

Renewable Project Business Models: Economics and Overview of Renewable Energy Project Financing

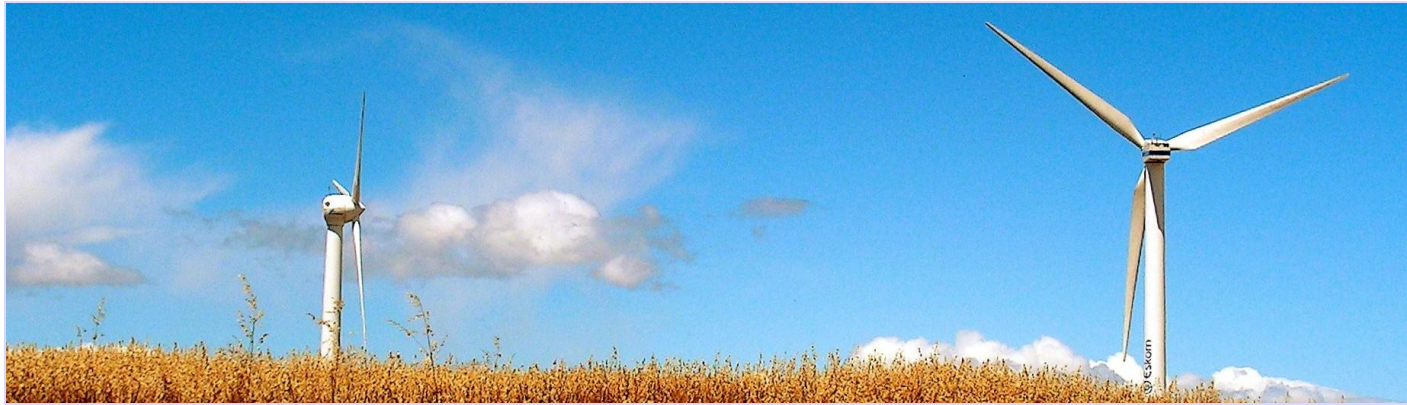


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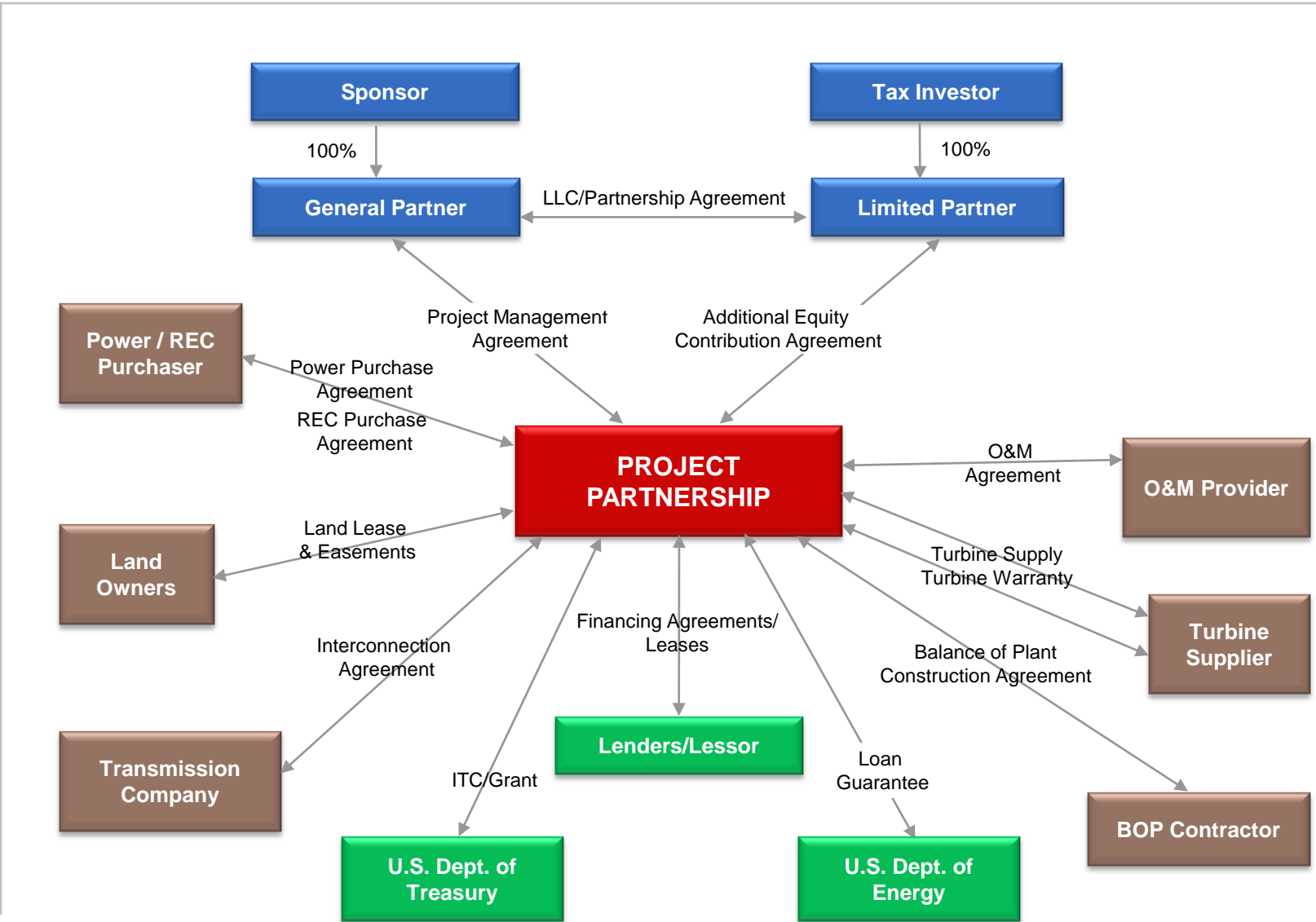
Agenda



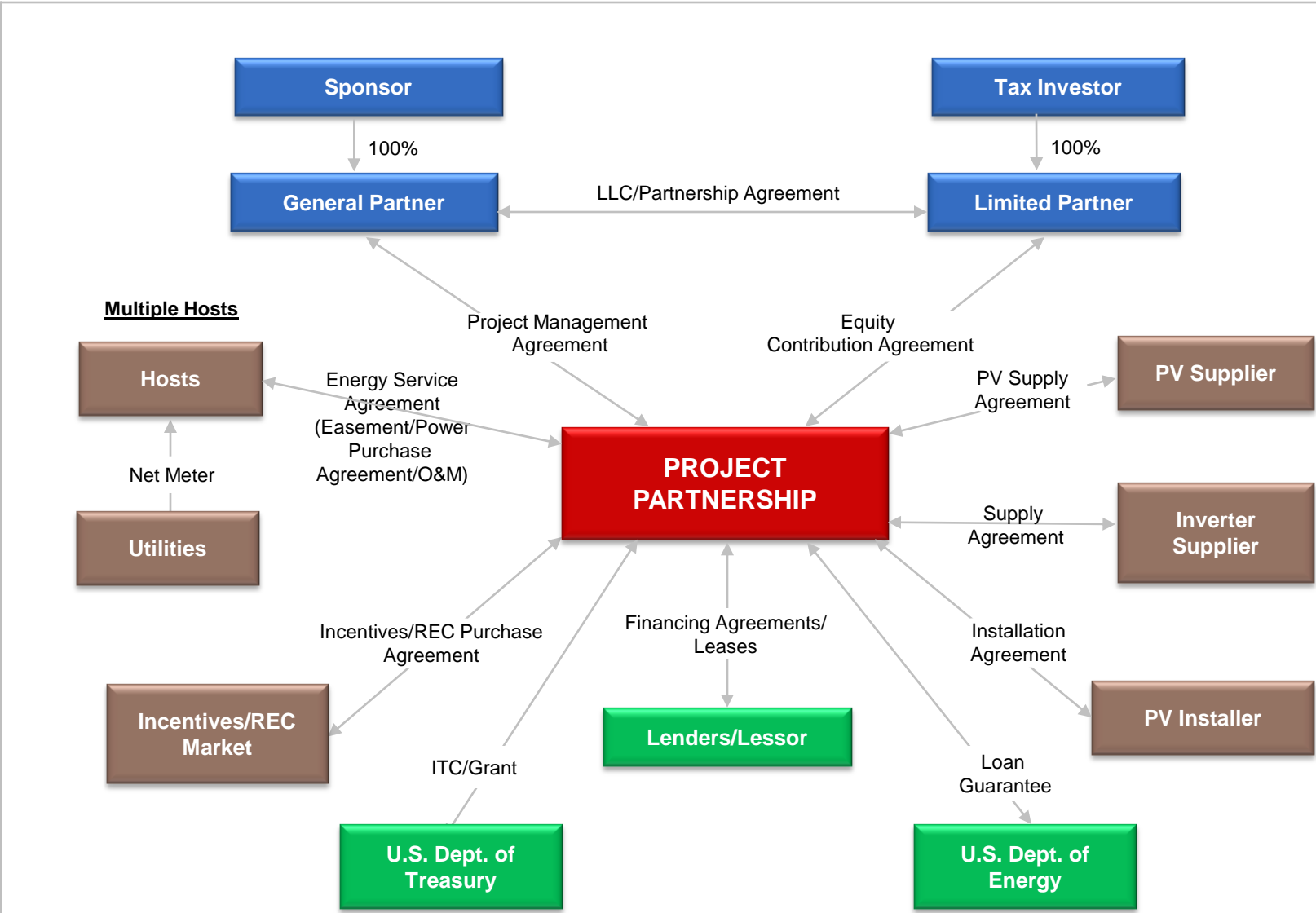
- Operating Structures
- Project Contracts
- Sources of Renewable Energy Project Economics
- Financing Alternatives
- Financing Markets
- Financing Structure Examples
- Project Risks & Mitigation
- Questions



