

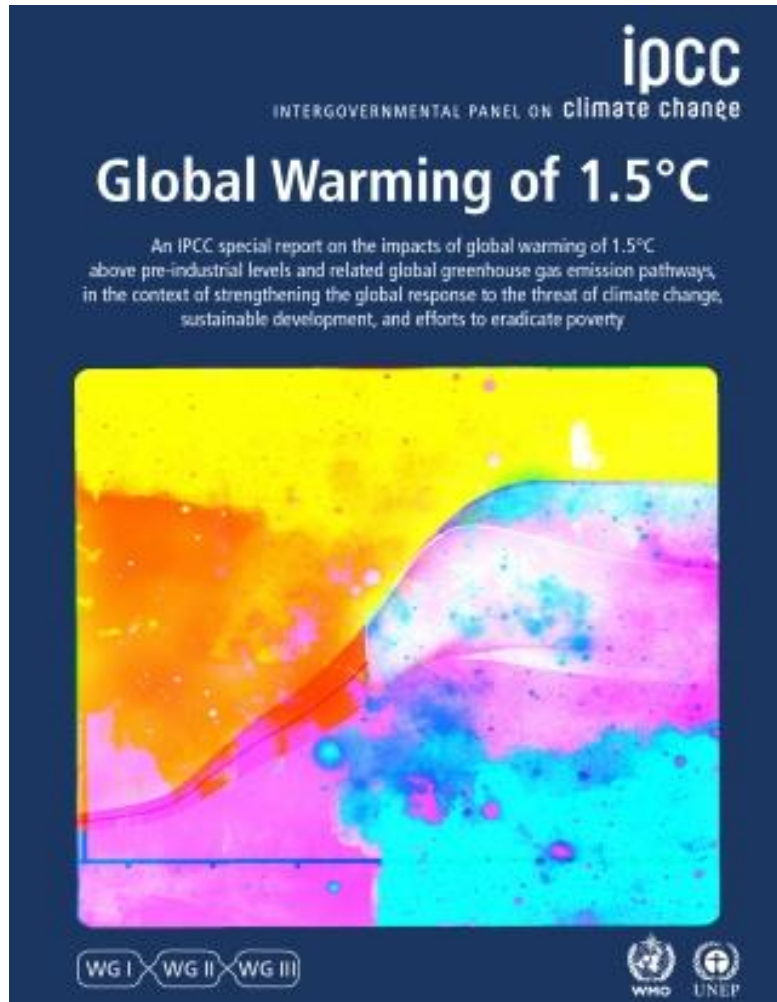
The role of private sector in GHG mitigation

