



StepStone

Sustainable Investing in Private Equity

Presented to:



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■ Clean Energy is a Diverse and Emerging Sector

- The area includes a broad array of investment strategies:
 - Technology venture capital
 - Growth equity and buyouts in mid market firms
 - Renewable energy power infrastructure
 - Emerging areas such as carbon credits

■ Rapidly Growing...

- Sustainable private equity investment grew 75% CAGR from 2002 to 2007.
- Clean technology has grown from under 1% to nearly 15% of global venture capital in the last decade.
- Political will and recent regulatory changes are driving investment in renewable energy projects.

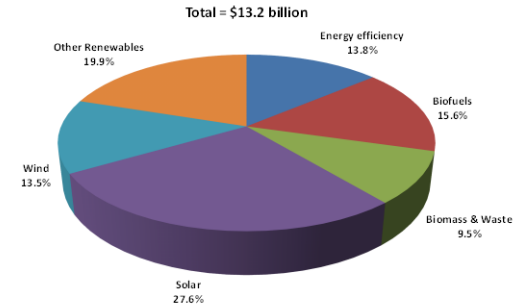
■ ...But Highly Volatile

- A large amount of capital has flowed into the sector, raising valuations.
- The sector is closely linked to commodity prices.
- The pace of change in technology and regulatory regimes poses risk and opportunities for private equity investors.

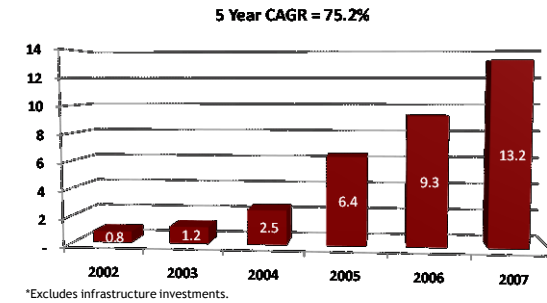
■ Specialized Expertise is Critical

- Successful clean tech investing often requires specific domain expertise in power/utilities/resources/operations that is distinct from traditional IT or life science backgrounds.
- Power infrastructure investing requires strong structuring, permitting/construction and governmental relations expertise.

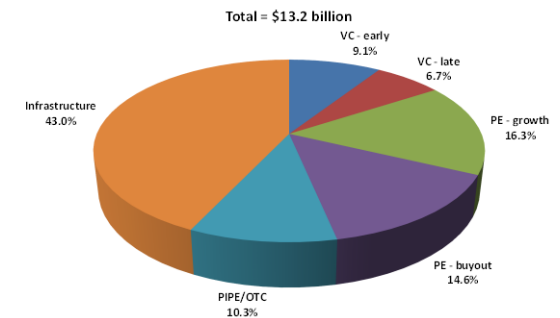
Global VC/PE Investment Activity by Sector (2007)



Global Sustainable VC/PE Investment Activity by Year (\$ billions)

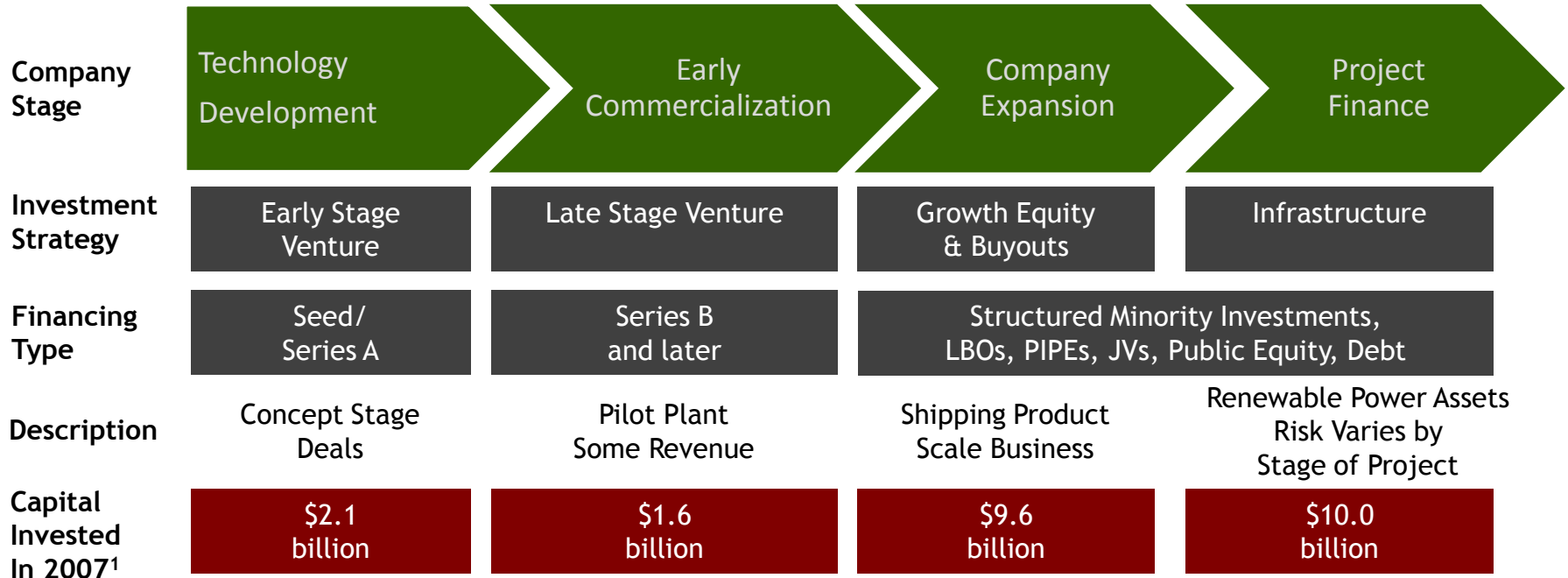


Global VC/PE Investment Activity by Stage (2007)



*Source: SEFI, New Energy Finance.

