

Promotion of Climate Technology Financing

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Outline of Presentation

- **Why need climate technology finance?**
- **Practical experience: ADB Pilot Asia-Pacific Climate Technology Finance Center**
- **Experience and observations**

Why climate technology promotion?

- **Developing countries (DCs) have to strike a balance - i.e., achieve socio-economic growth in a sustainable manner that produces lower levels of GHG emissions – advanced technology will be the key to address the two concerns.**
- **Climate technology: one of the three pillars of addressing climate change by DCs: technology, finance and capacity building**

Climate Technologies

Mitigation

Energy Efficiency

Industry, power, consumer goods, buildings

Renewable Energy

Power, biofuels, transport, others

Transport

Fuel efficient vehicles, electric vehicles, hybrids

Agriculture & Land Use

Sequestration, fertilizer use,

Adaptation

Water

Water treatment and management

Climate Disaster Risk Mgt

Early warning systems

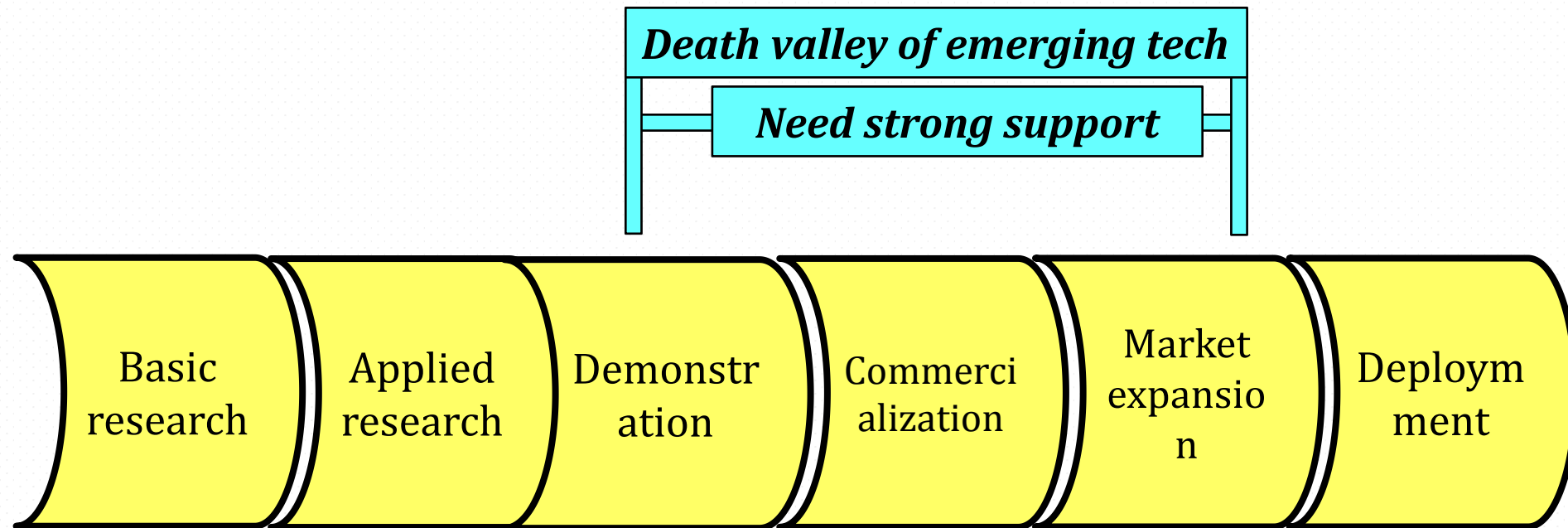
Coastal Zone/Urban Devt

Resilience-enhancing technologies e.g., architectural design standards

Agriculture

Irrigation, Biotech

Technology from idea to diffusion faces huge challenges



