



Transitioning to Low Carbon Industrial Development in the ASEAN

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Low Carbon Targets set by the countries in Glasgow COP 26

Country	Target year	
Australia	2050	In Law
Brunei Darussalam	-	In Policy Document
Cambodia*	-	Declaration/ Pledge
China	2060	Proposed/ In Discussion
India	2070	
Indonesia	2060	
Japan	2050	
Korea, Rep.	2050	
Lao PDR	2050	
Malaysia	2050	
Myanmar	2050	
New Zealand	2050	
Philippines	-	
Singapore	-	
Thailand	2050	
Vietnam	2050	

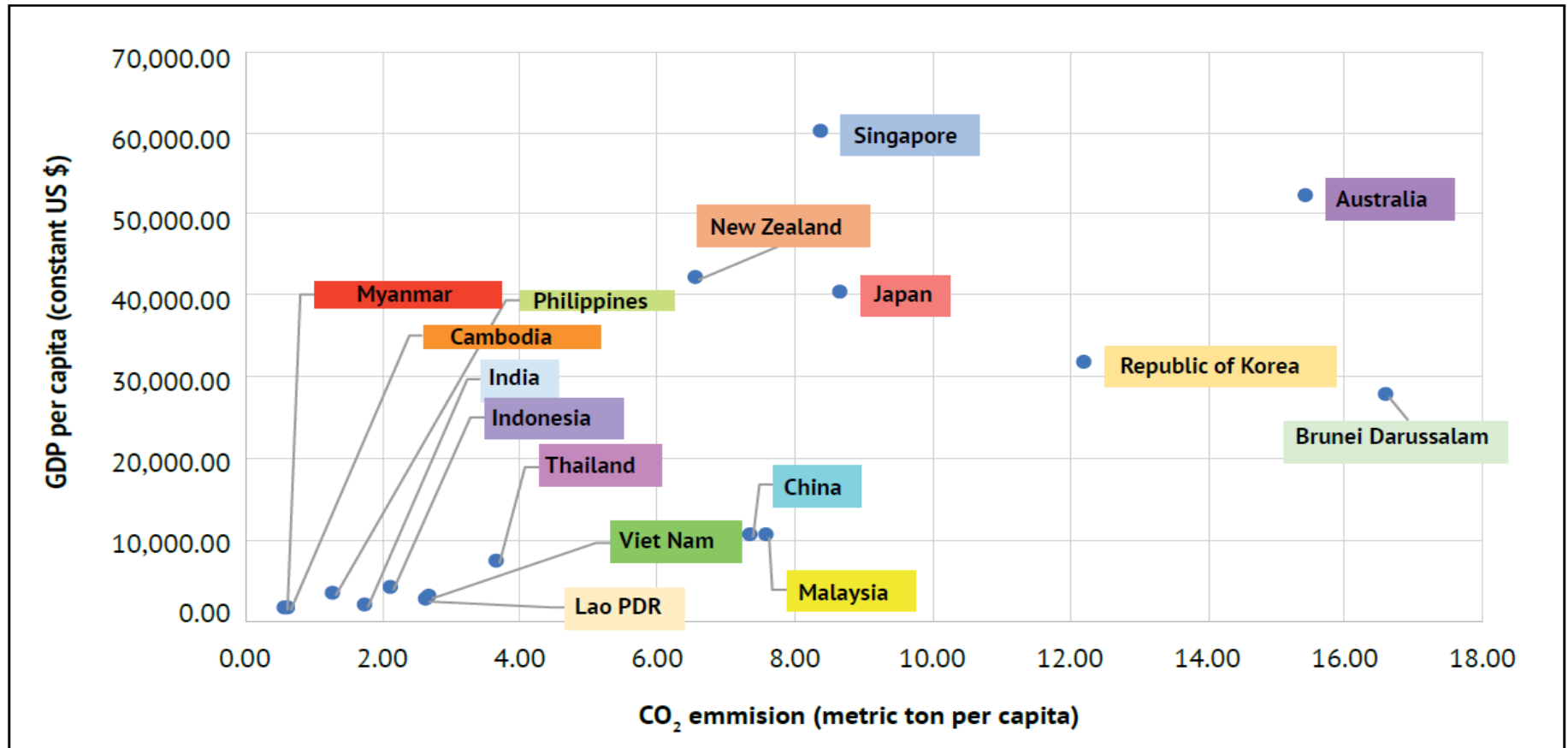
Achieving Net Zero emissions means **that some greenhouse gases are still released**, but these are offset by removing an equivalent amount of greenhouse gases from the atmosphere and storing it permanently in soil, plants, or materials.

