



**Myanmar Institute of Strategic and International Studies
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Myanmar's Green Industrial Transition: Pathways for Structural Transformation and Thailand-Myanmar Cooperation in Regional Value Chain

Authors

U Tun Myint, Senior Advisor

Daw Mya Lwin Lwin Aung, Senior Researcher

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Tun Myint, Mya Lwin Lwin Aung
Myanmar Institute of Strategic and International Studies (MISIS)

Abstract

Myanmar's economy remains largely dependent on agriculture and natural resources, while industrial development is still characterized by low value-added production, limited technological capacity, and weak participation in regional and global value chains. At the same time, climate change, environment degradation, evolving international sustainability standards, and changing global supply chains have created an urgent need for a greener and more resilient development pathway. This paper examines Myanmar's green industrial transition as a strategy for structural transformation and explores the role of Thailand-Myanmar cooperation in strengthening regional value chains.

This paper reviews Myanmar's current economic structure and analyzes the transition from traditional production systems toward sustainable agriculture, renewable energy, green industries, circular economy practices, and responsible natural resource management. It also examines value-chain development in agriculture, livestock, fisheries, and agro-processing, together with climate change adaptation, carbon management, and Green Supply Chain Management (GSCM). Particular attention is given to Thailand-Myanmar bilateral cooperation through trade, investment, transport connectivity, regional cooperation frameworks, and green industrial partnership that support technology transfer, logistics development, and sustainable industrial upgrading.

The analysis finds that Myanmar has established an important policy foundation through the Myanmar Sustainable Development Plan (MSDP), Nationally Determined Contributions (NDCs), the Myanmar Investment Law, Good Agricultural Practices (GAP), renewable energy initiatives, and sustainable investment promotion. However, significant challenges remain, including inadequate infrastructure, limited access to technology and green finance, institutional coordination constraints, and increasing environmental and sustainability requirements in international markets. The paper argues that green industrial transition is not only an environmental imperative but also a strategic opportunity to increase value addition, diversify exports, attract quality investment, and enhance economic resilience. By strengthening domestic reforms and deepening cooperation with Thailand, ASEAN, and other regional partners, Myanmar can improve its competitiveness, integrate more effectively into regional value chains, and advance toward a more inclusive, low-carbon, and sustainable economy.

1. Introduction

The global economy is undergoing a major transformation as countries increasingly pursue sustainable development in response to climate change, environmental degradation, resource scarcity, and changing market demands. Around the world, governments and businesses are adopting green industrial policies to promote low-carbon production, improve resource efficiency, and strengthen economic resilience. At the same time, international trade and investment are increasingly influenced by Environmental, Social and Governance (ESG) standards, carbon reduction commitments, and sustainable supply chain requirements. These global changes are reshaping production systems, investment decisions, and participation in regional and global value chains.

Myanmar is also entering an important stage of economic transformation. The country's economy continues to depend heavily on agriculture and natural resources, which provide employment, income, and export earnings for a large share of the population. However, industrial development remains limited and is concentrated mainly in low value-added activities. Many industries continue to face challenges such as weak infrastructure, limited technology, inadequate access to finance, and low productivity. These structural constraints reduce competitiveness and limit opportunities for industrial upgrading and export diversification.

Climate change has become one of the most serious challenges affecting Myanmar's economic and social development. More frequent floods, droughts, cyclones, irregular rainfall, forest degradation, biodiversity loss, and environmental pollution are affecting agricultural production, food security, rural livelihoods, infrastructure, and national economic performance. At the same time, international markets are introducing stricter environmental requirements, including carbon reduction measures, product traceability, sustainable sourcing, and ESG compliance. These developments show that climate policy, industrial policy, trade competitiveness, and investment promotion are becoming increasingly interconnected.

