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 78,000 underlying investments in our database, identifying 1,395 distinct clean tech investments across 826 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 494 different funds (344 venture capital funds, 140 private

equity funds and 10 infrastructure 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 (25.7% of capital), renewable power development (33.9%), energy optimization (20.5%), and resource solutions (19.9%). In terms of geography, \$20.1 billion (68.2% of capital) in our sample was invested in U.S.-based companies. Developed markets outside of the United States received investments of \$6.1 billion (20.8%), while emerging markets accounted for \$3.3 billion (11.0%). Of the deployed capital, 88.2% has been invested in companies that received their initial funding in or after 2005.

Company-level statistics from our analysis include \$29.5 billion invested in private clean tech companies, \$18.9 billion in realized proceeds, and \$15.0 billion in remaining net asset value through September 30, 2016. The gross total value/paid-in capital multiple is 1.1; the gross distributed/paid-in capital multiple, 0.6; and the gross internal rate of return (IRR), 3.9%. Of the 1,395 investments, 722 are fully realized (51.8% 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 270 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 400 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,

private equity, and infrastructure 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 forwardlooking 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, 2016, three of the four clean tech groups achieved a positive gross IRR. Renewable power development had the strongest performance in gross IRR terms, returning 9.2%.

Early stage investments have produced a gross IRR of -1.0% and total value/paid-in capital multiple of 1.0. Later stage investments have generated a gross IRR of 8.0% and total value/paid-in capital multiple of 1.2.

Geographically, U.S.-based companies have produced a gross company-level IRR of 1.6% and total value/paid-in capital multiple of 1.1, while companies based outside the United States have generated a gross IRR of 11.8% and multiple of 1.3.

Inquiries about our statistics or requests to contribute data to our database can be directed to cleantechdata@cambridgeassociates.com