Sustainable Investment Landscape



¹Source: Cleantech Network, New Energy Finance

- Clean technology is more capital intensive than traditional IT-focused venture capital, increasing the risk of lost capital, especially in early stage strategies.
 - Technology risk can be mitigated in mid and late stage opportunities. However, valuations are critical – many late stage firms have overpaid in subsequent funding rounds.
 - Growth equity deals providing the first institutional capital in companies with strong revenue and products is an attractive strategy.
- Renewable power infrastructure investments have a higher return profile than traditional infrastructure. These deals can generate high multiple exits to strategic buyers, but they typically involve greenfield risk.
- There are limited “pure play” buyout funds in the sector. Generalists firms are increasingly active, however.

Innovation Areas	Application Areas			
	Energy/Power	Water	Green Building	Manufacturing / Industrial
Distributed Grid / Alternative Technologies	Solar, Wind, GeoThermal, Clean Coal	Water Purification (Desalination / Ion Exchange)	Smart Grid Applications	Smart Grid Applications
Resource Efficiency\	Smart Grid Applications	Leak Detection, Irrigation Control	LED / LEC, Chromogenics	Materials Control, Tracking
IT / Network Applications	Distributed Grid Monitoring	Advanced Meter Reading	Ballast Control, Energy Monitoring	Industrial Sensor Technologies
Advanced Materials	Batteries and Supercapacitors	Water Monitor and Sensors	LEED Design, Insulated Concrete Forms	NanoTech Applications, Barrier Coatings
BioScience Innovations	Ethanol / BioFuel, Catalysts	Produced Water / Purification	Bio Insulation	PetroChemical Replacements
Recycling and Pollution Control	Air / Emissions, Carbon Trading	Water Re-Use / Residuals	Biodegradable Building Materials	EOL / Electronics Recycling

■ Impact of Recession and Financial Crisis

- *Decline in Commodity Prices*
 - **Crude Oil** – Lower oil prices lessen urgency to deploy clean energy solutions.
 - **Other Commodities** – Natural gas, coal, corn, steel, carbon, polysilicon are all part of renewables food chain.
- *Access to Leverage* – Credit is scarce for infrastructure projects and buyouts, but the extent of the liquidity draught varies widely.
 - **Tax equity** – This market is expected to decline in 2008 and 2009. Tax equity yields have increased by 200-300 basis points.

■ Valuations are Declining

- Private equity valuations typically lag public markets, as entrepreneur's expectations adjust.
 - Series A valuations are down slightly, but remain relatively robust for quality companies.
 - Companies with less than 18 months of cash on hand (and no revenue) are raising money in down rounds.
 - Growth-stage companies have less access to bank debt and other sources of capital, making private equity more attractive.
 - Deal flow pace has slowed considerably.

■ Government Incentives and Mandates Continue

- Incentives for solar and wind energy in Federal TARP Bill
- Increase in renewable portfolio energy standards in last election.
- Expectation of extensive federal support of sector over next 4 years.

- **Sustainable Investments are Attractive Component of a Private Equity Portfolio.**
 - Potential for strong returns while promoting sustainability.
 - Despite the recent downturn in oil prices, the sector remains attractive. However, institutions should invest with best of breed managers with strong experience in their subsector, access to proprietary deals and the vision to anticipate, rather than respond to, changes in the marketplace.

- **Manager Selection is Critical in this Emerging Sector.**
 - A very limited number of venture firms have the domain expertise and differentiated deal flow to successfully execute early stage deals with significant technology risk.
 - Later stage and growth equity investing generally offers a more attractive risk-reward proposition if assets can be found at reasonable valuations.
 - There are numerous groups which have recently moved into sustainable private equity investing and many of these groups are expected to generate poor returns for LPs.

- **Valuations, Commodity Prices, Regulatory Uncertainty and Overfunding Sectors are Key Risks.**
 - Momentum investments in trendy areas such as PV solar and biofuels have lost significant capital for investors.

- **Co-investment Opportunities are Often Available for Limited Partners.**
 - Larger size of funding rounds and projects presents opportunity for reduced fee and carry.

- **Strong Political, Social and Economic Tailwinds in Alternative Energy Should Benefit the Entire Private Equity Food Chain.**
 - A “picks and shovels” approach, focusing on the companies supplying to the builders of renewable power infrastructure is particularly compelling.
 - There are numerous areas outside of power generation that are attractive, including energy efficiency technology, water resources and sustainable agriculture products.