

How can SMEs be supported for transitioning to Circular Economy in Asia and Pacific (CEAP)

Combat

Climate Change

Combat

Nature & Biodiversity Loss

Combat

Pollution

Create

Solution – 3 Planetary Crisis

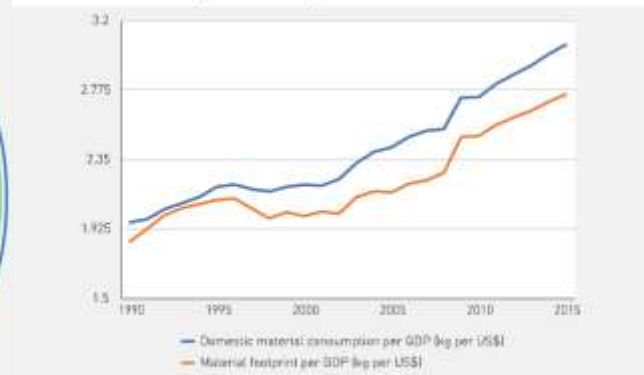
Resource Efficient and Pollution Free Asia Pacific

Resource Efficiency in Asia-Pacific

Analysing Resource Efficiency Transitions in Asia and the Pacific

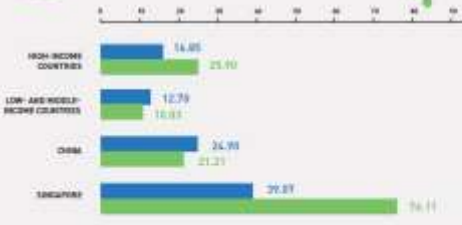


Figure 1
Trends in resource intensity, 1990–2015 (kg per US\$)



Source: ESCAP calculations based on ESCAP Statistical Database, see http://data.unescap.org/escap_stat/#data/. Note: The aggregated value is weighted using GDP.

RESOURCE USE IN ASIA & THE PACIFIC

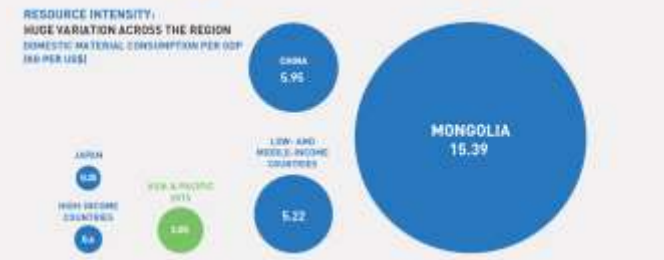


RESOURCE EFFICIENCY IN ASIA & THE PACIFIC

RESOURCE INTENSITY IS TWICE AS HIGH IN THE ASIA-PACIFIC REGION AS THE AVERAGE FOR REST OF THE WORLD



IT TAKES APPROXIMATELY DOUBLE THE QUANTITY OF MATERIAL RESOURCES AS INPUT TO PRODUCE EACH DOLLAR OF GDP IN THE REGION, COMPARED WITH REST OF THE WORLD



DOMESTIC MATERIAL CONSUMPTION



MATERIAL FOOTPRINT



RESOURCE INTENSITY:

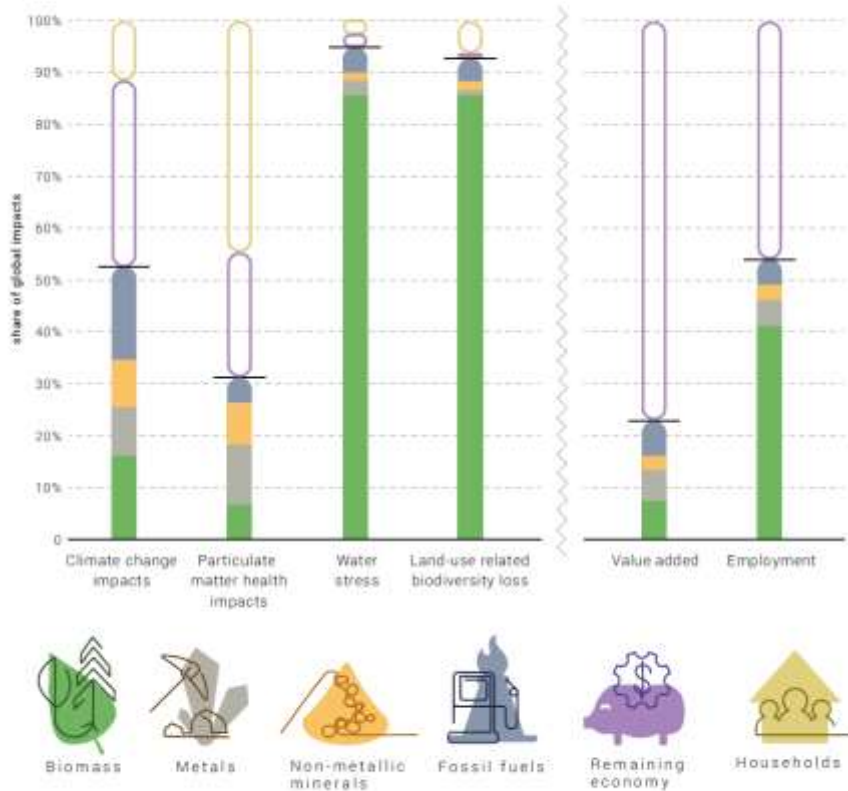


RESOURCE EFFICIENCY:



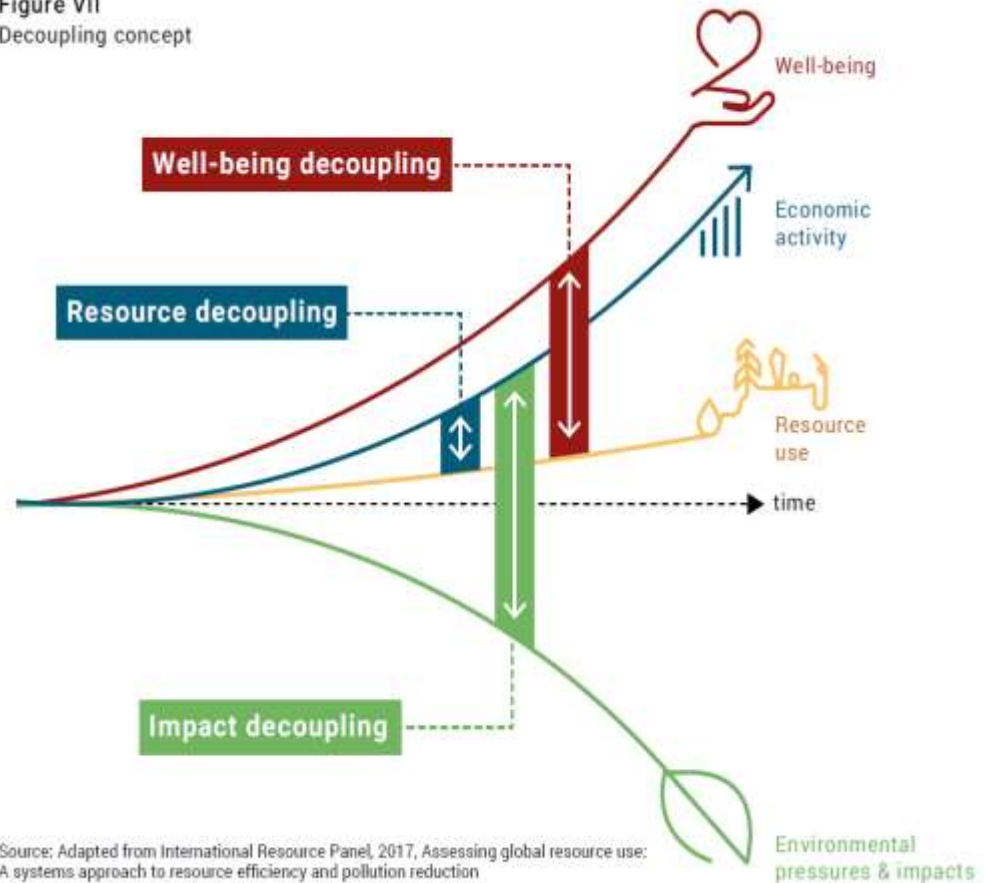
Global Resources Outlook 2019

Figure II
Global impacts split by resource type, remaining economy and households



Sources: Exiobase 3.4 (Exiobase, n.d.; Stadler et al., 2018), combined with land-use data (Chapter 2) and impact assessment methods (Section 3.1) of the Global Resources Outlook 2019, reference year 2011

Figure VII
Decoupling concept



Source: Adapted from International Resource Panel, 2017, Assessing global resource use: A systems approach to resource efficiency and pollution reduction

Asia and the Pacific Region



Growing population

from 7 billion today to 9 billion by 2050



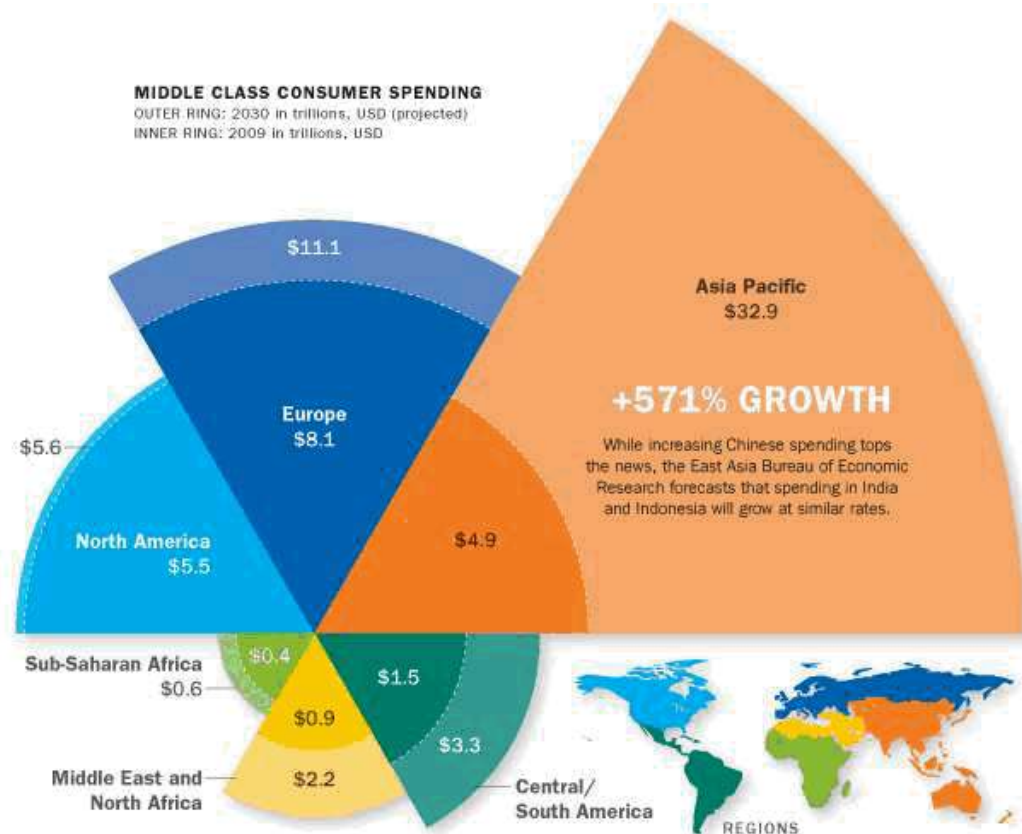
Economic development and increasing global trade



