

# Private Equity Re-Sets The Performance Bar

*All wind power developers must begin to address the changes and competitive threats that have been introduced to the market from private equity-backed developers.*

**BY RICHARD HOMICH & RAJIV ADVANI**

**T**he renewable energy industry has evolved considerably over the past few years, from cash-strapped developers cobbling together 10 MW to 15 MW projects to well-funded developers financing 250 MW to 500 MW projects with staged tax equity partnership structures. This evolution has accelerated industry growth, increasing private equity (PE) interest in developers. These investments are changing industry dynamics by raising the bar for developer returns and giving developers the financial capability to tie up critical industry resources. This evolution requires all developers to raise their performance to stay competitive.

At the end of the day, competitiveness will be defined by shareholder returns, as higher returns attract capital, other resources and opportunities. However, managing to shareholder returns requires a shift from a project-based to a portfolio-based perspective. Focusing solely on project returns can sub-optimize shareholder returns, whereas portfolios managed with strategic structuring and reinvestment decisions will drive higher performance.

Developers need to rise to this challenge by increasing their financial sophistication. Hiring financial talent is a start. However, developing the pro-

cesses and systems to manage portfolios is an even more critical next step.

## **Raising the performance bar**

With electricity generation from renewables growing at 30% per year and wind slated to provide nearly 20% of U.S. energy consumption needs within the next few decades, PE has taken active interest in this growth opportunity and asserted its influence in many ways.

There was a 51% increase in investments into the clean-tech sector in the first quarter of this year over the first quarter of 2007 – with average deal size increasing by approximately 50% from 2006 through 2007. In addition, four out of 10 of the largest deals in clean-tech were made in the first quarter of this year. Participants in this equity investment boom include many major venture capital firms (e.g., Khosla Ventures, Kleiner Perkins and Draper Fisher), as well as a number of later-stage equity investors (e.g., Fortis, Drexia and Marathon Capital), investment banks (e.g., Goldman Sachs, Credit Suisse and HSH Nordbank) and retail banks (e.g., Wells Fargo).

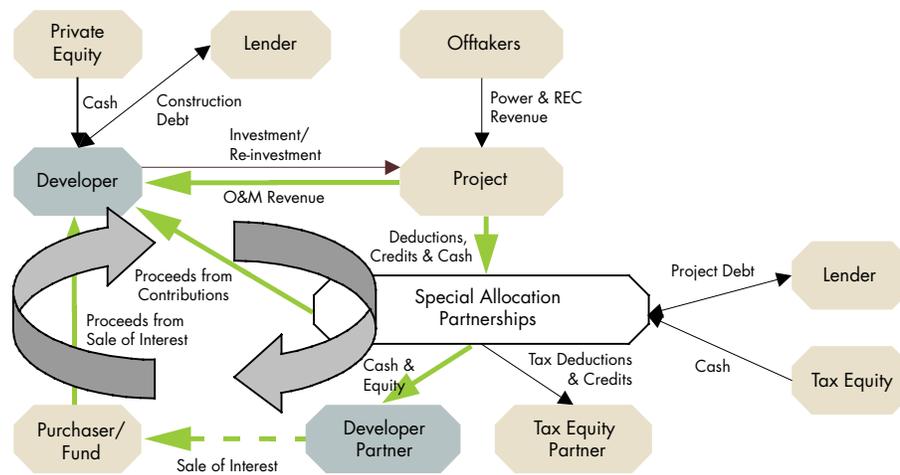
Correspondingly, renewable energy project financing has evolved from project-by-project financings to captive financing vehicles (e.g., SunEdison's SunE Solar Funds funded by Goldman, HSH, and Wells Fargo; Sun

Power's SunPower Program funded by Morgan Stanley, GE, Goldman and Credit Suisse) and new energy-focused PE firms (e.g., Hudson Clean Energy funded by GE, Goldman and Credit Suisse). This evolution from a project perspective to a portfolio perspective changes the metrics used to evaluate performance. For example, project analysis focuses on yield, whereas measures of shareholder value creation may include earnings before interest, taxes, depreciation and amortization (EBITDA); earnings per share; and return on equity.

PE capital has changed industry dynamics by tying up strategic resources, creating competitive advantages for their investments. Attracted by more competitive compensation and greater upside opportunities, top industry talent has defected from traditional developers to PE-backed developers. Those developers are also recruiting from other industries (e.g., financial services), increasing the talent pool in the industry and making their investments more competitive. Additionally, PE has used capital to lock up equipment supply through forward commitments – making it more difficult for smaller project-based developers to keep pace.