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

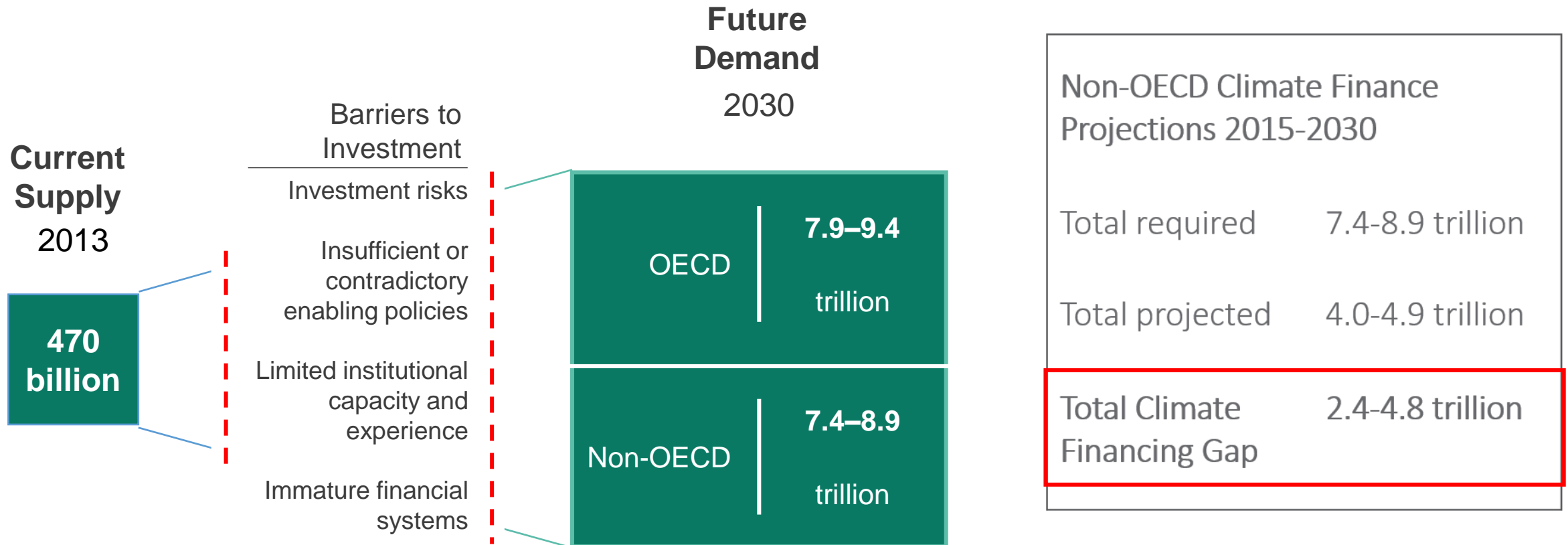


> Under emissions in line with current pledges under the Paris Agreement (known as Nationally Determined Contributions or NDCs), global warming is expected to surpass 1.5°C, even if they are supplemented with very challenging increases in the scale and ambition of mitigation after 2030.

> Limiting warming to 1.5°C requires a marked shift in investment patterns

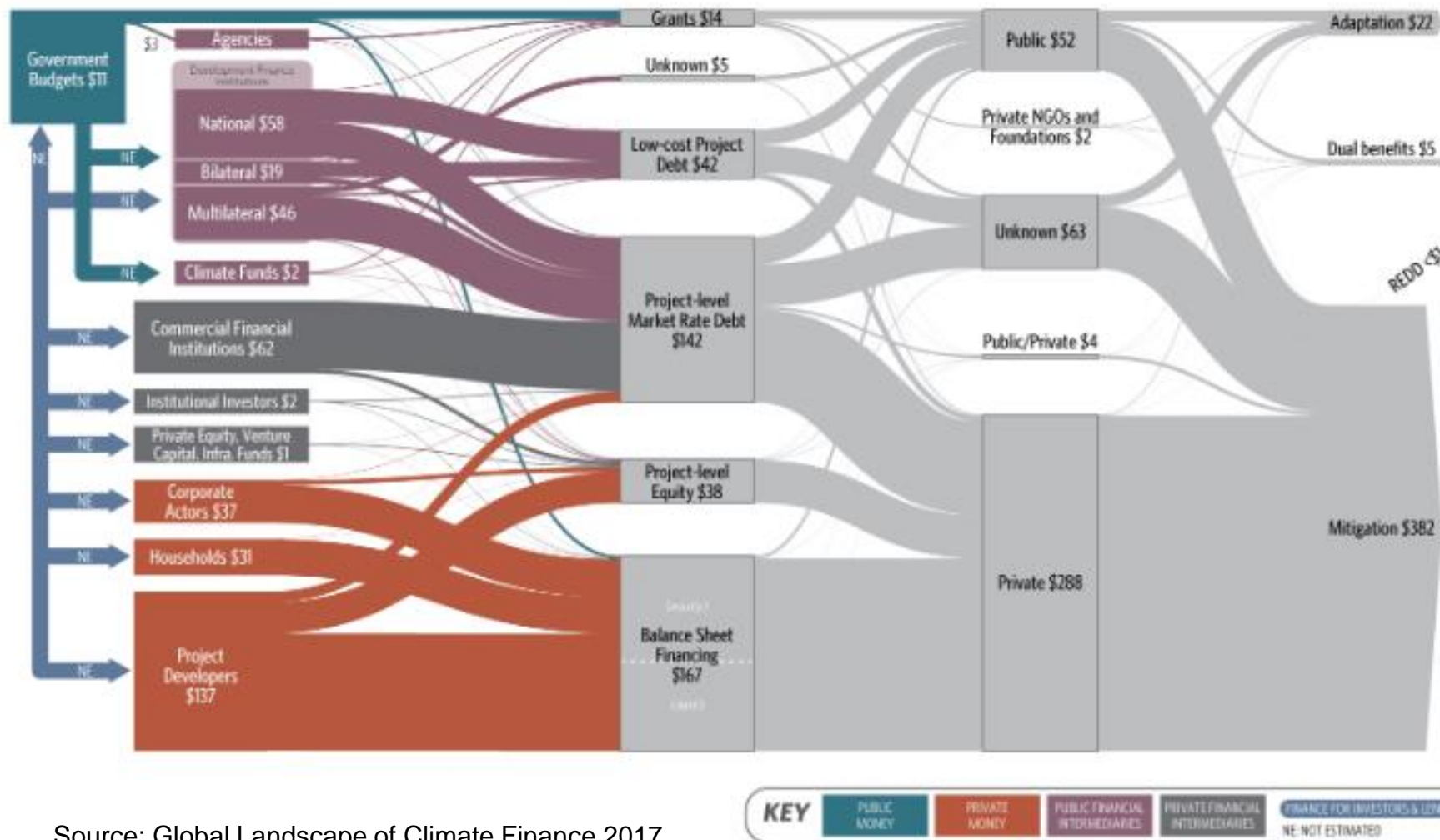
Investments in low-carbon energy technologies and energy efficiency would need to approximately double in the next 20 years, while investment in fossil-fuel extraction and conversion decrease by about a quarter.

