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Financing CSP Projects

Concentrated Solar Power Summit

San Francisco, California

January 28 – 29, 2008

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Agenda

- Status of the Financing Market
- CSP Financing Considerations and Issues
- Financing Structures for Financial Equity and Debt



Investor / Lender Profiles

■ Prospective Lenders

- Bank Market: Predominantly European and Japanese banks active in the US wind sector. If priced right, CSP debt financings should attract US commercial banks as well (more than wind)
- Institutional Market: Insurance companies and pension funds with experience in the US power sector

15-20 active
players

\$350 MM Average
deal size

Need syndication



Investor / Lender Profiles

■ Prospective Equity Investors

- Financial: Major financial institutions (banks, insurance companies) and industrials
- Strategic: Utilities and energy companies as JV partners

16-19 active
players

>\$2-3 Billion
annual capital



CSP Financing Considerations

Developer

- Credibility
- Track record
- Risk Profile

Tax Equity

- Commitments
- Risk Profile

Technology

- Suppliers
- Track Record
- Warranty

Solar Resources

- Data
- Uncertainty
- Verification

Construction

- EPC? / Turnkey?
- Contractor
- Track Record

O & M

- Contractor / Track Record
- Spare Parts
- Transmission
- Water
- Term

Revenue

- PPA
- Merchant
- Tradable Credits

Regulatory

- ITC expiration
- Change in Law

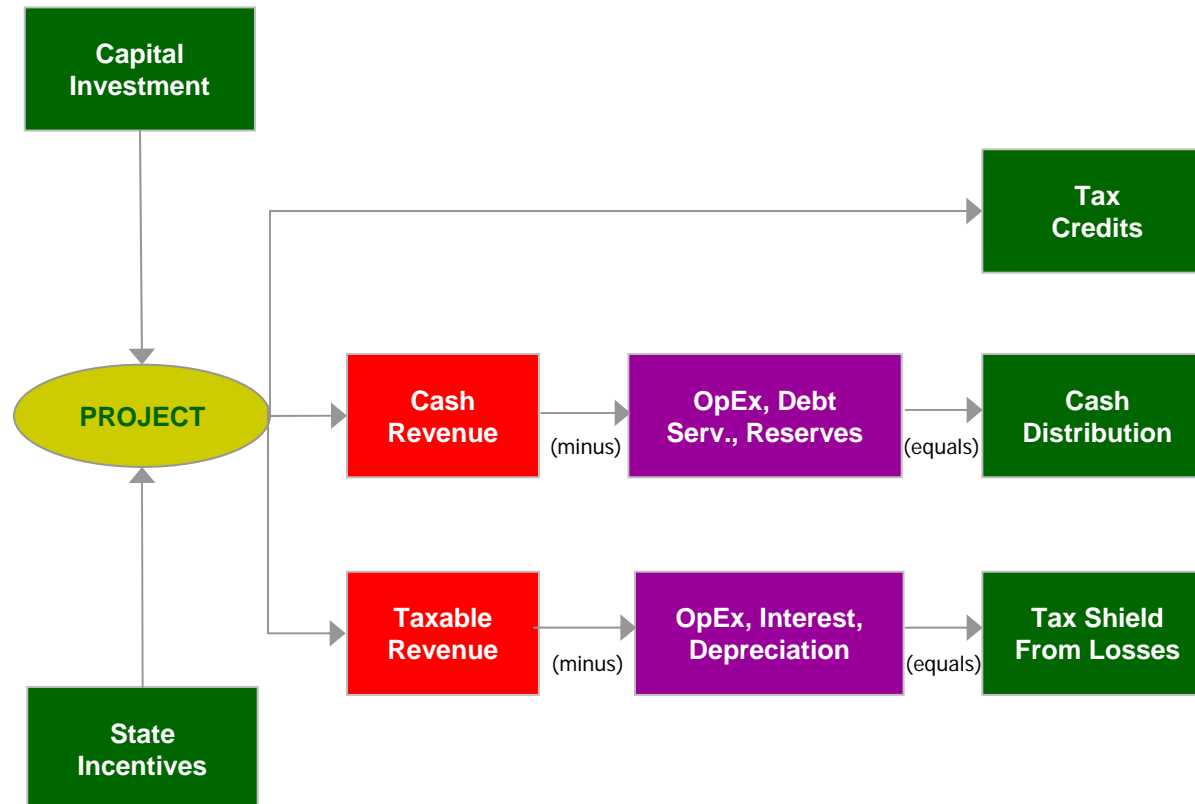


Salient Features of CSP Financing

- Structure driven by tax issues
- Proprietary technology
- Performance risk allocation is complex
- Challenging economics



