Institutional investor survey results

Pension and insurance fund attitudes toward investment in renewable energy infrastructure

November 2013
Key findings

► 61% of pension and insurance funds surveyed have no investment in renewable energy infrastructure.
► Nearly one-third of respondents expect their allocation to renewable energy to increase in the next three years, and 15% expect it to increase by over 10%*.
► Greater certainty of government support and greater in-house expertise in renewable energy are two of the most important factors in encouraging higher allocations to this asset class in the future.
► Insurance funds and pension funds differ in their attitudes toward renewable energy infrastructure, in their preferred vehicle of investment and in their views on investment going forward. Insurance funds appear to be the most active investors.

* This excludes 40% of respondents for whom the question was “not applicable”.
The survey was carried out by Institutional Investor LLC on behalf of EY.

75 responses from European and North American pension (44) and insurance (31) funds were received.

41% of European respondents had assets under management of over $50b, compared to 13% of North American respondents.

Over a third of respondents had assets under management of $100b or more.
Investment in renewable energy infrastructure
31% of respondents have invested in renewable infrastructure

In total, just under a third of respondents have investments in renewable energy infrastructure.

41% of insurance funds surveyed have invested in renewable energy infrastructure compared to 22% of pension funds.
## Alignment with fund objectives

Renewable energy investments align more closely to insurance fund objectives than those of pension funds.

### Insurance funds

#### Renewable alignment with fund objectives

<table>
<thead>
<tr>
<th>Objective</th>
<th>Good Match</th>
<th>Neutral</th>
<th>Poor Match</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>My fund's need to diversify into alternative asset classes</td>
<td>61%</td>
<td>26%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>My fund's ethical objectives</td>
<td>42%</td>
<td>42%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>My fund's investment horizon and liquidity requirements</td>
<td>42%</td>
<td>29%</td>
<td>23%</td>
<td>6%</td>
</tr>
<tr>
<td>My fund's risk-return requirements</td>
<td>39%</td>
<td>35%</td>
<td>19%</td>
<td>6%</td>
</tr>
<tr>
<td>My fund's regulatory or legal requirements</td>
<td>16%</td>
<td>55%</td>
<td>19%</td>
<td>10%</td>
</tr>
</tbody>
</table>

#### Pension funds

#### Renewable alignment with fund objectives

<table>
<thead>
<tr>
<th>Objective</th>
<th>Good Match</th>
<th>Neutral</th>
<th>Poor Match</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>My fund's need to diversify into alternative asset classes</td>
<td>34%</td>
<td>36%</td>
<td>16%</td>
<td>14%</td>
</tr>
<tr>
<td>My fund's ethical objectives</td>
<td>27%</td>
<td>39%</td>
<td>23%</td>
<td>11%</td>
</tr>
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<td>My fund's investment horizon and liquidity requirements</td>
<td>34%</td>
<td>32%</td>
<td>23%</td>
<td>11%</td>
</tr>
<tr>
<td>My fund's risk-return requirements</td>
<td>20%</td>
<td>52%</td>
<td>9%</td>
<td>18%</td>
</tr>
<tr>
<td>My fund's regulatory or legal requirements</td>
<td>20%</td>
<td>55%</td>
<td>11%</td>
<td>14%</td>
</tr>
</tbody>
</table>

- 61% of insurance fund respondents stated that renewable energy infrastructure aligned well with their need to diversify into alternative asset classes, compared to 34% of pension funds.
- 42% of insurance funds surveyed found renewable energy assets provide a good match with their ethical objectives, versus only 27% of pension funds.
Technology preferences

More than half of insurers surveyed have already invested or are considering investments in on-shore wind; on-shore wind and hydro-electric are the most popular technologies for pension funds.

Insurance funds

Investment by type of renewable energy infrastructure

Pension funds

Investment by type of renewable energy infrastructure
Geographic preferences
The US is the top destination for renewable energy infrastructure investments

- More than one in four respondents have already made or are considering renewable energy infrastructure investments in the US.
- The UK and Ireland is the second most popular destination for investment among respondents.

Renewable energy infrastructure investments by location

Sample size (n = 69)
Forms of investment

Insurance companies invest mainly in project debt, whereas pension funds prefer tradable corporate equities.

Inspection and pension funds

Forms of investment

- Tradable corporate equity (shares traded on a public exchange): 16% (Pension funds), 12% (Insurance funds)
- Project debt: 7% (Pension funds), 17% (Insurance funds)
- Project equity: 14% (Pension funds), 9% (Insurance funds)
- Tradable corporate debt (bonds traded on a public exchange): 12% (Pension funds), 10% (Insurance funds)
- Other: 1% (Pension funds), 2% (Insurance funds)
- Not applicable: 35% (Pension funds), 12% (Insurance funds)

Sample size (n = 69)

Forms of investment

- Tradable corporate equity (shares traded on a public exchange): 27% (Pension funds), 29% (Insurance funds)
- Project debt: 12% (Pension funds), 43% (Insurance funds)
- Project equity: 21% (Pension funds), 24% (Insurance funds)
- Tradable corporate debt (bonds traded on a public exchange): 20% (Pension funds), 25% (Insurance funds)
- Other: 4% (Pension funds), 0% (Insurance funds)
- Not applicable: 29% (Pension funds), 59% (Insurance funds)

Insurance fund sample size (n = 28)

Pension fund sample size (n = 41)
38% of respondents said their renewable energy investments had met or exceeded their expectations. For many, these are still relatively recent investments, and their performance has not yet been evaluated.

