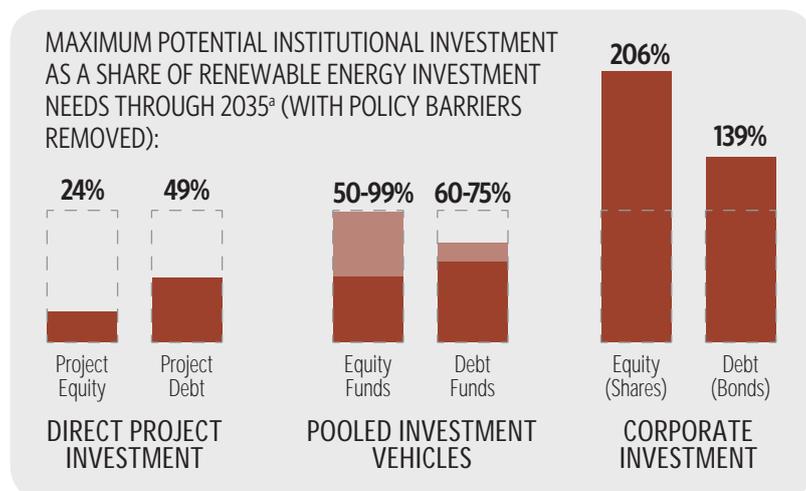


**While institutional investors manage more than \$70 trillion in assets, renewable energy investment potential from institutional investors is limited by the ways these investors must manage their portfolios.**

**As a result of these limiting factors, and the investment options available, institutional investors may not be able to invest at sufficient scale to transform the cost of financing renewable energy.**



ABILITY TO INFLUENCE COST OF FINANCING DIFFERS BY THE INVESTMENT VEHICLE USED:

#### DIRECT PROJECT INVESTMENT

- Typically illiquid and carries a premium return
- Potentially a good match with institutional investor profile; best opportunity for institutional investors to lower cost of capital for renewable energy projects
- Institutional investor capital may not be available at sufficient scale to impact market dynamics and thus lower cost of capital

#### POOLED INVESTMENT VEHICLES

- Investment vehicles that buy and hold renewable energy assets for the long-term may be able to reduce cost of capital and provide some liquidity
- Match with institutional investor profile, and potential to lower cost of capital, depends on fund structure, strategy and fees

#### CORPORATE INVESTMENT

- Institutions invest in utilities and other corporations, which may face their own constraints to investing in renewable energy
- Cost of capital will be determined by corporate finance and strategy concerns and capital market conditions, rather than institutional investor involvement; as a result, corporations may not pass through institutional investor advantages in providing low-cost, long-term financing to their renewable energy investments

#### FACTORS LIMITING INVESTMENT IN RENEWABLE ENERGY PROJECTS:

- Some institutions **have short-term needs** for liquidity and cannot invest in long-term assets
- Many institutions (particularly pension funds) are **too small to justify building a dedicated team** for direct renewable energy project investment
- All institutions require significant **liquidity in their investment portfolios**, to meet regulatory requirements and ensure their financial security, and are limited in the amount of illiquid assets they can own (such as project debt)
- Institutional investors must **diversify** across investment options to reduce investment risk, which limits their exposure to a single asset class like renewable energy

**There are five improvements that can help institutional investors reach their renewable energy investment potential.**

Institutional investors are far from this potential.<sup>b</sup> We identify five potential avenues to encourage greater level of investment from institutional investors:

1. **Fix policy barriers that discourage institutions from investing.** However, this must be done carefully, considering the trade-offs being made to increase institutional investment in renewable energy. Examples of policy barriers include:
  - » **Renewable energy support policies that put institutional investors at a disadvantage;** for example U.S. tax credits, which cannot be used by tax-exempt pension funds
  - » **Policies with other objectives which discourage institutional investment in renewable energy;** for example European electricity market “unbundling,” designed to ensure efficient market operations, make investors choose between renewable energy generation and transmission assets
  - » **Energy and renewable energy policies that are inconsistent and create perceived policy risk;** for example Spanish retroactive tariff cuts and start-stop expiration of U.S. incentives discourage institutions from investing
2. **Improve institutional investor practices,** including treatment of illiquid assets, specialized investment expertise for renewable energy, and using asset allocation approaches that capture the risk and return characteristics of renewable energy assets
3. Identify whether **financial regulations affecting renewable energy investment** can be modified without negatively impacting institutional investors’ financial security, solvency, or operating costs
4. **Develop better pooled investment vehicles** that create liquidity, increase diversification, and reduce transaction costs while maintaining the link to underlying cash flows from renewable energy projects
5. **Encourage utilities and other corporate investors.** However, these investors may face their own set of barriers, and would not have the unique advantages of institutions when it comes to financing costs

<sup>a</sup> Based on CPI analysis: “The Challenge of Institutional Investment in Renewable Energy.” Project and pooled investment potential shown as a share of required project finance investment. Corporate investment potential shown as a share of required corporate / balance sheet finance. Investment needs, are based on the International Energy Agency’s World Energy Outlook 2011, and Bloomberg New Energy Finance.

<sup>b</sup> See CPI (2012), “The Landscape of Climate Finance 2012.” In 2011, over \$600 million of institutional investment flowed to new renewable energy projects, compared with an estimated maximum potential of \$39 billion per year to renewable energy. However, this figure excludes reinvestment and secondary transactions - which comprise the bulk of insurance company and other institutional investor activity.