Operating Structure of a Typical Wind Project



Operating Structure of a Typical PV Rooftop Solar Project



Project Contracts

- Partnership/Limited Liability Company Agreement
 - Special Purpose Entity
 - Management Rights
 - Cash Flow/Tax Attribute Allocation
 - Limited Liability
 - Segment Cash Flows
 - Maximize Incentives
 - Limit Grant Recapture
- Additional Equity Contribution Agreement
 - Capital Contributions
 - PTC Monetization
- Power Purchase Agreement/Hedges
 - Sale of Energy, Environmental Attributes
 - Access to Project's Capacity
 - Credit Support



Project Contracts (cont'd)

- Construction Contracts
 - Turbine/PV/Inverter Supply
 - Warranty
 - Balance of Plant/Installation
- Land/Lease/Easement
 - Control of Site
- Operating Agreements
 - Equipment Warranty
 - O&M Agreement
 - Project Administration Agreement
- Access to Grid - Interconnection Agreement/Net Metering
- Credit Agreement/LLC Agreement/Security Documents
 - Financing/Conditions/Covenants/Representations
 - Loan Agreement/Participation Agreement/Leases
 - Security Agreement, Collateral, Cash Flow Waterfall
 - Consents of Project Contract Counterparties



Sources of Cash and Tax and other Incentives

- Project Revenue
 - Energy Sales
 - REC Sales
- Federal Incentives
 - Production Tax Credits (PTC)
 - Investment Tax Credit (ITC)
 - Treasury Grant in lieu of ITC
 - DOE Loan Guarantee (FIPP)
- Accelerated Tax Depreciation
 - 5 year MACRS + Bonus depreciation, when available
- State Incentives
 - Sales and Property Tax Abatement/Rebates/Exemptions
 - Other Incentives



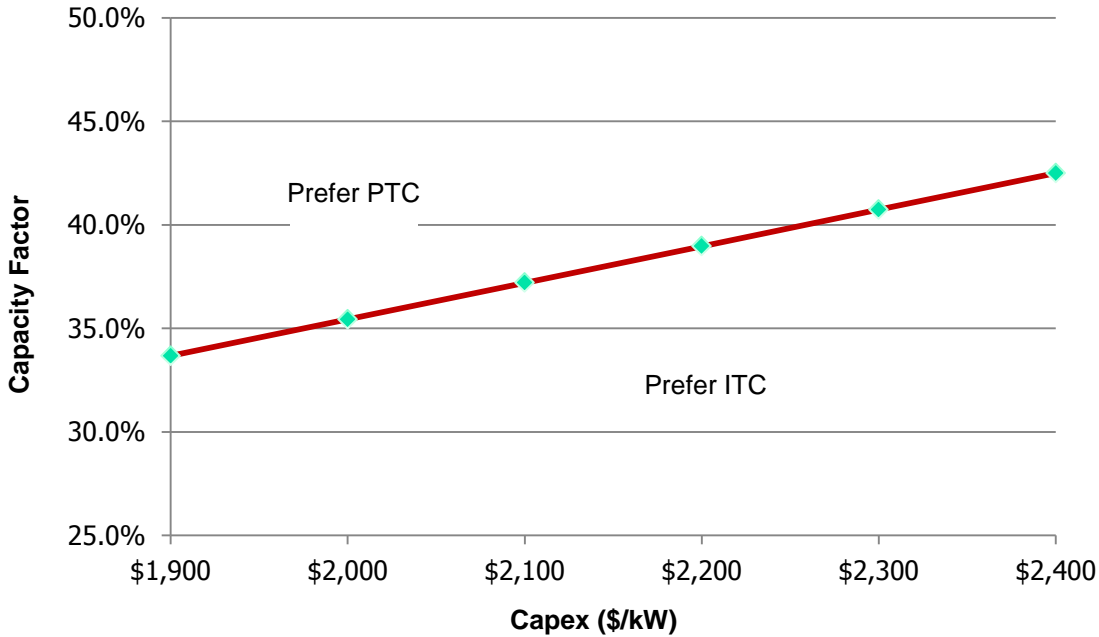
Federal Tax Attributes – by Technology

TECHNOLOGY	PTC ^{1,2}	ITC ²	Cash Grant ^{2,3}	DEPRECIATION ⁴
Wind	2.2 cents/kWh for 10 Yrs, ends 12/31/12	30%, ends 12/31/12	Equal to ITC, ends 12/31/12	5 Yr MACRS
Solar	NA	30%, ends 12/31/16 10% thereafter	Equal to ITC, ends 12/31/16	5 Yr MACRS
Geothermal	2.2 cents/kWh for 10 Yrs, ends 12/31/13	10%, ends 12/31/13	Equal to ITC, ends 12/31/13	5 Yr MACRS, not incl. transmission; rest 20 Yr MACRS
Closed-Loop Biomass	2.2 cents/kWh for 10 Yrs, ends 12/31/13	30%, ends 12/31/13	Equal to ITC, ends 12/31/13	5 Yr MACRS
Open-Loop Biomass	1.1 cents/kWh for 10 Yrs, ends 12/31/13	30%, ends 12/31/13	Equal to ITC, ends 12/31/13	5 Yr MACRS
Marine Energy Renewables	1.1 cents/kWh for 10 Yrs, ends 12/31/13	30%, ends 12/31/13	Equal to ITC, ends 12/31/13	20 Yr MACRS
Municipal Solid Waste	1.1 cents/kWh for 10 Yrs, ends 12/31/13	30%, ends 12/31/13	Equal to ITC, ends 12/31/13	7 Yr MACRS
Qualified Hydropower	1.1 cents/kWh for 10 Yrs, ends 12/31/13	30%, ends 12/31/13	Equal to ITC, ends 12/31/13	20 Yr MACRS
Qualified Fuel Cell	NA	30% (not greater than \$1,500/Kw capacity), ends 12/31/16	Equal to ITC, ends 12/31/16	5 Yr MACRS
Qualified Microturbine	NA	10% (not greater than \$200/Kw capacity), ends 12/31/2016	Equal to ITC, ends 12/31/13	5 Yr MACRS

1. PTC subject to annual inflation adjustment, using the GDP deflator, and round up to the first decimal.
2. Cannot take both PTC and ITC/Grant.
3. Commence construction in 2009-11, be in service by 2012 (wind), 2013 (others) or 2016 (solar, fuel cell).
4. 100% Bonus Depreciation for property placed in service after 9/8/10 and before 1/1/12, 50% Bonus Depreciation (before applying MACRS) for property otherwise placed in service during 2008 to 2012.