ADB's Pilot Climate Technology Finance Center

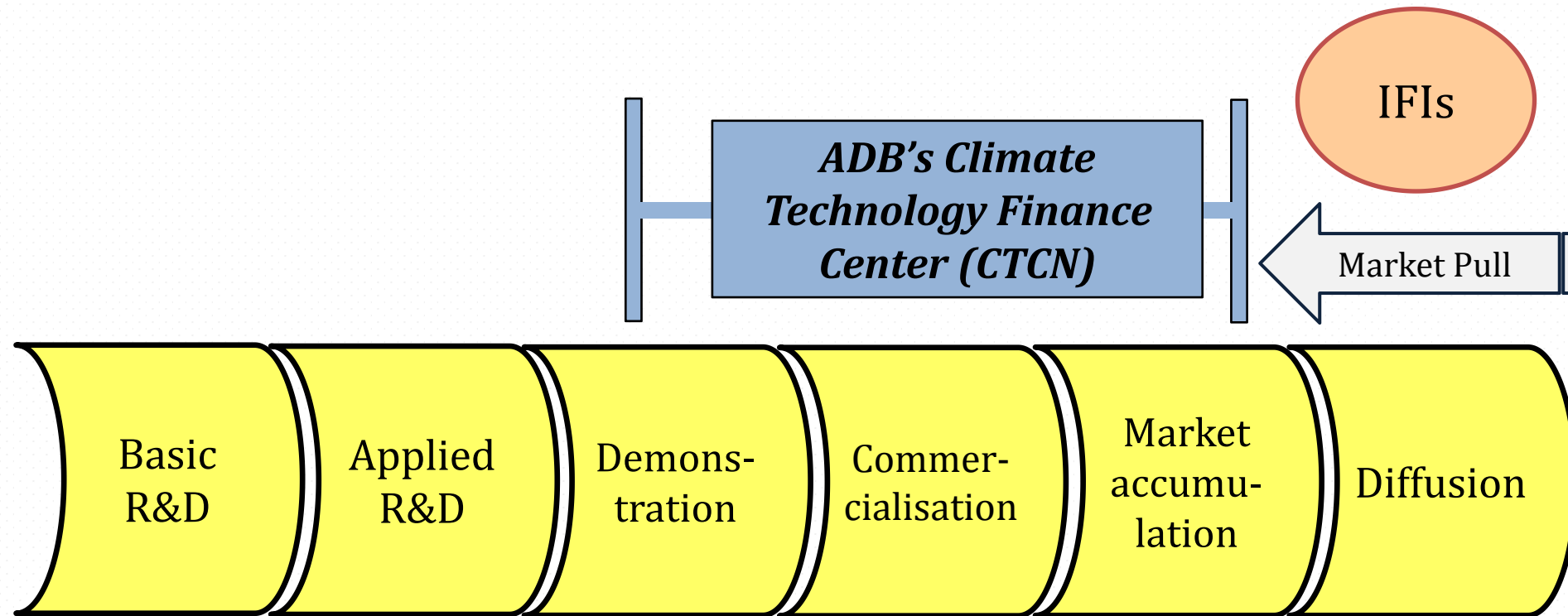
1. Objectives

- Promote climate technology investment

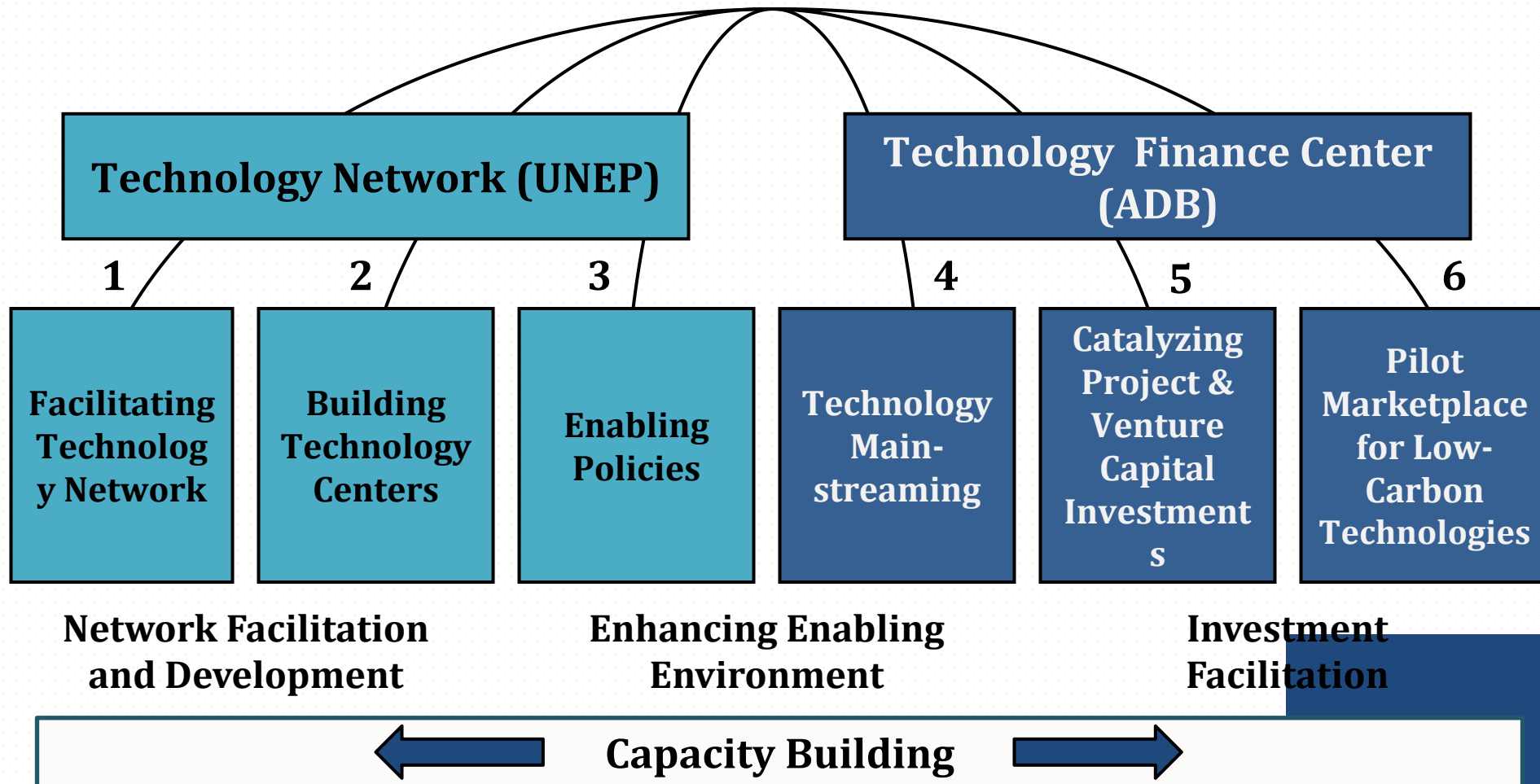
2. Means - Provide advisory and knowledge services on:

- Climate technology options
- Climate change policy
- Climate finance

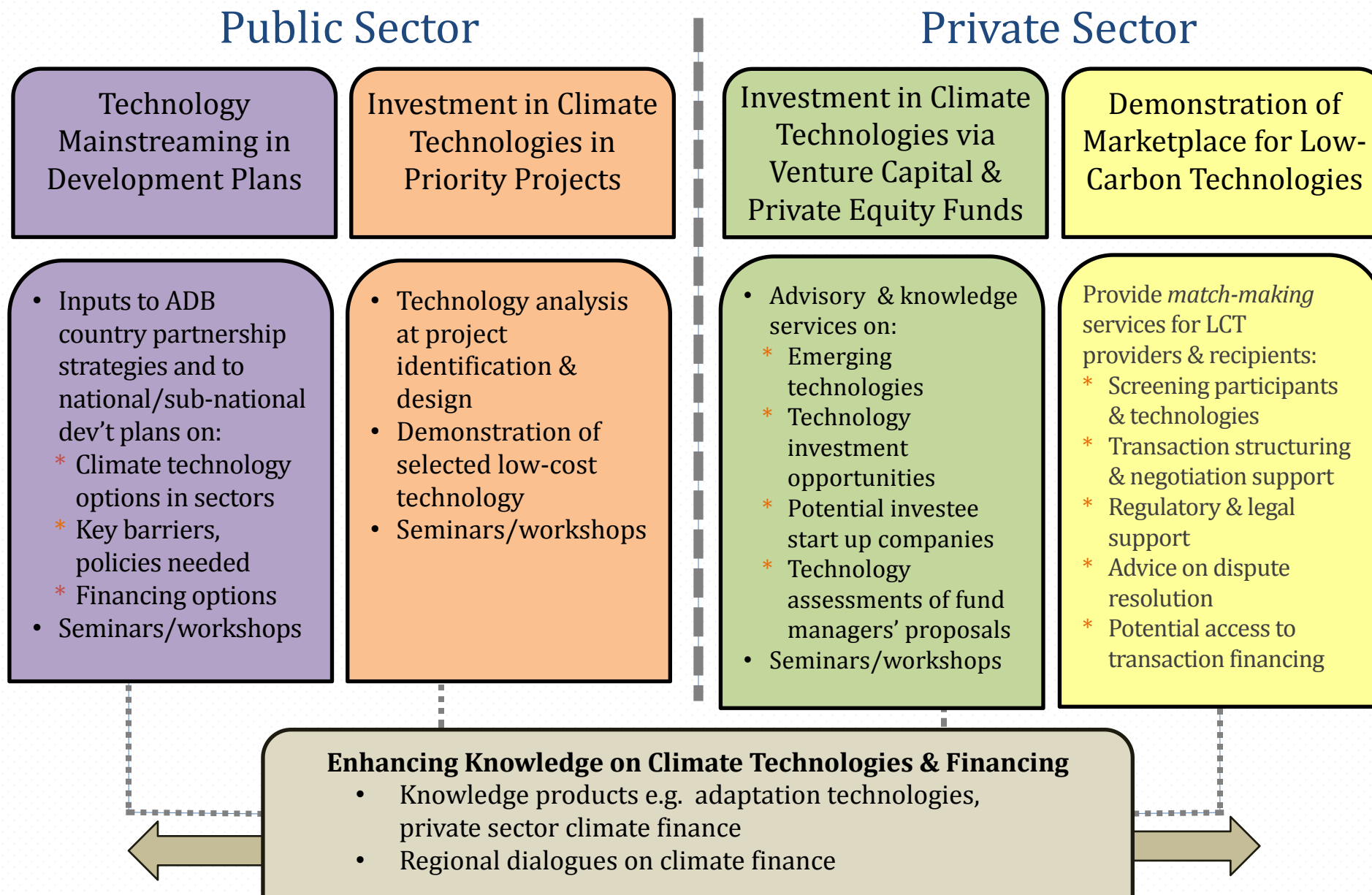
How does ADB's Pilot Asia-Pacific Climate Technology Finance Center fit in?



