Institutional Investors In Sustainable Infrastructure & Energy

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A Growing Demand for Energy and Infrastructure Globally

- The OECD estimates global infrastructure requirements to be USD 50 trillion by 2030.

- “Greening growth” may require cumulative investments in green infrastructure of USD 36 - 42 TN between 2012 and 2030, or approximately USD 2 TN or 2% of global GDP per year.

- Today, approximately USD trillion is being invested annually leaving a USD 1 trillion investment gap.
Significant Constraints for Traditional Investors

- Public Financing in infrastructure has generally declined over decades

- Private Banks’ allocation on infrastructure and energy most likely to be constrained due to newer regulations (deleveraging)

- Transnational Corporations involved in infrastructure have also increased cash holdings after 2008 due to credit constraints
Institutional Investors Attracted for Diversification & Higher Returns

- Diversification to avoid volatility in equities and low untenable yields in government and high grade bonds
- Cash yields, inflation protection, and low volatility of infrastructure attractive
- Varying institutional attractiveness of across types of infrastructure deals:
  - Emerging markets large deals-low risk adjusted returns
  - Developed world large deals-low risk and barely acceptable returns
  - Developed world mid market deals-high return-hard to access
- Positive regulatory climate for clean energy and infrastructure
Increasingly Adopting Sustainable Infrastructure Investments

- ‘Green’ investment not usually split out in the investment policies of pension funds and target allocations are seldom specified.

- Some of the world’s major pension funds & insurance companies have invested directly in clean energy projects:
  - ATP in Denmark set up a clean energy fund and invited co-investment.
  - APG in the Netherlands make their own direct investments.
  - Dutch fund PPGM has committed capital to BNP Paribas Clean Energy Fund.

- Also increasing exposures to clean energy and other green assets by adopting SRI or ESG investment approaches. Example: Principles for Responsible Insurance.

- Pension Funds and Insurers have invested over $22BN in Clean Energy-- 70% in wind.
Different Investment Channels Available for Green Investing

- Indirect investment—investment in listed corporate stocks and bonds
- Direct project investments
- Semi-direct investments such as funds or vehicles
- Investments typically made through financing vehicles such as green bonds or private equity style investments
Barriers to institutional investment in green infrastructure

1. Issues with infrastructure investments
   - Direct investing challenges
     - Short term investment horizon and need for liquidity (illiquidity risk)
     - Difficulties with bidding process and timing; lack of investor best practice and expertise
     - Asset and liability matching (ALM) application issues; diversification and exposure limits
     - Need scale >$50Bn AuM and dealflow to maintain costly team
     - Min $100M deal size; expensive and time consuming due diligence; higher transaction costs;
   - Regulatory and policy issues
     - Political uncertainty
     - Illiquidity and direct investment restrictions e.g. capital adequacy rules (Solvency II, IORP II)
     - Uncertain new policy application e.g. Solvency II for pension funds?
     - Accounting rules e.g. mark to market for illiquid assets
   - Lack of project pipeline and quality historical data
     - Compounded by exit of banks (Basel III/deleveraging)
     - Little historical pricing data or indices for investments such as private placement debt

2. Issues particular to green investments
   - Risk/return imbalance
     - Market failures: insufficient carbon pricing and incentives; presence of fossil fuel subsidies
   - Unpredictable, fragmented, complex and short duration policy support
     - Retroactive support cuts, switching incentives (FIT to FiP) or start and stop (PTC)
     - Use of tax credits popular with insurers can discourage tax exempt pension funds
     - Unrelated policy objective discouragement e.g. EU unbundling preventing majority ownership of both transmission and generation/production
     - Fiduciary duty debate
   - Special species of risk, e.g. technology and volumetric require expertise and resources
   - Competition for capital with other traditional infrastructure assets

3. Lack of suitable investment vehicles
   - Issues with fund and vehicle design
     - High fees to support fund structure
     - Liquidity trade-off with connection to underlying asset and associated benefits: difficult to offer liquidity without asset disconnect, churn and leverage in fund
   - Nascent green bond markets, no indices/funds, restricted access to liquid vehicles (MLPs & REITs)
     - Small pipeline of projects, high transaction costs, minimum deal size and definition uncertainty
   - Challenges with securitisation
   - Credit and ratings issues
     - Historical lack of ratings data, expensive process
     - Absence of monoline insurers since financial crisis

Summary

- Growing Global Demand for Energy and Infrastructure
- Significant Constraints for Traditional Investors
- Institutions Attracted for Diversification, Cash Flow, & Higher Returns
- Increasingly Adopting Sustainable Infrastructure Investments
- Green Project and PE Structures Largely Meeting Return Requirements
- Barriers to Institutional Investment at Scale Remain
- Suitable Modular and Replicable Transactions are Being Scaled—Our next Speaker from Liberation Capital will Illustrate These