

# Chapter 5

## Circular Economy Strategies and Plans in ASEAN

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# Chapter 5

## Circular Economy Strategies and Plans in ASEAN

### 1. Introduction

This chapter provides information on circular economy strategies and plans in Association of Southeast Asian Nations (ASEAN) Member States (AMS). In addition, it introduces circular economy strategies and plans in Japan and the European Union (EU), which can be examples of best practices in specific sectors to AMS.

### 2. Current Circular Economy Situation in ASEAN

ASEAN has developed the *Framework for Circular Economy for the ASEAN Economic Community* in 2021 (ASEAN, 2021). In addition, Cambodia, Indonesia, Thailand, and Viet Nam published national strategies or plans focussing on the circular economy (Table 5.1). Thailand announced a bio-circular-green (BCG) economy model in 2021 as a national development and post-pandemic recovery strategy. The deputy prime minister of Viet Nam signed Decision No. 687/QĐ-TTg, approving a circular economy development scheme, in 2022. Meanwhile, Indonesia, in collaboration with the United Nations Development Programme (UNDP), published circular economic initiatives (UNDP, 2022). Cambodia also published a circular economy strategy and action plan in 2021, in collaboration with UNDP.

Brunei Darussalam, the Lao People's Democratic Republic (Lao PDR), Malaysia, Myanmar, the Philippines, and Singapore have published various environmental strategies and plans. However, these do not focus specifically on a circular economy.

**Table 5.1. Circular Economy Plans in ASEAN**

| Country           | Plan                                                                                         | Year | Focus on the Circular Economy |
|-------------------|----------------------------------------------------------------------------------------------|------|-------------------------------|
| Brunei Darussalam | <i>Towards A Dynamic and Sustainable Economy: Economic Blueprint for Brunei Darussalam</i>   | 2020 |                               |
| Cambodia          | <i>National Circular Economy Strategy and Action Plan 2021</i>                               | 2021 | ✓                             |
| Indonesia         | <i>The Future is Circular: Concrete Steps for Circular Economic Initiatives in Indonesia</i> | 2022 | ✓                             |
| Lao PDR           | <i>9th Five-Year National Socio-Economic Development Plan (2021–2025)</i>                    | 2021 |                               |
| Malaysia          | <i>Twelfth Malaysia Plan, 2021–2025</i>                                                      | 2021 |                               |
| Myanmar           | <i>National Waste Management Strategy and Master Plan for Myanmar, 2018–2030</i>             | 2020 |                               |
| Philippines       | <i>Philippine Action Plan for Sustainable Consumption and</i>                                | 2020 |                               |

| Country   | Plan                                                 | Year | Focus on the Circular Economy |
|-----------|------------------------------------------------------|------|-------------------------------|
|           | <i>Production</i>                                    |      |                               |
| Singapore | <i>Zero Waste Masterplan</i>                         | 2019 |                               |
| Thailand  | Bio-Circular-Green Economy Strategic Plan, 2021–2026 | 2021 | ✓                             |
| Viet Nam  | Circular economy development scheme                  | 2022 | ✓                             |

Source: Authors.

### 3. Circular Economy Strategies in ASEAN

#### 3.1. ASEAN

ASEAN developed the *Framework for Circular Economy for the ASEAN Economic Community* in 2021. It sets out an ambitious long-term vision of the circular economy, building on the strengths of existing ASEAN initiatives, and identifies priority focus areas for action along with enablers to accelerate the realisation of a circular economy throughout the region (ASEAN, 2021). The strategic goals of the framework are a resilient economy, resource efficiency, and sustainable growth. The guiding principles are promoting ASEAN integration and development of regional value chains, considering the broader impact on the economy and society, recognising the unique circumstances of each AMS, encouraging ASEAN-wide coordination on knowledge and technology sharing, evaluating financial and institutional feasibility and sustainability prior to implementation, and functioning within the reality of international production linkages. Policy framework and institutions, enhanced awareness and competency across sectors, Industry 4.0 for a circular economy, and partnership and collaboration are regarded as enablers (ASEAN, 2021).

ASEAN will develop the implementation plan for this framework in the future. AMS will implement circular economies in alignment with the framework, and the collaboration amongst AMS will be promoted under the framework.