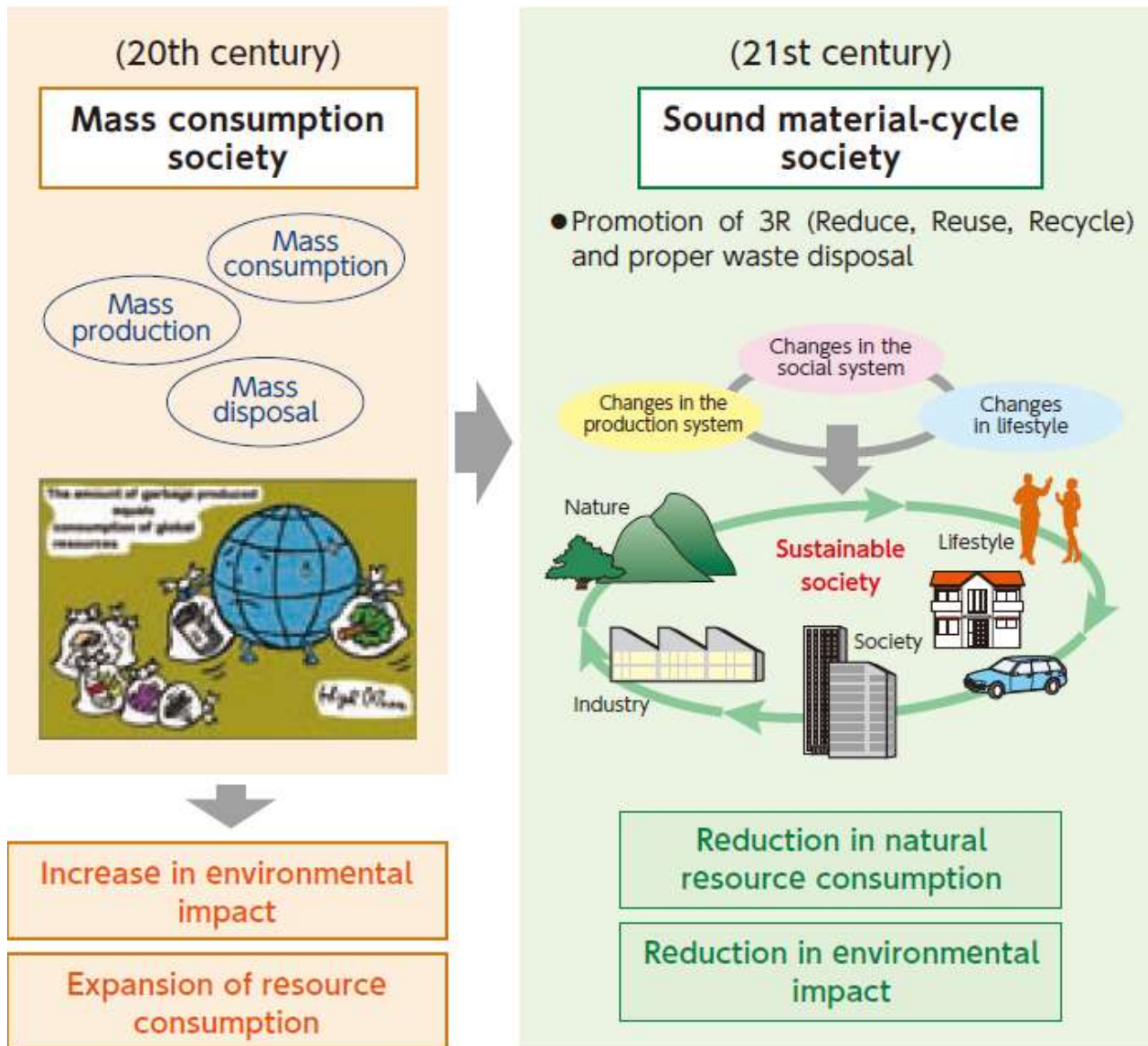
Growing middle-class with **changing consumption patterns**



Increasing **consumption of biomass**



Linear to Circular!