CSP Project Economics

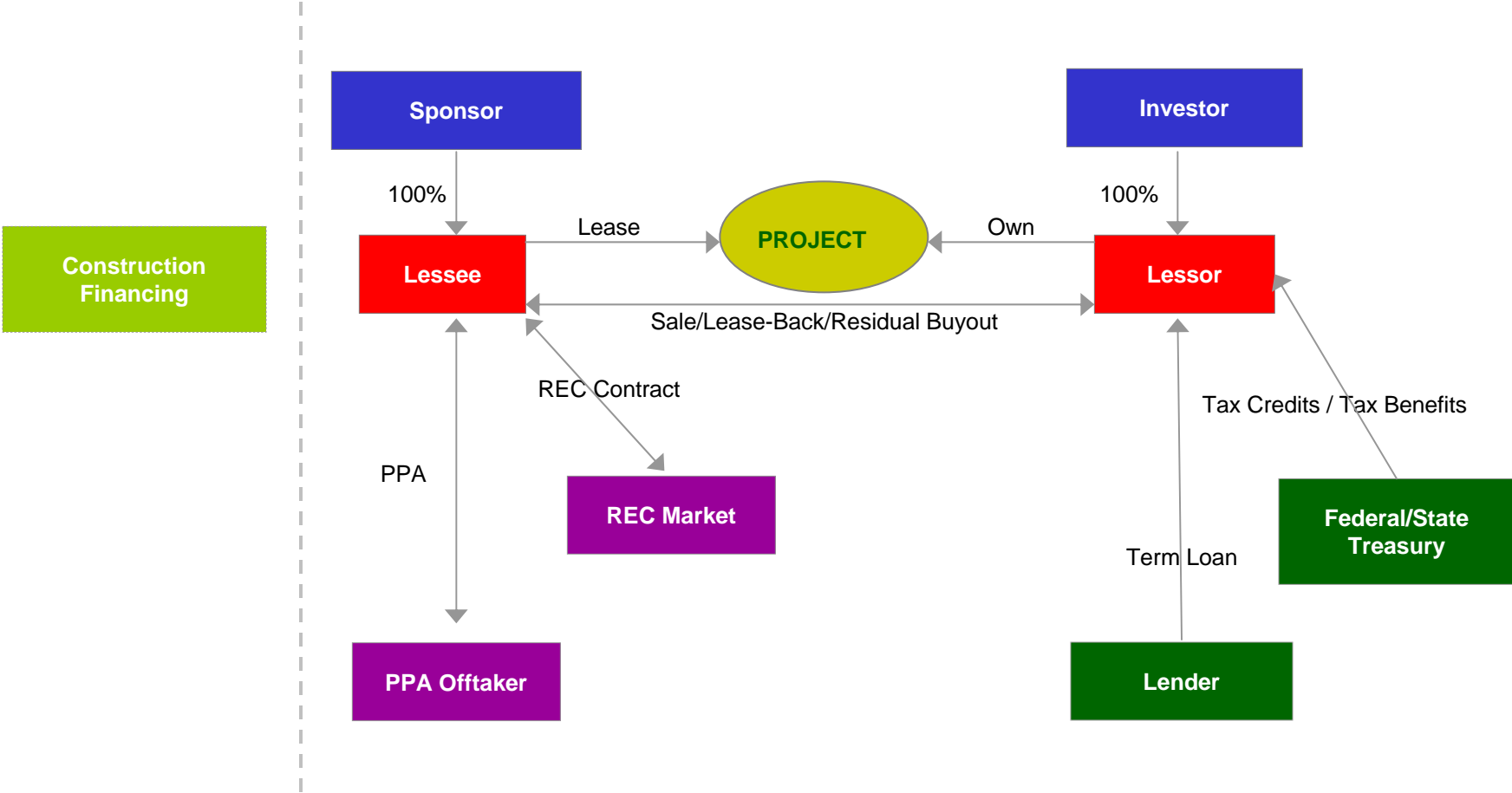


Alternative Financing Structures

- Discussion assumes developer unable to utilize tax benefits
- Alternatives show comprehensive structures with debt and equity
- Construction financing
 - Construction Loans
 - Equity Bridge
- Term Financing
 - Leveraged Lease
 - Partnership Flips with Term Loan



Lease



Lease

- Construction funded by Sponsor equity and a construction loan
 - 60 % Construction Debt
 - 40 % Equity from Sponsor
- Within 90 days of COD, Sponsor sells the project to the Investor and immediately leases it back
- Sponsor repays the construction loan from sale proceeds; Investor finances the purchase with cash equity and a non-recourse term debt
- Lessee typically would have an FMV-based buyout option