In response, Myanmar has gradually incorporated sustainability into its national development agenda. The Myanmar Sustainable Development Plan (MSDP) 2018-2030, the Nationally Determined Contributions (NDCs) under the Paris Agreement, the Myanmar Investment Law, renewable energy initiatives, Good Agricultural Practices (GAP), and sustainable investment promotion all demonstrate the country's commitment to achieving balanced economic growth while protecting natural resources and reducing environmental impacts. Government institutions, including the Directorate of Investment and Company Administration (DICA), the Myanmar Investment Commission (MIC), the Ministry of Agriculture, Livestock and Irrigation (MOALI), and the Ministry of Natural Resources and Environmental Conservation (MONREC), are promoting sustainable investment, renewable energy, climate-smart agriculture, and environmentally responsible business practices.

Regional cooperation has also become an important driver of Myanmar's green transition. Through ASEAN, the Greater Mekong Subregion, the Lancang-Mekong Cooperation framework, and partnerships with neighboring countries such as Thailand, China, India, and Japan, and the Republic of Korea, Myanmar is expanding cooperation in technology transfer,

investment, renewable energy, climate adaptation, logistics development, and regional value chain integration. These partnerships provide opportunities to improve industrial competitiveness, strengthen cross-border connectivity, and support sustainable economic development.

1.1 Rationale for Selecting the Green Industrial Transition Megatrend

Among the many global megatrends influencing economic development, this paper focuses on green industrial transition because it has the greatest long-term significance for Myanmar's structural transformation and future economic competitiveness. Worldwide, industries are shifting toward cleaner production, renewable energy, circular economy practices, digital technologies, and sustainable supply chains. These changes are transforming international trade, foreign direct investment (FDI), and global production networks.

For Myanmar, this transition is particularly urgent. Agriculture remains the backbone of the national economy, but it is also one of the sectors most vulnerable to climate change. At the same time, export markets increasingly require products that meet environmental standards, food safety requirements, traceability systems, and ESG principles. Without adapting to these new market conditions, Myanmar risks losing competitiveness and opportunities to participate in higher-value regional and global markets.

Green industrial transition therefore represents not only an environmental necessity but also a strategic economic opportunity. By promoting renewable energy, sustainable agriculture, circular economy practices, green manufacturing, and climate-smart technologies, Myanmar can improve productivity, increase value addition, attract quality investment, diversify exports, and strengthen resilience against future economic and climate-related shocks.

1.2 Megatrend Assessment and Economic Implications

The global transition toward a green economy is reshaping industrial development and international trade. Countries are introducing carbon-neutral policies, renewable energy targets, green finance, and sustainable investment frameworks to support long-term economic growth. At the same time, multinational companies are increasingly selecting suppliers that comply with environmental standards, carbon reduction commitments, and responsible production practices.

For Myanmar, these global changes create both opportunities and challenges. The country possesses abundant agricultural resources, significant renewable energy potential, and a strategic location linking South Asia and Southeast Asia. (Hector and Maria, 2014) However, much of Myanmar's exports still consists of raw or minimally processed agricultural products, limiting domestic value addition and industrial development. To remain competitive, Myanmar needs to strengthen agro-processing industries, renewable energy systems, green infrastructure, sustainable logistics, and climate-resilient production systems.

The green industrial transition also has important implications for Myanmar's participation in regional and global value chains. Future competitiveness will depend on the country's ability to improve productivity, increase value-added manufacturing, adopt cleaner technologies, and meet international sustainability standards. Strengthening these areas will help Myanmar move beyond primary commodity exports and integrate more effectively into ASEAN production networks.

1.3 Green Industrial Transition and Global Value Chain Participation

Green industrial transition is becoming a key requirement for participation in global value chains. International manufacturers and investors increasingly prioritize renewable energy, low-carbon production, ESG compliance, product traceability, and sustainable sourcing throughout their supply chains. Countries that can meet these requirements are better positioned to attract investment and access higher-value markets. (UNIDO, 2018)

Myanmar has considerable potential to benefit from this transition because of its agricultural resources, fisheries, forest products, and strategic geographic location. However, limited processing capacity, weak logistics systems, inadequate infrastructure, and climate vulnerability continue to constrain industrial upgrading and regional integration.