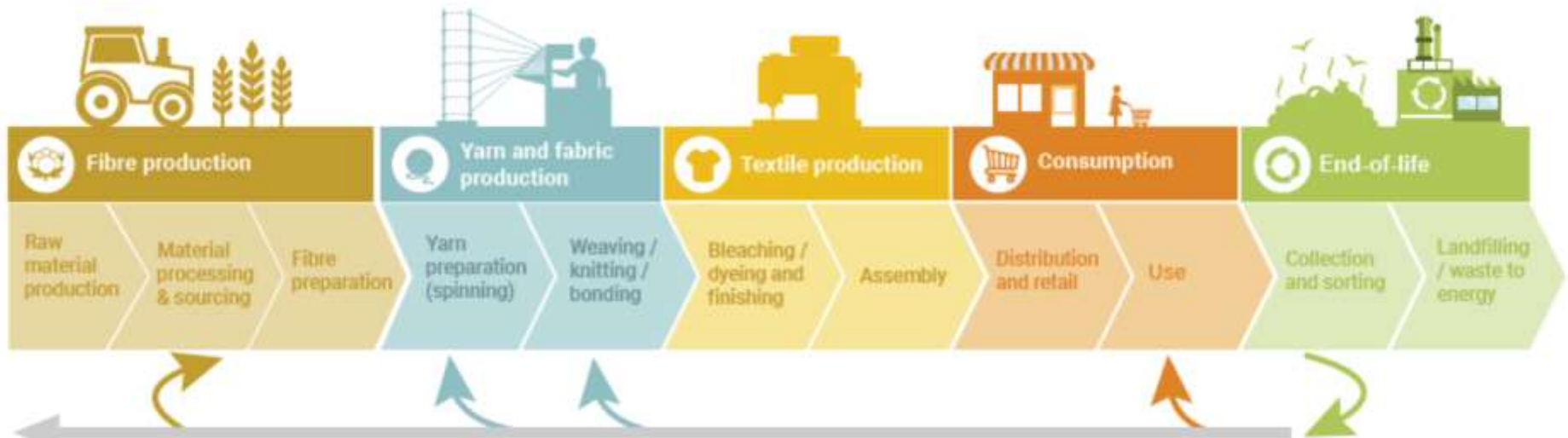


A historic UNEA 5.2: Resolution adopted to end plastic pollution (res. 5/14)

- Calls for development of international legally binding instrument on plastic pollution including in the marine environment
- UNEP to convene an intergovernmental negotiating committee (INC):
 - Starting work during the 2nd half of 2022
 - Completing by the end of 2024
- An interim secretariat has been put in place to organize work and speedily advance on necessary arrangements and documentation required



SMEs in a Value Chain (Example – Textiles)



Overview of current textile trade and value chains

Standards and tools for sustainable textile value chains

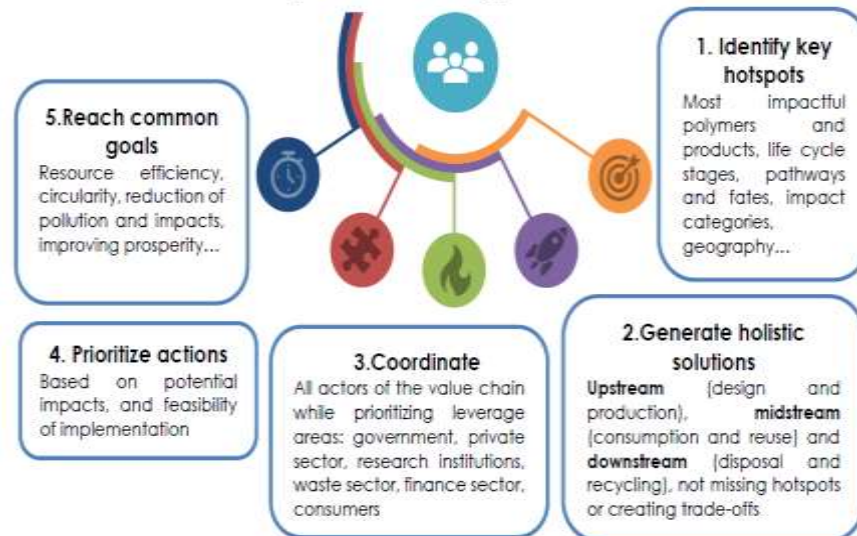
Chemicals in textile value chains

Social aspects of textile trade

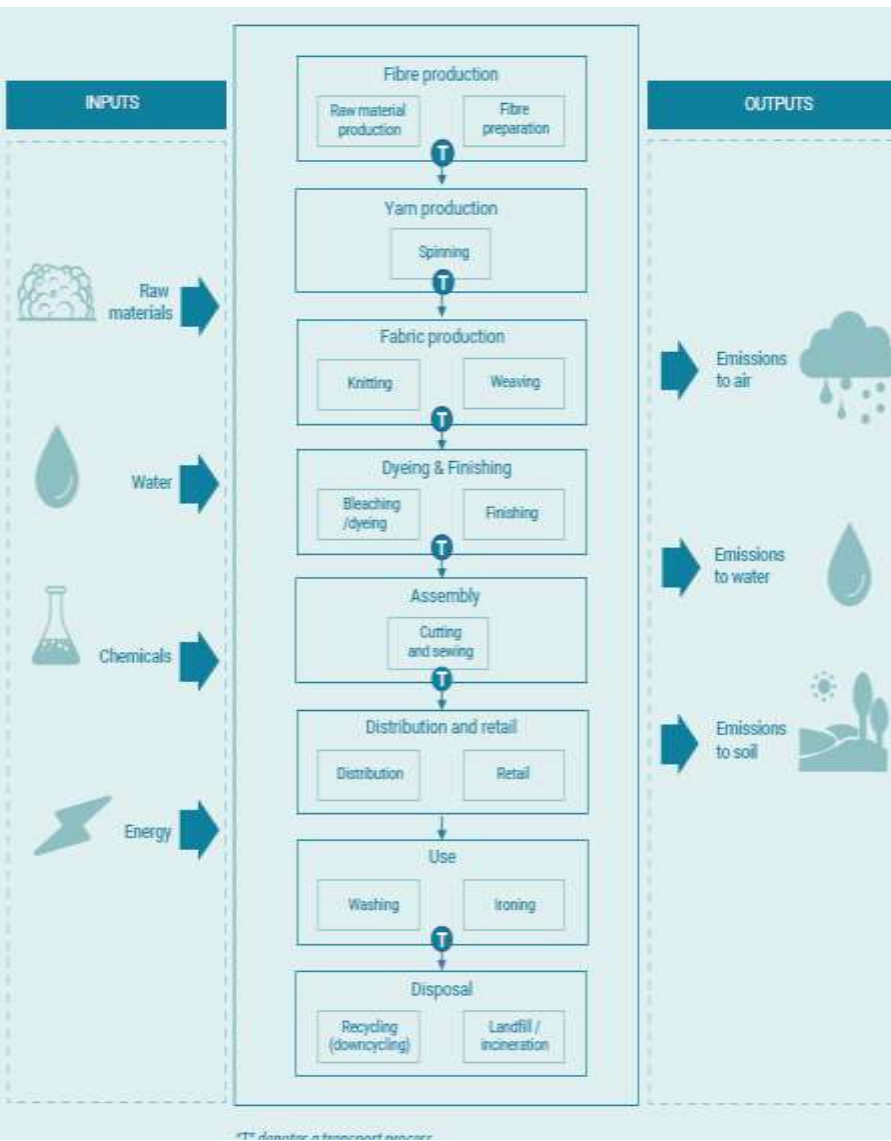
Water and energy use in textile value chains

