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"Mainstream Green Finance" Green Policies for Post COVID-19 Economic Recovery

15th PACER Dialogues

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8th July 2021





1. Why does Southeast Asia need a Green Recovery?



2. What are the opportunities for a Green Recovery in the region?

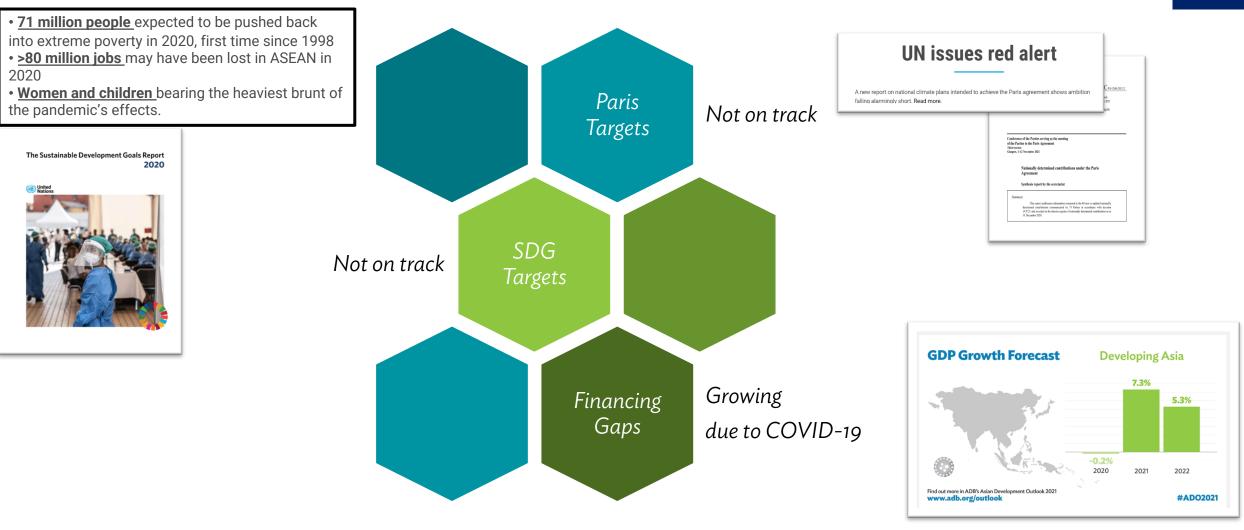


3. How can government's start with Green Recovery?



1. Why does Southeast Asia need a Green Recovery?

On Track ?



SDGs' Financing: A big(ger!) challenge Post COVID-19





	Estimated	d Baseline Estimates			Climate-adjusted Estimates		
	Current Investment (2015)	Annual Needs	Gap	Gap (% of GDP)	Annual Needs	Gap	Gap (% of GDP)
Total (25)	881	1,211	330	1.7	1,340	459	2.4
Total without PRC (24)	195	457	262	4.3	503	308	5.0
Selected Central Asia Countries (3)	6	11	5	2.3	12	7	3.1
Selected South Asia Countries (8)	134	294	160	4.7	329	195	5.7
Selected Southeast Asia Countries (7)	55	147	92	3.8	157	102	4.1
Selected Pacific Countries (5)	1	2	1	6.2	L	2	6.9
ndia	118	230	112	4.1	261	144	5.3
ndonesia	23	70	47	4.7	74	51	5.1
PRC	686	753	68	0.5	837	151	1.2

PRC = People's Republic of China.

Numbers in parentheses refer to the number of selected countries.

Note: The gap as a % of GDP is based on the annual average of projected GDP from 2016 to 2020. The 25 DMCs covered here are listed in Annex Table 2.

Source: ADB (2016a); Country sources; Investment and Capital Stock Dataset, 1960–2015, IMF; Private Participation in Infrastructure Database, World Bank; World

Bank (2015a and 2015b); World Development Indicators; World Bank; ADB estimates.