Strengthening green industrial policies can help Myanmar expand value-added manufacturing, improve agro-processing, promote renewable energy, and develop sustainable supply chains. Regional cooperation, particularly with Thailand, offers important opportunities for technology transfer, investment, logistics connectivity, and industrial collaboration. By aligning domestic reforms with regional cooperation and global sustainability trends, Myanmar can enhance its competitiveness, strengthen participation in regional value chains, and achieve more inclusive, resilient, and sustainable economic development.

2. Myanmar's Economic Structure

Myanmar is developing economy undergoing a gradual process of structural transformation. Although the economy has become more diversified over the past decade, agriculture remains the foundation of national development and continues to play a vital role in employment, rural livelihoods, food security, and export earnings. At the same time, the services sector has expanded steadily, while industrial development is still in its early stages and remains concentrated in low value-added activities. The country possesses abundant agricultural land, rich natural resources, and a strategic geographic location connecting South Asia, Southeast Asia, and China. These advantages provide significant opportunities for industrial development and regional economic integration. However, Myanmar continues to face challenges related to low productivity, limited industrial capacity, inadequate infrastructure, and climate vulnerability. Understanding the current economic structure is therefore essential for identifying pathways toward green industrial transition and sustainable economic growth.

2.1 Overview of Myanmar's Economic Structure

Myanmar's economy comprises three main sectors: agriculture, industry, and services. Agriculture remains the largest employer and a major source of exports, while the services sector has grown steadily through trade, logistics, finance, telecommunications, tourism, and digital services. (CSO, 2024) Industrial development has expanded gradually but remains relatively limited compared with other ASEAN countries. Economic growth continues to rely heavily on agriculture, natural resources, and primary commodity exports, with limited domestic value addition, constraining productivity and competitiveness. Government initiative, including the Myanmar Automated Cargo Clearance System (MACCS), online business registration, and one-stop investment services, have improved trade facilitation, although further infrastructure, digital connectivity, and institutional reforms remain essential for sustainable economic transformation.

2.2 Agriculture, Livestock and Fisheries Sector

Agriculture remains the backbone of Myanmar's economy, providing livelihoods, food security, and export earnings through products such as rice, pulses, maize, sesame, rubber, fruits, and vegetables. Myanmar is a leading exporter of pulses, with India, Thailand, and China as major markets. However, the sector faces challenges including low productivity, limited mechanization, inadequate irrigation, weak logistics, insufficient post-harvest facilities, and climate risks. Livestock and fisheries also support rural incomes, employment, and exports but require improvements in disease control, productivity, processing, cold-chain infrastructure, quality standards, and sustainable resource management to strengthen competitiveness and increase value addition.¹

2.3 Industrial Development and Manufacturing Structure

Myanmar's manufacturing sector remains concentrated in labor-intensive, low value-added industries, including garments, food processing, beverages, wood products, and consumer goods. The garment industry primarily operates under the Cutting, Making, and Packaging (CMP) system, limiting domestic value addition. Agro-processing offers significant potential to increase exports, employment, and industrial linkages but is constrained by inadequate processing technology, quality control, logistics, and infrastructure. Myanmar's strategic location supports opportunities for regional industrial cooperation with Thailand, China, and India through production networks and economic corridors. Green industrial development can further promote renewable energy, cleaner production, resource efficiency, and sustainable manufacturing.²

^{1, 2} Source: Authors' Key Informant Interview (KIIs) with representatives from government agencies, business associations, producers, exporters and logistics service providers.

2.4 Structural Challenges and Opportunities

Myanmar's economic structure faces significant constraints, including inadequate transport infrastructure, unreliable electricity, weak logistics, limited technological capacity, restricted access to finance, and insufficient industrial diversification. These challenges reduce productivity, increase costs, and hinder participation in regional and global value chains. Climate change further threatens agriculture, infrastructure, and food security through floods, droughts, and extreme weather, while international markets increasingly require food safety, and traceability standards. Despite these challenges, Myanmar has abundant natural resources, renewable energy potential, fertile agricultural land, rich fisheries, a young workforce, and a strategic location connecting South and Southeast Asia with China. Advancing value addition, agro-processing, renewable energy, sustainable manufacturing, infrastructure, and regional cooperation will support a resilient, diversified, and sustainable green economic transition.