Sharing of good practice

Why a value chain approach?



How to support SMEs - Impact Assessment



	Fibre Production	<ul style="list-style-type: none"> High use of fossil fuels to produce synthetic fibres (which involves climate, human health and ecosystem quality impacts) High use of agrichemicals, land and water to produce natural fibres, especially cotton (leading to biodiversity and ecosystem quality impacts) Unsafe working conditions and fragility of the legal system (leading to human health impacts and social risks)
	Yarn and Fabric Production	<ul style="list-style-type: none"> No hotspots identified (although there are climate, human health and ecosystem quality impacts, along with social risks, the available life cycle data shows yarn and fabric production is not among the top contributors to impacts when the whole value chain is considered)
	Textile Production	<ul style="list-style-type: none"> High use of fossil fuels for heat and electricity generation in energy-intensive textile processes (which involves climate, human health and ecosystem quality impacts) Use of hazardous chemicals (leading to high human health and ecosystem quality impacts, particularly via water pollution) Release of microfibres (leading to ecosystem quality impacts and potential human health impacts) Unsafe working conditions and fragility of the legal system (leading to human health impacts and social risks)¹⁸
	Use Phase	<ul style="list-style-type: none"> High use of electricity in the care of textiles over their lifetime (fossil fuels used for energy production, leading to climate, human health and ecosystem quality impacts) High use of water and releases of microfibres in washing textiles over their lifetime (leading respectively to water scarcity, ecosystem quality and potential human health impacts)
	End-of-Life	<ul style="list-style-type: none"> Low rates of recovery of textiles at end-of-life leading to high material value loss and non-renewable resource depletion

How to Support SMEs - Tools for a Circular Economy



Life Cycle approach: Life cycle assessment of the textile value chains highlight the most problematic products, processes and stages that cause the most environmental and social impacts (called “hot spots”). In addition, based on the experience of the Life Cycle thinking team of UNEP, [indicators, tools and comparative analysis](#) can be provided to

conduct a life cycle assessment for the textile sector. As a result, it can guide the selection of the most appropriate alternative material, product, business model or intervention strategies, by comparing the respective impacts (human and eco toxicity, depletion of resources, damage to ecosystems).



Eco-innovation: Eco-innovation is a [methodology](#) that develops new business models and strategies which incorporate sustainability through life cycle thinking and

cooperation across the value chain. Eco-innovation is not only actively working with companies but also offers support to governments in developing policies based on life cycle thinking. It is specifically designed to be applied also by small enterprises and can be seen by large brands as an effective way to engage companies, especially small and medium-sized enterprises (SMEs), of their value chains and help those comply with their requirements. It has been implemented in developing countries in companies working on the chemicals value chain, including dyeing and spinning companies from the textile sector. It has also been implemented in the agri-food sector. The global Resource Efficient and Cleaner Production network ([RECPnet](#)) supports the outreach to companies, especially SMEs in developing, manufacturing countries.



Consumer Information: Consumer information tools, such as ecolabels, voluntary standards or marketing claims, aim at enabling consumers to take more sustainable decisions regarding

product purchase, use and end of life. It is important that information provided is accurate and reliable. Therefore, UNEP, together with the International Trade Centre has developed international [Guidelines for providing product sustainability information](#).



Sustainable procurement: Buying more sustainable goods and services can help drive markets in the direction of sustainability, reduce the negative impacts of an organization and produce positive benefits for the environment and society. Combining business-to-business collaboration with a demand drive through government procurement can really

help scale this transformation to a much wider range of companies. UNEP has published in 2018 a paper: [Building circularity into our economies through sustainable procurement](#), which aims to introduce the role that sustainable procurement can play to bring circularity in value chains, including in the textile sector.