Private sector investment is needed to help fill the financing gap



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?



Source: Global Landscape of Climate Finance 2017, Climate Policy Initiative

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

> Project developers are the main source within the private sphere

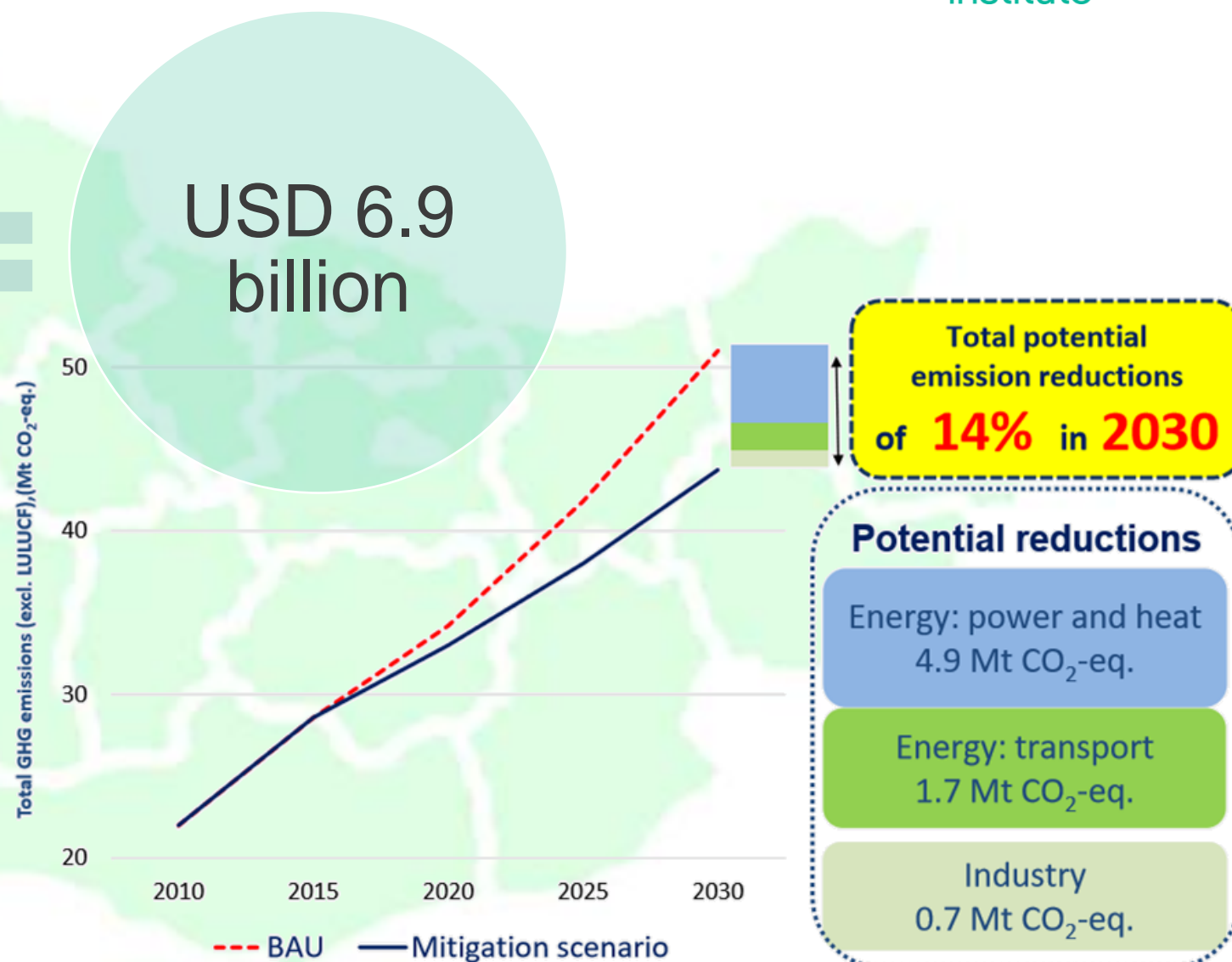
> Balance sheet financing is the main instrument used to finance private projects