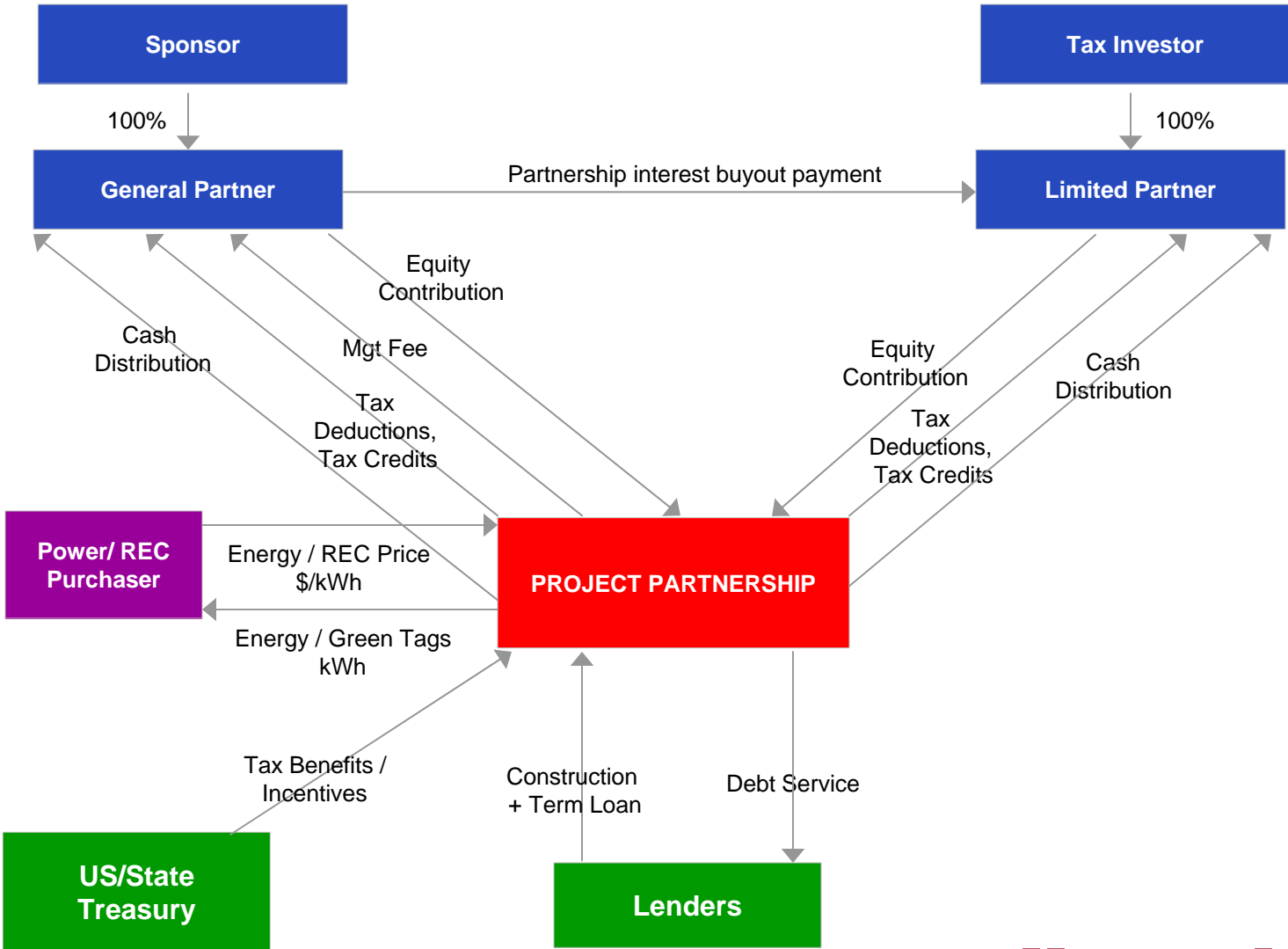


Lease

- Lease term is commensurate with PPA but limited by asset life
- Lessor will have consent rights over various Lessee actions; and can terminate the lease on default
- Transfers will be limited
- Equity target return are unleveraged IRR of 7% or so

