

Recommendations for Supporting SMEs in the Transition to Circular Economy: A perspective on Thailand

SEED Practitioner Labs Policy Prototyping – Thailand 2020



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SEI Stockholm Environment Institute

Focus:	Circular economy transition, climate change mitigation and adaptation
Ecosystem Impact:	Access to technology, access to finance, greater awareness of circularity
Lab Cycle:	Policy, Thailand 2020
Solution Developers:	The Stockholm Environment Institute (SEI)

Background

Under Thailand's national framework of 'Factory 4.0', the Thai Ministry of Industry proposes the circular economy model as an alternative to the traditional linear economy production process of 'take, make, dispose.' It also looks to this framework as a catalyst to increase competition and growth in the Thai economy. Under this policy, the Ministry focuses their support on:

1. Promoting circular product design and developing efficient manufacturing processes throughout the product chain (Product Life Cycle).
2. Promoting sustainable consumption with the concept of Reuse and Reduce.
3. Improving waste management procedures, waste management regulations and investment in waste management in the long term.
4. Emphasising recycling by promoting the second usage of raw materials or upcycling materials effectively as well as promoting the use of chemicals that are safe and environmentally friendly.

Subsequently, the Bio-Circular Green Economic Model (BCG) has also been promoted as a model for sustainable and inclusive growth by the Thai government under Thailand 4.0 strategy¹.

Despite policies in place to promote circularity in the Thai economy, the implementation of circular economy in Thailand is nascent and interventions are yet to achieve their full potential. Meanwhile, eco-inclusive MSMEs face barriers to adopting a closed-loop production model. This is due to a number of factors including slow changes in consumer perceptions on the need for more sustainable production and correspondingly slow consumption, high upfront costs or actors exploring circularity practices, a lack of relevant skilled labour in the market knowledgeable on circularity, insufficient institutional support for transitions, and (perceived) risks when changing to innovative models.

Solution Overview

The Asian centre of the Stockholm Environment Institute (SEI) conducted a thorough study on the barriers and challenges faced by the private sector hindering a transition towards sustainable production and adoption of circular economy business models. Discussions with stakeholders from the public and private sector, financial institutions, MSMEs and their intermediaries at the SEED Policy Lab led to the following recommendations:

1. **Improving Information, Training and Education:** launching informational campaigns to up public awareness on circular economy. These would result in increased demand and public pressure for change as potential consumers are better informed on the impact of alternative products and circularity process. On the supply side, training is crucial to equip MSMEs to transition from a linear value chain to a circular supply chain. Events and conferences create spaces where multiple stakeholders and industry players can convene, share learnings and pledge commitments to realising a circular economy.²
2. **Encouraging Regulation and Policy** that spur circularity practices and communicate them more succinctly to the business community. The Thai Department of Industrial Work (DIW) and Department of Industrial Promotion can assist MSMEs in taking up sustainable production practices and setting industry standards when it comes to waste from production process.

¹ Office of National Higher Education Science Research and Innovation Policy Council (2020) "BCG in Action". <https://www.nxpo.or.th/th/en/bcg-in-action/>

² Thailand Board of Investment (2019) "Circular economy: Shaping a sustainable future". Thailand Investment Review Nov 2019. https://www.boi.go.th/upload/content/TIR5_2019_5e2e95134a76b.pdf

3. **Financial Incentives and Penalties.** Incentives can reduce the amount of capital needed to overhaul distribution, inventory management, production and to cover substantial time and human resource investments.³ Financial solution providers can incorporate sustainable production requirements for eligibility to obtain loans, grants and equity funding. Additionally, tax-breaks can be offered for MSMEs that operate closed-loop models, while penalties could be imposed on businesses that generate excess waste in production.
4. **Improving Access of stakeholders to Technology and Infrastructure** through exchange and transfer. Leveraging plastic recycle and digital technologies, sustainable fuel, or circular chemical solutions, which are already developed in corporates such as Unilever and Nestle.⁴ On top of this, emerging technologies such as digital, automation and machine learning from start-ups can enhance traceability and automated material sorting in the recycling process as well as innovative or bio-based materials. Creating spaces that encourage exchanges and transfer of these technologies and innovation to design closed-loop or alternatives to 'take, make, dispose' products are therefore recommended.

Benefits to Eco-inclusive Enterprises

These policy recommendations have various benefits for MSMEs in Thailand, including:

- **Increase demand for MSME products** as educational campaigns to enhance knowledge on circularity practices and circular products and services offered by MSMEs.
- **Reduced barriers to operating within a Circular Economy** by providing financial incentives to MSMEs who operate within closed-loop models and penalties to businesses that generate excess waste.

Policy Benefits

Implementation of the recommendations will help achieve Thailand's policy goals. In terms of economic benefits, supporting MSMEs to adopt circular practices will accelerate the transition to a green circular economy. Thai authorities have acknowledged the distinct long-term advantages for businesses to shift to circular economy models and more sustainable forms of production, for example lower production costs, increased competitiveness, reduced emissions and greater profitability.⁵

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³ Rizos et. al. (2016) 'Implementation of Circular Economy Business Models by Small and Medium-Sized Enterprises (SMEs): Barriers and Enablers' in Sustainability 2016, Issue 8, 1212.

⁴ <https://www.waste360.com/recycling/recycling-technologies-neste-and-unilever-combine-expertise-chemically-recycle-waste>

⁵ Thailand Board of Investment (2019) "Circular economy: Shaping a sustainable future". Thailand Investment Review Nov 2019. https://www.boi.go.th/upload/content/TIR5_2019_5e2e95134a76b.pdf

SEED Practitioner Labs Policy Prototyping

SEED Practitioner Labs Policy Prototyping work with policymakers and intermediaries over a multi-step collaborative process. Through this process, participants design policy instruments that increase access to and improve the quality of support mechanisms for socially inclusive and environmentally sustainable enterprises looking to scale their environmental, social and economic impacts.