- UN Estimates: \$3-\$5 trillion annually, globally for SDGs
- ADB: Asia needs \$26 trillion investments in infrastructure 2016 to 2030, or \$1.7 trillion per year, incl. for climate change
- The GAP: Even before COVID-19, Asia had a substantial investment gap \$459 billion per year (\$907 billion p.a. if including social infrastructure)
- COVID Impacts: Government budgets further constrained

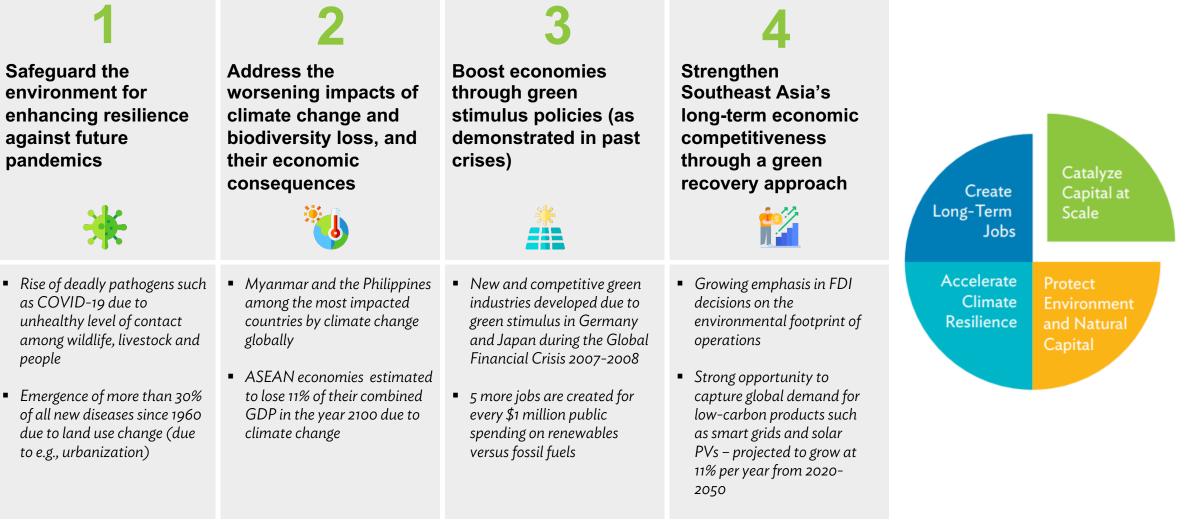
Table 1.1.3 GDP growth rate, % per year

The outlook is positive, but recovery paths vary.

	2019	2020	2021	2022
Southeast Asia	4.4	-4.0	4.4	5.1
Brunei Darussalam	3.9	1.2	2.5	3.0
Cambodia	7.1	-3.1	4.0	5.5
Indonesia	5.0	-2.1	4.5	5.0
Lao People's Democratic Republic	4.7	-0.5	4.0	4.5
Malaysia	4.3	-5.6	6.0	5.7
Myanmar	6.8	3.3	-9.8	
Philippines	6.1	-9.6	4.5	5.5
Singapore	1.3	-5.4	6.0	4.1
Thailand	2.3	-6.1	3.0	4.5
Timor-Leste	1.8	-7.9	3.4	4.3
Viet Nam	7.0	2.9	6.7	7.0

The Green Recovery Rationale: 4 Reasons





SOURCES: Organisation for Economic Co-operation and Development (OECD); Asian Development Bank; World Economic Forum; Center for

people

Emergence of more than 30% of all new diseases since 1960 due to land use change (due to e.g., urbanization)

The Climate Change Rationale: Critical Juncture



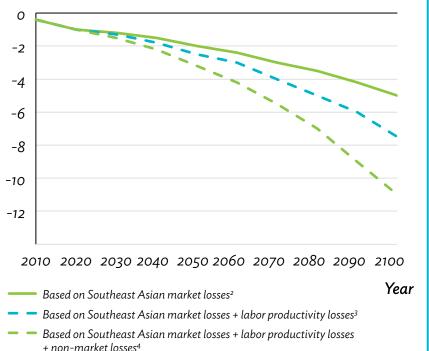
Climate change could risk GDP losses of up to 11% by 2100 in Southeast Asia, while biodiversity loss could place more than half of global GDP at risk

