

# Circular Economy: an Opportunity for Malaysian Businesses







## **SPOTLIGHT**

Around Malaysia, a number of businesses are prospering from innovation and collaboration in their processes and value chains that avoid waste and improve the efficiency and longevity of materials use. Geomax Rubber collects end-of-life nitrile rubber gloves, upcycles these into recycled rubber compound that is transformed into rubber soles for footwear. Kloth Circularity collects, sorts and repurposes textile and garment waste into new textile products. Entomal, Bioloop and Sentara Group, for example, are utilizing Black Soldier Flies larvae to convert organic waste into protein rich animal feed and nutrient rich bio-fertilizer. FatHopes Energy collects and refines Used Cooking Oil for use in sustainable aviation fuel. These initiatives are exemplary for the Circular Economy – and provide a call-to-action for businesses and other organizations in Malaysia and beyond.

#### CIRCULAR ECONOMY

The Circular Economy (CE) is positioned as the ambitious opposite of the current linear economy, which is based on taking materials from nature, making and using these in products, and discarding these products after their useful life. This linear extraction and use of materials is unsustainable, as it – globally - causes 60% of climate emissions, contributes up to 90% of loss of nature on land, and 40% of particulate matter pollution. Materials use continues to increase rapidly – the Global Materials Flow Database estimates that the total material consumption of the Malaysian economy doubled over the past 25 years while the per capita material footprint also doubled over the same period. Plastics use and pollution vividly illustrate the shortfalls of the linear economy; however, they are only part of the bigger problem of the wasteful use of all materials.

<sup>1</sup> International Resource Panel (2024), Bend the Trend: Global Resources Outlook 2024, see: https://wedocs.unep.org/bitstream/handle/20.500.11822/44901/Global-Resource-Outlook\_2024.pdf?sequence=3&isAllowed=y

<sup>2</sup> International Resource Panel (2025), Global Materials Flow Database, https://www.resourcepanel.org/global-material-flows-database

The CE concept has diverse roots, which has given rise to divergent definitions, each highlighting different elements, such as nature's principles, circularity practices, circular business models, and sustainable materials resource management.<sup>3</sup> In operational terms, CE envisions **circular value chains**, that bring the net use of virgin materials as well as the net disposal of waste as close as possible to zero (see Figure 1). This invokes the application of three material resource management strategies in all circular value chain stages, respectively: repeatedly recovering and reusing end-of-life materials (**resource circularity**); using materials more efficiently and longer (**resource efficiency**); and switching to renewable materials and energy (**resource substitution**). CE starts with developing circular products and value chains, then fosters materials efficiency and longevity of use of materials in all value chain stages, and ends with recovering and recycling the end-of-life materials that could not – yet - be avoided.

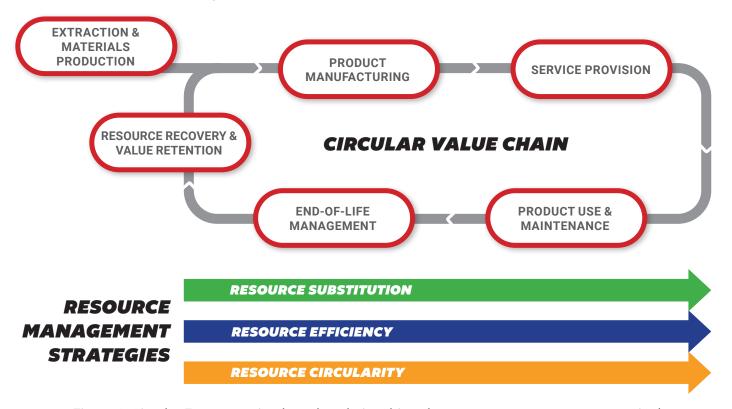


Figure 1: Circular Economy: circular value chains driven by resource management strategies4

## **POLICY PRIORITY**

CE is a regional and national priority in Southeast Asia and other regions. The Association of South-East Asian Nations (ASEAN) adopted its CE Framework in 2021 in support of ASEAN's regional economic integration. Seven ASEAN Member States have adopted further specific CE national roadmaps and/or action plans: Malaysia, Cambodia, Indonesia, Laos, Singapore, Thailand, and Vietnam.

In 2024, the Malaysian Ministry of Housing and Local Government released "Building a Prosperous Future: Circular Economy Blueprint for Solid Waste 2025-2035". This Blueprint aims for a CE transformation of solid waste management to maximize resource efficiency and minimize waste generation by 2050, while promoting economic growth, social well-being and environmental sustainability. It provides a 20 point-agenda for solid waste management, covering legislative reform, improved guidelines and procedures, using better and digitalized data, improved infrastructure and facilities, and market creation. Among the specific actions, it is for example foreseen to enact Extended Producer Responsibility (EPR), introduce packaging legislation, establish product design guidelines, and facilitate waste exchanges through digital platforms, whilst also upgrading and expanding materials recovery at existing and new waste management facilities.