Net Zero Economy = Δ Emissions intensity = Decomposition of Energy Use

$$\begin{aligned}\Delta CO_2 &= \Delta GDP \times \Delta CO_2/GDP \\ &= \Delta GDP \times \Delta Energy/GDP \times \Delta CO_2/Energy\end{aligned}$$

- **Energy intensity (Energy/GDP)**
 - technological improvements within each industry/product
 - structural change within the economy
- **Carbon intensity (CO₂/Energy)**
 - fossil fuels are phased down by renewable or nuclear power or CCUS
 - end use energy efficiency
 - annual changes usually much smaller than Δ Energy/GDP
 - but decisive in the longer term

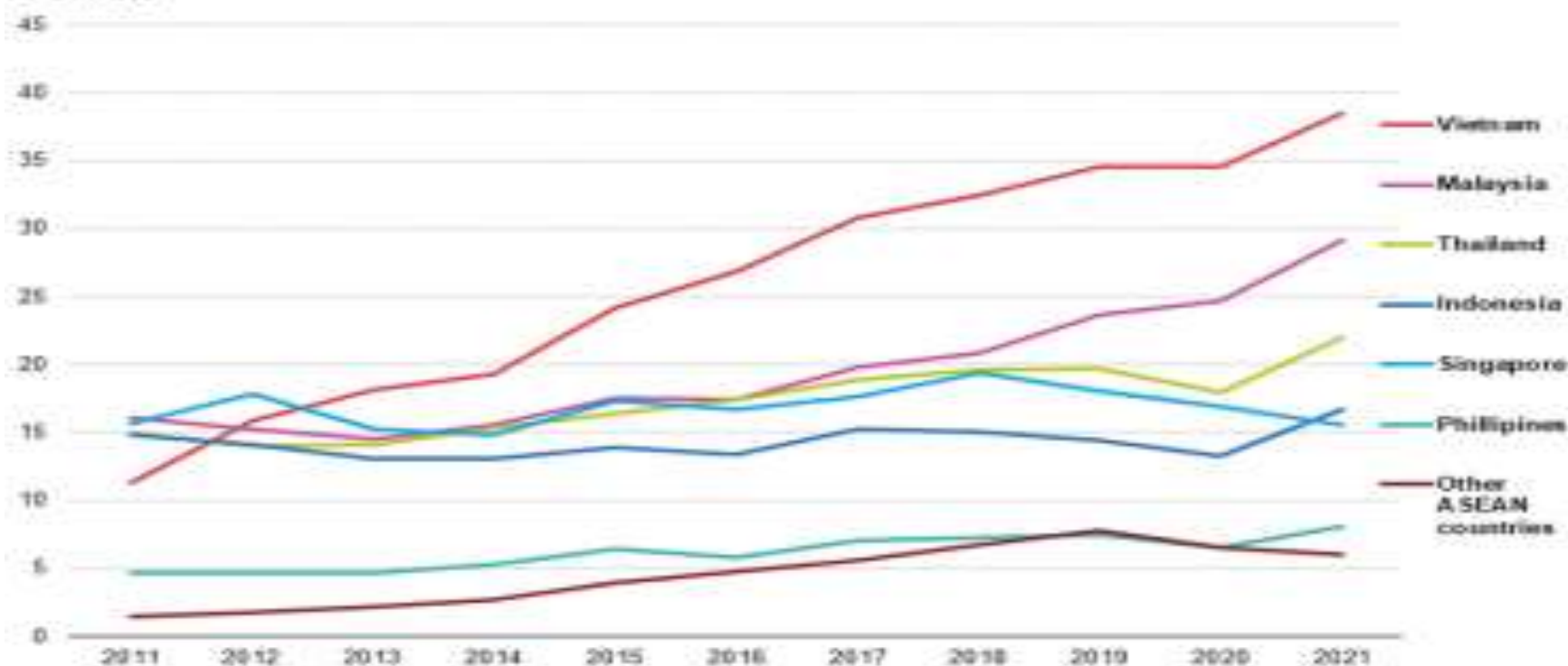
Emission Profile of ASEAN



ASEAN's Trade Exposure to EU

EU imports of goods from ASEAN countries, 2011 - 2021

€ billion



Source: Eurostat (online data code: Comext data code: DS-018995)