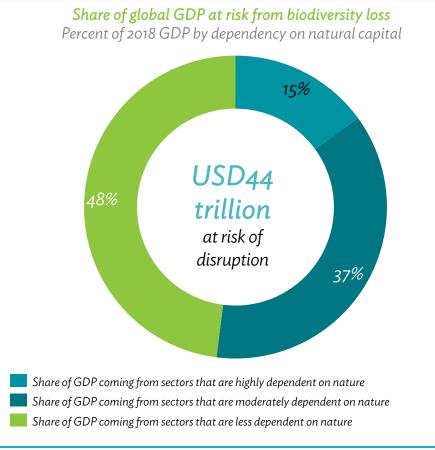
The individual contributions submitted to date would only cut about 1% of global greenhouse gas emissions a far cry from the 45% cut needed by 2030 to meet the 1.5 degree goal

Intergovernmental Panel on Climate Change (IPCC).



GDP loss due to climate change





1. Modelling was done based on the following ASEAN economies: Indonesia, Malaysia, the Philippines, Thailand and Viet Nam.

- 2. Refers to direct impact to ASEAN markets of sea level rise, changes in energy-demand patterns, changes in crop yields, and changes in tourism flows
- 3. Refer to the impact of warming temperatures on labor productivity; in particular, as the number of hours during which temperatures exceed thresholds limiting physical labor rise, labor will need to be additionally cooled and/or altered in timing, or where this is not possible, for labor to be reduced, with potential impacts on economic output.
- 4. Refer to non-market impacts which include increased risk of potentially catastrophic events and losses to health and ecosystems.

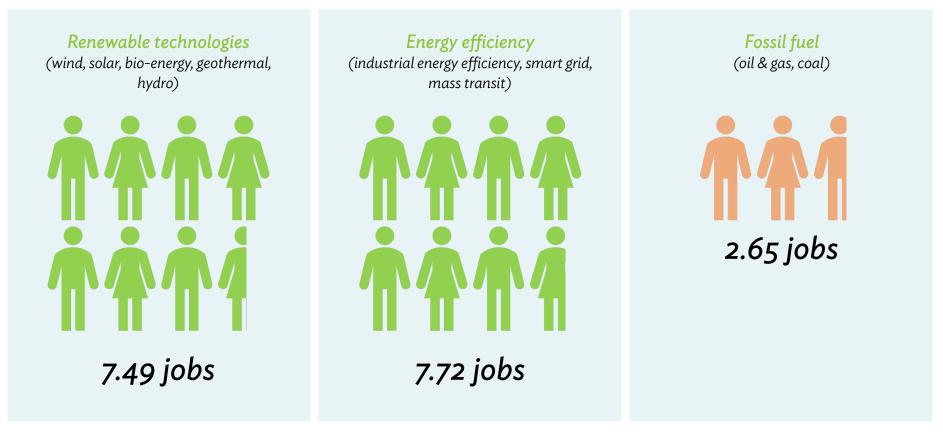
SOURCES: Asian Development Bank; World Economic Forum; AlphaBeta analysis

The Jobs Rationale: An Equitable Growth



Government spending on renewable energy and energy efficiency has been shown to create more jobs than spending on fossil fuels

Jobs created, directly and indirectly¹, per USD1 million in spending



1. Excludes induced jobs, which refer to jobs that are created as a result of increased demand for goods and services, that in turn arise from the specific economic impact. SOURCE: Heidi Garett-Pelter (2017); McKinsey & Company (2020)

