Bonds and Climate Change

The state of the market in 2013

Venice

October 2013

Climate Policy Initiative
Key findings

- Total of $346bn is double last year’s estimate
- 89% is investment grade
- China accounts for $127bn (37%), followed by the UK and France
- 75% is ow carbon transport, esp. rail, then clean energy & climate finance
$346bn breakdown (at 1 Mar)

- Transport dominates at 76%
- Energy = $41bn
- Climate Finance = $32bn
## Low-carbon, climate resilient transition

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
<th>Details</th>
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<tbody>
<tr>
<td>Transport</td>
<td>263bn</td>
<td>- Rail, metro&lt;br&gt;- Evs&lt;br&gt;- Biofuels&lt;br&gt;- Rail FF excl.&lt;br&gt;- Mature&lt;br&gt;Future: - EVs: Tesla, auto mnftrs&lt;br&gt;- Tripling of rail: Africa, CA HS</td>
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<td>Finance</td>
<td>32bn</td>
<td>- MDB programs&lt;br&gt;- Conduits: EuroFIMA $16bn, Indian Rail $7bn, IREDA&lt;br&gt;Future: - Munis&lt;br&gt;- Banks&lt;br&gt;- Corporates</td>
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<td>Energy</td>
<td>41bn</td>
<td>- Wind 24%&lt;br&gt;- Solar 21%&lt;br&gt;- Hydro 8%&lt;br&gt;- Nuclear 32%&lt;br&gt;- Biomass&lt;br&gt;Future: - RE invest funds&lt;br&gt;- Rooftop solar ABS&lt;br&gt;- Utility ABS</td>
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<td>Buildings &amp; Industry</td>
<td>4.8bn</td>
<td>- LEDs 13%&lt;br&gt;- Insulation&lt;br&gt;- Energy star appliances: LG&lt;br&gt;- EE munis&lt;br&gt;- Retrofit&lt;br&gt;- Green buildings&lt;br&gt;Future: Siemens, GE, Schneider Electric etc.</td>
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<td>Waste &amp; Pollution control</td>
<td>1.4bn</td>
<td>- Recycling / recycled products / circular economy&lt;br&gt;- Air filters&lt;br&gt;- Landfill gas, WTE&lt;br&gt;Future: - Corporate waste mgmt</td>
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<td>Water</td>
<td></td>
<td>- Sustainable water mgmt&lt;br&gt;- Efficient technology&lt;br&gt;- Resilient infras.&lt;br&gt;- Criteria difficult&lt;br&gt;Future: - flood protection&lt;br&gt;- water infra in drought-threat areas</td>
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<tr>
<td>Agriculture &amp; Forestry</td>
<td>3.8bn</td>
<td>- 88% paper /wood / forest mgmt&lt;br&gt;- Afforestation&lt;br&gt;- Organic seeds &amp; fertilizers&lt;br&gt;- Sweden, Portugal, USA&lt;br&gt;Future - Climate-resilient ag</td>
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www.climatebonds.net/taxonomy
Bonds, re-fi, and the capital pipeline

- **Equity**: High risk
  - Project finance
  - First 2-5 years

- **Bank loans**: High risk

- **Project bonds**: Corporate, asset-linked
  - Re-financing by utilities
  - Bank securitization

- **Asset-backed**: Low risk
  - Long-term holdings for long-term investors
  - 15-25 years

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HSBC | Climate Bonds
Needed

Common definitions; transparency; standards

Public sector

- Credit support, tax incentives, pension incentives, green monoline
- Green covered bonds & ABS: regulation, standardisation, risk weighting
- Cornerstone issuers & investors

MDBs

- Leverage to stretch capital
- Aggregation in EMs
- Portfolio packaging for investors
Takeaways

Thematic bond investing is no longer niche
Demand focus will be on corporate use-of-proceeds-linked bonds
Expect China to take global lead

[Statistical graphics and data]

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