

Greening SMEs as the Basis for Moving Towards Circular Economy and Sufficiency Economy

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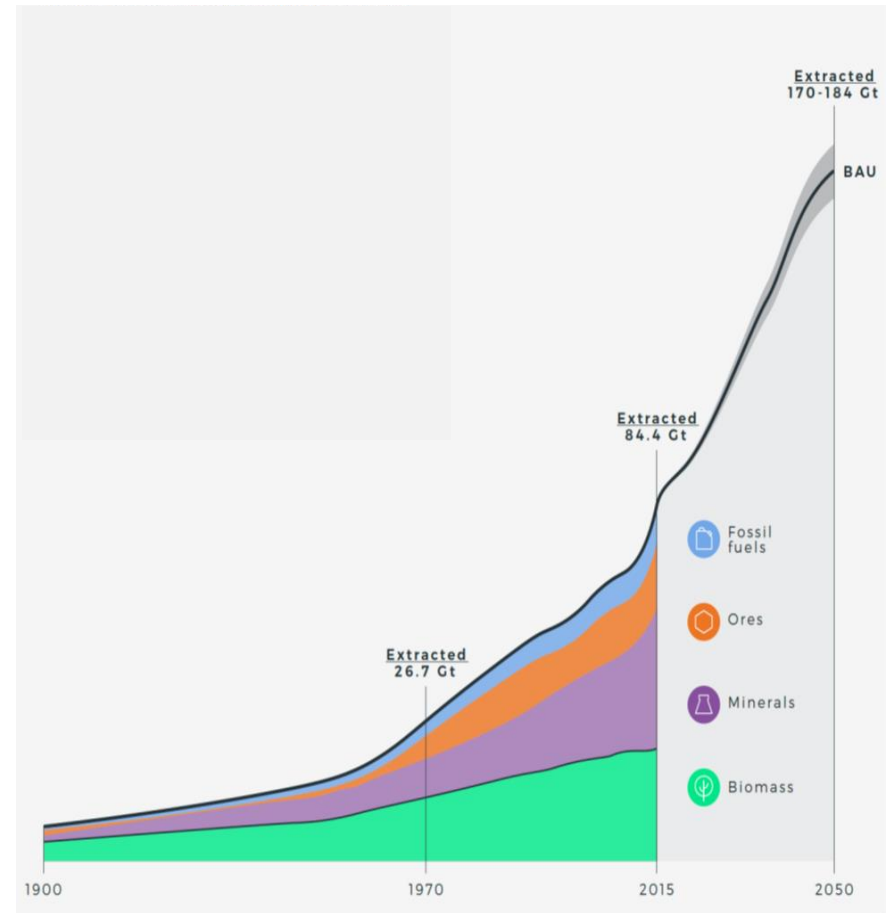