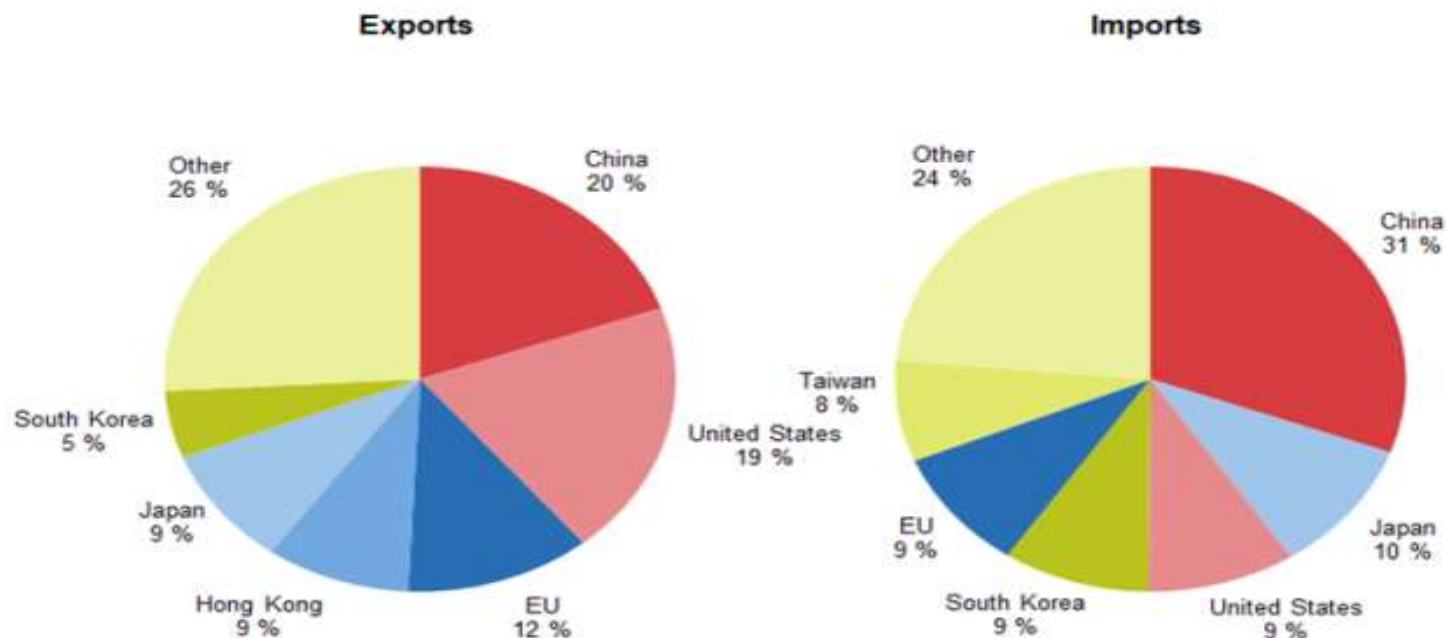
* Other ASEAN countries are Brunei, Cambodia, Laos and Myanmar