Nearly one in three respondents expect their future renewable allocation to increase in the next three years, and 15% expect it to increase by over 10%.

The vast majority (76%) of those who expect their allocations to increase are insurance funds.

#### Performance of renewable infrastructure investments

<table>
<thead>
<tr>
<th>Status</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our renewable energy investments have exceeded our expectations</td>
<td>9%</td>
</tr>
<tr>
<td>Our renewable energy investments have met our expectations</td>
<td>29%</td>
</tr>
<tr>
<td>Our renewable energy investments have fallen short of our expectations</td>
<td>11%</td>
</tr>
<tr>
<td>It's too soon to tell</td>
<td>51%</td>
</tr>
</tbody>
</table>

Sample size (n = 35)

#### Outlook for future allocations to renewable infrastructure

<table>
<thead>
<tr>
<th>Outlook</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase by 10%+</td>
<td>15%</td>
</tr>
<tr>
<td>Increase by 5% to 10%</td>
<td>8%</td>
</tr>
<tr>
<td>Increase by up to 5%</td>
<td>10%</td>
</tr>
<tr>
<td>No change</td>
<td>68%</td>
</tr>
<tr>
<td>Decrease by up to 5%</td>
<td>0%</td>
</tr>
<tr>
<td>Decrease by 5% to 10%</td>
<td>0%</td>
</tr>
<tr>
<td>Decrease by 10%+</td>
<td>0%</td>
</tr>
</tbody>
</table>

Sample size (n = 40)

(1) Excludes 31 respondents who answered “don’t know/not applicable”
(2) With 51% stating it was “too soon to tell”
Drivers of future investment
Greater certainty of government policy and support, in-house expertise in renewable energy and transparency of potential investments will encourage investments

Insurance and pension funds

Drivers for renewable energy infrastructure investments

- Greater in-house expertise in renewable energy infrastructure investing: 44%
- Greater certainty of government support and policy: 30%
- Greater transparency of potential investments: 34%
- Increasing interest in socially and environmentally responsible investment from pension plan holders or other funders: 22%
- Greater access to attractively structured renewable energy assets: 22%
- Development of suitable pooled investment vehicles: 27%
- Partnership opportunities with other investors: 22%
- Government policy that supports institutional investors’ unique requirements, e.g., current use of tax credits in the US may not be of value to pension funds: 19%
- Other: 22%

Insurance fund sample size (n = 27)  
Pension fund sample size (n = 41)

- Respondents specified “Other” drivers to be:
  - “Appropriate risk/returns and more client requests”
  - “Double the size of portfolio”
  - “Economics”
  - “Economic viability”
  - “Less government support. Projects must be viable without subsidies”

- From the comments respondents made quoted above, it seems that although greater certainty of government support is a key driver of investment, some funds are deterred from investing precisely because renewable energy infrastructure requires subsidy.

- For insurance funds, which tend to be larger in terms of assets under management than pension funds, having more in-house expertise in this area is crucial to increasing investment. Many pension funds simply do not have the resources needed to invest in teams to evaluate projects.

- For pension funds, greater transparency of investments – the ability to look-through to underlying projects and compare to historical performance data – is critical.
Recent EY cleantech thought leadership

Renewable energy country attractiveness index (RECAI)
Our quarterly RECAI report ranks national energy markets on their attractiveness for renewable asset investments.

Do you need a chief resource and energy officer?
There is a compelling case for elevating corporate resource management to the highest levels of executive management through a chief resource and energy officer (CREO) position. This white paper explores the value of the CREO role, its key responsibilities and essential qualifications, and potential models for integrating such a role into your organization.

From boiler room to board room: optimizing the corporate energy mix
Designed as a resource for corporate energy managers, this report discusses strategies and considerations for addressing energy-related risks through the integration of renewables into a more diversified energy mix.

US water sector on the verge of transformation
This report shares EY's point of view on the multiple challenges that are converging to compel change in the US water sector, including an action agenda of ten proactive steps that water industry stakeholders should consider to help establish the long-term sustainability and growth of the sector.

Global renewable energy country attractiveness and resource map
These maps provide a global view of the renewable energy landscape by combining our overall and technology-specific RECAI rankings with data on installed renewable generation capacity, capacity growth rate, new project pipeline and percentage of electricity generated from renewable sources.

Cleantech matters: expanding the electric vehicle experience
Summarized in this report are the insights and recommendations arising from our annual Cleantech Ignition Sessions, which convene industry players from around the world to discuss trends in electrification of vehicles.

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