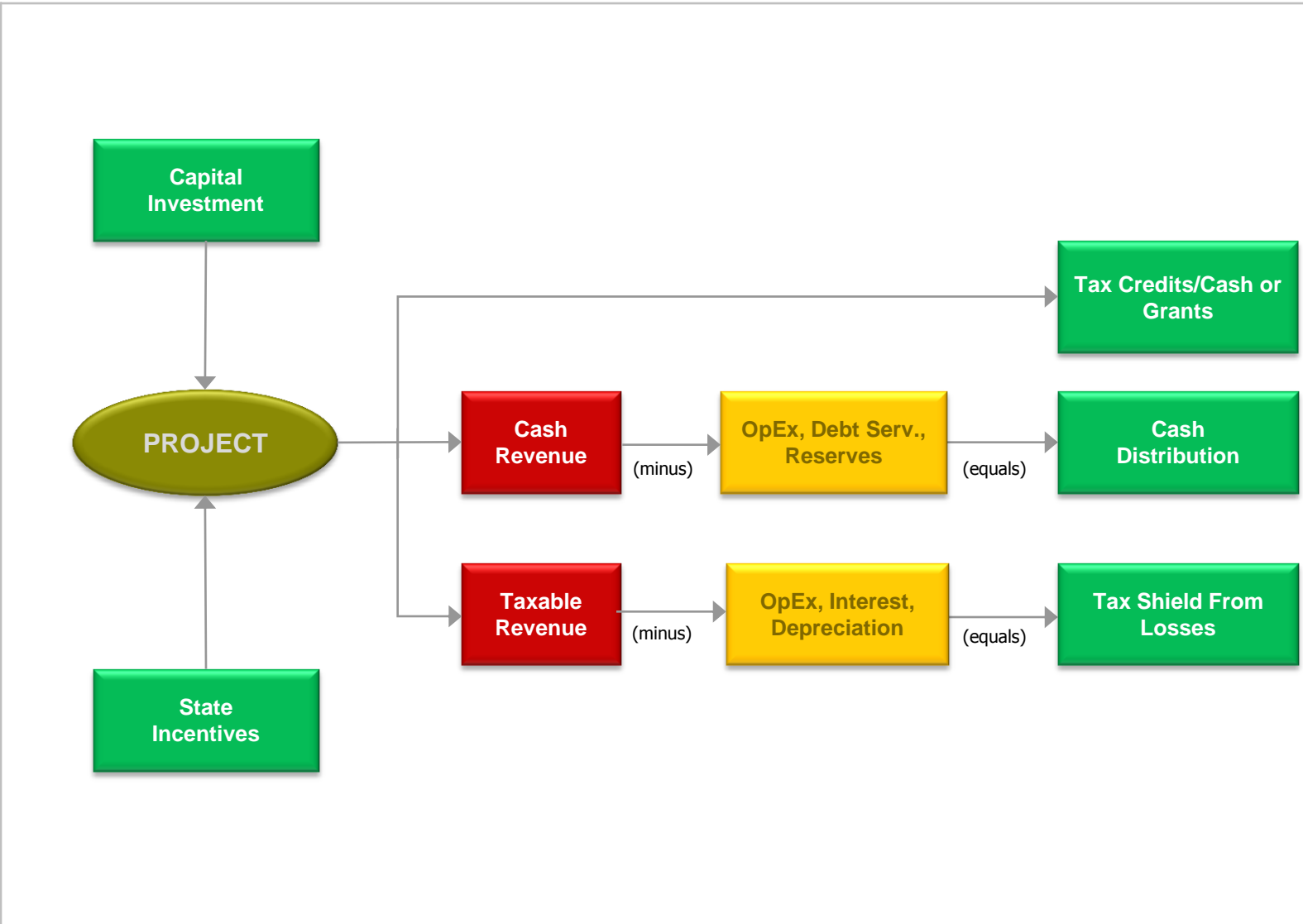
PTC vs. ITC – Wind Project



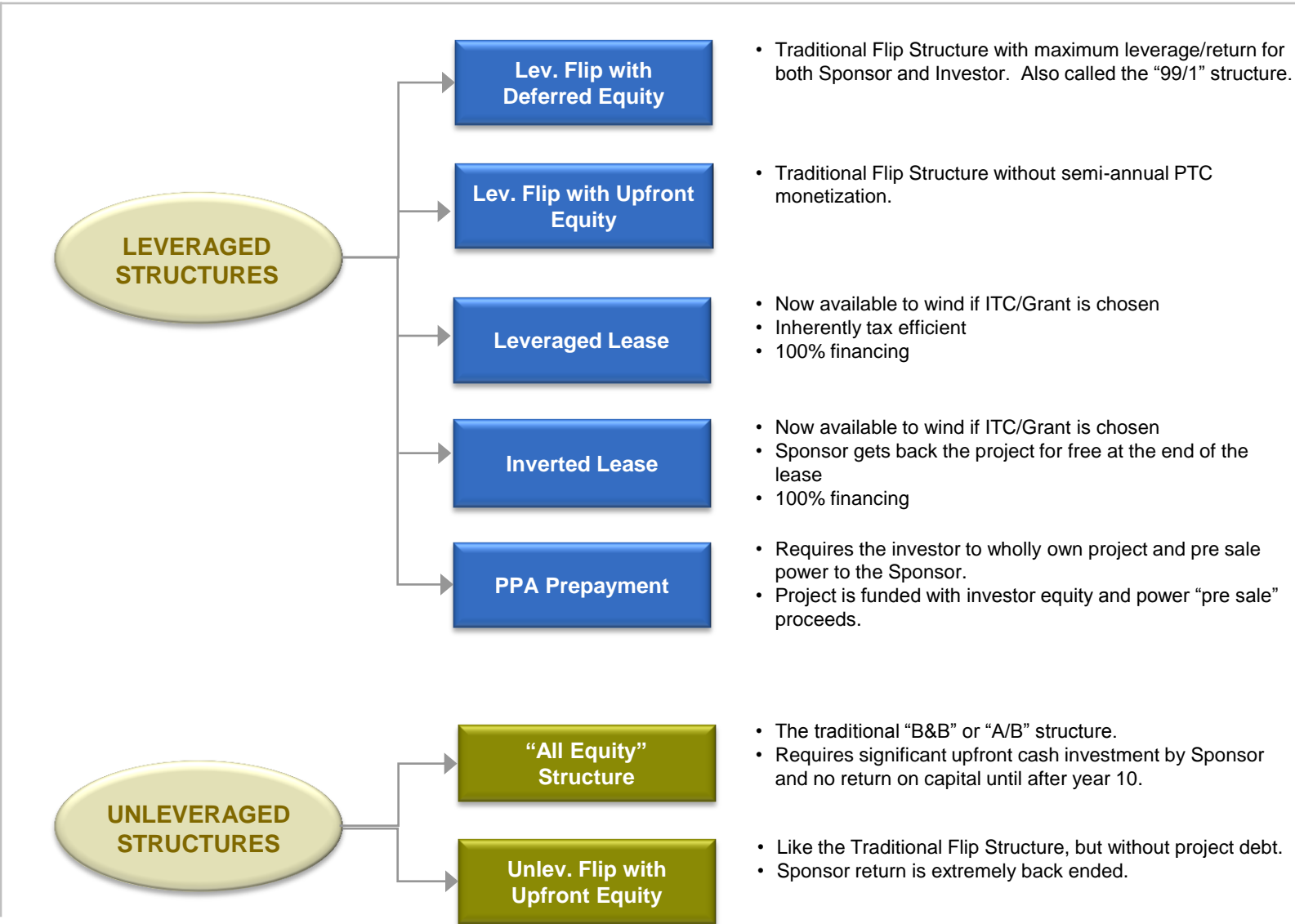
- PTC is production based, thus varies by capacity factor
- ITC is fixed at 30% of eligible capital cost
- PTCs will be preferred in projects with higher capacity factor and lower capital cost
- Most project would opt for the ITC/Grant
 - Risk
 - Productivity and capital cost
- PTC & ITC require tax appetite, ITC Grant doesn't