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

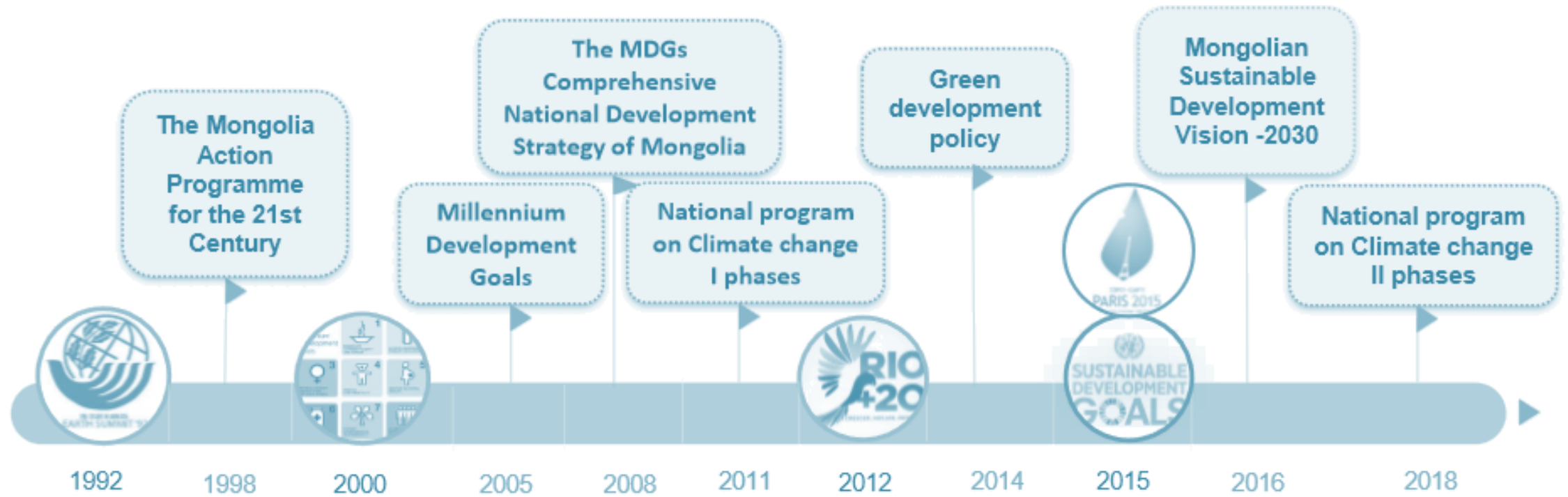


> Long and mid term policy documents

National Development Strategy (2008), State Policy on PPP (2009), National Security Concept (2010), **National Green Development Policy (2014)**, **Mongolia INDC (2015)**, Sustainable Development Vision 2030 (2016)