3. Transition from Traditional Systems to Green Industrial Transformation

Myanmar is gradually transitioning from traditional production systems towards a greener and more sustainable economy, driven by climate change, environmental degradation, evolving international market requirements, and the need to enhance competitiveness. Growing demand for low-carbon, environmentally responsible products presents both challenges and opportunities. Green industrial transformation promotes productivity, value addition, resource efficiency, quality investment, export competitiveness, and climate resilience while supporting economic diversification and employment. To facilitate this transition, the Government has introduced policies on sustainable agriculture, renewable energy, industrial development, investment promotion, natural resource management, and regional cooperation, providing a foundation for long-term green and inclusive economic growth.

3.1 Sustainable Agriculture and Circular Economy Practices

Agriculture remains the backbone of Myanmar's economy but faces challenges including low productivity, inefficient resource use, reliance on chemical inputs, and increasing climate risks. In response, Myanmar is promoting climate-smart agriculture, Good Agricultural Practices (GAP), integrated pest management, and improved post-harvest management to enhance productivity, food safety, and market competitiveness. Circular economy practices are also being adopted by converting crop residues, livestock manure, and organic waste into compost, organic fertilizers, animal feed, and bioenergy, improving resource efficiency while reducing emissions and production costs. Government agencies, universities, producer associations, and development partners support this transition through farmer training, extension services, demonstration farms, and awareness programs, encouraging more sustainable and resilient agricultural production.

3.2 Renewable Energy Development and Green Infrastructure

Reliable and affordable energy is essential for industrial development and agricultural modernization, yet many rural communities and industries continue to rely on diesel generators, increasing production costs and greenhouse gas emissions. To support its green transition, Myanmar is promoting renewable energy, particularly solar power, through solar-powered irrigation systems, solar dryers, and renewable electricity generation to improve energy security and reduce fuel dependence. The country also has considerable wind energy potential, with resource assessments identifying suitable areas for future investment. Expanding renewable energy can improve electricity access, reduce reliance on imported fuels, and support low-carbon industrial growth.

Regional cooperation, including the Lancang-Mekong-Korea Cooperation framework, has introduced improved cooking stoves and biomass fuel briquettes made from agricultural residues and sawdust to reduce fuelwood consumption, open burning, and forest degradation. In addition, investment in green infrastructure such as wastewater treatment, resource recovery facilities, modern irrigation systems, and climate-resilient transport networks will be essential to strengthen sustainable industrial development and long-term economic resilience.

3.3 Green Industrial Development and Sustainable Investment Promotion

Myanmar's industrial sector is gradually transitioning toward greener and higher value-added industries, with competitiveness increasingly driven by productivity, technology adoption, environmental performance, and compliance with international sustainability standards. The Directorate of Investment and Company Administration (DICS), under the Myanmar Investment Law (MIL), promotes responsible investment that strengthens supply chains, supports technology transfer, creates employment, and increases local value addition.

Myanmar also seeks to expand beyond the traditional CMP model by developing supporting industries, agro-processing, and downstream manufacturing. Digital platforms such as Myanmar Companies Online (MyCO)³ and One-Stop Service (OSS) Centers improve investment facilitation. In addition, Myanmar Investment Commission (MIC) promotes investment in electric vehicles, battery production, charging infrastructure, and other green industries.⁴

3.4 Regional Cooperation and ASEAN Sustainable Investment Frameworks

Regional cooperation is essential for Myanmar's green industrial transition as ASEAN production networks become increasingly integrated. Collaboration in trade, investment, technology, and sustainable development can enhance competitiveness and support sustainable growth. The ASEAN Sustainable Investment Guidelines, adopted by AEM-AIAC⁵ in 2026,

³ <https://www.myco.dica.gov.mm/>

⁴ Myanmar Investment Commission (MIC) Notification No.1/2023

⁵ the ASEAN Economic Ministers–ASEAN Investment Area Council (AEM–AIAC)

promote environmentally responsible investment in renewable energy, sustainable agriculture, green manufacturing, eco-tourism, and green technologies.