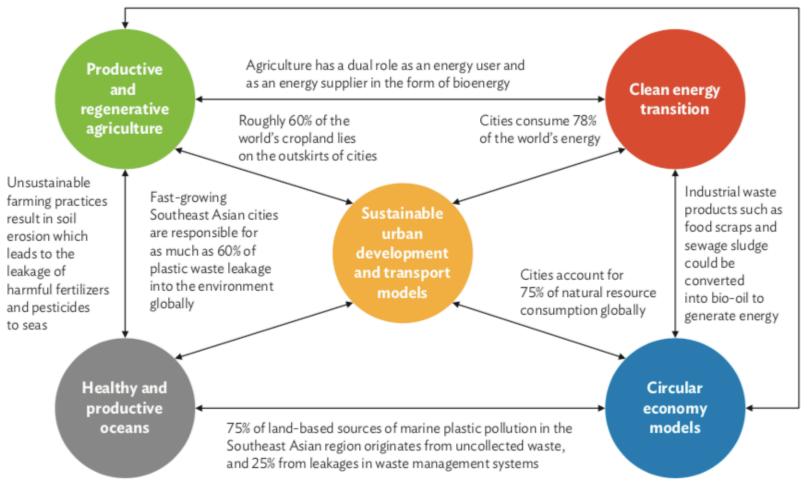
2. What are the opportunities for a Green Recovery in the region?

Green Growth Opportunities

The five green growth opportunities are highly interconnected



Agriculture offers opportunities for the circular economy from primary production using precision agriculture techniques, to the recycling and utilization of agricultural wastes and materials

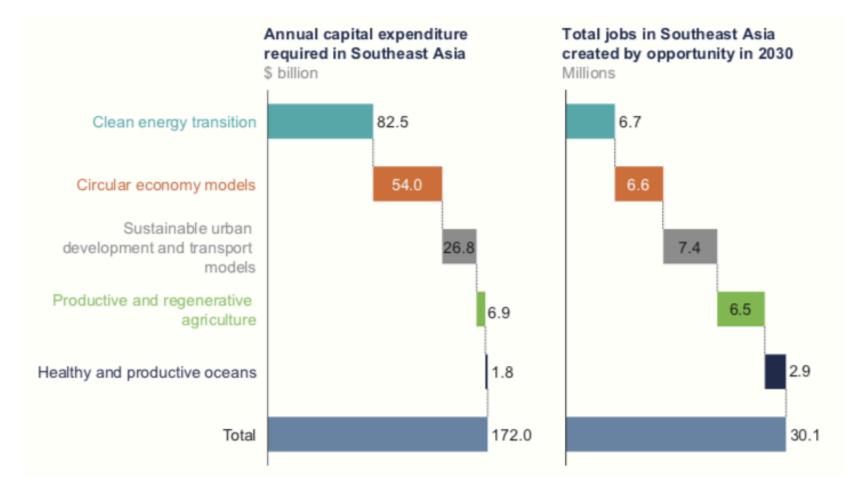


SOURCES: UN HABITAT; Ellen MacArthur Foundation; Proceedings of the National Academy of Sciences of the United States of America; UNESCAP; Ernst and Young; Environment and Natural Resources Journal; National Ocean Service (United States); AlphaBeta analysis

Green Growth Opportunities

Five green growth opportunities, requiring over USD172 billion worth of CAPEX could create 30 million jobs in Southeast Asia by 2030





1. The estimate relates to ten Southeast Asian nations: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam. SOURCE: World Economic Forum; Literature review; AlphaBeta analysis. See Appendix for sizing assumptions and methodology.



GREEN FINANCE STRATEGIES FOR POST-COVID-19 ECONOMIC RECOVERY IN SOUTHEAST ASIA GREENING RECOVERIES FOR PEOPLE AND PLANET

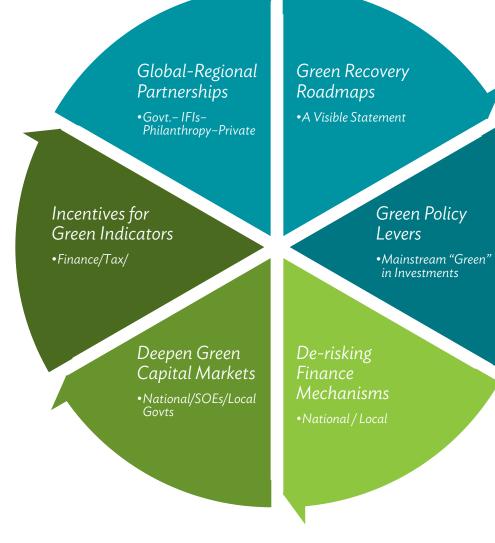
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3. How can government's start with Green Recovery?