<sup>3</sup> Van Berkel, R (2025), Circular Economy: an introduction and overview, SWITCH Asia, https://www.switch-asia.eu/resource/circular-economy-an-introduction-and-overview/

<sup>4</sup> Van Berkel, R (2025), Circular Economy: An Introduction and Overview, https://www.aceba.co/site/assets/files/1430/ce\_back-ground\_note\_final.pdf

<sup>5</sup> MHLG. (2024), *Building a Prosperous Future: Circular Economy Blueprint for Solid Waste 2025-2035*. Ministry of Housing and Local Government, https://www.kpkt.gov.my/kpkt/resources/user\_1/GALERI/PDF\_PENERBITAN/BLUEPRINT/BLUEPRINT\_EKONOMI\_KITARAN\_SISA\_PEPEJAL\_DI\_MALAYSIA\_2025\_2035.pdf?mid=74

In parallel, the Malaysian Ministry of Investment, Trade and Industry (MITI) launched the "Circular Economy Policy Framework for Manufacturing Sector in Malaysia". This framework is based around four themes, respectively: circular input; efficient process; sustainable output; and socio-economic impact (deemed as enablers). Ambitions, targets and key actions are included for each theme. Key actions include, amongst others, minimum recycled content requirements; development of eco-industrial parks; improved classification and certification of secondary materials; and a system of robust national CE metrics.

## **BUSINESS OPPORTUNITY**

CE provides a responsible business opportunity. Firstly, using materials, energy, and water more efficiently and longer reduces business costs. Secondly, circular products and services can unlock access to new markets or consolidate and grow current markets. Thirdly, as countries and societies gradually transition to circularity, businesses need to get prepared with alternatives particularly for single-use products, fast-moving consumer goods, and other products and services that are genuinely problematic from a circularity perspective.

A growing number of Malaysian businesses are already benefitting from CE. The ASEAN Circular Economy Business Alliance (ACEBA)<sup>7</sup>, with support from the EU SWITCH-Asia Policy Support Component<sup>8</sup>, documented in 2024 three business cases from Malaysia, as summarized in below table. Comparable sets of CE relevant business cases are already available for Cambodia, Indonesia, Laos, Myanmar, Philippines, Thailand and Vietnam – and are regularly being expanded.<sup>9</sup>

Table 1: Malaysian CE business cases

Title	Company	Circular Economy practices
Enabling circular recovery of textiles and garments waste	Kloth Circularity	Establishment and operation of clothing and textile waste collection bins and repurposing of collected fabric into merchandise and gift items through community sewing network.
Repurposing glass waste	Naturaall Glass Solutions	Decentralized system for glass waste collection and shredding for onward application as aggregate in building products.
Battery rejuvenation for circularity and energy efficiency in energy storage	Renewcell	Extension of useful lifetime and increase of energy storage efficiency of industrial lead-acid and nickel-cadmium batteries through battery rejuvenation and associated battery monitoring and management services.

## **GUIDING PRINCIPLES FOR BUSINESS**

CE presents an ambitious agenda to bring the use of natural resources back within planetary boundaries. This is contingent on developing circular products, services, and processes by businesses and other organizations. To facilitate business leadership and action, ACEBA developed five guiding principles for business and CE, upon extensive engagement with the business sector in Malaysia, Cambodia, Indonesia, Philippines and Thailand. These guiding principles position CE as responsible business, conducted with an environmental lens, through innovations that improve material and resource use, and foster socio-economic progress.

<sup>6</sup> MITI. (2024). Circular Economy Policy Framework for Manufacturing in Malaysia. Kuala Lumpur: Ministry of Investment, Trade and Industry. https://www.nimp2030.gov.my/nimp2030/resources/NIMP Banner/CIRCULAR\_ECONOMY\_POLICY\_FRAMEWORK.pdf 7 ACEBA website: https://www.aceba.co/aceba/

<sup>8</sup> SWITCH-Asia (2023), ASEAN Circular Economy Business Alliance (ACEBA): Mobilising Business Action for Circular Economy in ASEAN. https://www.switch-asia.eu/our-work/multi-country/asean-circular-economy-pact-acep-mobilizing-business-action-for-circular-economy/

<sup>9</sup> ACEBA Business Cases: https://www.aceba.co/aceba/business-case/



Figure 2: Guiding principles for business action on Circular Economy<sup>10</sup>