These initiatives provide opportunities for Myanmar to attract sustainable investment, strengthen industrial cooperation, and participate in regional green value chains. Cooperation with Thailand, China, Japan, Korea, India and development partners further supports technology transfer, research collaboration, renewable energy, climate-smart agriculture, and sustainable infrastructure development.

3.5 Natural Resource Conservation and Sustainable Forest Management

Natural resources are among Myanmar's key economic assets, supporting environmental services, rural livelihoods, and economic development. The Government promotes sustainable forest management through conservation, reforestation, biodiversity protection, and responsible resource use. The Myanmar Reforestation Program (2017/18-2026/27) aims to restore degraded forests and enhance ecosystem services and carbon sequestration.

Mangrove restoration has become another national priority. Rehabilitation projects in Ayeyarwady Region, Mon State, and Yangon Region help protect coastal communities from storms, conserve biodiversity, increase carbon storage, and improve fisheries habitats. Research institutions are also studying the properties of Myanmar's hardwood species to promote sustainable forest industries and encourage greater value addition. Rather than exporting raw timber, Myanmar increasingly promotes semi-processed and finished wood products to generate higher economic returns while reducing pressure on forest resources. In addition, sustainable utilization of bamboo, rattan, medicinal plants, and other non-timber forest products provides opportunities for rural enterprises, MSMEs, and community-based industries while supporting conservation objectives.

3.6 Transition toward a Green Economy

Myanmar's transition toward a green economy is long-term process integrating sustainable agriculture, renewable energy, green industries, circular economy practices, natural resource conservation, and responsible investment. Despite challenges such as infrastructure gaps, limited technology, financing constraints, institutional coordination issues, and climate risks, ongoing reforms provide a foundation for future progress.

Continued investment in green industries, renewable energy, climate-smart agriculture, sustainable infrastructure, and regional cooperation will support structural transformation and stronger participation in regional and global value chains. A green industrial transition can help Myanmar build a diversified, resource-efficient, low-carbon economy while improving competitiveness, protecting natural resources, and enhancing climate resilience.

4. Value Chain Development, Regional Integration, and Green Supply Chain Transformation

Myanmar's structural transformation depends on strengthening integrated value chains that connect production, processing, logistics, marketing, and exports while embedding sustainability throughout the supply chain. Agricultural and livestock value chains remain fragmented, which limited value addition, inadequate processing facilities, weak cold-chain and transport infrastructure, and high post-harvest losses, reducing competitiveness and compliance with international quality, food safety, and ESG standards. To address these challenges, Myanmar is promoting agro-industrial development through agro-processing, export-oriented production, MSME participation, and improved trade facilitation.

At the same time, Green Supply Chain Management (GSCM) encourages climate-smart agriculture, Good Agricultural Practices (GAP), renewable energy, sustainable packaging, digital traceability, and resource-efficient processing. Agricultural biomass also provides opportunities for bioenergy, biochar, and organic fertilizers, supporting circular economy practices while creating additional rural income. Regional cooperation with ASEAN and neighboring countries, particularly Thailand, China, and India, further facilitates investment, technology transfer, cross-border trade, and industrial collaboration. Strengthening green value chains through coordinated efforts among farmers, processors, logistics providers, financial institutions, government agencies, and international buyers will increase value addition, improve export competitiveness, reduce environmental impacts, and accelerate Myanmar's green industrial transition and regional economic integration.