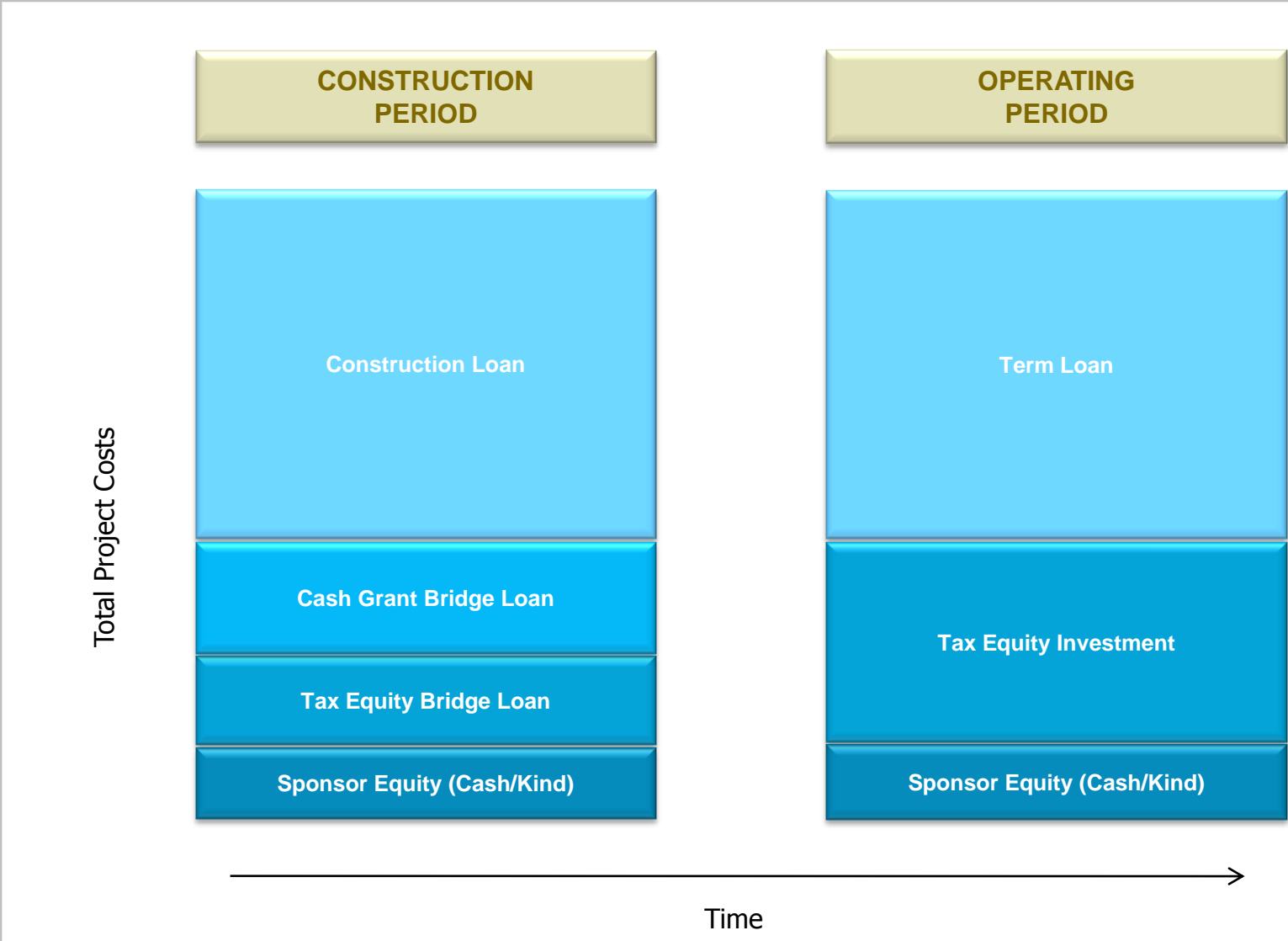
Project Economics



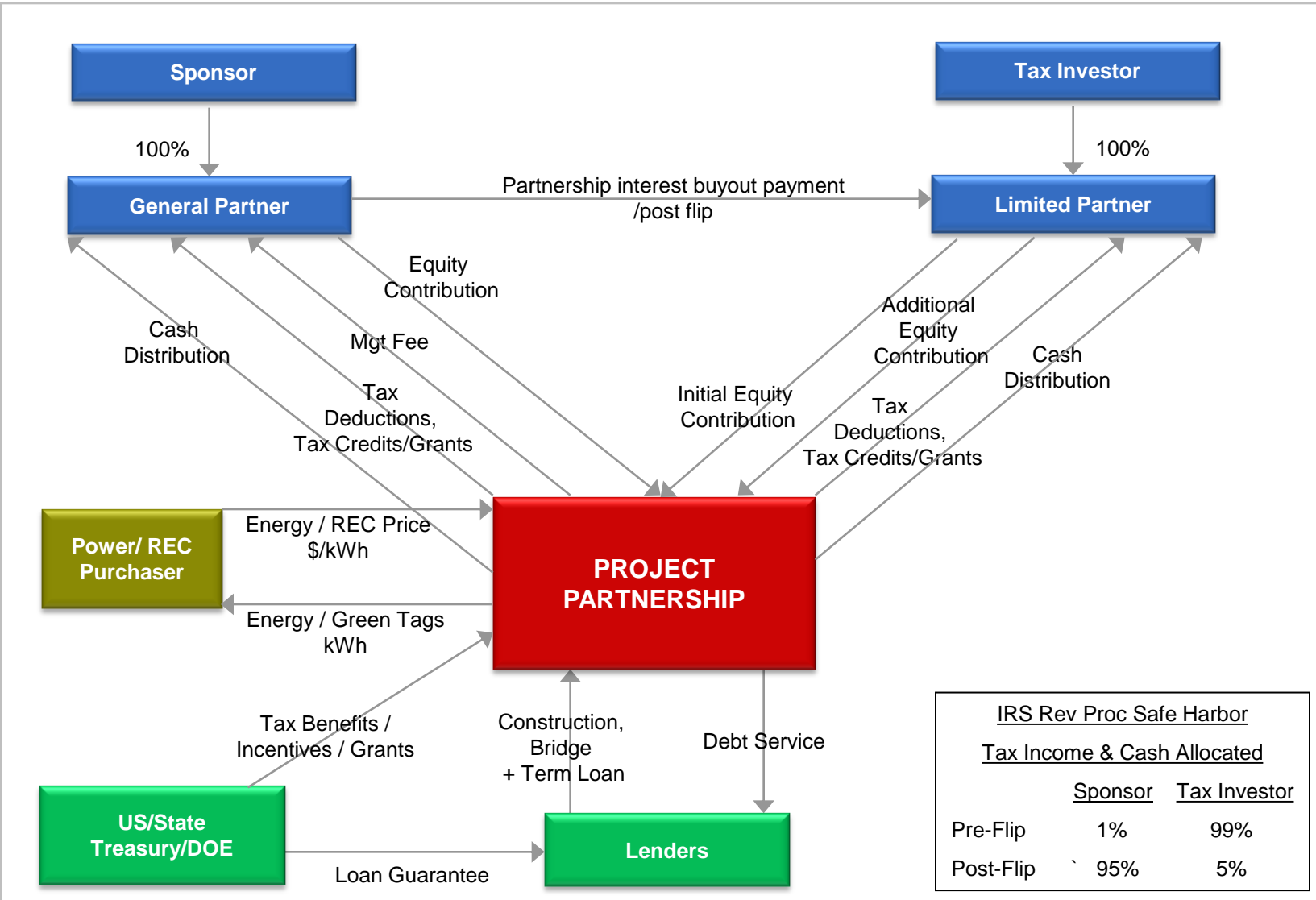
Financing Structure Alternatives



Project Capitalization



Partnership Flip - After Construction/Grant Bridge



<u>IRS Rev Proc Safe Harbor</u>		
<u>Tax Income & Cash Allocated</u>		
	<u>Sponsor</u>	<u>Tax Investor</u>
Pre-Flip	1%	99%
Post-Flip	95%	5%

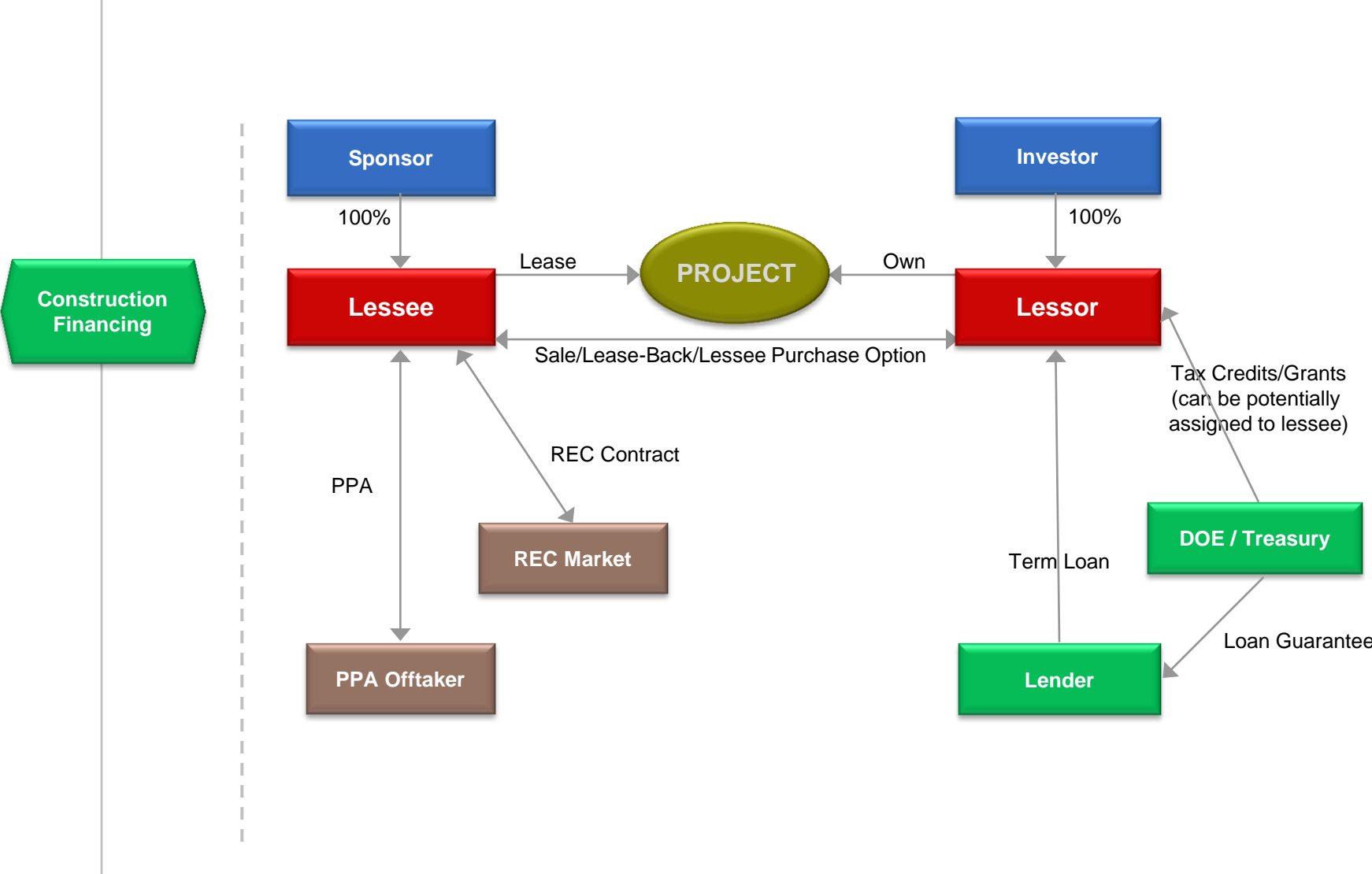


Partnership Flip

- Construction funded by a combination of sponsor cash equity, construction loan, grant bridge loan and tax equity bridge loan
- After COD, construction loan is converted to a non-recourse term loan and the bridge loans are repaid from Grant proceeds and tax equity investment. In an “unlevered tax structure”, construction and bridge loans are repaid with cash equity from investor/sponsor.
- Majority (up to 99%) of the cash equity is provided by the investor, who receives majority (up to 99%) of the cash distributions and tax benefits until about year 10 (or until the investor reaches its target IRR, the “Flip Date”). After that, allocations reverse and sponsor receives majority of the cash flow/income.
- Sponsor has an FMV-based buyout option for investor’s interest post-Flip Date
- Partnership term will be commensurate with asset life, but the effective investment term is measured by the Flip Date
- Investor has consent rights over various issues (fewer after flip); can replace the Sponsor management on default; Transfers limited
- PTC & ITC require tax appetite, ITC Grant doesn’t



