# Role of Private Sector in Promoting Green Innovations

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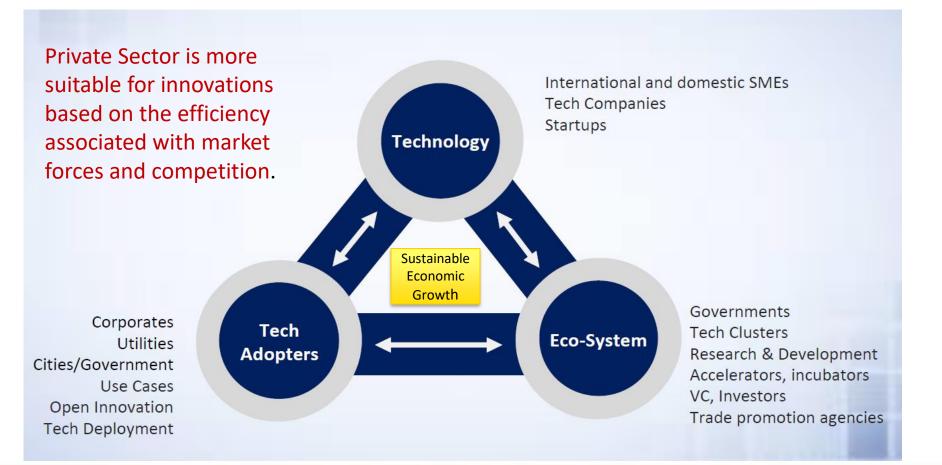


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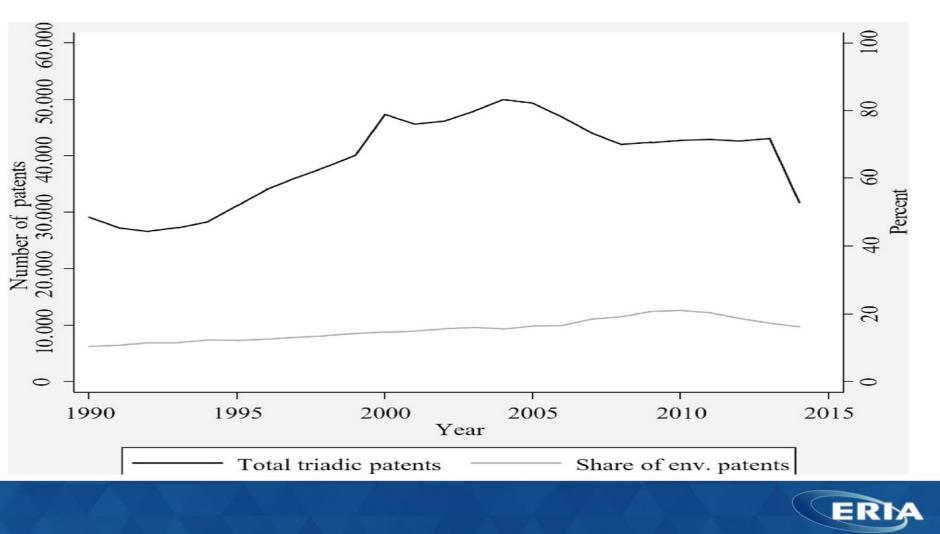
Regional Workshop on Mechanism for Technical Cooperation on Green Innovations, Tashkent, 19 October 2022

# **Eco-system of Green Innovations**





## Green Technology Patents filed by countries in ASEAN and East Asia



Source: ERIA, 2019 - Innovation Policy in https://www.eria.org/publications/innovation-policy-in-asean/

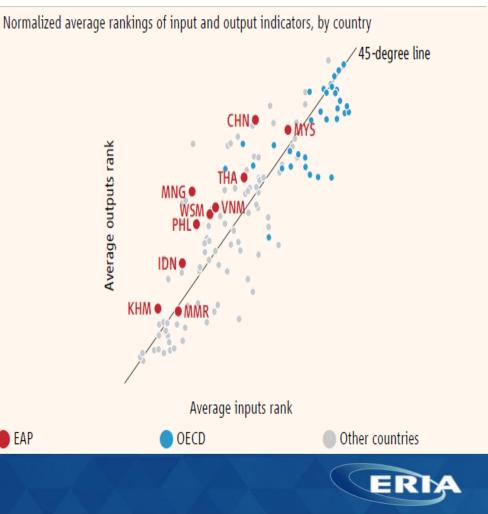
#### Private – Public Decomposition of Green Technological Patents (1990-2017)