Center objective - To accelerate access to climate mitigation and adaptation technologies



Pilot Center: How do the services fit?

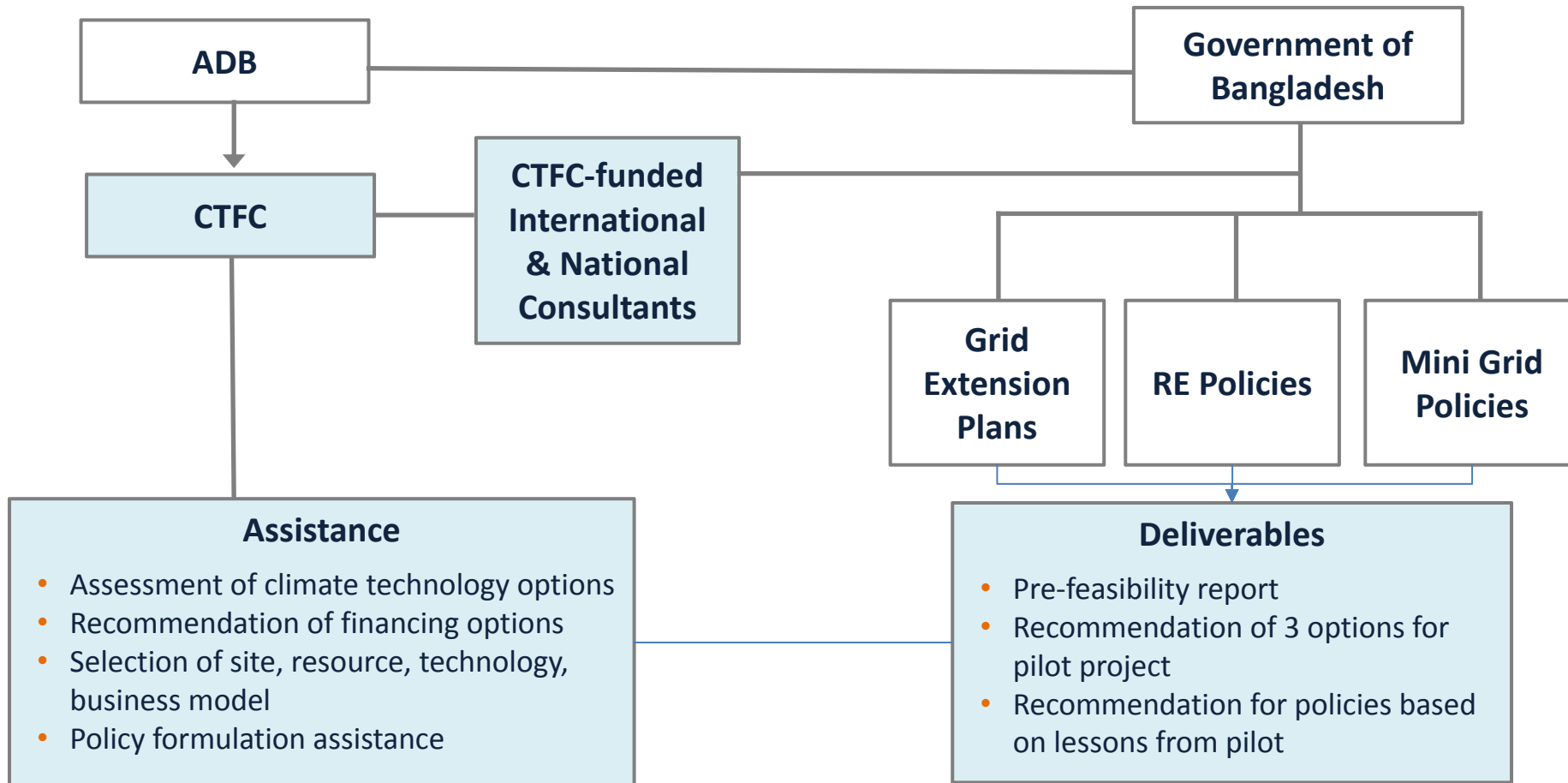


Climate Technology Finance Center

- 1. Working with ADB's Developing Member Countries (DMCs) to mainstream climate technologies into development plans.**
 - Via Country Partnership Strategies; National and/or sub-national plans; Country Operations Business Plans
- 2. Providing technical support and advisory service for ADB's public sector investment pipeline projects.**
 - Interventions at project design and preparation phase for loans, grants, technical assistance projects

Bangladesh: Pre-feasibility study on options to scale-up rural solar and wind hybrid energy technologies