#### 3.2. Indonesia

Indonesia created *The Future is Circular: Concrete Steps for Circular Economic Initiatives in Indonesia* as an initiative to promote a circular economy. It focusses on five sectors: food and beverages, textiles, construction, wholesale and retail trade, and electronics (i.e. electrical and electronic equipment [EEE]) (UNDP, 2022). Cumulatively, the economic, social, and environmental benefits derived from the 36 initiatives include savings in operating costs of more than \$30 million, job creation for 14,270 workers, emissions reductions of more than 1.4 million tonnes of carbon dioxide equivalent, energy savings of more than 4.8 million megawatt-hours, water consumption reduction by more than 252,000 billion cubic metres, and waste reduction of more than 827,000 tonnes (UNDP, 2022). The circular economy concept described in this initiative includes refuse, rethink, reduce, reuse, repair, refurbish, remanufacture, repurpose, recycle, and recover. Indonesia will develop specific policies to implement the circular economy from these broad perspectives.

### 3.3. Cambodia

Cambodia developed the *Circular Economy Strategy and Action Plan 2021* with UNDP, featuring a pilot project for e-waste recycling. The vision aims to achieve a prosperous economy, thriving and inclusive society, and healthy environment (MOE, 2021). Both economic and environmental impacts are expected by implementing this strategy and plan.

The action plan features raw materials design; production remanufacturing and distribution; consumption reuse and repair; and the collection, recycling, and use of residual waste. Cambodia will develop specific policies to implement the circular economy from those broad perspectives. Various approaches, including those relating to fines, regulations, and infrastructure and technology, will be featured.

### 3.4. Thailand

In 2021, Thailand announced the BCG concept and related policies, including utilisation of a circular economy system. The BCG model promotes sustainability of biological resources, strengthens communities and the grassroots economy, enhances sustainable competitiveness of industries, and builds resilience to global changes.<sup>27</sup> The competitiveness of the manufacturing and services industry will be enhanced by employing knowledge, technology, and innovation to improve efficiency, reduce waste, and enable circularity. The circular economy concept in BCG includes reuse, refurbishment, repair, remanufacturing, recycling, and composting (APEC, 2022).

### 3.5. Viet Nam

The deputy prime minister of Viet Nam signed Decision No. 687/QĐ-TTg in 2022 to develop a circular economy to promote innovation and to improve productivity. It also seeks to promote green growth together with restructuring of the economy; renovate the growth model by increasing effectiveness and interconnectedness within the circular economy; improve the competitiveness and resistance of enterprises and supply chains to external shocks to achieve economic prosperity, environmental stability, and societal equality; aim for a green economy and carbon neutrality; and contribute towards global warming mitigation.

## 4. Circular Economy Strategies in Japan and the European Union

### 4.1. Japan

Japan's Ministry of Economy, Trade and Industry published the *Growth-Oriented, Resource-Autonomous Circular Economy and Strategy* in 2023. The strategy points out that the circular economy contributes to economic goals such as economic growth and social goals such as economic security, sustainability, and well-being. This strategy will tackle economic challenges such as resources supply risks as well as economic growth and environmental challenges like resource depletion, limited waste management capacity, and carbon neutrality (METI, 2023). It comprises approaches related to reduce, reuse, recycle, share, repair, and refurbish.

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<sup>27</sup> NSTDA, Vision, <https://www.bcg.in.th/eng/vision/>

## **4.2. European Union**

The European Commission published the *Circular Economy Action Plan* in 2020. The circular economy will contribute to achieving climate neutrality, decouple economic growth from resource use, ensure long-term competitiveness, create new jobs, increase the profitability of manufacturing firms, and shelter manufacturing firms from resource price fluctuations (European Commission, 2020). Therefore, environmental and economic impacts are expected.

This plan includes approaches related to reduce, reuse, repair, remanufacture, repurpose, and recycle. In addition, it regards electronics and information and communications technology as a key value chain and outlines specific approaches for the area. For example, it seeks to introduce regulatory measures to promote the design for energy efficiency and durability, reparability, upgradability, maintenance, reuse, and recycling.

## **5. Conclusion**

ASEAN, Cambodia, Europe, Indonesia, Japan, Thailand, and Viet Nam have developed circular economy strategies and plans. These strategies and plans aim to achieve both economic impacts and environmental impacts. Economic impacts include economic growth, savings in operation costs, job creation, enhancing the competitiveness of the manufacturing and services industries, improved efficiency, resistance of enterprises and supply chains to external shocks, decreased resource supply risk, more profitability of manufacturing firms, and sheltering manufacturing firms from resource price fluctuations. Environmental impacts include carbon neutrality, energy savings, water consumption reduction, waste reduction, a healthy environment, cession of resource depletion, and solving the limitation of waste management capacity.

These strategies and plans describe various approaches, and the involvement of various players, such as manufactures, retailers, and waste management companies, is needed to implement those strategies and plans. To achieve both economic and environmental goals while involving various players, economic and environmental policies should be consistent. For that, close cooperation is important.

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