> Sectoral laws, policies and programmes

Energy Conservation Law (2015), Renewable Energy Law (2009), National Energy Efficiency Action Programme (2017), Law on Water, National Water Programme, Law on Concessions (2010)

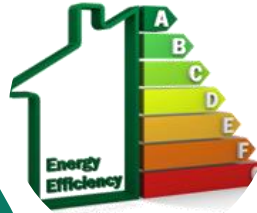


Mongolia: example of untapped markets which require barrier removal, technology transfer



Global
Green Growth
Institute

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

Total market size: **USD 308.3M**

Total market size: **USD 158.5M**






Total market size: **USD 755M**

Global Green Growth Institute at a glance



International
Inter-governmental
26 Country 30 member
programs countries

Four Thematic Priorities:

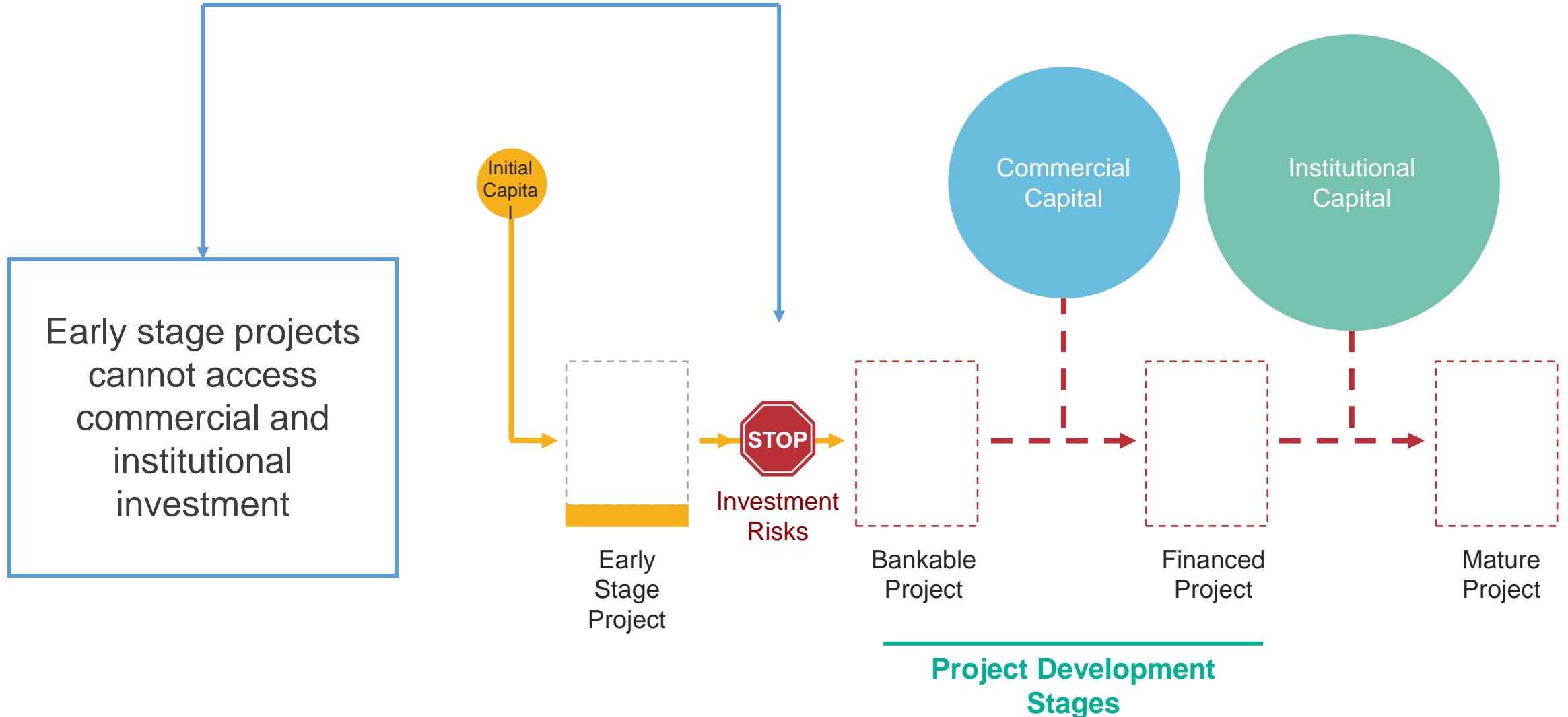
-  Sustainable Energy
 -  Water & Sanitation
 -  Sustainable Landscapes
 -  Green Cities
-
-  Multi-Sectoral
 - ◆ Member Countries