Process for assistance

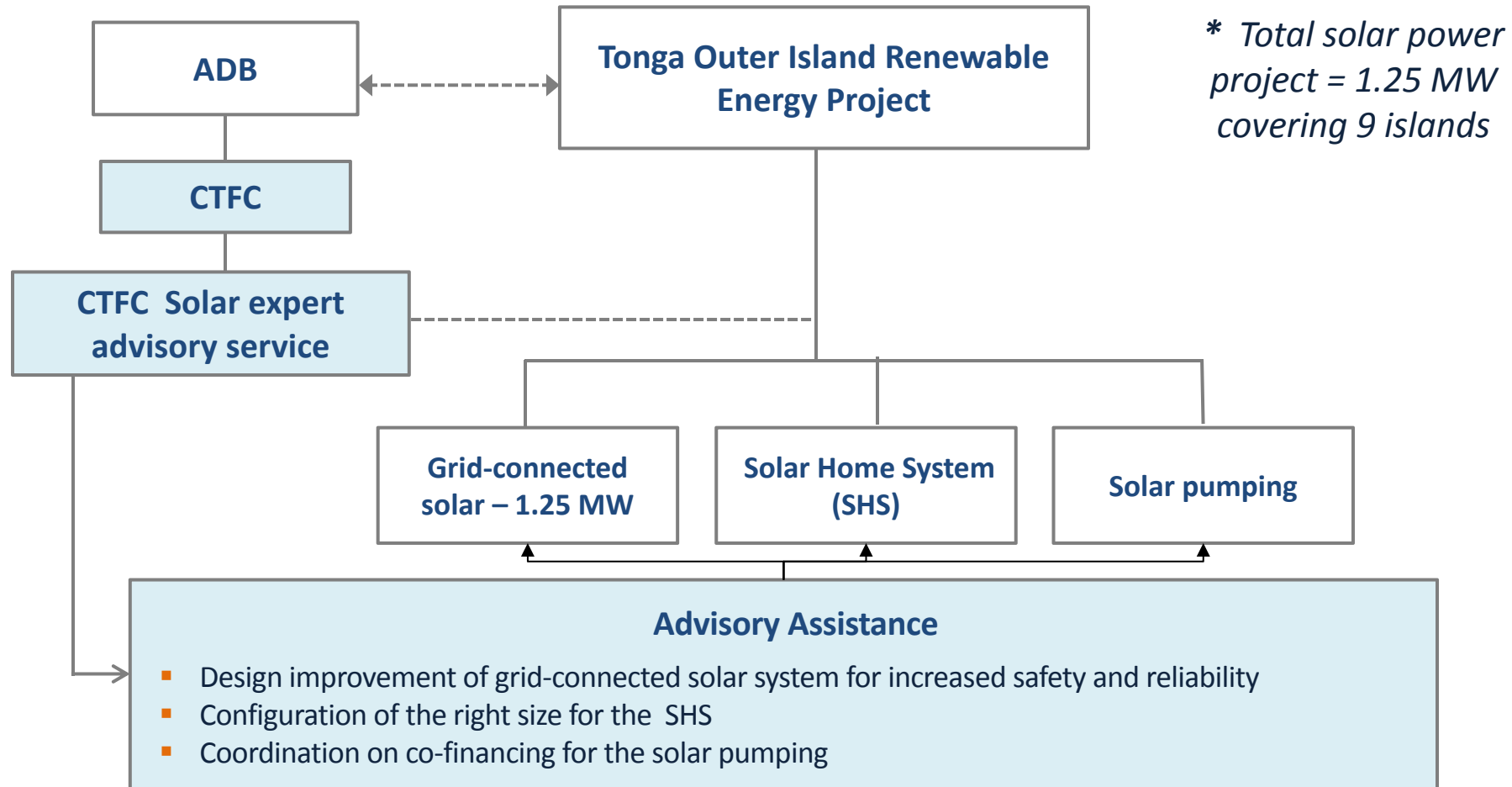


Bangladesh: Results - Power Generation Options

- **Upgrading of bagasse-based cogeneration in sugar mills**
 - Expand power generation using combined heat and power from sugarcane bagasse.
- **Poultry manure to biogas to power**
 - Waste from poultry farms as fuel through an anaerobic digester system → treat chicken manure and produce enough biogas to generate needed power and heat.
- **Solar nanogrids**
 - Link households in rural communities to a communal solar power system → connected to a small-scale agricultural or industrial application, like an irrigation system.
- **Solar minigrids**
 - Solar photovoltaic plants with a localized distribution network to a single village, or cluster of villages.

Tonga: Outer Island Renewable Energy Project: Assistance in design/implementation of components for a 0.8 MW* solar power capacity connecting existing diesel networks of 3* outer islands