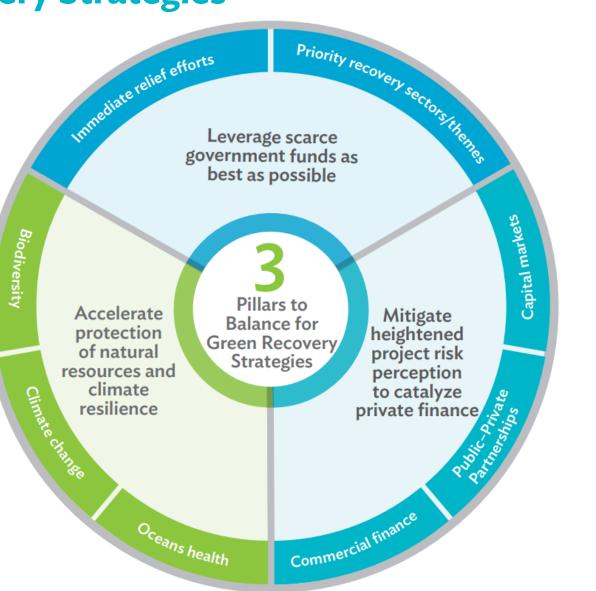
Conceptualize the Green Recovery Roadmap

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6 KEY Aspects to focus on



Clear Goals in Recovery Strategies

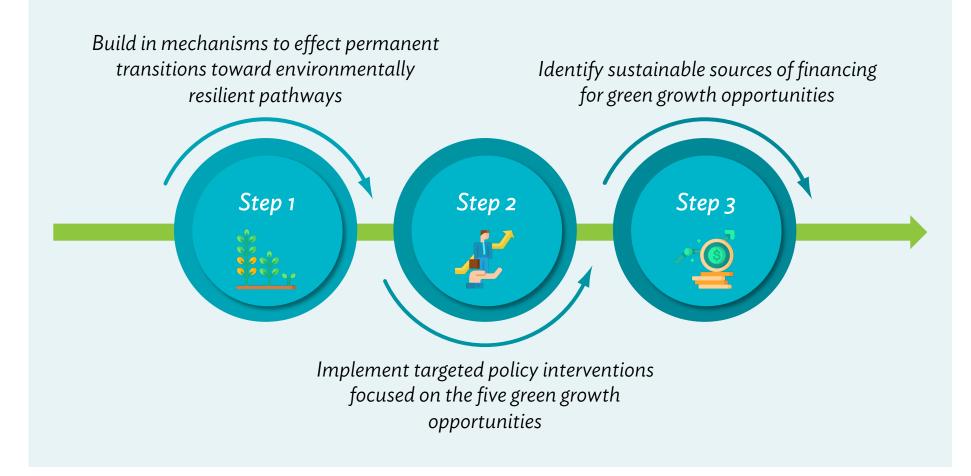




Implementing the Green Recovery

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There are three key steps to implementing a green recovery