Leveraged Lease

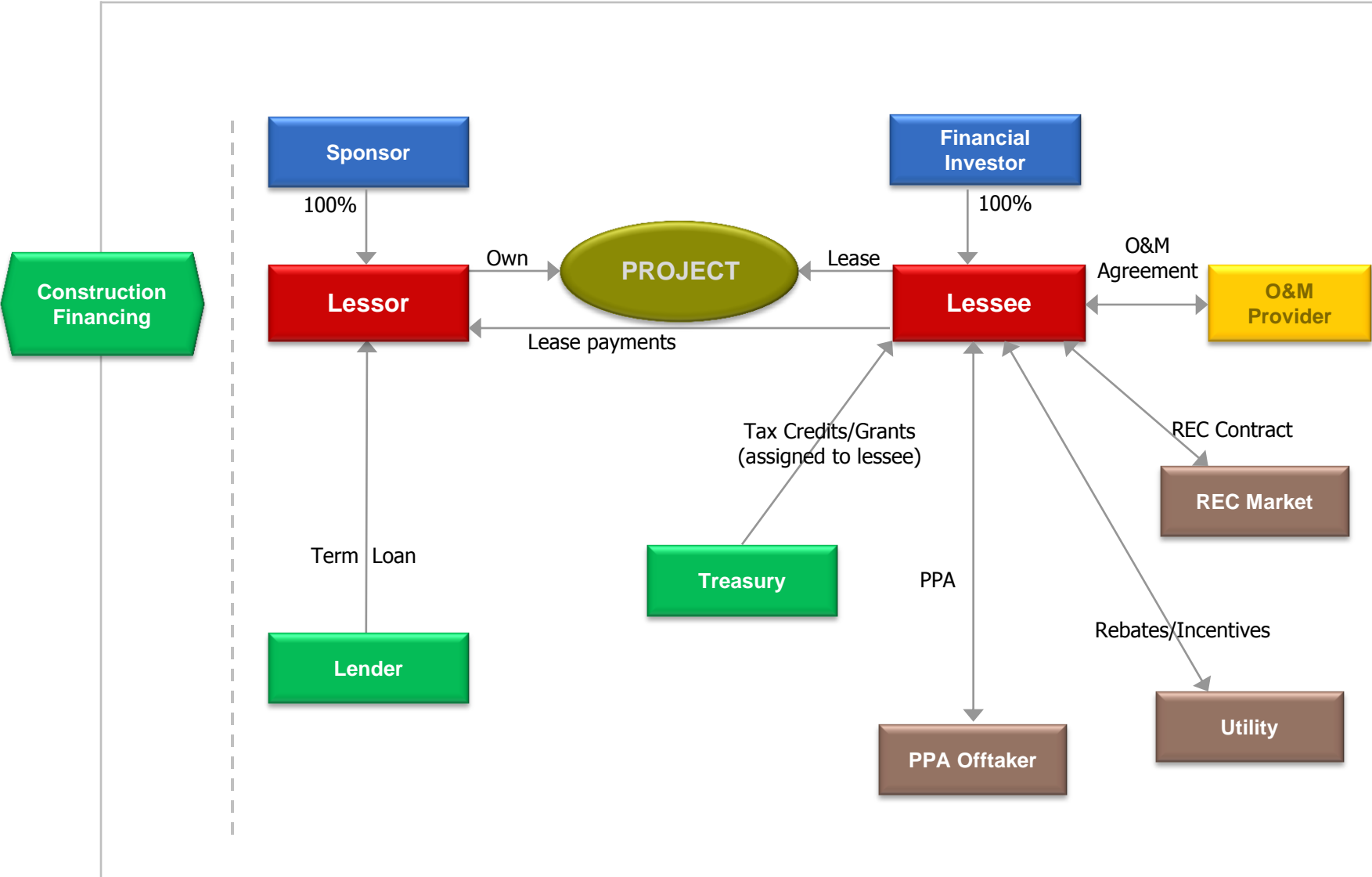


Leveraged Lease

- Construction funded by Sponsor equity & construction loan/cash grant bridge loan
- Within 90 days of COD, Sponsor sells the project to the Investor and immediately leases it back. Now, Investor owns the Lessor entity, which own the assets, and Sponsor owns the Lessee entity, which operates the assets. Both Lessor and Lessee entities are SPVs.
- Sponsor repays the construction loan from sale proceeds; Investor funds the purchase of the assets with cash equity and a non-recourse term debt to the Lessor
- Lessor's purchase price is generally FMV (as appraised), but practically subject to rent coverage ratio (rent earnings from Lessee / deb service obligations of Lessor)
- Typically a 100% financing solution to the Sponsor, since the Investor's purchase price often exceeds the cost of project construction; use of "prepaid" rent, if needed
- Lessor receives all tax benefits including the ITC/Grant. However, the Grant can be assigned to the Lessee
- Lessee typically has FMV-based purchase option to buy-back project at certain dates
- True lease for tax purposes; lessor retains benefits/burdens of ownership; must comply with the 80% of useful life/20% residual value rules
- Lessor has consent rights over various Lessee actions; may terminate the lease on default; But, lender has priority and Lessee defaults trigger loan defaults as well
- Lessee typically indemnifies the Lessor/Investor from reduction of tax benefits to the Lessor caused by Lessee's actions. Does not indemnify against risk related to the "structure" of the lease/investment



Inverted Lease

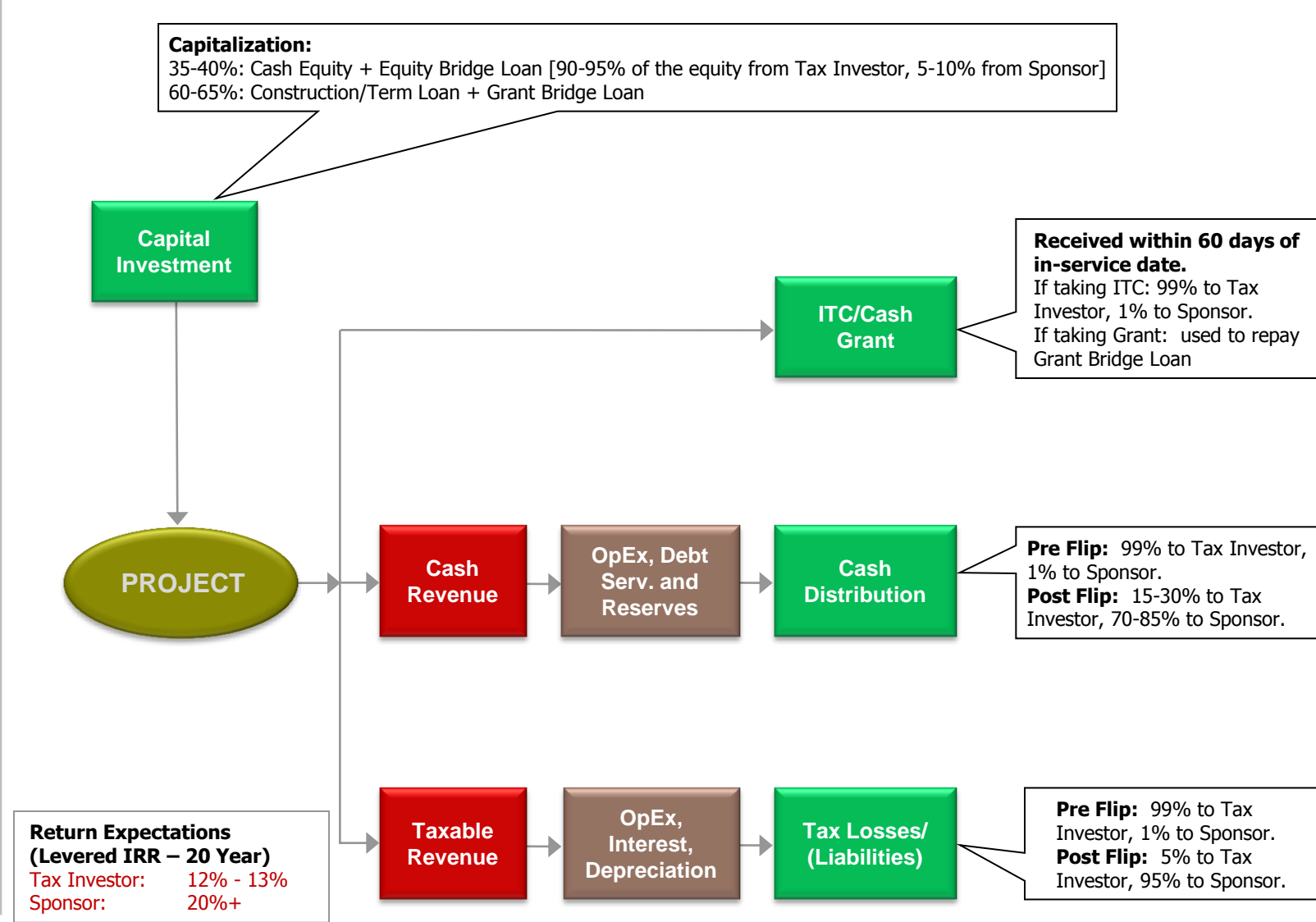


Inverted Lease

- Construction funded by Sponsor equity and construction loan
- Project company (Lessor) leases project to SPV controlled by financial investor (Lessee), a flow-through entity for tax purposes
- Lessor assigns ITC grant to the Lessee
- Lessor's depreciation basis is not reduced by the ITC grant; Lessee recognizes half of ITC grant into taxable income ratably over 5 years
- Lessee sells power & RECs (usually under PPA), pays monthly rent to Lessor
- Lessee contracts with O&M service provider to manage operating risk
- Sponsor (through Lessor) receives depreciation deductions to shelter rent income
- At the end of the lease (6-15 years), full operational & marketing control of the project automatically reverts to Lessor/Sponsor (without a need for a buy-out)