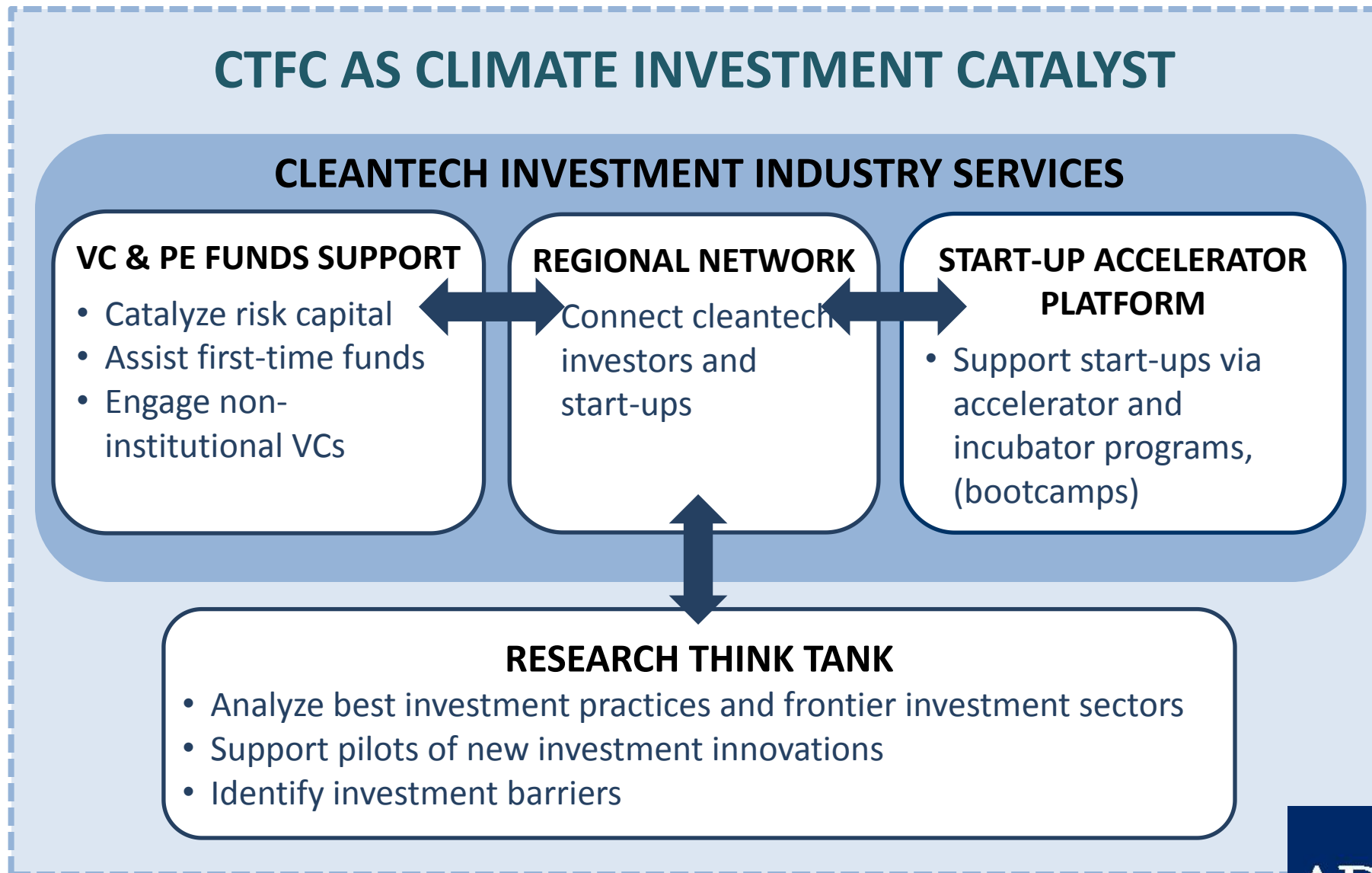
Process for assistance



Climate Technology Finance Center:

- 3. Working with Venture Capital (VC) and Private Equity (PE) Funds to encourage greater level of investments into climate technologies.**
 - Capacity building and creating a regional network

Climate Technology Investments via VC & PE Funds



Climate Technology Finance Center:

4. Setting up of IPEX Cleantech Asia (1st Low Carbon Technology Exchange and IP Platform in Asia-Pacific).

IPEX Cleantech Asia = match-making platform bringing together selected low carbon technology holders worldwide to technology acquirers in Asia

The Marketplace will bridge the gap by providing services to facilitate transactions...