Share of SME in Economy

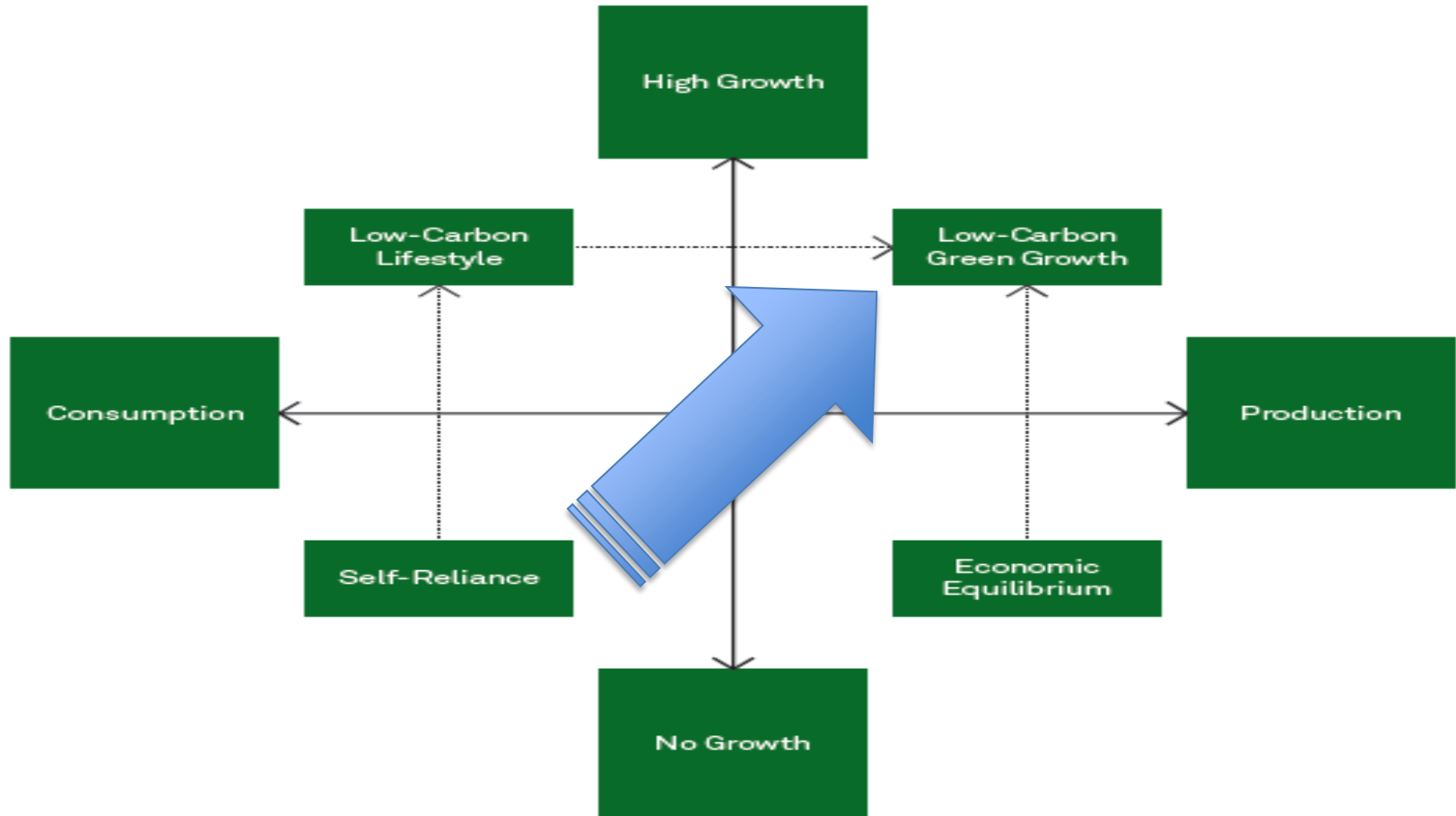
	Share of all enterprises	Share of exports	Share of output
Bangladesh	99.0	-	25
Cambodia	99.8	-	-
China, People's Republic	97.3	-	-
India	-	42.4	37.5
Indonesia	99.9	15.7	60.3
Japan	99.7	-	43.7
Kazakhstan	96.1	-	23.1
Korea, Republic	99.9	18.8	47.6
Malaysia	97.3	-	35.9
Philippines	99.6	-	35.7
Singapore	99.4	-	45.0
Sri Lanka	99.5	20.0	30.0
Thailand	99.7	26.3	39.6
Vietnam	97.7	-	-

Circular Economy

- Not yet an official buzzword for ASEAN; EU, Japan, P.R. China -3R
- Digitalization of 5R – Reuse, Repair, Redistribute, Remanufacture, Refurbish
- The next big thing for resource efficiency: Why?
 - Physical resources are depleting at an unprecedented speed
 - Commercial energy production is changing
 - Vastly increasing collection and flow of data