Leveraged Flip Structure Example



Leveraged Flip Structure Example – Wind

General Assumptions

Technology	Wind
Project Size	100.0 MW
Capacity Factor	37%
Project Cost	\$164.4 mill \$1,644/MW
Development Fee	\$6.8 mill
Annual Mgt. Fee	\$120,000
PPA Price (inflated 2%)	\$42.0/MWh
EBITDA (Year 1) \$MM	\$10 mill
Flip Occurs	Year 10

Project Capitalization

	\$ Mill	%
Debt	\$ 87.1	53.0%
Cash Grant	\$ 46.4	28.2%
Tax Investor Equity	\$ 29.3	17.9%
Sponsor Equity	\$ 1.5	0.9%
	\$ 164.4	100.0%

Debt Terms

Tenor	16 Years, with 9 year avg. life
Pricing	5.2% average
DSCR	1.35x minimum / 1.45x average
DSR Reserve	\$5.0 mill (6 month DS)

Allocations

	Pre Flip		Post Flip	
	Inc./Loss	Cash	Inc./Loss	Cash
Sponsor	5.0%	5.0%	95.0%	70.0%
Tax Investor	95.0%	95.0%	5.0%	30.0%

Equity Returns

	10 Year	20 Year
Tax Investor	13.6%	14.2%
Sponsor*	10.6%	26.1%

*Excluding Fees; Assuming full utilization of tax benefits allocated



Financing Process

- Hire Investment Bank/Financial Advisor
- Circulate Offering Memorandum
- Bid Submission by Prospective Lenders
- Selection of Lead Arrangers
- Due Diligence by Lead Arrangers
- Term Sheet
- Credit Committee Approval
- Commitment Letter
- Negotiate Loan Documentation
- Syndication by Lead Arrangers
- Closing and Initial Funding



Bank Market Overview

- A niche within the project finance bank market. Predominantly European and Japanese commercial banks
- Recent top lenders included MUFJ, Rabobank, Dexia, Credit Agricole, Santander, Natexis, WestLB, Mizuho, ING, SMBC, BayernLB, UniCredit
- Recent (re)entry - Deutsche Bank, Rabobank
- Equipment, construction and term loans; back leverage
- Historically 15-17 year fully amortizing term loans; During 2009-2010 most loans had miniperm structure (5-7 year term with a 15-17 year amortization)
- Interest rates are floating and the loans are prepayable without penalty



Institutional Debt Market Overview

- Insurance companies and pension funds; Lead institutions have long experience in wind financings
- Recent top lenders included Manulife/Hancock and Prudential
- Construction and term loans
- Longer term (20-25 years), fixed-rate, non-prepayable without penalty
- Fully amortized loans
- Better fit for refinancing operating assets



Bank Market – Current Status

	2009	2010
Volume (\$B)	\$ 5.12	\$ 7.95
# of Lenders	57	43
Lenders Committing > \$100 MM	17	23

- Bank market has recovered strongly in 2010 and continues to demonstrate growth in Q1 2011
- Underwriting capacity, albeit with market flex, has improved tremendously in 2010-11. Thus, larger deals are financeable, compared to 2009
 - 18 transactions with >\$200 MM commitment in 2010 and 4 such transactions in H1 2011
 - Mega deals – Sheperd’s Flat; Alta Wind
- Historically, pricing increased dramatically from L+150/175 bps margin and 150/175 bps upfront fee in 2007 to L+300/350 bps margin and 300/350 upfront fees in 2009
- From Q4 2009, pricing has been declining slowly:
 - Current pricing is around L+225 bps margin and 200/225 bps upfront fee
 - Grant bridge loans, given the shorter tenor and higher credit, enjoy 25/50 bps discount
- Strictly mini perms till 2010, but tenors were easing towards 15-18 years from Q1 2010, depending on credit

Data Source: Infrastructure Journal, Alyra analysis



Project Equity Market Overview

Passive, Tax-Motivated Investors:

- Passive tax investment as limited partners in project companies or as lessors
- Generally, preferred distribution or lease structures ensure a minimum target return and low operating risk to investors
- Mostly, financial institutions only (banks, insurance companies) who are familiar with the energy space
- Fluctuating but small universe – technology and industry complexities are entry barriers

Strategic Investors:

- Utilities, energy companies and industrials
- Various JV and buy-out structures
- Asset driven – direct ownership and control of assets are important
- Longer-term focus



Tax Equity Market - Current Status

- By 2007, there were about 20 active tax equity investors, up from fewer than 6 investors, 5 years prior. By late 2008, due to the market meltdown, the active investor market came down to 5-6 institutions
- Market recovered somewhat in 2010 – currently there are about 14 tax equity investors actively looking at deals.
 - The active investors are GE, MetLife, CS, Citi, BofA, Wells Fargo, US Bank, UBOC, Morgan Stanley and JP Morgan
- Cherry-picking: only high credit deals
- Investment sizes are smaller while the transactions are bigger – even the major investors are seeking co-investors in larger deals
- No commodity price exposure
- Mostly leveraged deals in 2010
- Yields have declined somewhat from 2009, but are still 200 – 250 bps higher from 2007
- Current unlevered yield 8-9% and levered yield 12-13%
 - Investor yields in shorter term levered partnership flips with grant need to be competitive with loan interest rates

Data Source: Chadbourne & Parke, Alyra analysis



Typical Loan Terms

	Bank Market	Institutional Market
Max Amount	Based on 1.0x DSCR in Low Case	Based on 1.0x DSCR in Low Case
Maturity	5 - 18 years	20+ years
Interest	LIBOR plus [2.00% - 2.25%] with periodic step-ups of 0.125% - 0.25%	US Treasury + [4% - 5%] fixed
Fees	2.00%-2.25% upfront [25-50 bps less for Grant Bridge Loan] 0.5% on undrawn amounts \$50-100 K annual admin fee	Lower than bank market
Amortization	Semi-annual schedule commencing six months from Financial Close; sculpted to attain Base Case DSCR	Semi-annual schedule commencing six months from Financial Close; sculpted to attain Base Case DSCR
Target DSCR	1.30x Min / 1.40x Average	1.30x Min / 1.40x Average
Reserve Accounts	<ul style="list-style-type: none"> ▪ 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) 	Similar to bank market
Customary Covenants	<ul style="list-style-type: none"> ▪ All project cash goes to "lock box" account and distributed subject to lender approval and agreed payments waterfall ▪ PPA "Tail" 1-2 years after debt maturity ▪ EPC/BOP with acceptable credit support ▪ 2-5 years performance guarantee with acceptable credit support ▪ Full security package ▪ LIBOR Swaps 	<ul style="list-style-type: none"> ▪ All project cash goes to "lock box" account and distributed subject to lender approval and agreed payments waterfall ▪ May not need PPA "Tail" – may take some residual risk ▪ EPC/BOP with acceptable credit support ▪ 5 years performance guarantee with acceptable credit support ▪ Full security package ▪ Prepayment penalty



Who's, What's, How's of ITC and Grant

- Treasury grants for renewable energy projects placed in service that would qualify for ITC.
- Tax exempt investors, government agencies, coops, §501(c) cannot receive a grant without blocker corporations between project and ineligible entities.
- Grant & ITC equal 10% or 30% of basis of qualifying property.
- Qualifying property - section 48 property - located in U.S.
 - integral to facility and located at facility
 - excludes buildings, transport vehicles, transmission
- In service by end 2011, or construction begun in 2009 to 11 but in service by 2012 (wind), 2013 (others), 2016 (solar, fuel cell).
- Construction starts with physical work of a significant nature, with safe harbor of 5% of costs
- Grant paid later of 60 days after placed in service or application, but inquiries may delay payment.



Who's, What's, How's of ITC and Grant (cont'd)

- Apply by 10/1/12 - detail, PE stamp, commissioning report, accountants' certificate, penalty of perjury.
- No National Environmental Policy Act of 1969 ("NEPA") review
- No Davis-Bacon prevailing wages
- Reduces taxable basis by half of grant, grant is not taxable income
- Recapture of grant transfer to disqualified person, disqualifying use, retire facility (20% each of 5 years after in service date). Transferor and transferee liable for recapture amount. Anticipate transfer limitations and indemnity as liability is at partnership level
- Recapture rights of Treasury are non-tax
- Annual certificate of ownership, capacity, output, jobs
- ITC passive loss and at risk rules don't apply to grants
- PTC third party power sales rules & subsidized energy financing don't apply to grants
- Generally, old PTC rules apply to PTC, extends in service deadline to 2012 (wind), 2013 (others)
- Lien on grants under federal Assignment of Claims Act
- Guidance does not change ITC rules
- Each separately metered unit qualifies, but can comprise total project



ITC, PTC or Grant, Flip, Lease, Inverted Lease?