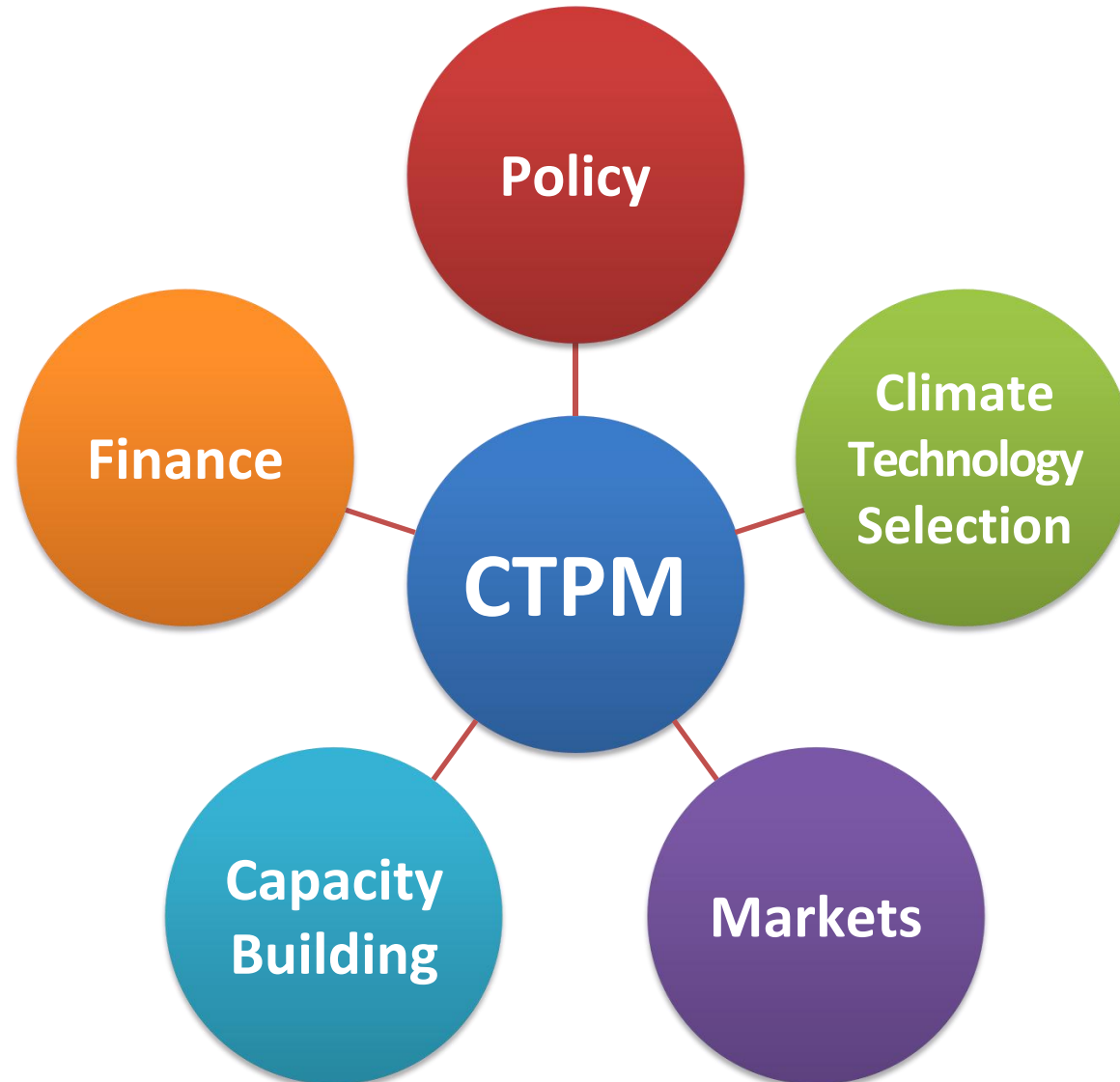
To LCT Providers

- Monetize existing IP Assets
- Access to rapidly developing markets
- Technology development collaboration
- De-risk deployment
- Access to counterparties and markets

To LCT Adopters

- Access to proven low carbon technologies
- Fast track valuation process
- Commercial, technological, and legal risk mitigation through enhanced due diligence
- Access to financing

Integrating CTFC components: Climate Technology Promotion Mechanism



Experience and lessons and observations:

Advanced climate technology financing and investment needs

- **A good policy environment: incentive policy, subsidiary policy, environment safeguard policy,**
- **A good application environment: entry into market policy, safe guard of technology application, ...**
- **A good business chain and environment, including life time service**
- **A strong local team with technical and professional capacity**
- **Financial support**
- **.....**

Experience and lessons and observations

- ❑ **Integration of climate technology into national development strategies, plans, and investment priorities is critical to facilitate direct investment in priority climate technology projects**
- ❑ **Substantial technology needs assessment such as prefeasibility studies encourage DCs to integrate climate technologies in their national investment plans**
- ❑ **Climate technology needs assessment with financing climate technology needs can catalyzes climate technology investment**

Experience and lessons and observations

- Technical assistance and manpower have catalytic role in putting forward private investments on climate technologies**
- Public sector(government, multilateral organization etc) and private sector(technology providers and adopters, solution providers, investors) all are indispensable actors.**
- Network, business mentoring and information are important factors for the VC/PE to implement climate technology investment**

Thoughts for thinking

- **Low Carbon technology: what is unique feature?**
- **Taking carbon reduction as asset to develop carbon finance --
a real financial instrument for low carbon technology**
- **Would low carbon technology + Carbon market work?**

Climate technology cooperation promotion

- **China has a lot of advanced climate technologies that may be easily adapted and adopted in South Asia and Southeast Asia countries.**
- **Exploring the practical way for win-win cooperation should be encouraged, and will need government agencies, technical institutions and business companies to work together.**

Thank you !

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