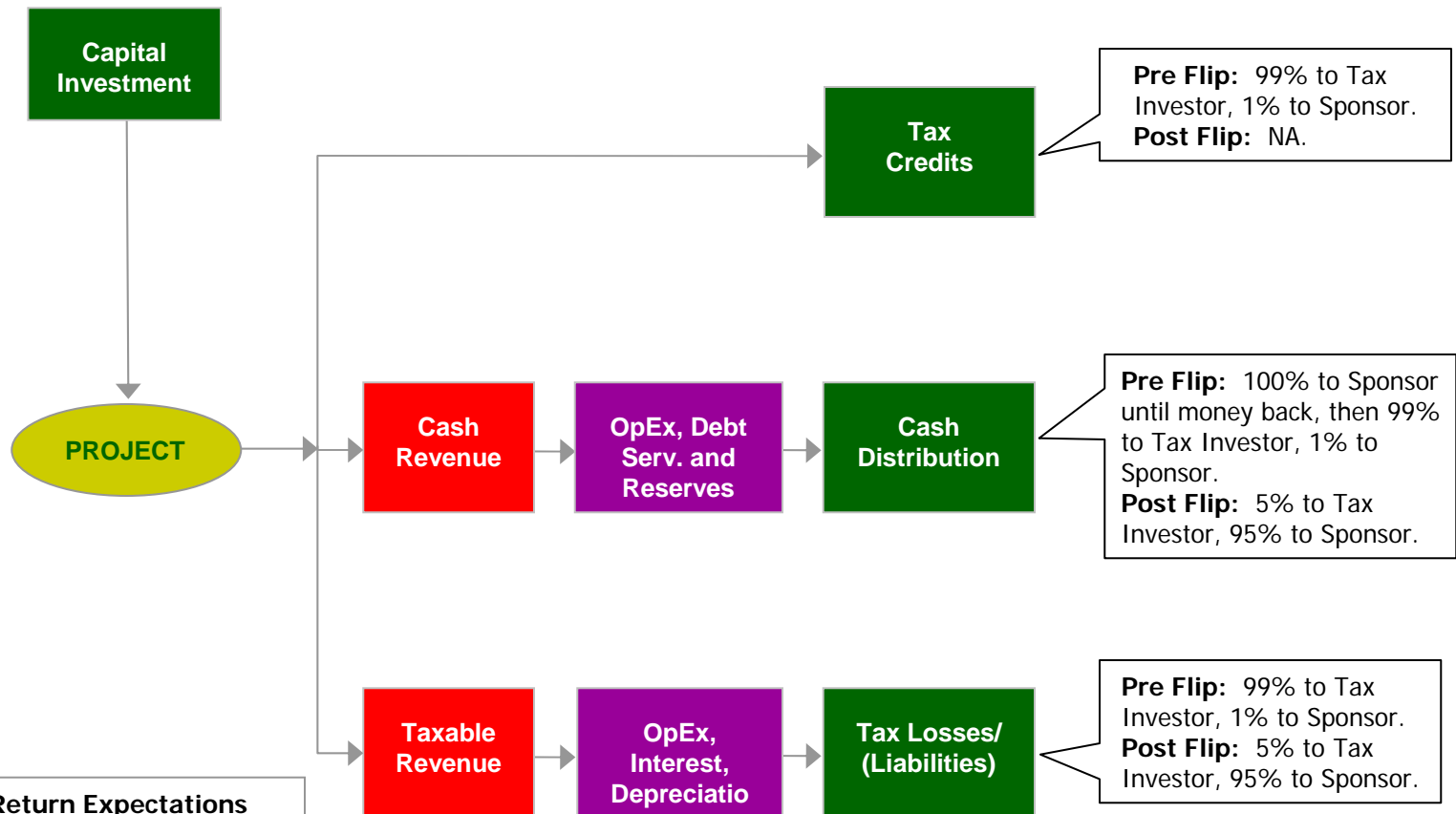


Partnership Flip



Partnership Flip

Capitalization: 40% Equity / 60% Debt; 99% of Equity from Tax Investor, 1% from Sponsor.



Return Expectations

Tax Investor: 8-9%
Sponsor: 15%+



Partnership Flip

- Construction funded by Sponsor equity and a construction loan
- Investor must be in the partnership prior to COD
- Sponsor repays the construction loan from Investor capital contribution and non-recourse term debt (or may be unleveraged)
- Sponsor typically would have an FMV-based buyout option
- Partnership term will be commensurate with asset life, but the effective investment term is measured by the flip date
- Investor will have consent rights over various issues; and can replace the Sponsor management on default
- Transfers will be limited
- Equity target return are unleveraged IRR of 7% or so



