The role of private sector in GHG mitigation

Bilateral Business Matchmaking Event for the Joint Crediting Mechanism, Nov. 7 2018

Romain Brillie, Country Representative to Mongolia, Global Green Growth Institute
Limiting global warming to 1.5°C requires a paradigm shift

Under emissions in line with current pledges under the Paris Agreement (known as Nationally Determined Contributions or NDCs), global warming is expected to surpass 1.5°C, even if they are supplemented with very challenging increases in the scale and ambition of mitigation after 2030.

Limiting warming to 1.5°C requires a marked shift in investment patterns
Investments in low-carbon energy technologies and energy efficiency would need to approximately double in the next 20 years, while investment in fossil-fuel extraction and conversion decrease by about a quarter.

Source: IPCC Special Report on Global Warming of 1.5°C, IPCC, Oct. 2018
Private sector investment is needed to help fill the financing gap

Current Supply 2013

470 billion

Future Demand 2030

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<thead>
<tr>
<th>Barriers to Investment</th>
<th>OECD</th>
<th>Non-OECD</th>
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<tr>
<td>Investment risks</td>
<td>7.9–9.4 trillion</td>
<td>7.4–8.9 trillion</td>
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<td>Insufficient or contradictory enabling policies</td>
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<td>Limited institutional capacity and experience</td>
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<td>Immature financial systems</td>
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Non-OECD Climate Finance Projections 2015-2030

- Total required: 7.4–8.9 trillion
- Total projected: 4.0–4.9 trillion
- Total Climate Financing Gap: 2.4–4.8 trillion

Source: 2013 supply and 2030 projected investment data from the IEA. OECD and non-OECD estimates extrapolated from IEA data. Clean energy finance used as a proxy for climate finance. All figures USD.
Can the private sector be leading the change?

> Private money already represents the largest part of climate finance flows

> Project developers are the main source within the private sphere

> Balance sheet financing is the main instrument used to finance private projects

Source: Global Landscape of Climate Finance 2017, Climate Policy Initiative
Financing Mongolia’s INDCs

- Estimated **USD 3.5 billion** needed for mitigation, **USD 3.4 billion** for adaptation under the current NDC.

- Energy, transport, industry, construction and housing and agriculture sectors need investment to transition to low-carbon.

**Source:** Environment and Climate Fund of Mongolia, 2018.
Government to set a supportive policy and regulatory environment

> Long and mid term policy documents

> Sectoral laws, policies and programmes
Mongolia: example of untapped markets which require barrier removal, technology transfer

**Mitigation**

- **Building heat loss** - +100,000 existing houses, +1077 precast concrete apartment units need improved thermal insulation
- **Energy Efficiency** - 127 large energy users are obliged by law to decrease their energy intensity
- **Green and Affordable housing** - 104,500 new houses need to be built in lieu of yurts

Source: Market assessments for the Mongolia Green Finance Corporation, GCF Readiness, GGGI, 2017

**Total market size:**
- **USD 308.3M**
- **USD 158.5M**
- **USD 755M**
Targeting impact on six Strategic Outcomes:

1. GHG emission reduction
2. Creation of green jobs
3. Increased access to sustainable services, such as, clean affordable energy, sustainable public transport, improved sanitation, and sustainable waste management
4. Improved air quality
5. Adequate supply of ecosystem services
6. Enhanced adaptation to climate change
High investment risk prevent early stage projects from becoming bankable.

Early stage projects cannot access commercial and institutional investment.

Early Stage Project -> Initial Capital

Commercial Capital -> Bankable Project

Institutional Capital -> Financed Project

Project Development Stages:
- Early Stage Project
- Bankable Project
- Financed Project
- Mature Project
What is “bankable”?
>
“Bankable” is achieved after early stage investment risks are sufficiently mitigate through dedicated public funds to meet the risk-return expectations of potential commercial and institutional investors.

Early stage projects cannot access commercial and institutional investors due to investment risks

- Political risk
- Regulatory risk
- Technology risk
- Credit risk
- Capital market risk

GGGI supports establishing a conducive environment for bankability
What we do, types of projects we work on

> WHAT: Develop a multi-country pipeline of bankable green projects and help government in green policy and planning

> HOW: Advise and plan with governments and the private sector
  • Turn “ideas” and “plans” into bankable investments
  • Design and structure projects and funds
  • Reduce investment risk
  • Mobilize and arrange investors
Mobilizing private finance for mitigation:
Mongolia Green Finance Corporation

- **Innovative**
  - High profile initiative, strong support from Government and private sector
  - National Green FI leveraging public and private finance at scale.
  - First dedicated national green financing institution for effective and strategic financing of climate mitigation, adaptation and wider green growth policy measures
  - Private sector managed = efficiency and transparency, public sector ensures policy support and financing.
  - 2 Letters of commitment for USD 10M equity in total signed by the GoM and the Mongolian Sustainable Finance Association (under the MBA, 10 commercial banks).

- **Profitable**
  - Reasonably profitable investment, supported by the Green Climate Fund
    - GCF concessional to de-risk the investment, Technical Assistance by expert orgs (GGGI, McQuarrie GIG, XacBank).
    - Total facility size at USD 50M.
    - Leverage financing of at least US$27.4M loan financing US$8.0M by GoM and US$19.4M by participating financial institutions (PFI) at the initial stage.
    - IRR of ~9% per year.

- **Impact driven**
  - Large potential for impact
    - -3,163,406 tCO2e (direct emissions), -632,182 tons of coal for 15 years’ project lifetime, +2000 jobs.
  - Large potential for scaling-up
    - Investment need to realize NDCs alone = USD 6.9 billion.
    - Estimated market size for three target markets > USD 1.2 billion.
    - Several other markets to access: waste and sanitation, non-utility scale renewables, sustainable livestock and agriculture, water efficiency and treatment, forest products etc.
Thank You