Clean Energy Policy and Investment for Institutional Investors

Council of Institutional Investors

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Renewable Energy and Institutional Investors: Policymaker Perspective

Renewable Energy and Infrastructure

1. **Require massive amounts of capital investment**

2. **Offer steady, relatively low risk, long term cash flow**

Institutional Investors

1. **Have large pools of capital to invest**

2. **Are "patient capital", seeking steady, long term returns; willing to exchange some upside for lower risk, lower volatility, lower Beta**

How does it work in practice? – Investment Types

	Corporate	Project
Equity	**Connection to underlying cash flows is lost:** • Companies seek growth • Re-invest rather than dividends • Lever portfolio and projects; sell down others; project churn can be high • Few pure plays • Beta can be high	**Stronger connection to policymaker vision of II involvement** • Can offer stable cash flows for 20+ years • Significant premium to gilts and bonds • Very low Beta if held to maturity and unlevered • Some regimes offer inflation indexation • However, policy concerns and structuring investments for pension funds may be a problem
Debt	**Same as corporate equity, plus:** • Default risk driven by corporate strategy not underlying projects • Some debt will go to fund growth rather than projects • Debt size large enough to be on Indices becomes an issue Plus: • Many pension funds invest only in sovereign debt…	**Strongest connection to policymaker vision of II involvement** • Even lower risk and greater stability than project equity

How does it work in practice? – Where institutional money is needed

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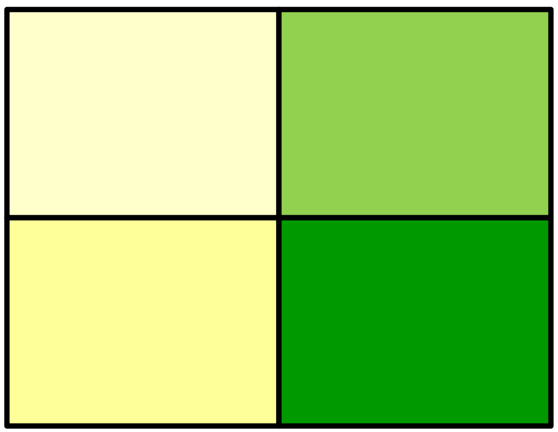
Matching investment needs to institutional investor needs

Where the Investment is needed

Corporate Project

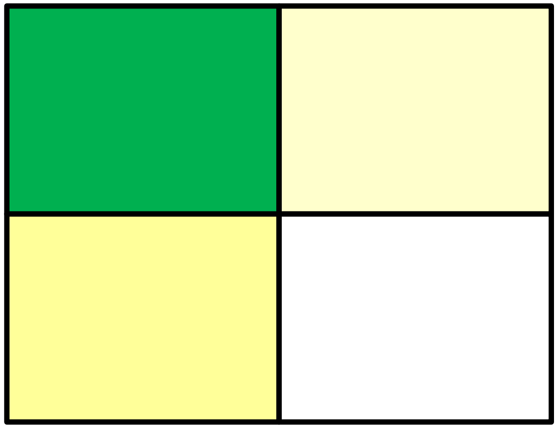
Equity

Debt

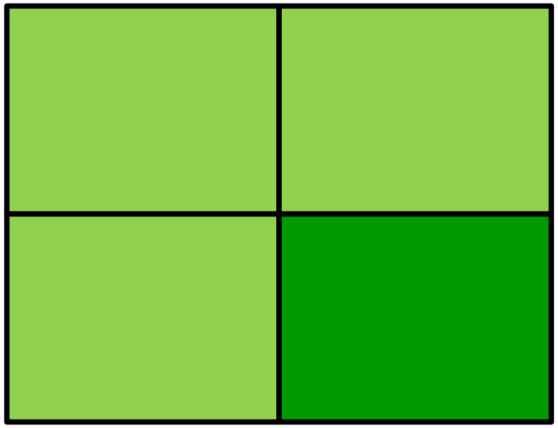


Where Institutions want to invest

Pension Funds



Insurance Companies



How does it work in practice? – Facing real world constraints to project investments

Constraints to Investing in Projects

1. **Asset Allocation Methodology**
   - ALM models do not capture some specific benefits of project investing
   - Input parameters determine attractiveness
2. **Illiquidity of project investments**
   - Limited secondary markets
   - Limited information outside of deal times
3. **Limited access to project investments**
   - Lack of awareness of opportunities or knowledge of the sector
   - Cost of specialist investor resources
4. **Packaging of projects distorts underlying cash flows**
   - Funds usually not designed for II
5. **Unrelated policy considerations reduce attractiveness to institutions**
   - Tax Equity
   - Solvency II
   - Electricity unbundling (Europe)

Implications

1. **Defined Contribution cannot play**
   - Liquidity issues
2. **Pooled investment funds of limited value**
   - Costs too high? "They charge 2 and 20 for infrastructure returns"
   - Funds do not match II investors needs; they include leverage, churn, etc
3. **Direct investing is difficult**
   - Size required to justify building a team ($20-50 billion AUM may be minimum)
   - Internal organization makes hiring a team difficult
   - Those that do invest prefer equity (higher returns to justify team)
   - Silo-ing of investment resources reduces opportunity set
   - Asset allocation not effective in making tradeoffs between return; liquidity; risks
   - Pension funds cannot complete book, so opportunities structured for other investors

Questions to Consider

Asset Allocation

- **Why so little fixed income in pension fund portfolios? Will liability driven investment help?**
- **Should Pension funds have more asset classes in the ALM modeling? But would we trust the numbers?**

Investment vehicles

- **Can better pooled investment vehicles be made? Do they need policy help?**

Policy Makers

- **Is pension fund involvement in project level investments realistic?**
- **Should policymakers instead focus on strengthening the balance sheets of corporate vehicles such as utilities?**