Sufficiency Economy: Theoretical Underpinning



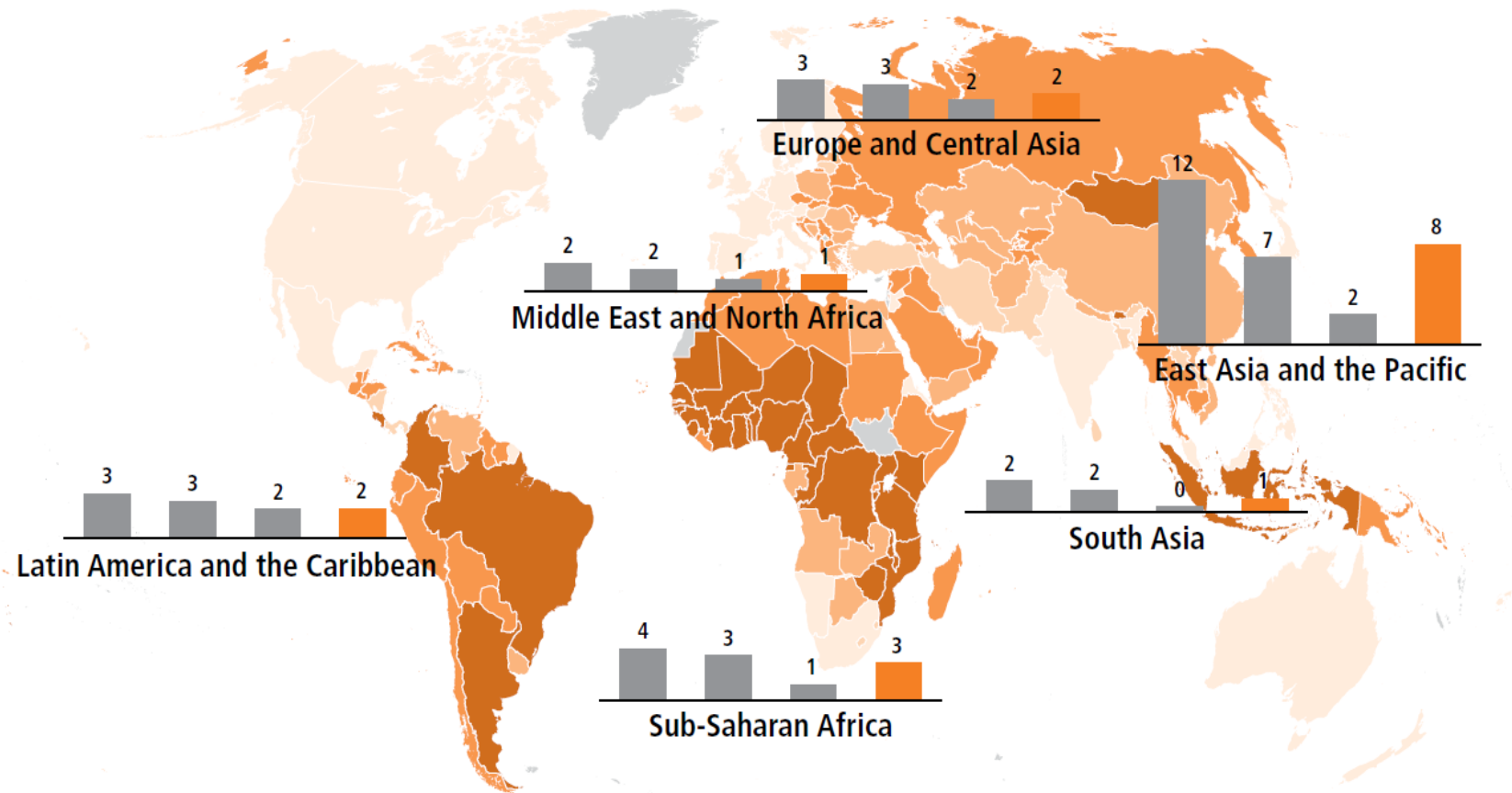
Structure of Circular Economy and Sufficiency Economy Practices

