The Landscape of Climate Finance in Germany

CPI Webinar – February 6, 2013
Presented by Hermann Amecke and Alexander Vasa
Overview

1. Summary of Findings
2. Methodology
3. Results
4. Conclusions
1. Climate-specific tangible investment (mixed incremental and full capital investment) in Germany in 2010 amounted to EUR 37 billion or 1.5% of GDP (2010)

2. The private sector provided most investments, supported significantly by concessionary loans (i.e. low-interest debt) from public banks

3. Climate finance is not systematically tracked. There is also not any systematic assessment of the effectiveness of public climate finance (regarding both EU and Germany)

4. There is no clear understanding of whether current investments are sufficient to achieve Germany’s goals
Methodology

1. Focused on investments in climate-specific tangible assets
   - Not on intangible programs (e.g. R&D)
   - Not on climate-related investments (e.g. rail)
   - Not on adaptation

2. We worked with a wide range of sources to track investment flows sector by sector.

3. Consistent within but not comparable between the two main investment categories
   - Efficiency and non-energy related investments: incremental cost
   - Renewable energy: total capital cost

4. Partial in terms of coverage of data regarding state and municipal level investments

5. Partial due to data gaps for certain sectors
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The German Climate Finance Landscape: climate specific investments in 2010 (EUR billions)
Who was investing (and how much)?

**Private climate-specific investment [EUR billion]**
- Companies: 22
- Households: 14

Private sector was the most important investor: EUR 36 billion or more than 95% of total.

**Public climate-specific investment [EUR billion]**
- German: 1.2
- EU: 0.2

Public expenditures amounted to: EUR 1 (to 1.4) billion.
How was it invested? The role of the public banks.

- Public banks (Förderbanken), such as KfW and the agricultural Rentenbank, provided at least EUR 16.5 billion (or 45%) in concessionary loans for climate measures in 2010.

- The main beneficiaries were private households (through KfW) and farmers (through the Rentenbank).

- Public banks received state guarantees (not quantified) and direct public support for particular policies (quantified).
What was the money invested in?

Renewable Energy (total capital investment): EUR 26.6 billion
Small-scale installations account for around 75% of renewable energy investments.
KfW loans financed 43% of total renewables investment.

<table>
<thead>
<tr>
<th>Investor</th>
<th>Share</th>
<th>Scale*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>37%</td>
<td>Small</td>
</tr>
<tr>
<td>Farmers</td>
<td>20%</td>
<td>Small</td>
</tr>
<tr>
<td>Industry and Commerce</td>
<td>16%</td>
<td>Small</td>
</tr>
<tr>
<td>Public sector</td>
<td>2%</td>
<td>Small/Large</td>
</tr>
<tr>
<td>Utilities, banks, and other financial investors</td>
<td>25%</td>
<td>Large</td>
</tr>
</tbody>
</table>

*Scale according to size-threshold
What was the money invested in?

Energy efficiency (incremental investment): EUR 7.2 billion

- Households invested the major share (EUR 4.1 billion), followed by corporate (2.6 billion) and public (0.5 billion) actors
- Majority (EUR 5.8 billion) was invested in buildings
- KfW played a key role as finance provider, supporting 72% of total energy efficiency investments, mainly in buildings
Summary of climate-specific investment

<table>
<thead>
<tr>
<th>Sector</th>
<th>Public</th>
<th>Private</th>
<th>Billion EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUILDINGS</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ENERGY</td>
<td>0</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>AGRICULTURE</td>
<td>0</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>INDUSTRY</td>
<td>0</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>TRANSPORT</td>
<td>0</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>HOUSEHOLDS</td>
<td>0</td>
<td>10</td>
<td>15</td>
</tr>
</tbody>
</table>

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February 2013
Conclusions (1)

• Money is flowing…
  – Strong role of *renewable energy* coincided with significant incentives such as *concessionary loans* and the *feed-in tariff*, and with *ambitious policy targets*
  – Role of *private sector* (non-energy) and particularly *households*, suggests that Germany approaches the climate change challenge also from the *demand side*

• …however, there is no clear understanding of whether the investments *are* in line with the *financing needs* of Germany’s targets.

Our findings can serve as a point of reference for estimating the additional efforts required and help to focus subsequent, more in-depth analysis.
Conclusions (2)

• No established process or framework for monitoring, reporting, or verification of climate-related expenditures
  – notable exceptions are KfW programs, or the Environment Ministry’s Nationale Klimaschutzinitiative

• No established definition of climate finance (or a clear differentiation between climate-specific, climate-related, etc.)

To improve our understanding of climate finance, there is a need to compile and report comprehensive (yet comparative) investment data, and to analyze the results systematically and on a regular basis.
Recommendations

• General / EU
  – Launch process for establishing definitions
  – Set up a central registry and annual reporting of public climate finance (EU, national and sub-national)
  – Improve the processes for measuring and reporting the impact of EU Funds

• Germany
  – Refine and improve transparency of the official statistics
  – Set up a system to track climate-specific private investment by households and the commercial sector
  – Reflect climate-specific policy objectives in reporting of private and public financial intermediaries
  – Conduct more robust analysis on which policy effectively facilitates private climate finance
Next steps

Now this understanding must be…

• **consolidated** through a second edition of the German Climate Finance Landscape for early 2014

• **expanded** together with our partners in research, policy, industry, and civil society; and then

• **focused** on the core aspects of financing climate change mitigation and the *Energiewende* in Germany (and beyond)
Thank you for your attention!

We look forward to your questions

Please type questions into the webinar module
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The full report can be found at:

Please feel free to contact us with any additional questions:
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