eurostat

ASEAN Trade Balance with EU

ASEAN trade in goods with main partners, 2020

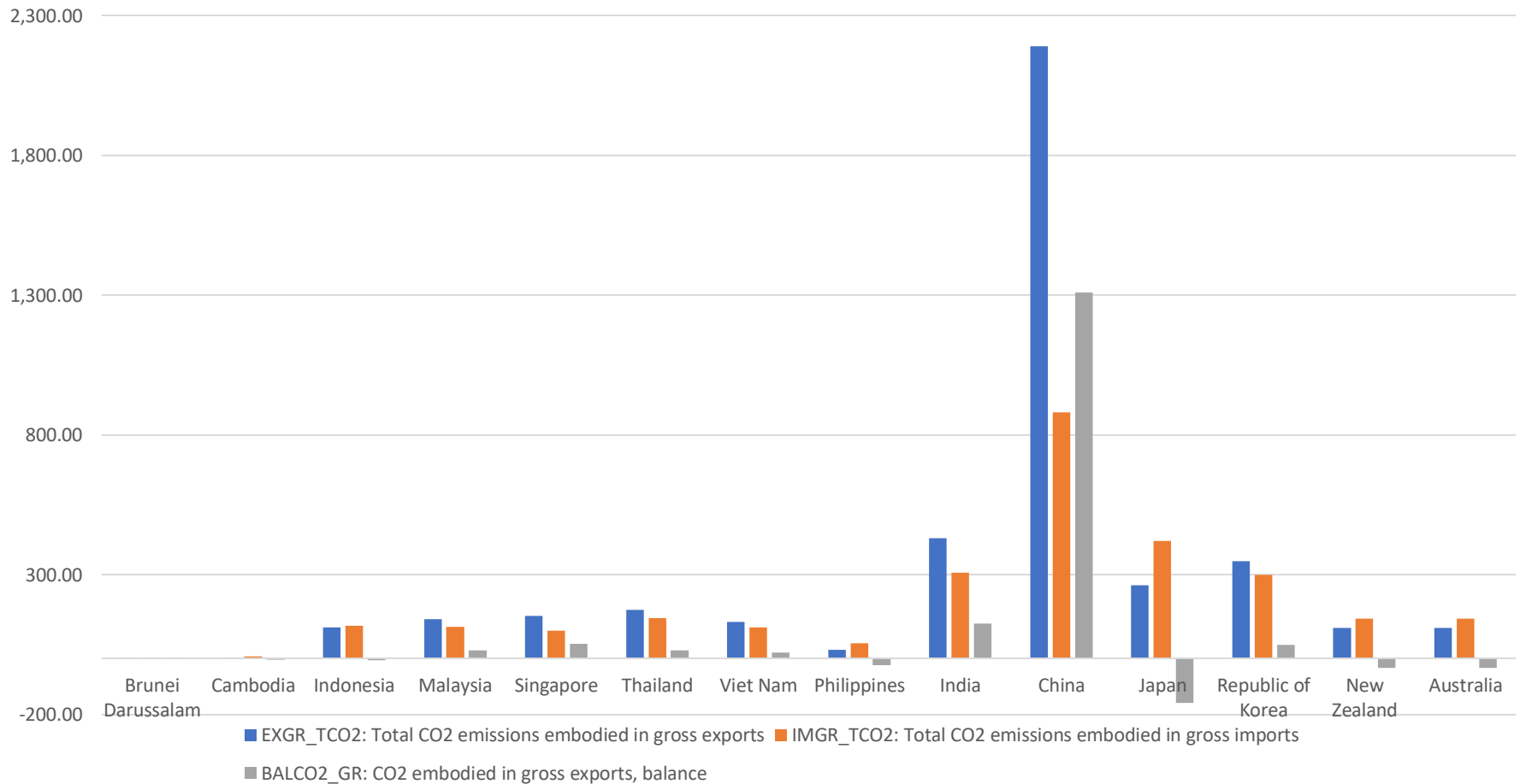
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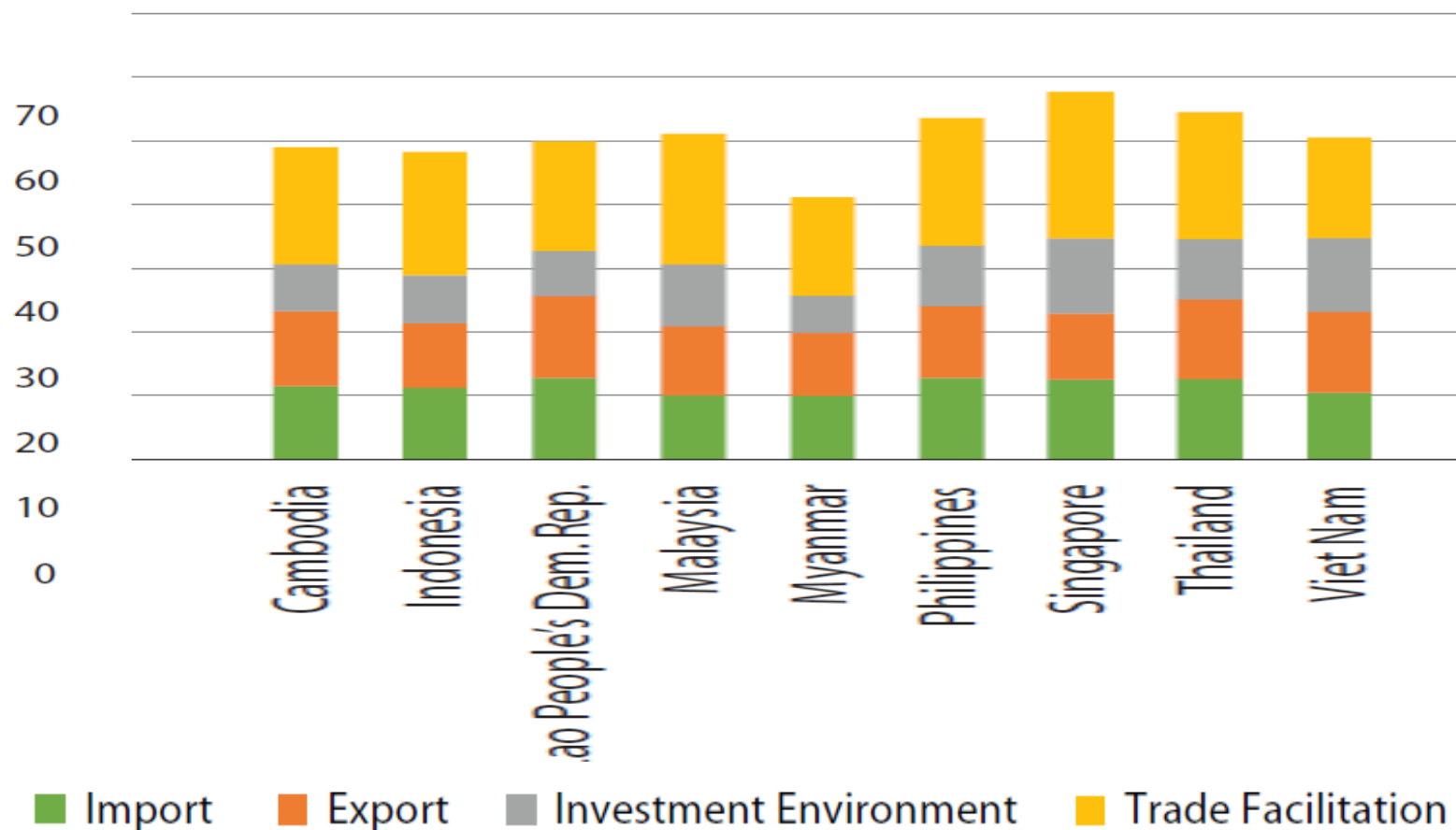
Source: UNCTAD