Typical Term Loan – Bank Market

Financing Amount:	Determined based on DSCR
Maturity:	15 - 18 years
Interest Margin:	LIBOR plus 1.250% + with periodic step-ups (0.125% every 4 years)
Amortization:	Semi-annual schedule commencing six months from Financial Close; sculpted to attain target DSCR
Target DSCR:	1.30x Min / 1.40x Average
Reserve Accounts:	6 month Debt Service Reserve 6 month O&M Reserve Non-Routine Expenditure Reserve (subject to IE review) Distribution Reserve (subject to 1.20x min DSCR)
Customary Covenants:	All project cash goes to “lock box” account and distributed subject to lender approval and agreed payments waterfall Long term PPA (loan term + 2yrs) Turnkey EPC with acceptable credit support 5+ years performance guarantee with acceptable credit support; Full security package



Typical Term Loan – Institutional Market

Financing Amount:	Determined based on DSCR
Maturity:	20+ years
Interest Margin:	US Treasury plus a 2.5% fixed margin
Amortization:	Semi-annual schedule commencing six months from Financial Close; sculpted to attain target DSCR
Target DSCR:	1.30x Min / 1.40x Average
Reserve Accounts:	6 month Debt Service Reserve 6 month O&M Reserve Non-Routine Expenditure Reserve (subject to IE review) Distribution Reserve (subject to 1.20x min DSCR)
Customary Covenants:	All project cash goes to “lock box” account and distributed subject to lender approval and agreed payments waterfall Long term PPA (loan term + 2yrs) 5+ years performance guarantee with acceptable credit support Prepayment penalty



Typical Construction Loan – Bank Market

Financing Amount:	Determined based on imputed DSCR targets for a typical term loan that the project could carry, plus other project specific factors
Maturity:	Construction period plus [3] months
Interest Margin:	Libor plus [1.25% - 1.75%]
Amortization:	Mandatory prepayment from financing; full security including pledges; equity commitment funded up front or pro rata (depending on credit); Turnkey EPC with acceptable credit support



Financing Structure Comparisons

	Pros	Cons
Leveraged Lease	<ul style="list-style-type: none">■ Fully tax efficient■ Timing flexibility	<ul style="list-style-type: none">■ Typically does not take construction risk■ Few active players■ Complex accounting issues■ High residual value■ Unlikely structure for new technology
Partnership Flip	<ul style="list-style-type: none">■ Can use framework established in wind power sector■ More active players■ Construction financing can be built-in■ Structuring flexibility	<ul style="list-style-type: none">■ Not fully tax efficient■ Complex tax allocation issues



About Milbank

We are a leading legal advisor in the energy sector:

- **Energy/Projects Firm of the Year 2007 & 2006** (*Chambers Global*)
- **Energy/Projects Award for Excellence 2007** (*Chambers USA*)
- **Global Law Firm of the Year Award 2007** (*Project Finance International Yearbook*)
- **Number 1 Global Renewable Energy Legal Adviser 2006** (*Euromoney's Project Finance/Dealogic*)
- **Number 1 U.S. Renewable Adviser Legal Adviser 2006** (*Euromoney's Project Finance/Dealogic*)
- **Number 1 Project Finance Legal Adviser in Latin America** (*Euromoney/Dealogic, 2007*)
- **Ten "Deals of the Year" in 2006** (*Euromoney's Project Finance*)





A firm imbued with a singular focus and rich experience in renewable energy, Alyra provides financial advisory services exclusively to the renewable energy sector. The firm specializes in M&A/cross-border joint ventures and structured tax equity/project finance. Alyra's clients include leading renewable energy companies in North America and Europe, institutional investors, national renewable energy research laboratories and Federal and state energy agencies.

Alyra was founded in January 2004 by Mohammed Alam, following his energy banking career with Fortis Capital Corp., where he led a range of origination, structuring and restructuring of renewable and conventional power transactions. Before Fortis he worked at GE Capital's Capital Markets Group, providing structuring and advisory services to GE's Latin American power and infrastructure transactions. Earlier, he started his finance career at Brown Brothers Harriman, focusing on emerging markets research. Mr. Alam holds a Master's in Public and Private Management degree with a meritorious scholarship from the Yale School of Management and a BS, summa cum laude, from the University of Massachusetts.

CURRENT MANDATES

Advisor to buyer regarding a potential wind portfolio acquisition (\$400-500 million)

.....

Advisor to investor regarding a potential investment/strategic joint venture in solar thermal (\$100+ million)

.....

Advisor to investor regarding a potential investment/strategic joint venture in solar PV (\$250+ million)

Recent Completed Transaction:
Sole Advisor
to Duke Energy regarding Duke's acquisition of the wind power assets of Tierra Energy (May 2007)



Contact Info

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