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

8 DECENT WORK AND ECONOMIC GROWTH

13 CLIMATE ACTION

17 PARTNERSHIPS FOR THE GOALS

## Policy Brief | Thailand, 2020

SEED Practitioner Labs for Policy Prototyping

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promoting entrepreneurship
for sustainable development

Established by
UN environment programme
UNDP
IUCN

Funded by
Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
Government of Flanders

Hosted by
adelphi


# Imprint

**Publisher:** SEED
c/o adelphi research gGmbH
Alt Moabit 91, 10559 Berlin, Germany
www.seed.uno | info@seed.uno



**Suggested citation:** SEED (2020). Recommendations for Supporting SMEs in the Transition to Circular Economy: A perspective on Thailand. Policy Brief. Berlin, Germany.

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# KEY MESSAGES

- In the context of Thailand's efforts on climate change adaptation and sustainable economic growth, its Ministry of Industry has proposed the circular economy framework as the future direction of "Factory 4.0" for Thai industries.
- Despite policies in place to promote circularity models and a growing awareness among policy makers, Thailand has yet to achieve its full circular potential. Slow change in consumer demand for circular products and services, lack of relevant skills within enterprises, high risk perceptions amongst enterprises and lack of targeted support for small businesses with circularity potential hinder progress.
- SEI's research highlights opportunities in: i) improving information and education; ii) encouraging regulation and policies; iii) financial incentives and penalties; and iv) improving access to technology and infrastructure for circularity.

# I. THE ISSUE

Under the 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', and 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 to innovative design 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. Emphasizing the concept of Recycle by promoting the second usage of raw materials or upcycling effectively as well as promoting the use of chemicals that are safe and environmentally friendly.

Despite policies in place to promote circularity in the Thai economy, the implementation of circular economy in Thailand has just started and there is room for interventions to achieve its full potential.

Meanwhile, eco-inclusive MSMEs face barriers to adopting a closed-loop production model. This is due to a number of factors such as:

1. Slow changes in consumer perceptions on the need for more sustainable production and equally slow behaviour towards purchasing products and services produced under circularity models (e.g. understanding circularity beyond simply recycling);

2. Enterprises incurring high upfront costs because of circularity practices (such as procuring expensive low carbon machines, or hiring new talent), resulting in higher prices for products and services and thus less competitive advantage;

3. Insufficiently skilled labour in the market that can develop, adopt or use advanced circularity relevant technologies and practices;

4. The risk of changing to innovative business models (such as delays in decision-making and loss of income due to re-prioritisation) or practices perceived by MSMEs in comparison to business as usual; and

5. Insufficient institutional support from policy and regulators for smaller business actors. The concept of Bio, Circular and Green Economy (BCG) is explicitly mentioned in Thai policy quite recently in 2019 when government agencies such as Ministry of Industry and National Science and Technology Development Agency (NSTDA) started advocating about BCG model as mechanism to larger policy framework (Thailand 4.0 hence Factory 4.0 and 20 years National Strategy). Efforts have been made to formulate standards and criteria of CE product and process as well as plan to bring together public-private partnership. However, these are in policy formulation process. The public-private collaborations are still largely focused on big industry players who have technology and know-how on CE practices.

# II. WHY IS THIS IMPORTANT?

The appetite for green consumption in Thailand is growing[1] and supported by the Thai government through existing policies and frameworks to support the transition to a more circular economy. MSMEs in Thailand contribute to 43% of the national overall GDP[2]. According to the OECD, MSMEs on aggregate have a high environmental footprint accounting a large share of global resource consumption, pollution, and waste generation[3]. In Thailand, MSMEs are also a significant economic engine, generating 14 million jobs (86% of total employment)[4]. Thus, supporting MSMEs to adopt circular practices is imminent in accelerating the transition to a green circular economy.

However, MSMEs' potential to increase business activity, generate employment, and create investment opportunities needs concerted policy effort. In the national movement towards a circular economy, especially in a time that demands urgent green recovery, MSMEs – owing to their model being more agile, quick to pivot and respond to changing local market demands – should be a key focus of new measures.