	Number of patents (% of total patents)	Alternative energy production	Energy conservation	Forestry and agriculture	Waste management	Number of green patents (% of total green patents)	Number of non-green patents (% of- total patents)	
				Panel A				
Private	946 329 (95%)	71 213 (85%)	22 399 (96%)	15 186 (93%)	19 609 (95%)	139 949 (90%)	806 380 (97%)	
Public	45 026 (5%)	12 802 (15%)	906 (4%)	1 226 (7%)	941 (5%)	16 244 (10%)	28 781 (3%)	
Total	991 355	84 015	23 305	16 412	20 550	156 193	835 162	
Group Sector								
Company Private				te				
Government non-profit company Publi				c	Private Sector: organizations that			
Company hospital				Private		engage in profit-seeking activities, and have a majority private		
Company university				Private				
Government non-profit				Public				
Government non-profit university Pub				c	ownership i.e not owned or operated			
Hospital				Public				
Individual				Private		vernment		
University			Public	Public				

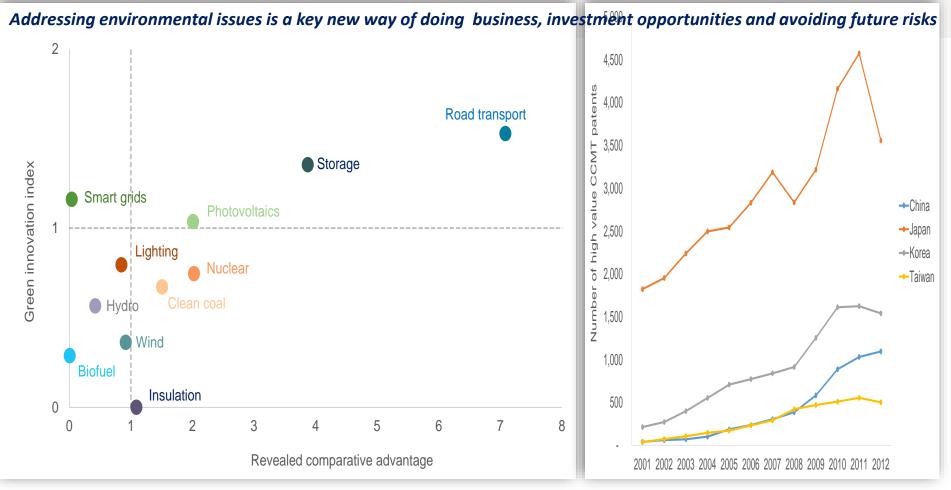


### Does Private Sector in Developing Countries have an efficient green innovation systems

- ASEAN has relatively greater innovation efficiency than the rest of developing countries.
- Efficient in converting inputs (R&D, Researchers, IP etc) into high tech exports, trade mark applications and patent applications.
- Lag behind OECD in-terms of level of innovation inputs and outputs



#### Drivers of Private Sector Action on Green Innovations; Case of Japan in East Asia

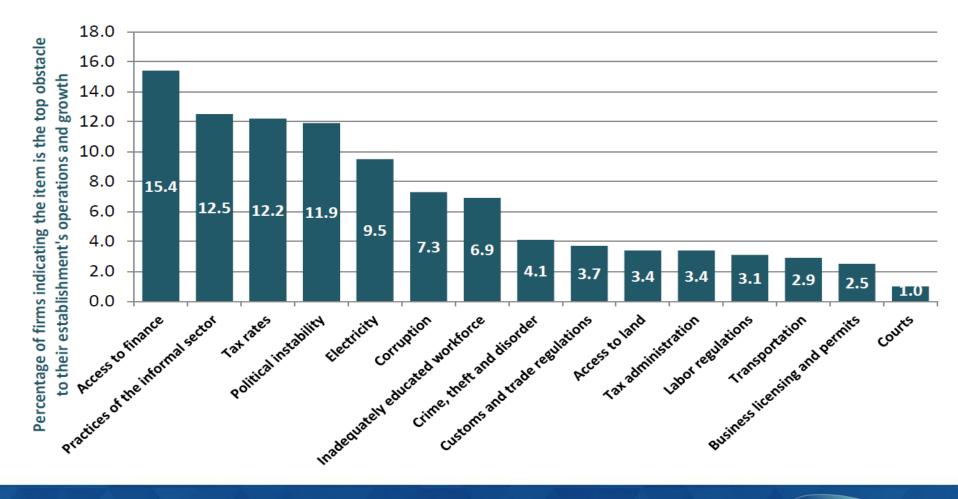


Japan has developed an innovation and export specialisation in multiple key low-carbon energy sectors



