistics report are gross company-level returns and are not net of any fund management or incentive fees that may be incurred by limited partners. See the Description of Performance Measurement Methodology on page 3 for more information.

Clean Tech Company Performance Statistics

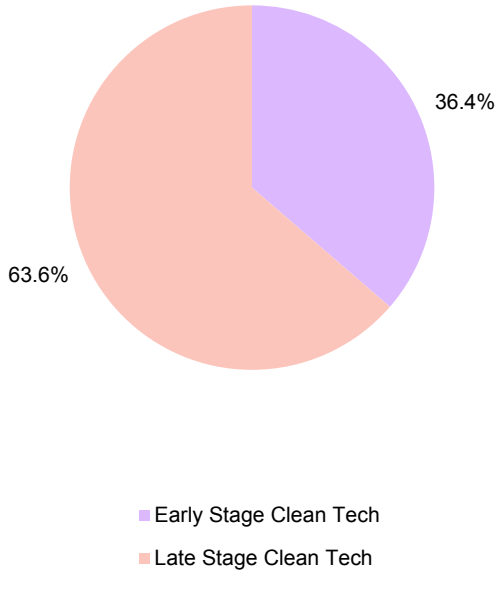
Data as of
September 30, 2013

Company Analysis: Allocations by Paid-In Capital

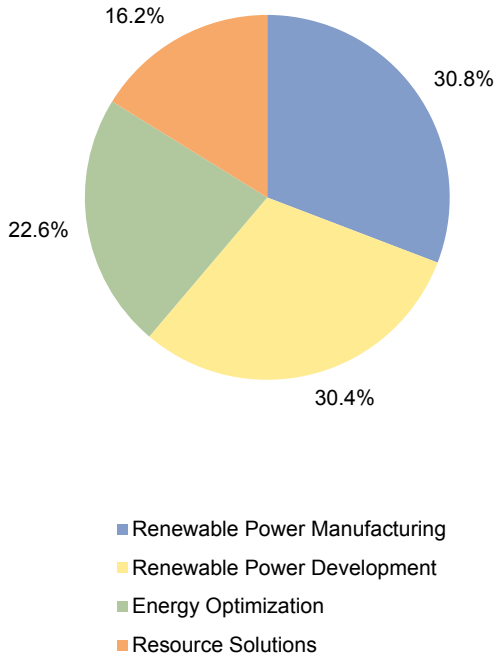
Clean Tech Allocation by Geography



Clean Tech Allocation by Stage



Clean Tech Allocation by Subsector



Source: ©2014 Cambridge Associates Private Investments Database. Cambridge Associates LLC, all rights reserved.
Notes: Global developed ex U.S. includes Western Europe, Canada, Israel, Australia, New Zealand, and Japan. Emerging markets includes China, India, Taiwan, and other emerging markets countries. Totals may not add exactly to 100% due to rounding. Performance includes 1,313 investments in 736 companies from 449 funds and reflects gross deal level returns from 2000 to 2013. Funds are distributed across U.S. venture capital (257 funds), ex U.S. venture capital (67funds), U.S. private equity (59 funds), and ex U.S. private equity (66 funds). Ex U.S. investments include 180 investments in developed markets ($4.5 billion paid-in capital) and 125 investments in emerging markets ($2.2 billion paid-in capital). All returns included in the clean tech statistics report are gross company-level returns and are not net of any fund management or incentive fees that may be incurred by limited partners. See the Description of Performance Measurement Methodology on page 3 for more information.