- What's best? Match & weigh objectives with constraints & programs.
- No tax appetite? *Grant*
- Higher/Lower cost? *ITC & Grant/PTC*
- Immature technology? *ITC & Grant*
- Higher/Lower capacity factor? *PTC/ITC & Grant*
- Retain ownership post-finance term? *Flip*
- Tax exempt? *Blocker & Creativity*
- Need liquidity in holdings? *ITC & Grant*
- Flexibility in transfers? *PTC*
- Receive subsidized energy financing? *ITC & Grant*
- Power sales to related parties? *ITC & Grant*
- Can't own? *ITC & Grant*
- Owner doesn't operate? *ITC & Grant*
- Shareholder tax exempt? *PTC*
- Costs > FMV? *ITC & Grant /PTC*
- FMV > Costs? *Lease*
- Financier with appetite for operational risk? *Inverted Lease*



Risk Identification & Allocation

- Lenders look for stable cash flows. Identify risks by asking how could the project fail?
 - Completion
 - Operating
 - Technology
 - Revenue
 - Tax & Political Risks
 - Change of Law
 - Counterparty Risk
- This list is not nearly exclusive
- Seek to reduce collective risk of the structure
- Efficient structuring allocates risk to best able to bear or control



Completion Risk

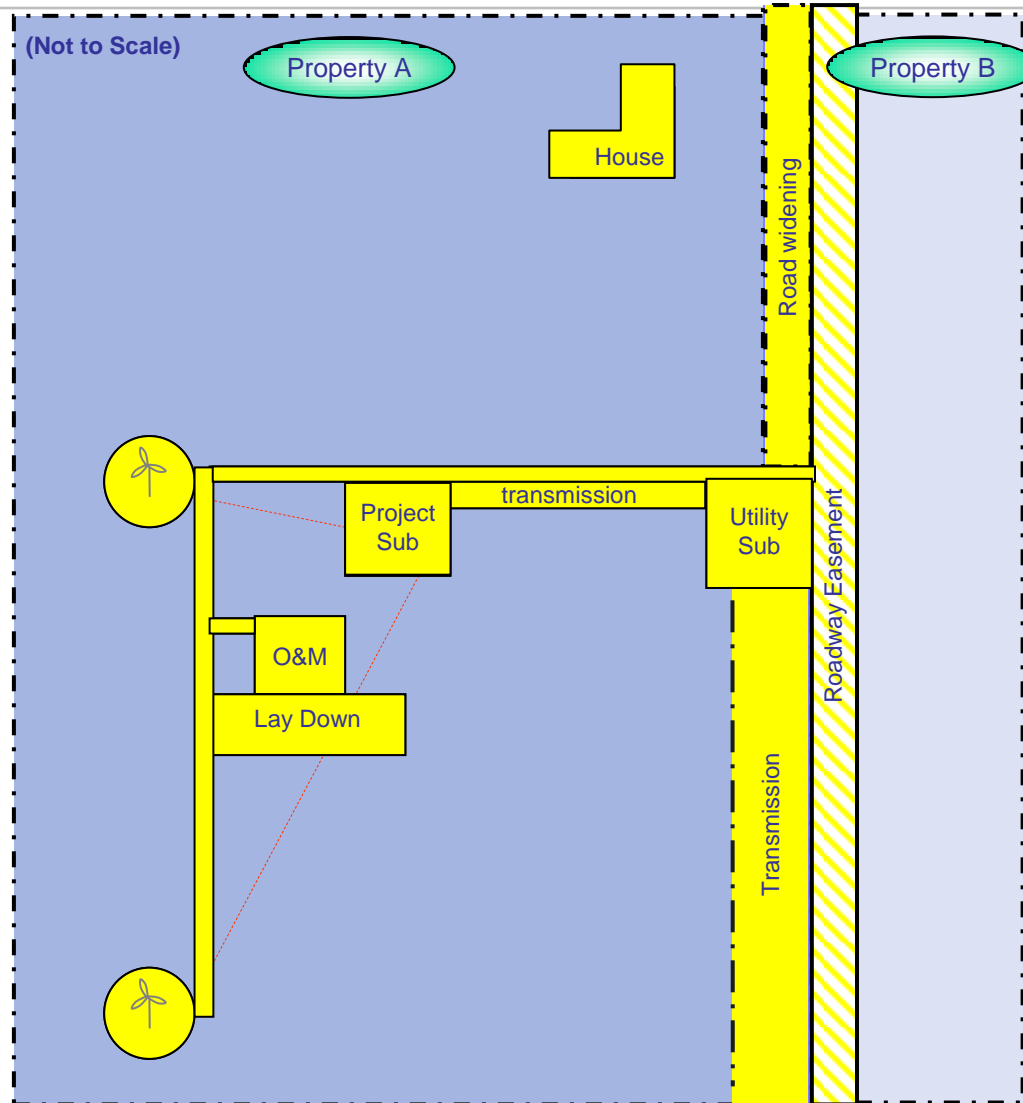
- Risk project is not completed on time, on budget and capable of operating as expected.
- Site Selection Issues
 - Wind/Solar/Biomass Resource
 - Transmission - capacity, curtailment, upgrades
 - Construction Logistics
 - Environmental - no endangered species, avian, archeological
 - Aviation - airports, military
- Permits
 - Vary by Location
 - Possible Delay - NIMBY
 - FAA
 - Wetlands/Waterways
 - Conditional Use
 - Building Permits
 - Crossing Permits
 - EWG
 - Clean Air (Biomass)



Site Control

■ Elements

- Wind turbine area
- Wind area easement
- Overhang/Setback
- Project substation
- Collection
- Construction
- Utility substation
- O&M building
- Road access
- "Piggyback" easement
- Road widening
- Transmission
- Effects



Periods During the Lease Term

- 30+ years, exclusive right for wind farm/non-interference
- Option or Development Period
 - in context of lease or separate option
- Construction Period
 - triggered by commencement of construction of wind turbines
- Base Period
 - triggered by commercial production of electricity; main period of commercial operations
- Extensions
 - may be applicable to different portions of the term



Compensation During Various Periods

- Option and Development Periods
 - fixed sums per acre per year (with possibly a minimum total amount), payable monthly or annually
 - net tower fee (per tower per year)
 - extra one-time fee for extension exercise
- Construction Period
 - one-time installation fee per MW
 - payable in one or two installments
 - no payment on re-powering
- Base Term
 - production payments
 - based on MW production (prorated based on project)
 - royalty/minimum royalty
 - based on percentage of "gross revenues" (prorated based on MW's on premises vs. project)
 - percentage may increase with time
 - "gross revenues" often include electricity sales revenue, REC payments and exclude tax credits, proceeds from project sale
 - may include minimum royalty floor (i.e., fixed amount per MW per year)
 - Alternatively, if utility or lender own, a fee easier computed fee



Turbine and BOP Developments

- Grant Qualification – Construction Commencement
- Vendors Providing Financing – Multiple Hats
- Supply Pendulum Swings
 - Availability & Cost
 - Down Payments
 - Delivery Flexibility
 - Warranties
 - Parts
 - Availability/Power Curve/Output
 - Intellectual Property
 - Serial Defect
 - LDs - late delivery/PTC/commissioning/cap
- Supply Capacity Up/Demand Down
 - New entrants
- Resistance to “wraps”
 - Focus on gaps/scope & liability
 - Synchronize with other contracts



Other Completion Risk Issues

- Tightly crafted Supply & Installation
 - Proven contractor and design
 - Fixed cost/scope/schedule
 - Liquidated damages - cover loss revenues/debt service/PTCs?
 - Credit issues with contractors/performance bonds/retainage/LOCs/ guarantees
- Liability caps
- Warranty terms significantly affecting the bottom line
- Qualifying for PTC/ITC/Grant and other Incentives
- Interconnection/Transmission upgrades



Investor Completion Risk Mitigants

- Independent Engineers & Other Experts
- Sponsor & Government Guarantees
- Funded reserves or security and budget contingencies to fund cost overruns and completion costs
- Sufficient equity and contingent equity
- Completion tests that demonstrate physical, legal, financial, operational completion
- Legal Opinions



Operating Risk

- The risk that the project, once complete, will not perform as expected. Mitigated by:
 - experienced, creditworthy operator
 - safety, security and environmental safeguards
 - permits
 - perform PPA and interconnection agreements
 - incentives for good performance
 - O&M reserves
 - insurance (casualty, full wrap, eqt. breakdown)
 - equipment & service warranties
 - Link to PPA performance/compliance with law & agreements
 - Watch exclusions
 - Indemnities



Revenue Risk

- The risk that the project will not have adequate cash for debt service, costs and return to sponsors.
 - Resource
 - Resource Studies
 - Appropriate Technology
 - Market and Engineer Studies
 - Interconnection Studies
 - PPA/Firm Offtake - Term
 - As available, must take
 - Energy Only, usually RECs
 - Pricing fixed (with escalator) or, less favorable, indexed to gas/power markets
 - Capacity payment rare if not dispatchable
 - PTC - in service by 12/31/12 (wind), 2013 (others)
 - Treasury Grant (30%) in service by 2011 or complete by 2012 (wind), 2013 (others), 2016 (solar and fuel cell), if begun in '09 - 11
 - RECs - State, Formative, Uncertain = Limited Price, Term
 - Greenhouse Gas/Carbon - More Uncertain