Rapid economic development in Thailand has led to the growth of the middle-class and expansion of urban communities, ultimately leading to a growth in waste generation. In recent years, support for sustainable consumption measures such as the nation-wide ban on single-use plastic have become increasingly popular[5]. This presents an opportunity for large and small businesses to meet the demands of consumers.

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[6].

*1 Netherlands Embassy Bangkok (2020), "Factsheet Circular Economy in Thailand". Retrieved from https://www.netherlandsworldwide.nl/countries/thailand/doing-business/circular-economy-in-thailand-factsheet*
*2 OSMEP 2019 "SMEs White Paper 2019". Retrieved from https://www.sme.go.th/upload/mod_download/download-20190919092631.pdf*
*3 OECD, 2018 "Issue paper. SMEs: Key Drivers of Green and Inclusive Growth". Retrieved from https://www.oecd.org/greengrowth/GGSD_2018_SME%20Issue%20Paper_WEB.pdf*
*4 Korwatanasakul, U. and S. W. Paweenawat. 2020. "Trade, Global Value Chains, and Small and Medium-Sized Enterprises in Thailand: A Firm-Level Panel Analysis". ADBI Working Paper 1130. Tokyo: Asian Development Bank Institute. Available: https://www.adb.org/publications/trade-global-value-chains-and-sme-thailand-firm-levelpanel-analysis*
*5 Chankeaw, P (2020) "Thailand kicks off 2020 with plastic bag ban", Reuters. https://www.reuters.com/article/us-thailand-environment-plastic-idUSKBN1Z01TR*
*6 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*

## Eco-inclusive SMEs

Eco-inclusive SMEs are enterprises who offer products and services, as well as operate business models that are environmentally beneficial and socially inclusive. These enterprises, often MSMEs, play a significant role in supporting a country to achieve the SDGs and their NDCs. SEED Award Winner in Thailand Fang Thai uses rice straw to create environment-friendly, biodegradable packaging alternatives. By giving new life to rice straw that would otherwise be burned, they close the loop in the rice production value chain, help reduce $CO_2$ levels, while reducing single-use plastic use. Social and environmental MSMEs like Fang Thai benefit less from policy interventions compared to the bigger business players. The research by SEI is crucial in highlighting the pressing barriers and challenges faced by the private sector. Recommendations presented highlight key enablers that can lift barriers faced by MSMEs to participate fully in the circular economy.

# III. SUPPORTING SMEs IN THE TRANSITION TO A CIRCULAR ECONOMY

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. Convening with stakeholders from the public and private sector, financial institutions, MSMEs and their intermediaries at the SEED Policy Lab lead to the following recommendations in: i) closing gaps on awareness and knowledge; ii) implementing policy standards and enforcement; iii) introducing financial incentives such as tax-breaks and subsidies; and iv) providing technical support in the form of training and enabling infrastructures.

## 1. Improving Information and Education

Informational campaigns to increase public awareness on circular economy. At the same time, educational campaigns to enhance knowledge on circularity practices for MSMEs can help fuel and sustain demand and supply of circular products and services. Awareness raising programmes will result in increasing 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, key recommendations would be to provide training programmes to equip MSMEs to transition from a linear value chain to a circular supply chain. Similarly, events and conferences create spaces where multiple stakeholders and industry players can convene, share learnings and pledge commitments to realising a circular economy .

## 2. Encouraging Regulation and Policy

From responsible ministries (Ministry of Industry, Ministry of National Resource and Environment) to private sector intermediaries (Chamber of Commerce, Thai Investment Board), policies that encourage circularity practices should be made explicit and communicated more succinctly or simplified to the business community. Regarding policy implementation, the Thai Department of Industrial Work 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. Currently, Department of Industrial Works (DIW) has been working on improving relevant legislations including the Factory Act, which covers the law on water pollution, air pollution, handling of waste or waste material and the Hazardous Substances Act. This is in connection to the policy attempts in promoting BCG model (Bio, Circular and Green economy) as the new economic concept. In order to build on the legislations, interventions that will further support the implementation such as voluntary pledges by business associations - can serve as a starting point.