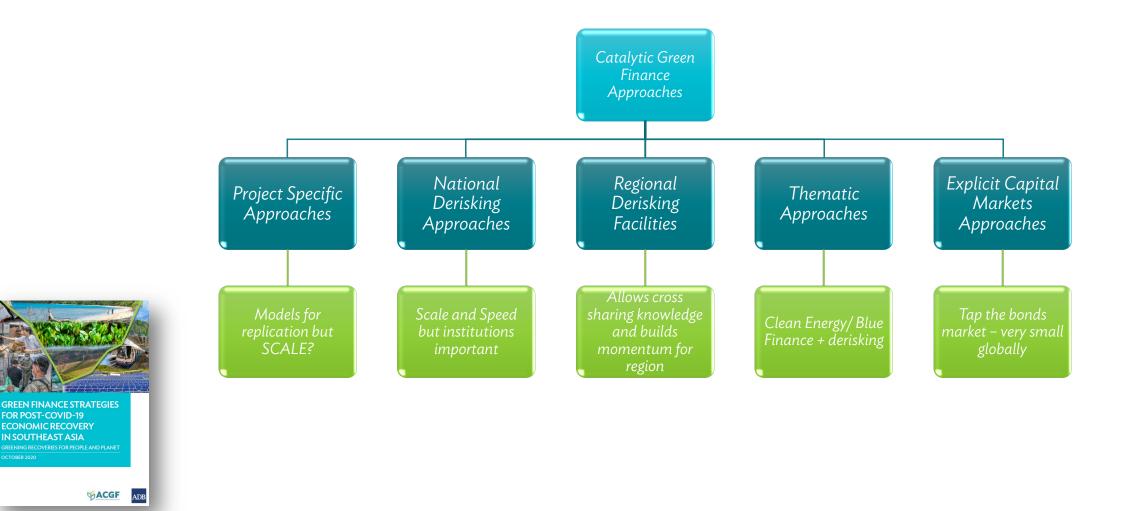


SOURCE: AlphaBeta analysis

Finance a key lever for Governments to use

ADB

Incentivize flows of private green capital: "1 X 6" principle



Financing the Green Recovery: The ACGF Example

Regional, Catalyzing, Integrated, Innovative

ACHIEVEMENTS 2018-2021





22 Provide the second s

billion

in cofinancing commitments







2020 First sovereign sustainability bond in Southeast Asia raised more than \$950 million for post-COVID-19 recovery in Thailand







Financing the Green Recovery: The Ace Recovery Program for SEA

Programmatic approach: \$300M to support a total of **\$4B** in projects + **\$2B** private capital to be mobilized over 30 years (in 2 rounds of financing)

Objectives:

- Support countries **prioritize NDCs** as part of recovery
- Create green jobs for economic recovery
- Mobilize green capital for building back better •
- Avoid lock-in of carbon intensive infrastructure & strengthen resilience







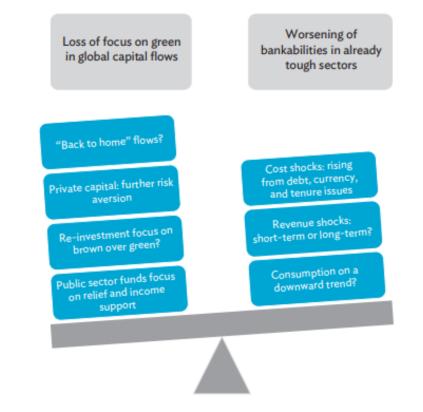
Thank You!



Green Finance Recoveries...already in progress



Challenges in Attracting Capital to Green Infrastructure



There are nine policy levers that governments can deploy to influence environmental

outcomes

#	Policy levers	Description
1	Pricing of externalities	Pricing the environmental externalities of activities into market decisions (e.g., carbon taxes)
2	Financial support for green products and services	Provide loans and grants for products / services with environmental impacts (e.g., loans for energy-efficient retrofits in construction sector), disbursing public funds to private corporations after environmental actions are taken, and green public procurement
3	Catalyzing private sector financing	Mobilize private sector investments in areas with environmental implications (e.g., green financing approaches)
4	Investments in supporting infrastructure	Direct government investments in projects with specific environmental outcomes (e.g., renewable energy projects, mining activities)
5	Support for innovation	Finance development of new technologies with implications for the environment (e.g., R&D for electric vehicle deployment)
6	Addressing non-price market failures	Impose environmental standards and regulations (e.g., property rights) in specific industries or activities with environmental impacts, or their reversal (deregulation)
7	Behavioral change and skills development programs	Trigger behavioral changes (e.g., "nudge" policies to alter consumer preferences on sustainability) and create skills programs to build capacity for green projects (e.g., regenerative agricultural techniques)
8	New collaborations	Foster collaborations within industry or between industry and other actors (government, civil society etc.) to influence environmental outcomes
9	New information systems	Address information asymmetries by alerting businesses to risks, providing information to consumers, and driving transparency in environmental performance