4.1 Agro-Industrial Development and MSME Participation

To strengthen value addition, Myanmar is promoting agro-industrial development zones and encouraging private sector participation in agricultural processing industries. MSMEs play a central role in transformation, as they closely linked to rural production systems and local supply chains. These initiatives are designed to support the development of small-scale processing industries, improve rural employment opportunities, and reduce post-harvest losses. Strengthening MSME participation also enhances the integration of small producers into formal value chains, improving income stability and market access. In parallel, improvements in rural infrastructure, including roads, storage facilities, electricity access, and digital connectivity, are necessary to support efficient value-chain operations and reduce transaction costs across the agricultural economy.

4.2 Agricultural Value Addition and Processing Industries

Myanmar's major agricultural exports including pulses, maize, sesame, rice, fruits, and vegetables remain important sources of foreign exchange, but most are exported in raw or semi-processed form, limiting domestic value addition and industrial development. In the pulses sector, processing is largely confined to cleaning, grading, splitting, and polishing, while

higher-value products such as bean flour and processed foods remain underdeveloped for export. Similarly, maize is mainly exported as animal feed despite opportunities to produce corn starch, corn oil, glucose syrup, and high-fructose corn syrup. The fruit and vegetable sector also offers strong potential for value-added products, including dried fruits, juices, frozen foods and processed products, but requires improved food safety systems, laboratory testing, cold-chain infrastructure, packaging, and compliance with international standards.

To enhance competitiveness, Myanmar is promoting agro-industrial development zones, encouraging private investment and MSME participation, and investing in post-harvest technology, modern processing facilities, quality assurance, logistics, and rural infrastructure. These initiatives aim to reduce post-harvest losses, strengthen market access, create rural employment, and integrate small producers into higher-value agricultural supply chains.

4.3 Fisheries and Livestock Value Addition

The fisheries sector has significant potential to increase value addition and export earnings by expanding fish filleting, freezing, packaging, and export-oriented seafood processing instead of relying on raw product exports. Achieving this requires investment in modern processing technology, cold-chain logistics, laboratory testing, quality control, and trade infrastructure to meet international sanitary and phytosanitary standards. Likewise, the livestock and poultry sectors offer opportunities for value-chain upgrading through improved production systems. Modern technologies, such as evaporative cooling in poultry farms, can reduce heat stress, improve productivity, and enhance yield stability. Integrating renewable energy, particularly solar power, and improved waste management systems can further reduce production costs, lower greenhouse gas emissions, and convert livestock waste into biogas or organic fertilizer, supporting circular economy development and environmental sustainability.

4.4 Integrated Farming Systems and Circular Agriculture

Integrated farming systems are increasingly recognized as an effective approach to improving productivity, resource efficiency, environmental sustainability, and farm income diversification. By integrating crop, livestock, poultry, and aquaculture activities, farmers can optimize resource use, reduce production costs, and strengthen resilience to climate and market risks. In Myanmar, models such as rice-fish farming, fish-livestock systems, and fish-poultry integration improve nutrient recycling, increase productivity, and lower input costs. Duck-rice farming is another tradition practice in which ducks naturally control weeds and pests while benefiting from paddy field feed resources, reducing pesticide and feed requirements and enhancing soil fertility.

However, adoption has declines and concerns over pesticide residues affecting duck health. Strengthening these integrated farming models through improved extension service, reduced chemical input use, better market access, and technical support can enhance productivity, support climate-smart agriculture, and promote green value chains. These systems also

advance circular economy principles by making more efficient use of land, water, nutrients, and biological resources while improving farmers' incomes and long-term agricultural sustainability.

4.5 Salt Industry Modernization and Coastal Sustainability

The salt production industry also presents opportunities for value-chain upgrading and environmental improvement. Traditional salt production methods rely on conventional evaporation ponds and labor-intensive systems, which often limit efficiency and productivity. Modern technologies such as polyethylene (PE) flooring, solar-powered pumping systems, and advanced purification equipment can significantly improve production efficiency and product quality. These improvements also reduce the need for expanding salt production into environmentally sensitive coastal areas.