## 3. Financial Incentives and Penalties

Circular economy transition demands additional capital to develop new models of distribution, inventory management, production and substantial time and human resource investments[7]. These pose a significant barrier for many MSMEs. Suppliers of financial solutions to MSMEs (SME banks, micro-lenders, venture capitalists, donors) can contribute to the transition by incorporating sustainable production requirements for eligibility to obtain loans, grants and equity funding. Tax-breaks for MSMEs who operate closed-loop models are another instrument, while penalties could be imposed on businesses that generate excess waste in the production process.

## 4. Improving Access to Technology and Infrastructure

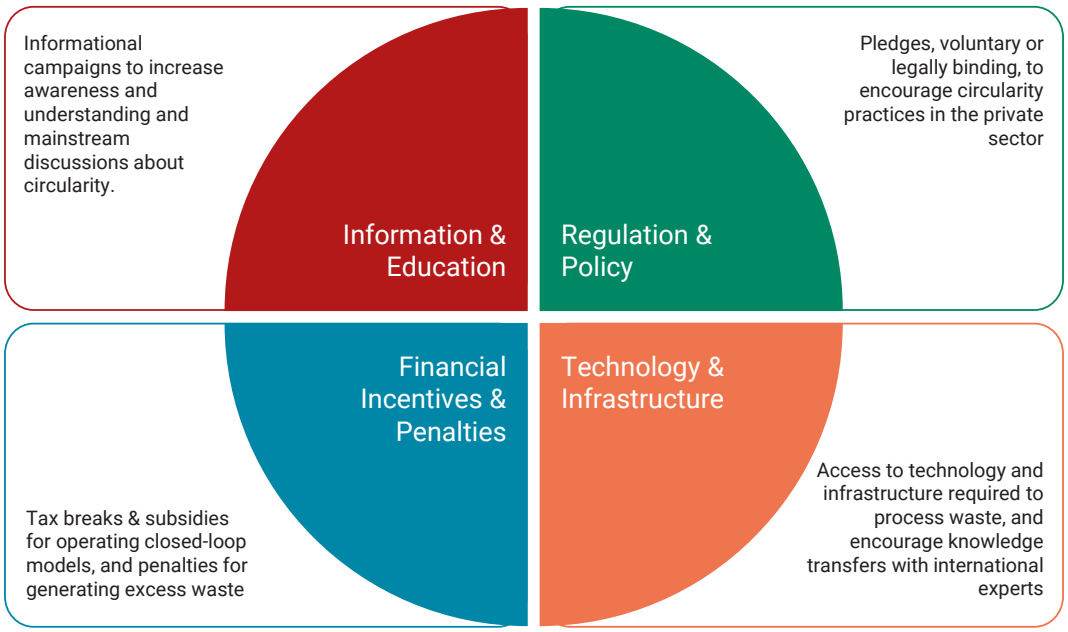
Improving access to the technology and infrastructure that help MSMEs migrate towards circularity. This is for example plastic recycle technology, digital technologies, sustainable fuel, or circular chemical solutions which are already developed in corporates such as Unilever and Nestle.[8] On top of this, emerging technologies such as digital, automation and machine learning from start-ups can be explored to 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 technology and innovation to design closed-loop or alternatives to 'take, make, dispose' products is therefore recommended.

*7 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.*

*8 https://www.waste360.com/recycling/recycling-technologies-neste-and-unilever-combine-expertise-chemically-recycle-waste*

*Figure 1: Support for SMEs to Transition to a Circular Economy*

# Supporting SMEs in the Transition to a Circular Economy




# IV. FURTHER IMPLICATIONS

- Financial incentives (such as tax-breaks) for MSMEs to adopt circularity models should be coupled with non-financial support to equip business owners to effectively adopt circular economy practices.
- Nationwide awareness campaigns involving multiple stakeholders such as government and cultural influencers can drive understanding about circularity and generate consumer demand for closed-loop products that would open new markets for eco-inclusive MSMEs.
- SEI will engage with additional stakeholders to further validate the research recommendations, as well as announce and promote the recommendations to relevant ecosystem actors.