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



GGGI supports establishing a conducive environment for bankability

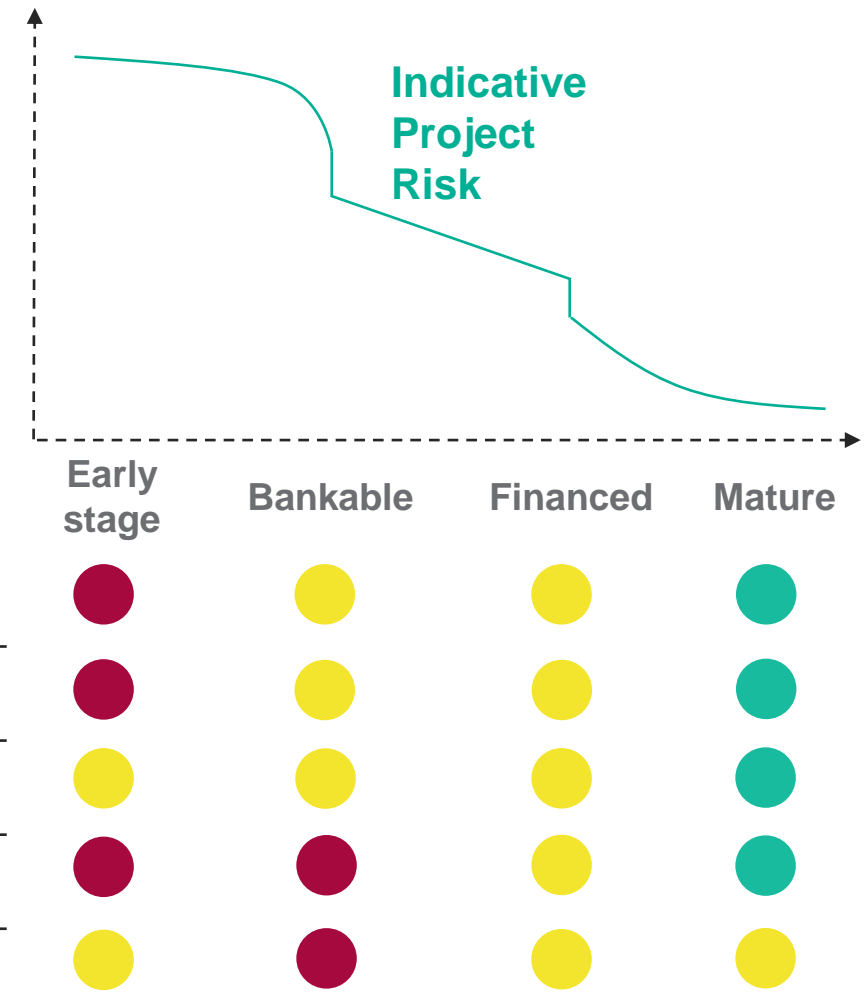
What is “bankable”?

> “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

Political Risk
Regulatory Risk
Technology Risk
Credit Risk
Capital Markets Risk



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

FINANCIAL
INSTRUMENTS

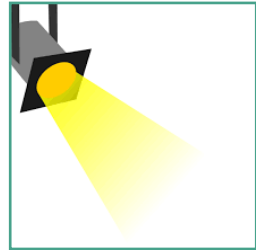
BANKABLE
PROJECTS

NATIONAL FINANCING
VEHICLES

Mobilizing private finance for mitigation: Mongolia Green Finance Corporation



Global
Green Growth
Institute



> 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 concessionality 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