To maintain their options, all developers need to address the changes and competitive threats resulting from

**Figure 1: Shareholder Value Driven By Velocity Investment/Re-investment**



PE-backed developers. Focusing on shareholder return would be a good start, as strong returns provide the means to attract PE and strategic investments and compensate key talent.

**Greater financial sophistication**

Making decisions to maximize shareholder return requires a broad portfolio view where outcomes of projects (e.g., cashflow, earnings) influence decisions on future projects. Although the concept is simple, making systematic decisions accordingly requires financial sophistication at the project and portfolio levels.

At the project level, structuring and modeling tax equity financing presents significant challenges, as tax equity partnership structures are inherently esoteric and complex. Optimizing these financing structures for a given business context increases the complexity. Cashflow and income patterns can be erratic, making it difficult to manage and understand how structuring and tax-code choices will impact project returns.

Sophisticated deal teams are able to analyze multiple scenarios to assess impact of various structures – a time-consuming luxury that many cannot support. Instead, most employ a limited set of standard structures. Those with the ability to analyze a broader range of innovative structures will be better positioned to drive portfolio performance.

In addition to structuring, teams

must track actual project performance, prepare accounting reports and reconcile variances. These activities often involve complex calculations and require sophisticated models and processes. For example, hypothetical liquidation at book value (HLBV), the primary accounting method used to allocate earnings, presents a common stumbling block for modelers and accountants.

Tracking and reconciling expected versus actual cash and income allocated from the partnership is yet another difficult task. However, these activities produce critical portfolio information required to support portfolio-level decision-making. However, project-level analysis and financial management are just the beginning.

Managing to higher shareholder returns also requires a portfolio in which developers efficiently leverage their equity capital to generate a high volume of projects (see Figure 1). Higher velocity equates to greater potential to generate growth in assets, earnings and EBITDA, which, in turn, drives shareholder returns. This high-velocity management approach requires a portfolio view in which project-level structuring decisions are made to support funding for future projects.

Executing these activities requires highly skilled financial analysts and management. However, relying on human resources without support-

ing processes creates risks and inefficiencies. People naturally introduce errors, which necessitates risk management processes. Additionally, with PE-backed firms hiring aggressively in the market, these resources can be expensive to hire and difficult to retain. Consequently, managing knowledge will be important for the prevention of loss of critical information as people move between firms.

Technology could be used to improve management of returns and risk and retain critical knowledge. However, the predominant spreadsheet technology imposes a number of limitations that can perpetuate these issues. For instance, tax equity partnership modeling requires a number of advanced modeling capabilities generally not supported by spreadsheets (e.g., supporting circular analysis required for calculating tax yields, change control and auditing, and simultaneously analyzing multiple scenarios for HLBV and other calculations). Spreadsheets are also not suited to support portfolio management or provide for consistency and transparency to mitigate risks.

**Enhanced capabilities**

To remain competitive, developers will need to make themselves more attractive to investors by demonstrating financial sophistication at both the project level and portfolio level, as higher returns will drive investor decisions. However, managing to achieve higher returns will require processes and systems that increase capabilities and performance.

**Structure projects**

Developers need to master project-level modeling and tracking of tax equity partnership flip structures. These elements include running multiple scenarios and testing the impact of options in the tax code, using debt (e.g., project-level and back-leverage), and tracking/reconciling actual project performance.

These basic building blocks are requirements to consolidating a project into a portfolio and supporting decision-making on how the existing portfolio can drive a pipeline of future

projects. Therefore, new projects can be strategically engineered with an optimal schedule of cash, earnings and structural variations to increase portfolio-level returns (e.g., structured debt, tax equity share, contribution of assets, cash sweeps, cash allocation, number of flips, targeted flip and term yields).

### **Generate velocity**

Maximizing shareholder returns requires leveraging investor equity across as many projects as possible (i.e., velocity).

To increase velocity, developers

need to strategically structure projects (e.g., cash sweeps and share percentages) to support timing of future investments, as well as make decisions on the disposition of existing projects within the portfolio to balance risk and return (e.g., syndication, sale of interest and cashflow reinvestment).

### **Manage knowledge/risk**

Given the inherent risks and limitations of human resources, developers need to find methods to support the complexity of managing a portfolio of projects, as well as mitigate the poten-

tial for errors and loss of knowledge. Although traditional technology offers a means to support project structuring and tracking, developers need to recognize the limitations of this technology and explore other options as well. **NP**

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