	Micro (single SME entity)	Meso (symbiosis association at SME cluster level)	Macro (SME -economy -state)
Production area (primary, secondary, and tertiary industry)	Cleaner production Eco design	Eco-industrial park	Regional eco-industrial network
Consumption area	Green purchase and consumption	Environmentally friendly park	Renting service
Waste management area	Product recycle system	Waste trade market Venous industrial park	Urban symbiosis
Other support	Policies and laws; information platform; capacity building		

Green SME Technology Gaps to Achieve Full Potentials of CE

Country	Source Segregation	Collection Rate (Urban)	Technology Recycling Rate	Technology Gap Treatment/Disposal				
				Composting	Incineration	Sanitary Landfill	Open Dump	Open Burning
Brunei Darussalam	<50%	90%	15%			<input type="checkbox"/>	<input type="checkbox"/>	
Cambodia	<50%	80%	<50%	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Indonesia	<50%	56% - 75%	<50%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lao PDR	<50%	40% - 70%	<50%	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Malaysia	<50%	>70%	50% -60% (Metal, Paper, Plastic): Others (<50%)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Myanmar	50%		70% (Plastic, Paper, Metal)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Philippines	50% - 70%	40% - 90%	20%-33% (Paper) 30%-70% (Aluminum) 20% - 58% (Other Metals) 23% - 42% (Plastic) 28% - 60% (Glass)	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
Singapore	70%	>90%	50% - 60% (Paper, Horticulture) >90% (Fe, CandD, Used Slag) >80% (Scrap Tire) >80% (Wood) >50% (Others) Overall (60%)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Thailand	<50%	>80%	>90% (Metal) 50% - 60% (Paper, Construction) <50% (Others)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Viet Nam	<50%	80% - 82%	>90% (Metal) >70% (Plastic, E-waste) 50% (Paper) <50% (Others)	<input checked="" type="checkbox"/>			<input type="checkbox"/>	