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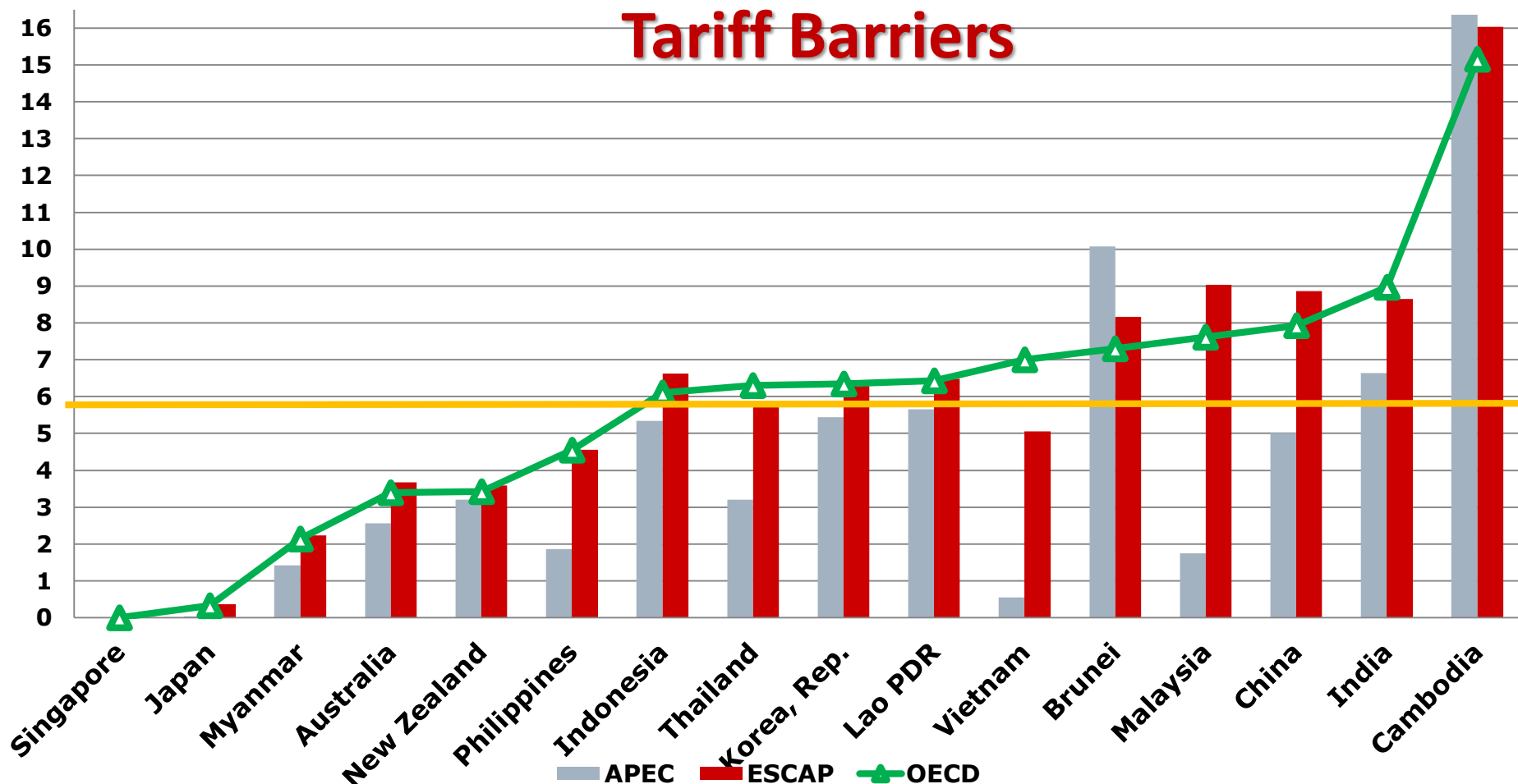
ASEAN's Embedded Emissions in Value Chains