Sustainable lifestyles: People have the power to positively impact the planet via their daily lifestyle decisions covering food, mobility, housing, and leisure – which includes

consumer goods (like fashion and textiles) and tourism. As contributions to the One Planet network Sustainable Lifestyles and Education Programme, UNEP has developed: [the science](#) around [lifestyles and climate](#) and how and what motivates people to change behaviour, guides on how sustainable lifestyle initiatives can be developed in [cities](#) and in [offices](#), with menus of actions to consider; and [communication materials](#) and [social media kit](#) to motivate and activate people for positive climate action. Fashion is an element in all materials as the 2-3 billion new consumers soon to come on line will mostly be urban youth who get their information and aspirational messaging from social media. Youth set today's trends and are tomorrow's decision makers. In the recent media tool kit [Fashion slow-down](#) was a core action that asks people to buy better and avoid fast fashion that mass produces at the cost of environmental and human justice.

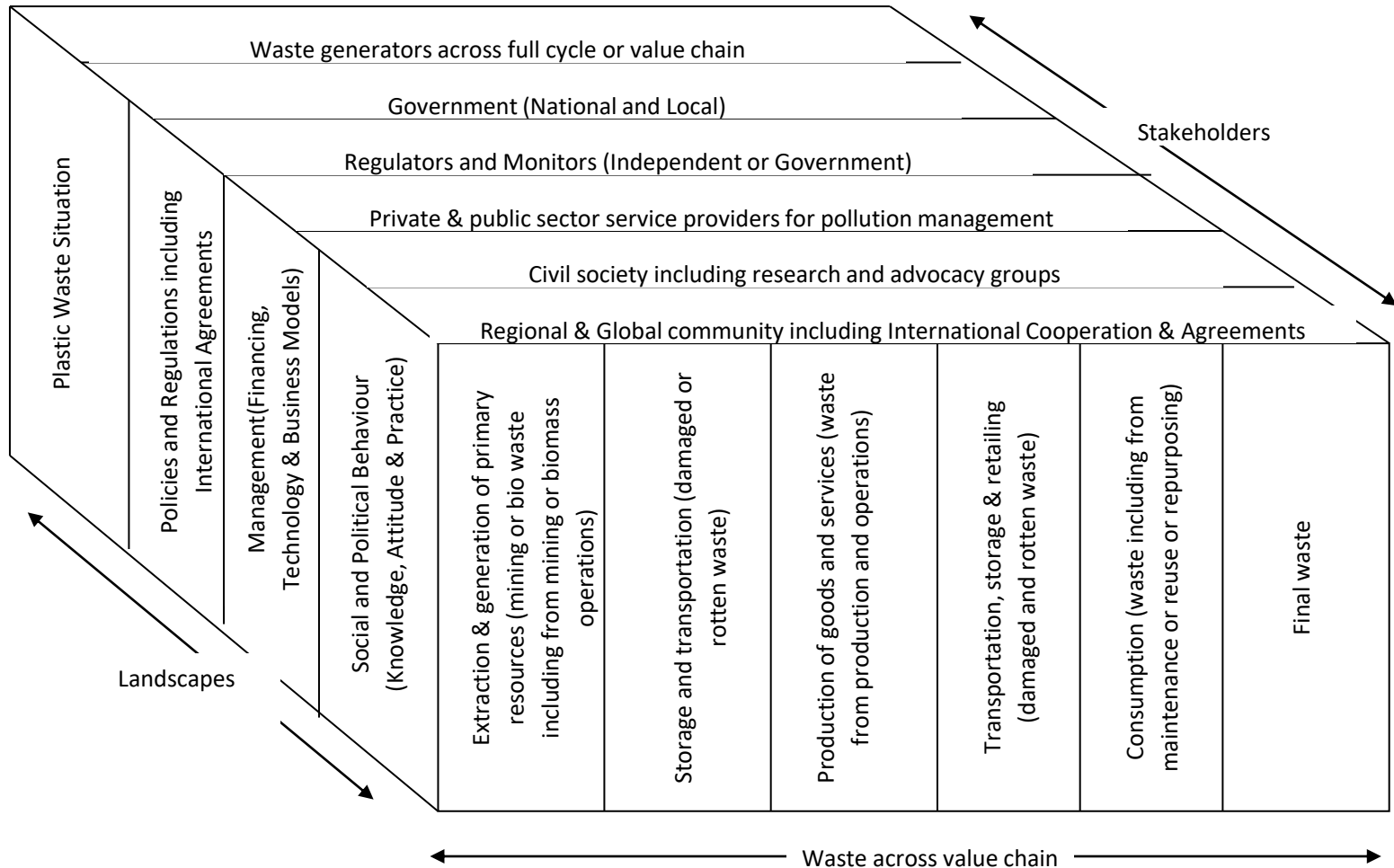


Trade: Green Markets and Global Value Chains constitutes one of the [Environment and Trade Hub's](#) principal work streams, aiming to enhance the design and uptake of sustainability standards and to facilitate market access for sustainably produced and certified products in order to green global production and consumption. In this context,

the Hub provides training on sustainable value chains and trade for textiles as part of the Partnership for Action on Green Economy (PAGE) project in the province of Jiangsu – one of the leading regions for textile production and export in China – presenting standards, tools and best practices. The Hub offers a variety of methodologies and resources related to sustainability standards with relevance to the textile sector, including a [Guide for the Assessment of the Costs and Benefits of Sustainability Certification](#), a [handbook on Trade and Green Economy](#); and an [analysis on Green Economy and Trade – Trends, Challenges and Opportunities](#), among others.