Source: EPO Patstat Database, version 2015b, UNComtrade 2012 data

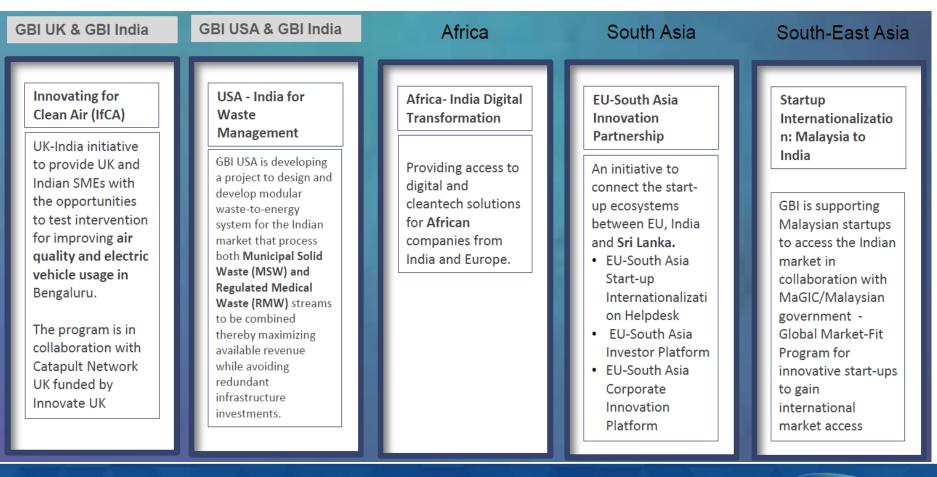
#### Barriers to Private Sector Investments in on Low Carbon Green Growth



ERM

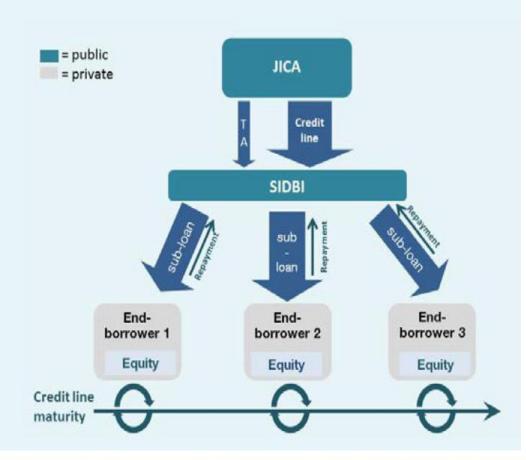
Source: ERIA , 2018 – Private Financing of Low Carbon Tech - Market Survey

#### Areas of Good Practices in Green Tech Innovation: Cross – Border Private Sector Cooperation





#### Areas of Good Practices: Green Credit Lines focusing Innovations in SMEs



- Green credit lines distinguished to address environmental and climate challenges
- Energy efficiency improvement in MSMEs and small farmers.
- Eligibility criteria: awareness creation and building innovative capacity



Source: JICA, 2018

## Ways to upscale the Private Sector Role in Green Innovations

- Speak the language of the private sector focusing on benefits of increased competitiveness, reduced costs, and improved profits – rather than environmental/climate benefits alone.
- Private sector engagement approaches need to promote not only supplying technology innovations but also a business model for climate protection/sustainable development, by understanding the market demands.
- Private sector role needs to go beyond the low—hanging fruits in innovations (such as RE & EE) and target a range of complex issues such as low carbon economy and circular economy-by building appropriate incentive systems and integrated approaches.
- Build a strong evidence base of what works and what does not for sectors (agriculture, manufacturing, and services – high and low polluting) and countries (low, middle, and high income).







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