Value Considerations in Acquisitions

Marlene Motyka
Keith Adams
Deloitte Financial Advisory Services LLP
Agenda

Market Conditions

Approaches to Value

Facilities Under Construction & Development

Intangible Assets

IP Assets – Due Diligence
Market Conditions

- Uncertainty regarding production tax credits and investment tax credits
- Innovation and development of new technologies
- Increased acquisitions and joint ventures
  - Larger projects
  - Tight wind turbine supply market
  - Increased utility interest in project ownership
- Influx of foreign investment
  - Significant expertise and capital outside the US
  - US viewed as growth market
Market Conditions

Mergers and Acquisitions Volume

- Fuel Cells
- Bio-Fuels/Ethanol

*Data obtained from CapitalIQ as of 7/31/2008*
Market Conditions

Mergers and Acquisitions Volume

*Data obtained from Capital IQ as of 7/31/2008*
Market Conditions

- Kleiner Perkins –
  - 29 partners on its GreenTech team
  - Green Growth Fund - $500 million (May 2008)
  - 12 current portfolio companies
  - Fortune article, July 8, 2008 “Kleiner bets the farm.”

- Cleantech Venture Network expects VC and PE investments in clean technologies to reach $8.7 billion by 2009

- 150 new patents were granted in clean technology between 2002 and 2007
Market Conditions

• Energy independence
• Increased development of alternative energy:
  – State Renewable Portfolio Standards
  – Interest in being “Green”
  – Tax-equity
  – Carbon legislation
Impact of Carbon to Asset Valuations

High Carbon Emitting Assets
- Non-regulated Fossil Fuel Generation
- Transportation Assets and Manufacturing Facilities
- Refining Assets
- Intangible Assets: PPAs, Leases, Tolls
- Regulated Fossil Fuel Generation Assets

Low or Non-carbon Emitting Assets
- New Transmission, Pipeline, and Related Assets
- Intangible Assets: PPAs, RECS, ERCs, Allowances
- Existing Clean Technology
- New Technology for Clean Alternatives
## Approaches to Value

<table>
<thead>
<tr>
<th>Income Approach</th>
<th>Market Approach</th>
<th>Cost Approach</th>
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<tbody>
<tr>
<td>• Measures the value of an asset by the present value of its future economic benefits</td>
<td>• Establishes value through analysis of recent sales of comparable property</td>
<td>• Considers the concept of replacement as an indicator of value</td>
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<tr>
<td>• Discounted cash flow</td>
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<td>• A prudent investor would pay no more for an asset than the amount for which it could be replaced</td>
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<tr>
<td>• Revenue</td>
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<td>• Adjustments to RCN to represent losses in value resulting from:</td>
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<tr>
<td>• Expenses</td>
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<td>• Physical deterioration</td>
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<tr>
<td>• Taxes</td>
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<td>• Functional obsolescence</td>
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<tr>
<td>• CapEx</td>
<td>• Adjustments made for differences assets based on:</td>
<td>• Economic obsolescence</td>
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<tr>
<td>• Working capital</td>
<td>• Expected growth</td>
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<tr>
<td>• Discount rate</td>
<td>• Risk</td>
<td></td>
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<tr>
<td>• Systematic risk</td>
<td>• Profitability</td>
<td></td>
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<tr>
<td>• Unsystematic risk</td>
<td>• Etc</td>
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Income Approach

• Detailed cash flows can be developed
• Ability to capture PTCs and MACRS depreciation benefits
• Key considerations
  – Revenues:
    • Contract expiration date vs end of useful life
    • Spot pricing
  – Expenses:
    • Fuel, O&M, G&A, property taxes, capital expenditures
Income Approach

- Tax Depreciation
  - 5 year MACRS on alternative energy property; 15 or 20 year MACRS or 20 year SL on transmission installations
  - Commission date can impact year 1 due to mid-quarter convention or short taxable year
  - Proposed Economic Stimulus packages include bonus depreciation provisions
Income Approach

• PTC
  – 10 years from original placed in service date
  – Benefit based upon net kilowatt hours produced and sold to third party
  – Generated MWh x $21 (based on 2008 inflation adjustment factor of 1.3854)

• ITC
  – Upfront credit of 30% of investment cost
  – Reduce tax depreciation basis by 50% of the credit received
Market Approach

• Market data exists but comparability is difficult
  – Often not relied upon as a primary indicator
• Key considerations
  – Location, location, location
    • Electricity prices
    • Wind or solar resources
    • Proximity of fuel stock
    • Transmission
    • Transportation
Market Approach

- Contracted vs. spot pricing
- Equipment manufacturer
- Project age

• Adjustments to implied multiples to increase comparability
Cost Approach

• Detailed project data and current replacement market data is typically known and available

• Key considerations
  – Costs of major components can change dramatically so historical costs most likely not representative of current cost even if 1 or 2 years old
  – Useful life of technology
    • May not be created equal
Cost Approach

– Transmission connection
– Additional costs
  • Capitalized interest
  • Developer’s profit
  • Transportation
– Depreciation
  • Physical: age
  • Functional: technology
  • Economic: income approach support
Facilities Under Construction

• Market approach
  – Comparable transaction data is challenging to identify and compare due to percent complete
  – Assess most comparable transaction and if possible deduct cost to complete
Facilities Under Construction

• Cost and income approaches
  – Can be completed in same manner as in-service projects but...
    • Deduct cost to complete
    • Probability of completion
    • Estimate of final construction costs needed
• Reconciliation
Facilities Under Development

- Advanced stages vs. early stages
- Market approach
  - No comparable data due to varying degrees of development and probability of completion
- Cost approach
  - Developed based upon current expenditures with attention to:
    - Personnel costs
    - Developer’s profit
    - Probability of completion
Facilities Under Development

• Income approach
  – Developed based upon current expectations of cash flows with attention to:
    • Contracted vs. spot pricing
    • Cost to complete
    • Probability of completion
    • Discount rate to reflect development/construction/pricing risks and expected return required by investors

• Reconciliation
Intangible Assets

• Approach depends upon asset but consider market, cost and income
• Typical intangibles assets
  – Power purchase agreements/Off-take agreements
  – Fuel supply agreements/feedstock supply agreements
  – Renewable energy credits
  – Land leases
  – Intellectual property (“IP”)
IP Assets – Due Diligence

• Risk and opportunity...
  – Identify IP assets (i.e., patented, unpatented, copy rights, etc.)
  – Verify ownership of assets
  – Evaluate the strength of IP and its protections
    • Trace the developers careers
    • Find similar technologies
    • Identify potential claims
    • Analyze any grant of IP rights made by the target
  – Assess asset alignment with current and future revenue sources