SMEs part of the Processes and Stakeholders(Example – Plastics)






SMEs in Optimizing Resource Efficiency through Circular Economy

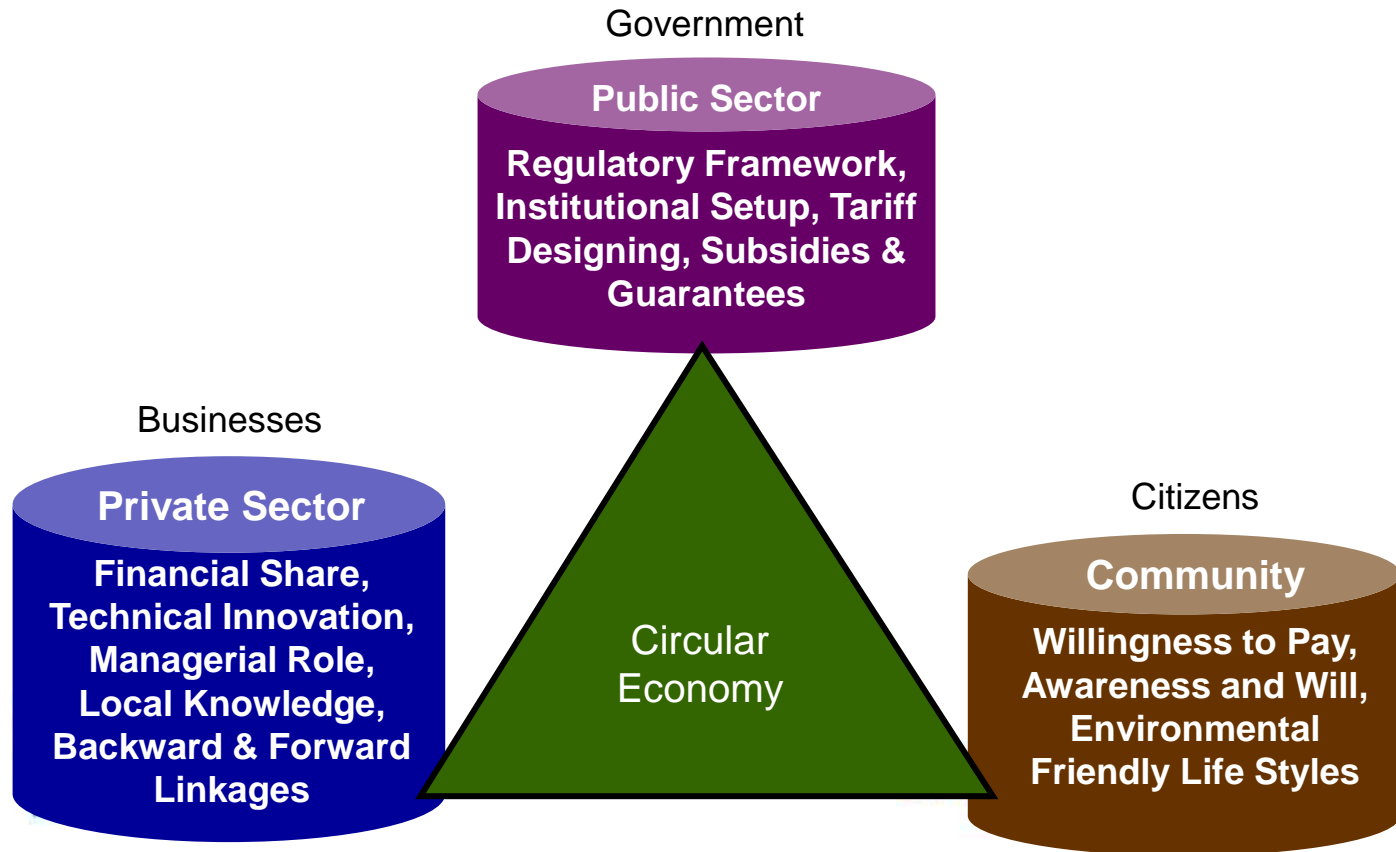
	Policies and Regulatory Framework	Institutional Arrangements including Private Sector	Financing Mechanisms including PPP, EPR, CSR	Technology Support & Capacity Building	Innovations and Business Models	Awareness-raising for Stakeholder Engagement and Behaviour Changes
Eco-Design						
Green Supply Chain						
Sharing Platforms						
Extended Product Life & Product Use						
Product as a Service						
Green Recycling & Recovery						

SMEs in the Role of Modern Technologies in Circular Economy for Resource Efficiency

Figure 5. Disruptive Technologies Used by Pioneers to Launch and Operate Circular Business Models with Speed and Scale

		Circular Supplies	Resource Recovery	Product Life Extension	Sharing Platforms	Product as a Service
 Digital	Mobile			1	2	
	M2M				1	1
	Cloud				1	1
	Social			1	2	1
	Big data analytics	1			1	2
 Hybrid	Trace and return systems		1	2	1	
	3D printing	1		1		
 Engineering	Modular design technology		1	1		1
	Advanced recycling tech	1	2			
	Life and material sciences	2	1			

Role of Stakeholders for transitioning to Circular Economy



Specific Steps to help SMEs - Assessment

- Identify green SMEs (or having potential to be green) based on their production processes, supply chain, product lines, and business models
- Identify the demand side based on the sustainable lifestyles and green consumption
- Identify the challenges and opportunities for jumpstart of the green SMEs focusing on support from stimulus package, sustainable finance, technology transfer, induced demand through sustainable lifestyles and green public procurement
- Shortlist the sectors and SMEs clusters for detailed roadmap for the jumpstart involving the government and all the relevant stakeholders