Historically, expansion of salt production areas has sometimes contributed to mangrove degradation due to increased seawater pumping and land conservation. By modernizing production systems, Myanmar can increase output while protecting coastal ecosystems and enhancing environmental sustainability.

4.6 Climate Change, Trade, and Value Chain Vulnerability

Myanmar's value chains are increasingly vulnerable to climate-related challenges, including floods, droughts, irregular rainfall, environmental degradation, biodiversity loss, and air pollution. These impacts reduce agricultural productivity, disrupt supply chains, threaten rural livelihoods, and weaken export competitiveness. Climate change has become not only an environmental concern but also a key economic factor influencing production, market access, and regional trade. International markets are placing greater emphasis on environmental and sustainability standards. For example, Thailand's burn-free and haze-free requirements (Amanda, 2026) for maize imports demonstrate how climate-related regulations increasingly affect agricultural trade, highlighting the need for Myanmar to adopt climate-smart production systems and strengthen environmental compliance.

4.7 Regional Trade Integration and Bilateral Economic Cooperation

Regional trade and economic cooperation are central to Myanmar's value chain development and green industrial transition. As an export-oriented economy, Myanmar relies on neighboring countries for markets, investment, technology transfer, logistics, and industrial collaboration. China, Thailand, and India are its principal trading partners, accounting for a significant share of trade in agricultural products, fisheries, natural gas, and manufactured goods. China supports trade, infrastructure, and industrial development through the China-Myanmar Economic Corridor (CMEC) and Belt and Road Initiative (BRI), while Thailand facilitates cross-border trade, logistics, investment, and renewable energy cooperation.

India remains the largest market for Myanmar's pulses and benefits from regional connectivity initiatives such as the India-Myanmar-Thailand Trilateral Highway and Kaladan Multi-Modal Transit Transport Project. (Kiran, 2020) Growing environmental and sustainability requirements including food safety, traceability, ESG principles, and burn-free certification are encouraging investment in sustainable agriculture, renewable energy, modern processing, cold-chain logistics, and digital trade systems.

Map of India-Myanmar-Thailand Trilateral Highway



Source: ASEAN-India Development and Cooperation Report 2021

In addition, local currency settlement mechanisms with neighboring countries enhance trade efficiency and resilience. Strengthening regional cooperation will help Myanmar expand value-added production, improve competitiveness, and integrate more effectively into regional green value chains.

4.8 Regional Financial Cooperation and Local Currency Settlement

Regional financial cooperation is strengthening Myanmar's trade integration and supporting its green economic transition. The expansion of local currency settlement mechanisms including Baht-Kyat⁶, Yuan-Kyat⁷, and Rupee-Kyat⁸ reduces dependence on the US dollar, lowers transaction costs, minimizes exchange rate risks, and improves payment efficiency for cross-border trade. These arrangements are particularly important given Thailand, China, and India's role as Myanmar's principal trading partners. Enhanced financial connectivity also facilitates trade, investment, and regional supply chain integration.

Beyond trade, regional financial cooperation can mobilize green finance for renewable energy, climate-smart agriculture, sustainable infrastructure, and green industrial development, strengthening Myanmar's transition to a low-carbon resilient, and more regionally integrated economy.

⁶ Republic of the Union of Myanmar, Central Bank of Myanmar, Notification 5/2022

⁷ Republic of the Union of Myanmar, Central Bank of Myanmar, Notification 14/12/2021

⁸ Republic of the Union of Myanmar, Central Bank of Myanmar, Notification 5/04/2023

4.9 Green Supply Chain Transformation

Myanmar is gradually adopting Green Supply Chain Management (GSCM), although implementation remains at an early stage. Limited adoption of organic farming biofertilizers, Good Agricultural Practices (GAP), climate-smart agriculture, and energy-efficient technologies continues to constrain sustainable production. Strengthening green supply chains requires improvements across production, processing, packaging, transportation, and distribution through renewable energy, eco-friendly packaging, digital traceability, and sustainable logistics.