# V. REFERENCES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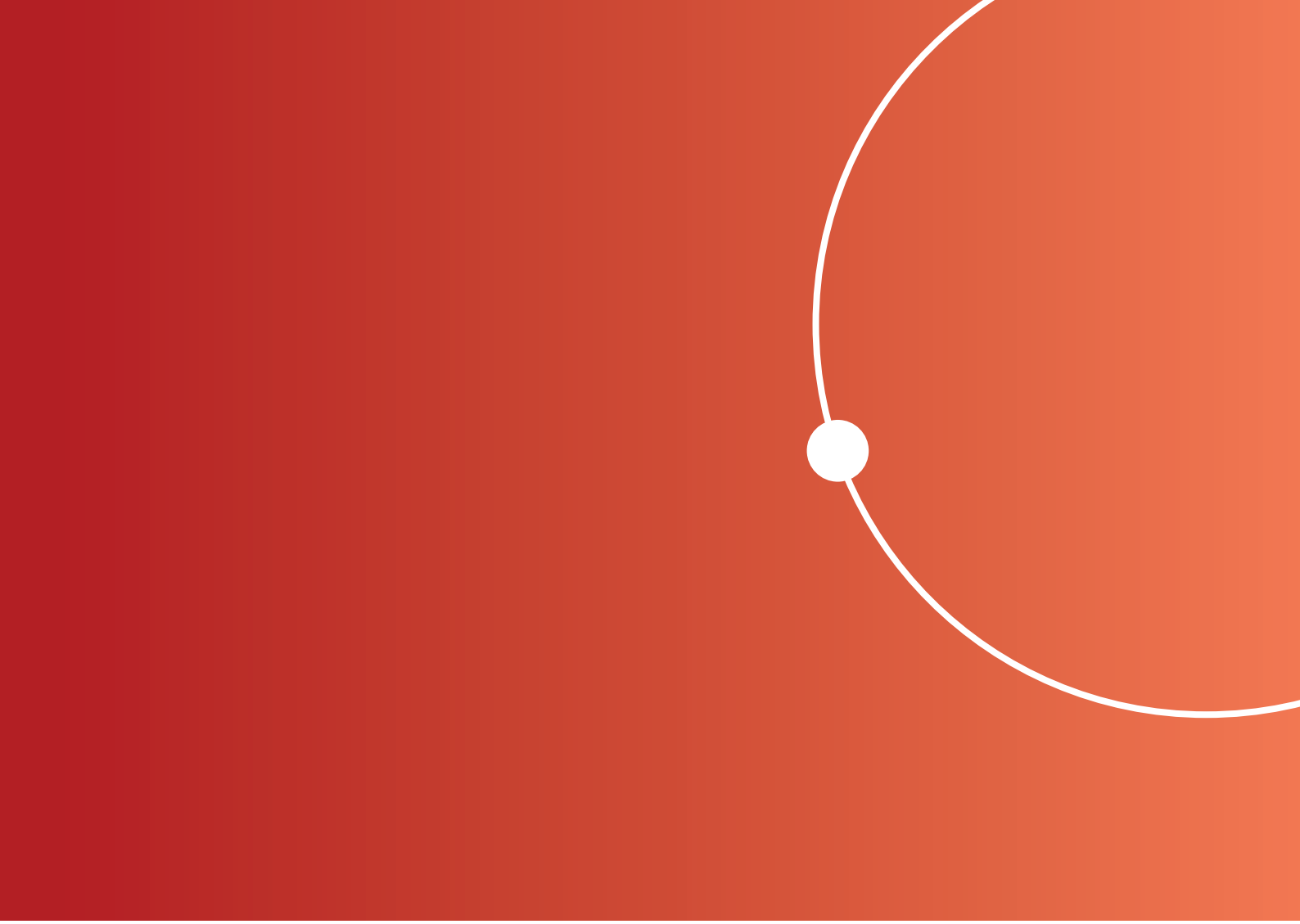
## About the SEED Practitioner Labs for Policy Prototyping

SEED Practitioner Labs for Policy Prototyping work with policymakers and intermediaries over a multi-step collaborative process to design policy instruments which 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.



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