Specific Steps to help SMEs - Solutions

- **Production process and supply chain:** This covers the resources, raw materials and inputs required by SMEs including extraction of resources, transportation to the production point, energy and other materials required for the production and operations, the emissions in any form and the efficiency of the production system.
- **Product and services produced by SMEs:** The products and services serve one or more purposes for the customers, for example bulbs for lighting, reusable and recyclable packaging, etc. The products are being transformed to be environmentally friendly while serving the same or better purpose (LED bulbs, reusable shopping bags, etc.).
- **Business models:** many SMEs are transforming business models, for example from selling a product (like LED bulbs) to sell a service (lighting) to control the inventory throughout the life cycle for better recycling, recovery and green supply chain.

Specific Steps to help SMEs - Assessment

- **Sustainable lifestyles:** The government, private sector and other civil society organizations, and international agencies are continuously promoting sustainable lifestyles which are making stronger sense during and post-pandemic. This will induce the demand for green SMEs including information on their production processes and supply chain, products including their lifecycle, and business models.
- **Green/sustainable public procurement:** The government is one of the major procurement points for many products and services; thus, it can influence the SMEs to go green through their procurement policies.
- **Sustainable financing:** The government and international agencies are working with national and international financing institutions to create financing incentives for green SMEs through various measures. The major private sector is also supporting their SMEs through sustainable financing such as green bonds.
- **Technology transfer and knowledge share:** International and bilateral agencies are supporting SMEs through international cooperation and south-south cooperation to have access to the cleaner and greener technologies and relevant knowledge and skills.
- **Sustainability reporting:** The government is already supporting sustainability reporting for major private sector companies. This can be trickledown to the SMEs with locally developed criteria. UNEP's "Sustainability Assessment of Technologies" framework can help to develop a framework for "Sustainability Reporting for SMEs."

What can governments do?

Legislate on:

- Public investment in green infrastructure
- Tax rebates or waivers, e.g., for recycling
- Tax on environmentally harmful goods and services
- Incentives to create green jobs and invest in green infrastructure
- Green jobs training programmes
- Green procurement
- Extended producer responsibility
- Eliminating fossil fuel subsidies
- Regulating drivers of biodiversity loss

Oversee/ensure:

- Government actions to implement the Paris Agreement
- Environmental risk assessments in COVID-19 recovery planning focusing on the circular economy
- Inclusion of safeguards and continued protection of environmental rights in recovery legislation
- Public participation and social inclusion in circular economy legislative processes

Adopt **budgets** for:

- Low-carbon activities
- Clean technology research and development
- Conservation programmes
- Sustainable agriculture
- Urban green and blue infrastructure
- Promote mechanism traceability

INITIATIVES IN ASIA & PACIFIC

- CIRCULAR ECONOMY IN ASIA AND THE PACIFIC (CEAP)
- CIRCULAR CITIES (CC)
- CIRCULARITY AND YOUTH (CY) – LOW CARBON LIFESTYLE STARTUPS
- SUSTAINABLE CONSUMPTION AND PRODUCTION (SCP) & RESOURCE EFFICIENCY (RE)
- PLASTIC-FREE RIVERS (CounterMEASURE)
- GO4SDGs – TEXTILES AND SUSTAINABLE FOOD
- AIR POLLUTION – SUSTAINABLE MOBILITY, OPEN BURNING, MONITORING, EMISSIONS CONTROL
- COST OF INACTION

Thank you!

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Global Alliance on Circular Economy and Resource Efficiency - GACERE -



What is GACERE?

An alliance of **governments**, supported by stakeholders, **willing to work together**, share knowledge and **advocate** for the **global circular economy transition** to a more sustainable management of natural resources at the political level and in multilateral fora to achieve sustainable consumption and production.

Member countries



Canada



Chile



Colombia



European Union



India



Japan



Kenya



Morocco



New Zealand



Nigeria



Norway



Peru



Republic of Korea



Rwanda



South Africa



Switzerland

Strategic partners



Regional networks



Supported by:



GACERE working areas include:

- ❖ **Advocate** for a global just transition to a resource efficient and circular economy.
- ❖ **Mapping of domestic policies, fiscal and regulatory frameworks** on the sustainable management of natural resources.
- ❖ **Identify barriers, knowledge and governance gaps** that hinder circular and just transitions.
- ❖ **Identify research needs and possible global governance improvements** that could help governments and stakeholders to address such barriers
- ❖ **Take forward and support sectoral, bilateral and/or regional partnerships** for the circular economy transition to disseminate best practices while making sure not duplicating efforts.
- ❖ Facilitate more **global conversations on the governance of natural resources** and options to improve the current situation, including through the wider adoption of more resource efficient and circular approaches.

GACERE knowledge & events

The Alliance develops **knowledge products (short papers)**, providing key facts and figures on the potential impact of circular economy on strategic agendas, including:

- Circular Economy and Biodiversity
- Circular Economy and Green Recovery
- Circular Economy and Climate Change

Papers are accessible from www.unep.org/gacere

GACERE organizes **high-level events**, such as the WCEF 2022 session on Partnerships for a global circular economy, side events at the UN Environment Assembly, etc.

Details on past and upcoming GACERE events are available at:
www.unep.org/gacere



GACERE

Global Alliance on
Circular Economy and
Resource Efficiency

**To learn more about GACERE,
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