Revenue Risk (cont'd)

- Major Issues
 - Changes in Markets
 - Output/Availability Guarantees
 - Credit Support
- Major Issues – Wind
 - Transmission
 - Curtailment
 - Scheduling
- Major Issues – Biomass
 - Feedstock Supply/Quality
 - Correlation of Inputs & Outputs
- Major Issues – PV
 - Numerous Customers - Standard Form ESA
 - Duration of Incentives



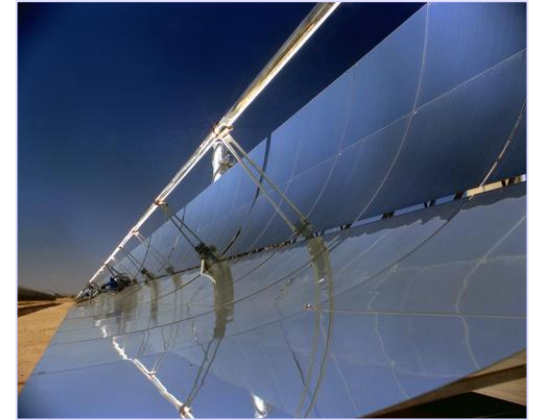
Successful Commodity-based Projects

- Traditional long-term contracts mitigate risks but reduce upside
- Commodity Risk Management
 - Market Knowledge
 - Purchasing Power
 - Distribution
- Competitive Advantages
 - Location
 - Scale
 - Cost



PPA and Other Revenue Developments

- Natural Gas/Wholesale Power Prices Down
- Merchant Electric Prices Down
- Financial Crisis/Slowdown limits capital flows
- Project Delays
- Curtailment risk in many markets
- RPS/RES
- Greenhouse Gas/Carbon uncertainty
- Change in Markets
- Risk Allocation
 - Congestion
 - Transmission Upgrades
 - Change in law



Other Power Purchase Agreement/ESA Issues

- Coordinate with other project/financing arrangements
- Completion/milestone requirements
- Default, damages for breach and termination
- Force majeure
- Financing
 - Strong offtake yields financing with less equity, more leverage, lower reserves, longer tenor, lower costs, easier distribution conditions.

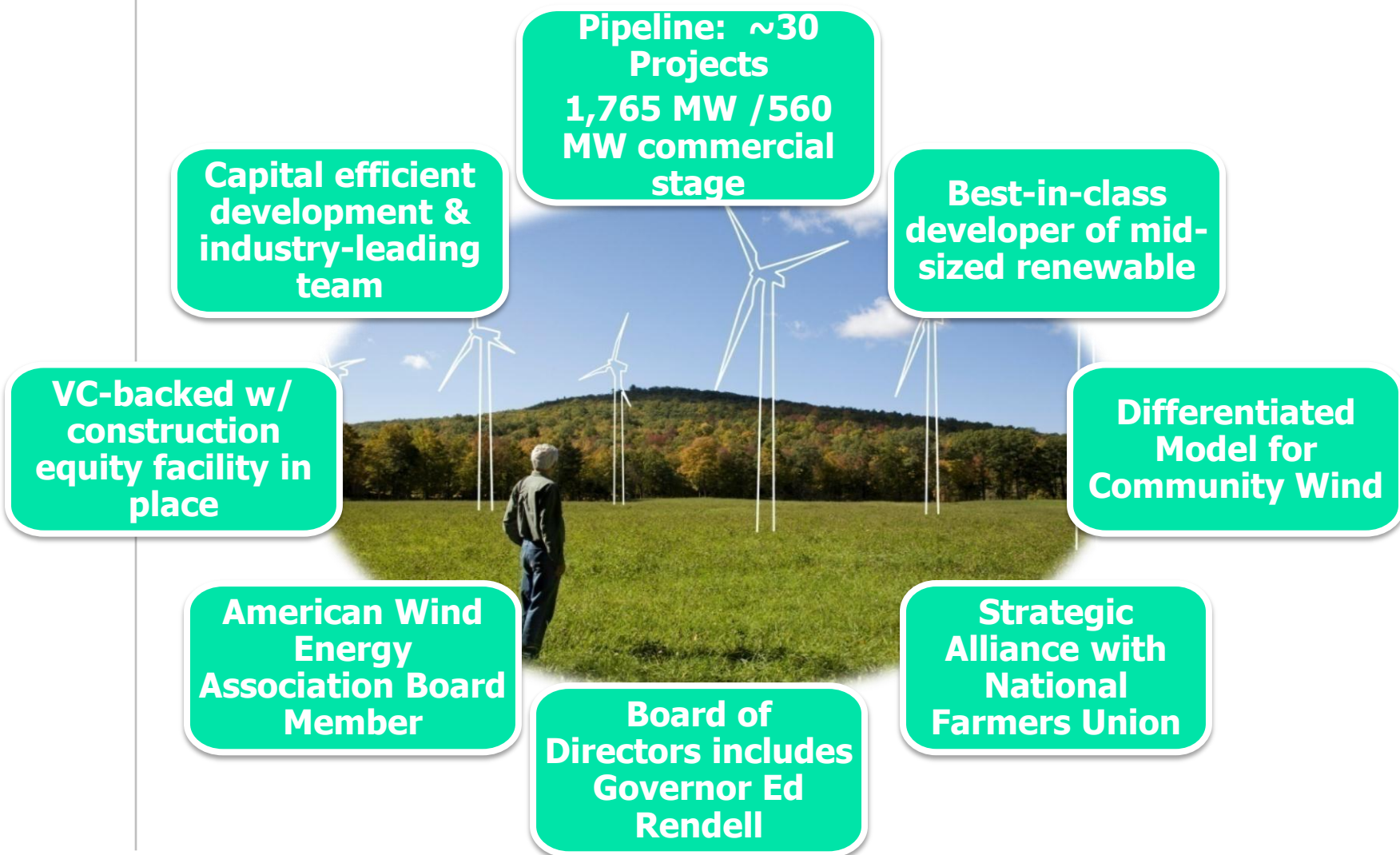


Merchant Project Trends

- PPAs bundle Power and RECs, often with low prices
- RECs/GHG attributes may have attractive upside
- Wind/Solar low break even costs versus historical energy prices
- Major Issues - Merchant
 - Manage Volatility and Attract Financing
 - Counterparty Risk
 - Structure
 - Project sells energy into power pool
 - Hedge provider often pays fixed price
 - Project sells RECs to LSE/voluntary markets
 - For Hedging/Synthetic PPAs
 - Wind Resource Confidence
 - Liquid Spot Market - Day ahead/Hour ahead
 - Historical Price Data
 - Transmission Constraints, Low Curtailment Risk
 - Low Imbalance Penalties
 - Long Settlement/Mitigating Structures
 - Other Issues
 - Project left with more Operational/Scheduling Risk
 - Regulatory Risk - REC/Market Structure Change
 - Credit
 - Intercreditor Issues



OwnEnergy – Company Highlights



Alyra Renewable Energy Finance LLC

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 acquisitions, joint ventures, structured tax equity and project finance transactions and typically represents strategic investors in such transactions. Clients include the leading energy companies and institutional investors in North America and Europe.

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 Markets Group, GE's internal investment banking group, performing investment structuring and financial advisory in Latin American energy and infrastructure transactions. Earlier, he began his finance career at Brown Brothers Harriman, focusing on emerging markets research.

Mr. Alam is involved in supporting clean energy growth through his roles in the public bodies and advocacy. In December 2010, Mr. Alam was appointed by U.S. Commerce Secretary Gary Locke as a member of the Renewable Energy and Energy Efficiency Advisory Committee, to advise the U.S. Commerce Secretary on issues related to the global competitiveness of the U.S. renewable energy industry. In March 2011 Mr. Alam was part of the Antarctic Renewable Energy Expedition, led by polar explorer Robert Swan, OBE, and his environmental advocacy organization, 2041.

Mr. Alam holds a Master's degree in Public and Private Management from the Yale School of Management where he was one of three recipients in his class for the Scholastic Excellence Award. He also holds a Bachelor's of Science degree, summa cum laude, from the University of Massachusetts, with various scholastic and leadership honors and distinctions, including the valedictorian nomination. Mr. Alam frequently speaks at major international energy conferences and is an author of published articles for leading energy publications.

RECENT ENGAGEMENT HIGHLIGHTS

- Exclusive Advisor to Spinnaker Energy regarding the buyout of a 707 MW wind and solar power development portfolio from Martifer Renewables.
- Exclusive Advisor to ARRCO Wind regarding the sale of its 550 MW wind power development portfolio.
- Exclusive Advisor to Project Resources Corp. regarding a strategic transaction to fund a wind power development portfolio in the Midwest.
- Exclusive Advisor to a premier solar PV development company in the Western U.S., regarding recapitalization of the development company.
- Advisor to a solar PV project development company regarding the sale of 23 MWs contracted PV projects.
- Exclusive Advisor to Duke Energy regarding its acquisition of all wind power assets of Tierra Energy.
- Originator and Advisor to Duke Energy regarding the \$240 million acquisition of Catamount Energy.
- Exclusive Advisor to a major strategic investor regarding a \$80 million wind power portfolio acquisition opportunity.
- Exclusive Advisor to a major strategic investor regarding a \$50 million solar energy development portfolio acquisition opportunity.



Thank You

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