## ACEBA: ASEAN CIRCULAR ECONOMY BUSINESS ALLIANCE

ACEBA was launched in July 2024 as an ASEAN-centric, business-led CE initiative, with the endorsement of the ASEAN Business Advisory Council (ASEAN BAC), the ASEAN Secretariat, and the European Union Delegation to ASEAN. ACEBA is an initiative of ARAIBA Sdn Bhd<sup>11</sup>, a purpose-driven, not-for-profit business organization that works to promote and facilitate responsible and inclusive business practices in ASEAN. The activities of ACEBA are further supported by a Technical Advisory under the SWITCH-Asia Policy Support Component.<sup>12</sup>

ACEBA brings together companies and other business organizations that <u>pledge</u> to lead by example. These participating companies agree to (1) promote CE in their business networks and advocacy; (2) consider and adopt appropriate CE solutions in their products and operations; and (3) share CE achievements and experiences. ARAIBA, in partnership with national and regional business organizations, supports participating companies with accessing appropriate CE knowledge and tools and relevant CE solutions, and promoting their achievements through knowledge sharing and networking activities.

<sup>10</sup> EU SWITCH-Asia and ASEAN CSR Network (2023), *Towards a Unifying Framework for Business Action for the Circular Economy in ASEAN*. https://www.aceba.co/site/assets/files/1086/working\_paper\_business\_action\_ce\_asean\_final.pdf

<sup>11</sup> ARAIBA website: https://www.araiba.org/araiba/

<sup>12</sup> EU SWITCH Asia (2023), *Mobilising Business Action for Circular Economy in ASEAN*, https://www.switch-asia.eu/our-work/multi-country/asean-circular-economy-pact-acep-mobilizing-business-action-for-circular-economy/

ACEBA encourages CE leadership by enterprises—from large corporates to MSMEs, start-ups, and social enterprises—and business associations in ASEAN Member States. Specifically, ACEBA:

- Provides visibility and voice to participating companies;
- Documents and showcases CE business practices and solutions;
- Facilitates peer-learning and sharing among participating companies and other leading businesses; and
- Promotes operational <u>CE tools and metrics</u> appropriate to ASEAN businesses.

ACEBA invites Malaysian businesses from all sectors to participate, as CE is applicable across business sectors. In its knowledge sharing and networking, ACEBA is prioritizing eight sectors that are of key economic importance in the region and Malaysia, have large participation of MSMEs, and have demonstrated good CE potential.

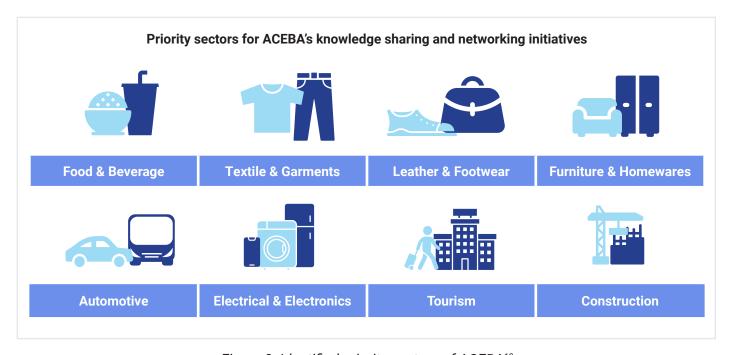


Figure 3: Identified priority sectors of ACEBA<sup>13</sup>

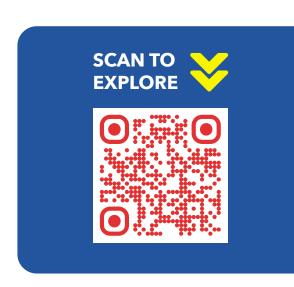
## **BUSINESS LEADING THE CHANGE**

The future of irreversible climate change, loss of nature, and pollution is already with us. There is no pause button as their negative impacts on livelihoods, society, economy and business are on the rise. Ignoring these signs is a risky business affair. We all need innovative, circular, and low carbon solutions, and business is in the driving seat to provide these. Getting more circular does not have to put firms out of business, as there is good potential for cost savings, new products and markets, and new competencies.

Get involved and started—one responsible step at a time business can lead the change towards a sustainable future and livable planet.



<sup>13</sup> EU SWITCH-Asia and ASEAN CSR Network (2023), Towards a Unifying Framework for Business Action for the Circular Economy in ASEAN. https://www.aceba.co/site/assets/files/1086/working\_paper\_business\_action\_ce\_asean\_final.pdf





ACEBA is an initiative of ARAIBA



ACEBA is supported by the technical advisory of the EU SWITCH-Asia Policy Support Component





