A COMMUNITY FOR PROFESSIONALS IN PRIVATE CAPITAL

# Sustainable Development Capital: Energy Efficiency in Asia Comes with Opportunity and Obstacles

*April 11, 2011 By Allie Corless*

*Today's peHUBlogger Network posting comes from Allie Corless and Jason Segal of Sustainable Development Capital LLP*

Energy efficiency investments represent an opportunity to "do more with less" and mitigate contributors to climate change through a commercially viable approach. Building owners can reduce energy usage by making simple, on-balance-sheet improvements that pay for themselves. At scale, institutional investors have opportunities to finance projects that corporations would prefer to keep off-balance-sheet. With appropriate due diligence and structuring, energy efficiency investing will generate returns of the magnitude typically associated with private equity but with risk profiles akin to infrastructure investing.

The energy efficiency opportunity set is large and scalable, with investments ranging from $1 million to $2 million and up to $20 million. In Asia alone, energy efficiency upgrades represent a market opportunity of $90-115 billion annually. China is expected to increase its target for energy intensity reduction for the 12th Five-Year Plan

beyond the 20 percent reduction already achieved, and India has identified "enhanced energy efficiency" as a principal means to mitigate the impacts of climate change. Indonesia has enacted laws and regulations incentivizing energy savings; Australia's National Framework for Energy Efficiency has been in force since 2008; South Korea is moving to introduce energy efficiency resource standards for energy suppliers.

To View PDF, Download H…

The key drivers of the investment opportunities are driven by the commercial realities of inefficient industrial, manufacturing and commercial facilities. Attractive projects exist in large-scale industrial plants (like steel, paper, textile, cement, power generation), manufacturing facilities and commercial buildings. When appropriately structured, a turnkey financial and technical solution offers an attractive value proposition to all parties involved.

Most industrial hosts (plant managers and building owners) are well aware of opportunities for potential savings in energy costs. For the most attractive improvements–typically those with the shortest payback periods– they are able to secure on-balance sheet financing. However, there is a dearth of financing for projects that offer a two- to four-year payback (i.e. a 3-year payback entails a gross return of 33% on invested capital). The magnitude of the savings potential provides sufficient upside to incentivize all stakeholders, through a shared savings model.

Currently, most energy efficiency upgrades are contracted to energy

service companies (ESCOs) that assume full responsibility for project design, development, installation, and maintenance of equipment. They are often obligated to finance entire projects up front, and recoup their capital outlays plus profits via "paid-from-savings" arrangements with their clients, with repayment occurring only as energy savings are realized. At the time of this writing, most ESCOs prefer to preserve their balance sheet for the operation and expansion of their businesses (as opposed to financing projects), and working with a third party capital provider is attractive.

This inherent and growing funding gap means capital is needed for the development and aggregation of Asian energy efficiency projects. Given the nature of the Asian capital markets, only a proportion can come via debt from traditional lenders, so the preponderance of project finance requires equity investors. Providing equity capital for these projects is not a riskless proposition. The primary risks include equipment/performance risk, counterparty credit/contractual risk, political risk, regulatory risk, exit risk and a lack of government support. However, each of these risks can be effectively mitigated by a combination of technical performance guarantees, careful selection of corporate hosts and political risk insurance. Exit risk may be completely eliminated by structuring projects so ownership is automatically transferred to the corporate hosts upon conclusion of the project contract and relevant payments.

From an equity investor's perspective, risk-adjusted returns can be

enhanced through a portfolio approach to energy efficiency investing. Risks can be further reduced through investing in a portfolio of projects with diversification across ESCOs and a focus on making maintenance and upgrades. Further, returns can be enhanced through the aggregation of similar projects across hosts, or multiple projects at a single host through reductions in administrative and contractual costs. Moderate amounts of debt can also be introduced into large-scale projects to enhance returns and balance risk.

In addition to providing capital, unlocking attractive returns consistently requires a diverse skill set including deal sourcing, technological knowledge, project execution capabilities and financial structuring. Therefore the most important element of a successful energy efficiency investment program is a manager with experience in developing, vetting and executing projects, as well as familiarity and relationships in the local markets.

Energy efficiency project finance in Asia, using a shared savings approach, can provide attractive cash yields at moderate levels of risk. As corporations, property owners, banks and institutional investors awaken to the opportunity, we expect significant capital to flow into the space, unlocking scalable investment returns while positively contributing to the reduction in greenhouse gas emissions.

**Take your pick!**

- ***Buyouts*** delivers exclusive news and analysis about private equity

deals, fundraising, top-quartile managers and more. Get your **FREE trial** or **subscribe now**.

- ***VC Journal*** provides exclusive news and analysis about venture capital deals, fundraising, top-quartile investors and more. Get your **FREE trial** or **subscribe now**.

## RELATED STORIES

Aurelius Equity to buy Hellanore

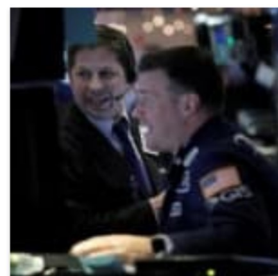
Mantra Secondary Opportunities II raises 120 mln euros

Veritas Capital, Elliott clinch $5.5 billion acquisition of Athenahealth: Reuters

Vista Equity to buy Apptio for about $1.94 bln

## OTHER COOL STUFF ON PE HUB

CVC to acquire ConvergeOne for about $1.8 bln



PE HUB First Read

BDC's François Lecavalier joins Canada Infrastructure Bank

Blackstone, LLOG looking to sell Gulf of Mexico oil exploration venture, say sources: Reuters

Powered by

*© 2006-2018 Buyouts Insider / Argosy Group LLCCopyright (c) Buyouts Insider/Argosy Group LLC. Reproduction in any form is prohibited without written consent by Buyouts Insider/Argosy Group LLC.*