Clean Tech Company Performance Statistics

Data as of
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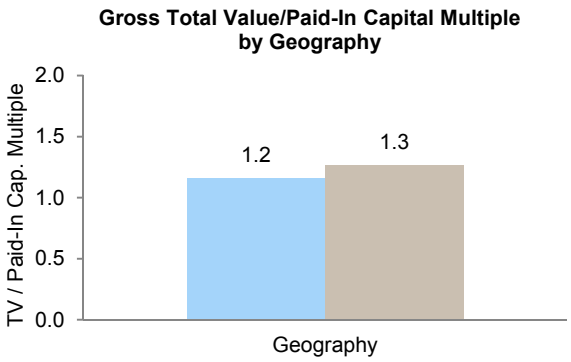
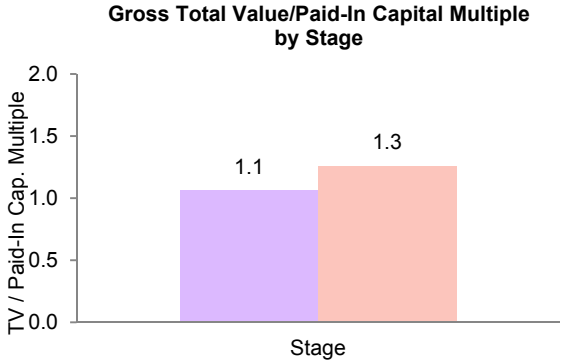
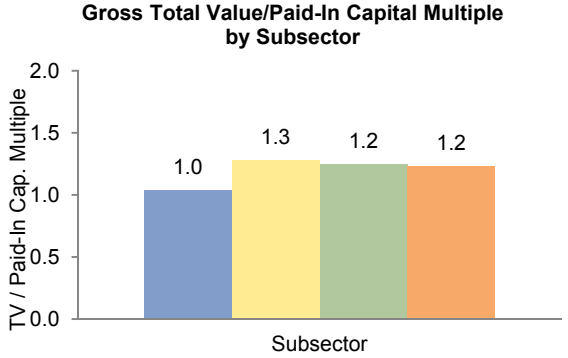
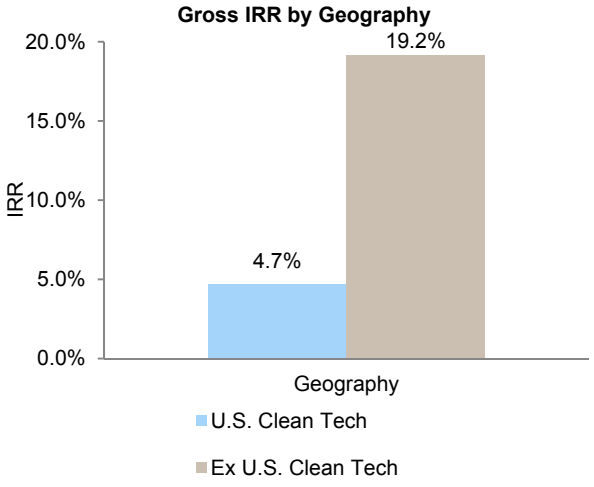
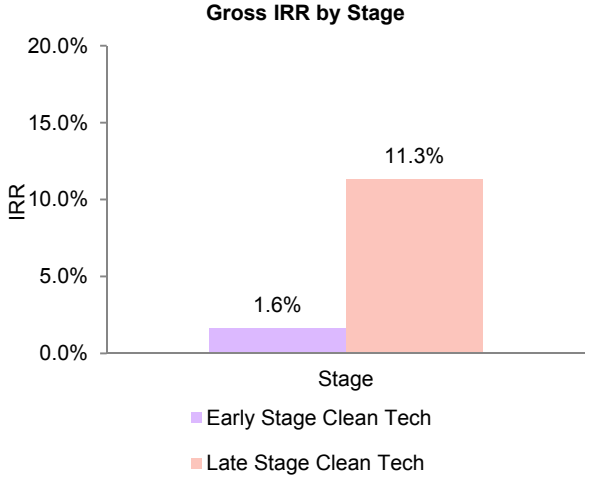
Company Analysis: Performance by Gross Total Value/Paid-In Capital Multiple and Gross IRR (%)

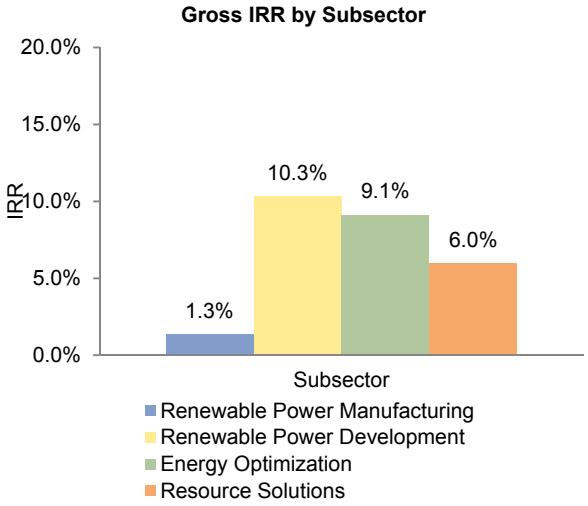












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Note on Performance Database Changes

Our goal is to provide you with the most accurate and relevant performance information possible; as a result, Cambridge Associates' private investments performance database will continually reflect changes to the underlying pool of contributing funds and clean technology company investments.

As these changes occur, you may notice quarter to quarter changes in the results of some historical benchmark return analyses.

CAMBRIDGE ASSOCIATES LLC