Carbon Efficiency Performance of ASEAN



Opportunity 1: Removing Tariff and Non-Tariff Barriers

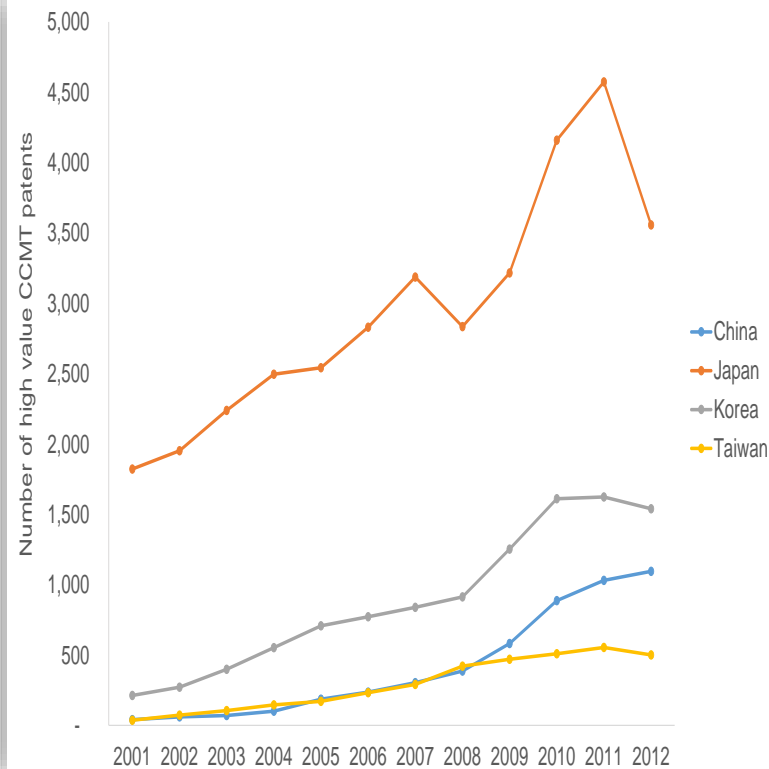
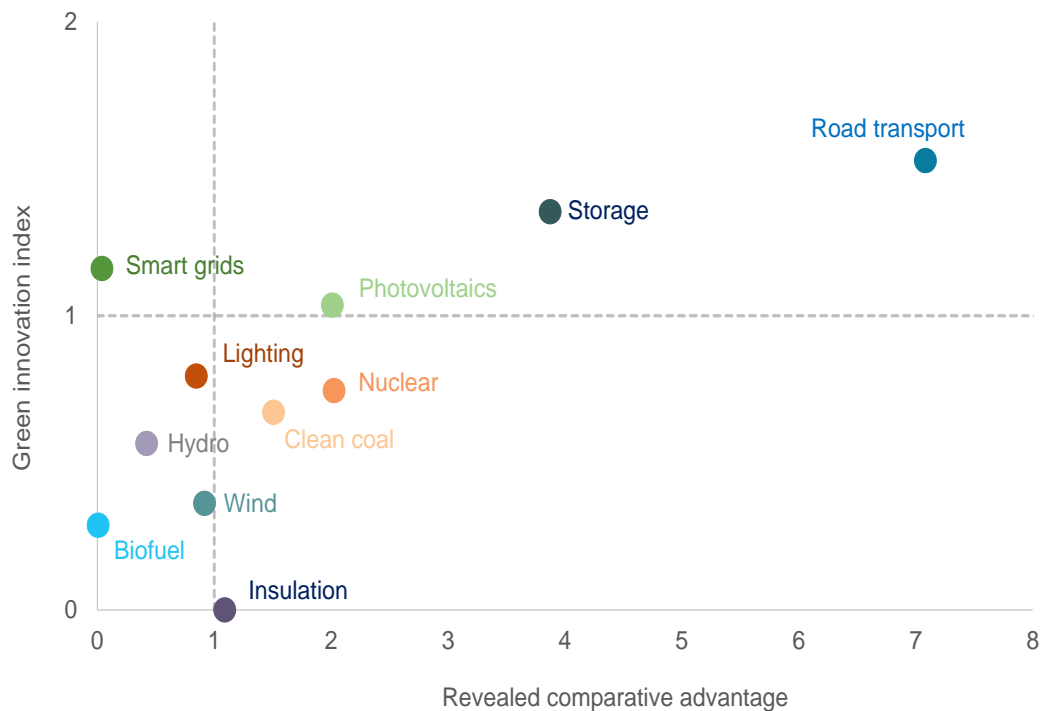