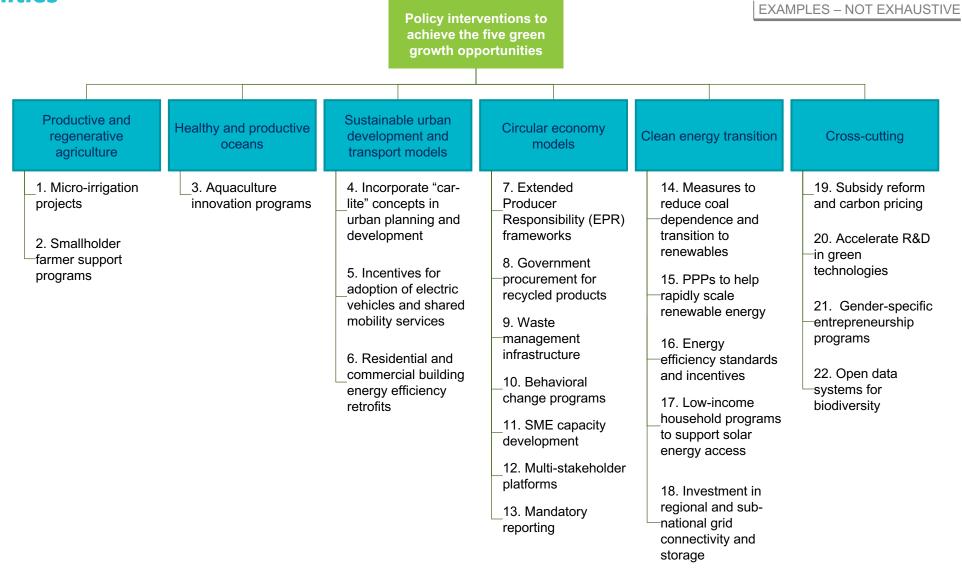
The World Economic Forum identified over USD10 trillion of green growth opportunities globally by 2030, five of which are especially relevant to the focus countries

Relevance:	Large	Moderate	Limited	Prioritize	d opportunities
Green Growth Opportunities ¹	Cambodia	Thailand	Indonesia	Myanmar	Philippines
Food, land and ocean use					
Ecosystem restoration and avoided land and ocean use expansion					
Productive and regenerative agriculture					
Healthy and productive oceans					
Sustainable management of forests					
Planet-compatible consumption					
Transparent and sustainable supply chains					
Infrastructure and the built environment					
Sustainable urban development and transport models					
Nature-positive built environmental design					
Planet-compatible urban utilities					
Nature as infrastructure					
Nature-positive connecting infrastructure					
Energy and extractives					
Circular economy models					
Nature-positive metals and minerals extraction					
Sustainable materials supply chains					
Clean energy transition					

 Some of these green growth opportunities have been rephrased compared to their original wording in the World Economic Forum research in order to aid greater clarity in their scope.
SOURCES World Economic Forum and Alaba Pate, 2020. The Economic Forum of Nature and Public Pate, 2020.

SOURCES: World Economic Forum and AlphaBeta. 2020. The Future of Nature and Business; AlphaBeta analysis

Examples of policy interventions that could help capture the identified green growth opportunities



Green Finance for Post COVID Response: A Critical Way Forward

Erek Marce As a cross cutting theme, green finance provides a clear roadmap for countries to achieve their SDGs and Paris Agreement Goals...And green projects will attract private capital sources.

ASEAN cumulative green, social and sustainability issuance by country



- ASEAN GSS issuance reached a record high of USD12.1bn in 2020, a 5.2% Y-o-Y increase from 2019. Cumulative GSS issuance in ASEAN since 2016 now stands at USD29.1bn
- ASEAN Green labelled theme continues going up, rising to USD9.3bn in 2020 and showing a consistent increase in terms of both instrument size and number of issuers.