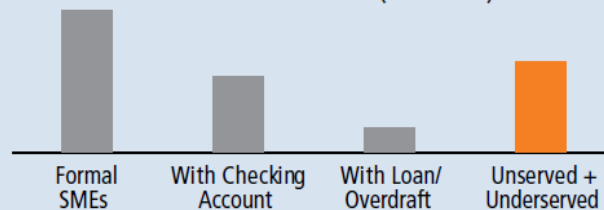
SME Green Credit Gaps



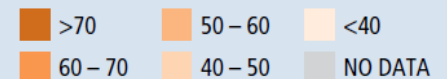
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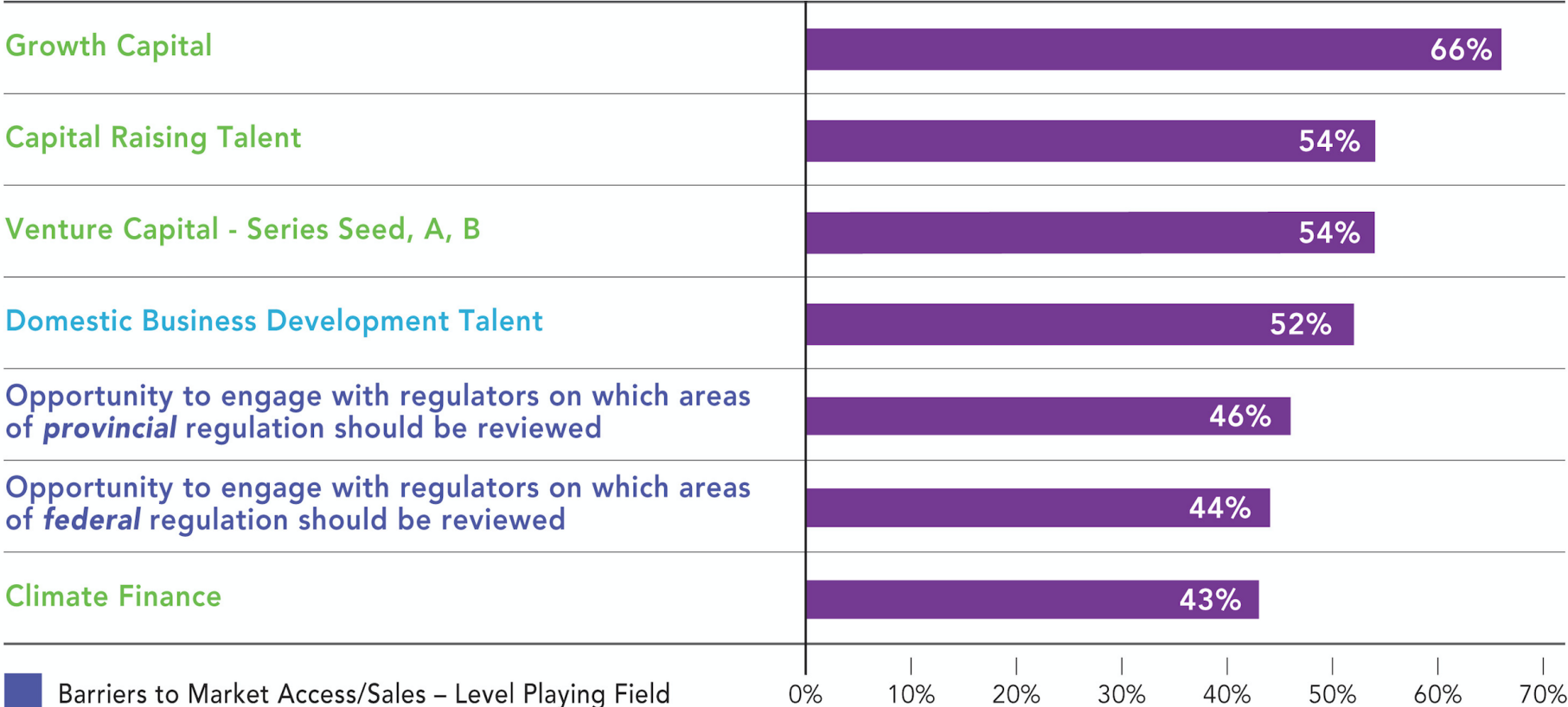
Number of SMEs (Millions)



Credit Gap: Unserved & Underserved (Percent)



Barriers to Green SME Finance



- Barriers to Market Access/Sales – Level Playing Field
- Barriers to Access Capital/Finance
- Barriers to Talent Access

Source: Canadian Clean Technology Innovation Partnership
 Source: Analytica Advisors

N=122



Realizing Green SMEs as a basis for CE&SE

1. Promote a reporting system to help monitor the scale-up of green SMEs

- ❖ Track the health of emerging green SMES as well as the resilience of financial institutions to circular economy -test scenarios
- ❖ Promote systematic sharing of green shots and regulations seen not as “protection” but “signaling” of green SME innovation.

2. Create level playing field for green SMEs in Circular Economy and Sufficiency Economy Finance Platforms

- ❖ to exchange experiences and develop approaches to disclosure on circular economy related financial risks -transition, physical and litigation.

3. Leverage Public Funds and Support to signal innovative Green SMEs to Private Investors

- ❖ Public investment in demonstration projects and proof of concept at commercial scale
- ❖ Public procurement budgets for green SMEs and requirements for major government suppliers
- ❖ Dedicated credit lines.
- ❖ Risk-sharing facilities
- ❖ Performance based contracts

ERIA Circular Economy Readiness Self-Assessment Tool

Production Efficiency

Policies and Regulations

Cross-Cutting

Industry
4.0

Circular
Economy

Readiness to
implement
key procedural
decisions

Planning incentives,
mandates and
policies to directly
support the
preparedness

Sector/Economy wide
innovation and
institutional
procedures that
effect preparedness

All indicators/determinants have been carefully designed to be:

Actionable

Under direct control of decision makers (business/policy making)

Context neutral

Relevant- independent of cost and time

Consensus

Widely agreed by the stakeholders



Thankyou

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