ERIA, 2016



Source: ERIA, 2015

Opportunity 2: Nurturing Innovation



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

Opportunity 3: Carbon Pricing in ASEAN

- Carbon pricing instruments are at different levels of development in ASEAN
- Countries can be grouped into three
 - Carbon pricing instruments are fully implemented
 - Carbon pricing is planned or under consideration
 - Carbon pricing instruments not considered/still not a priority in financing climate mitigation
- Carbon pricing approaches in ASEAN is being mostly developed as country driven approach, rather than a regionally coordinated scheme (as in the case of EU - CBAM)

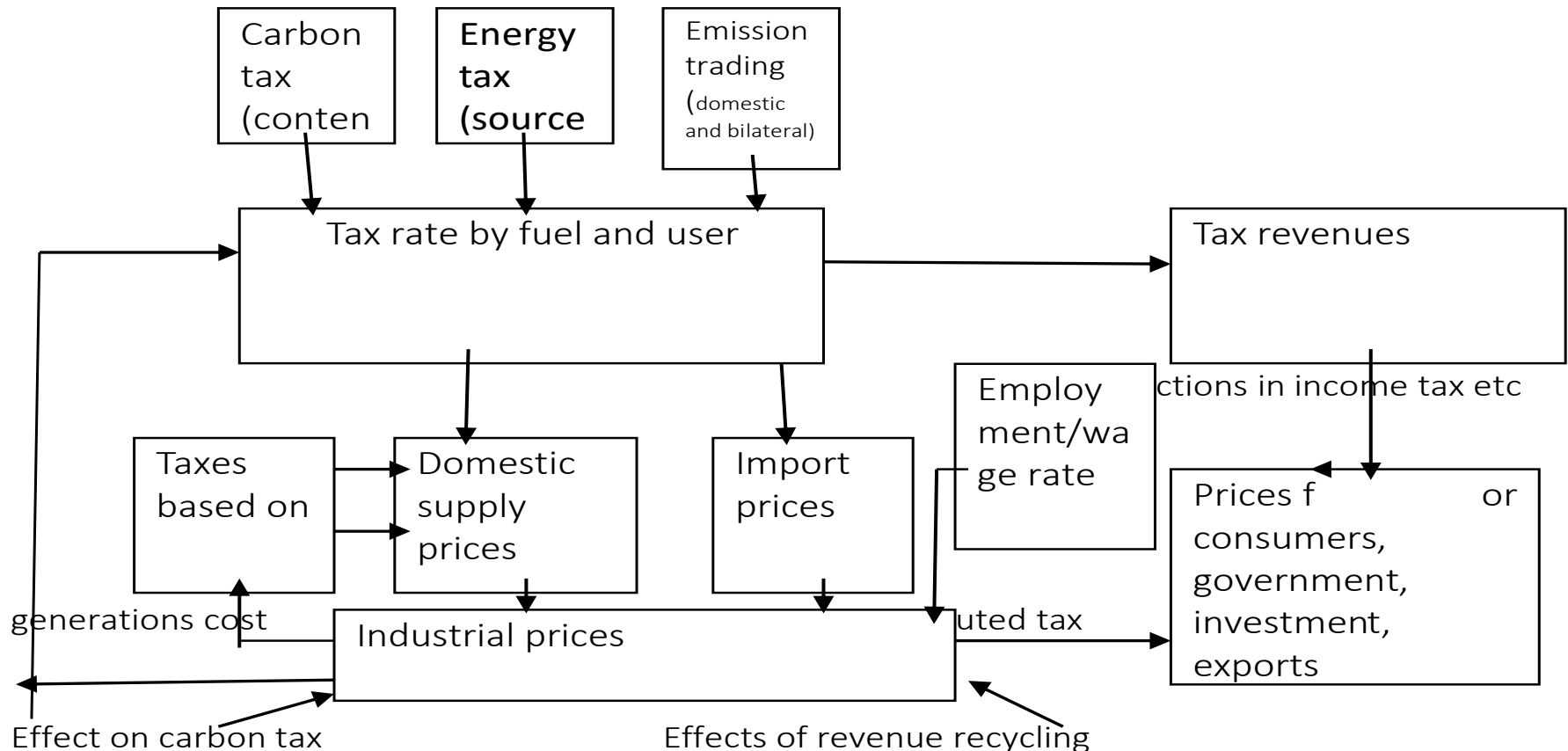
Market, Institutional and Regulatory Barriers slows down investment flows

Category	Obstacles	ASEAN	ASEAN+3	ASEAN+6- Mongolia and HK
Policy	Changing policies	56%	45%	50%
	Complex procedures	28%	27%	29%
Institutional	High initial investment cost	50%	45%	50%
	Longer recovery period	50%	45%	46%
	High collateral requirement	44%	45%	46%
	Insufficient credit and maturity	28%	27%	25%
	Lack of capacity to value assets	17%	14%	13%
Market	Currency risk	33%	32%	29%
	Insufficient profits	33%	32%	29%
	Unpredictable cash flows	28%	23%	25%
	Non-favorable interest rates	28%	23%	25%
	Rising interest rates	28%	23%	21%
	Technology advancement risks	22%	18%	17%
	Unstable consumer market	11%	9%	13%

Source: Anbumozhi et al, 2020

Regional Assessment of Impacts of CBAM and CP

E3 being used at European level and being modified for use at ASEAN level,



ASEAN initiatives

- ASEAN Socio-Cultural Community Blueprint 2025 that envisions “an ASEAN Community that engages and benefits the peoples and is inclusive, sustainable, resilient and dynamic”
- ASEAN Comprehensive Economic Recovery Framework – a Post Pandemic 5 Broader strategies for People Centric Sustainable investment .
- The ASEAN Taxonomy for Sustainable Finance has been developed to serve as a common building block that enables an orderly transition and fosters sustainable finance adoption.
- ASEAN Guidelines on Promoting Responsible Investment in Food, Agriculture, and Forestry provide guidance for governments and investors and are based on the SDGs.
- ASEAN CSR Network mandates and strategy to ensure sustainable and inclusive socio-economic development through promoting responsible business practices.
- ASEAN Economic Community Long Term Framework for Circular Economy

Opportunities for Regional Cooperation: A combination of Market based and Regulatory Approach will boost Private Investments

Regional structures and incentives that could enhance investment environmenta, include:	Rank	Average Ranking From Respondents
Regional carbon price	Most Significant (1) 1	2.68
Regional fund for investing in high risk low carbon circular transition projects	2	2.70
Regional Finance Warranty Program	3	3.39
Regional transition Guarantee fund	4	3.39
Regional regulations on energy financing services	Least Significant (6) 5	4.05
Regional green bonds	6	4.79

Other responses:

Interconnection of national grids/ cross-border grid development, regional free trade in technologies and services, regional coordination on exchange of knowledge and information, joint-venture investments amongst ASEAN states, removal of foreign investment limit for Renewable Energy projects, asset recycling facilities, job creation, etc.

Conclusion

- As ASEAN move toward a Net Zero/Low Carbon economy, there is need to realign the energy, innovation, trade, and fiscal policies into economic planning and business formulations.
- Meeting of targets will require crowding in of much higher levels of private finance and integration of carbon markets.
- There is potential for trade diversification as once CBAM is implemented, EU trading partners with more advanced emission mitigation measures or domestic carbon pricing mechanisms in place could potentially erode the market share away from ASEAN in high carbon products.
- CBAM creates an opportunity for AMS to align their own national carbon pricing mechanisms or devise new technological policies to offset taxation by the EU.
- A systematic approach for transparent tracking of emissions across borders and industries by ASEAN is needed.



Thank You

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