Agricultural residues such as maize stalks and rice husks can be converted into biomass energy, biochar, and organic fertilizers, supporting circular economy practices while reducing emissions and creating additional farmer income. Achieving this transition will require stronger policy support, technology transfer, infrastructure investment, and collaboration among government, industry, research institutions, and development partners.

4.10 Key Priorities for Value Chain Development and Regional integration

Looking ahead, Myanmar should prioritize strengthening linkages between production, processing, logistics, and markets to increase domestic value addition and improve competitiveness. Expanding agro-processing industries, supporting MSMEs, modernizing cold-chain infrastructure, and improving transportation and trade facilitation will enhance participation in regional value chains.

Regional corporation with Thailand, China, India, and other ASEAN partners should continue to focus on technology transfer, investment promotion, logistics connectivity, and sustainable industrial development. Expanding local currency settlement mechanisms, promoting Green Supply Chain Management, strengthening climate-smart agriculture, encouraging renewable energy and biomass utilization, and investing in green infrastructure will further improve resilience against climate-related disruptions.

Together, these measures will enable Myanmar to strengthen its integration into regional and global value chains while supporting sustainable, inclusive, and low-carbon economic growth.

5. Climate Change, Adaptation, and Carbon Management

Climate change is one of the most significant challenges to Myanmar's sustainable development. As an agriculture dependent economy, Myanmar is highly vulnerable to floods, cyclones, droughts, irregular rainfall, rising temperatures, environmental degradation, and biodiversity loss. These climate-related risks affect agricultural productivity, food security, rural livelihoods, infrastructure, public health, and overall economic stability. Increasingly frequent extreme weather events highlight the need to strengthen climate adaptation, mitigation, and long-term resilience.

Climate change has also become an important economic issue, influencing production systems, market access, and trade competitiveness, as international markets place greater emphasis on environmental sustainability and low-carbon production.

Myanmar has established several policy frameworks to guide its climate response. The Myanmar Sustainable Development Plan (MSDP) 2018-2030⁹ provides the country's overarching development strategy, integrating environmentally sustainable economic growth under its People and Planet pillar. Complementary frameworks, including the National Climate Change Policy and Nationally Determined Contribution (NDC)¹⁰ implementation mechanisms, support climate adaption, greenhouse gas mitigation, climate finance, and institutional coordination across government agencies. These policies increasingly integrate climate considerations into national planning and investment promotion.

Climate adaption has become a priority across agriculture, livestock, fisheries, forestry, and rural development. Myanmar is promoting climate-smart agriculture through drought-tolerant crop varieties, improved irrigation, efficient water management, soil conservation, and integrated farming systems that optimize resource use while enhancing resilience. In the livestock sector, improved farm management, disease control, and integrated crop-livestock systems help reduce climate risks and improve productivity. Fisheries adaptation measures include sustainable resource management, improved monitoring, fishing regulations, and support for coastal livelihoods. Research, laboratory modernization, and technical cooperation further strengthen scientific knowledge and evidence-based adaptation planning.

Alongside adaptation, Myanmar is advancing carbon management and low-carbon development. Through its NDC under the Paris Agreement, the country identifies mitigation opportunities in energy, agriculture, forestry, transport, and urban development. Priority measures include renewable electricity generation, sustainable forest management, agroforestry, integrated transport planning, green city development, and low-carbon agricultural practices.

Solar energy is increasingly promoted in rural and agricultural areas to reduce dependence on diesel-powered equipment, while improving energy security. Forest restoration, mangrove rehabilitation, biodiversity conservation, and agroforestry contribute to carbon sequestration and ecosystem resilience. Myanmar is also promoting circular economy approaches by converting agricultural residues and livestock waste into bioenergy, organic fertilizers, and other productive uses. Biochar technologies are emerging as a promising solution for carbon reduction, soil improvement, and sustainable agriculture through regional cooperation initiatives in the Lower Mekong Sub-region.

International cooperation plays a critical role in supporting Myanmar's climate adaptation and mitigation efforts. The country collaborates with international organizations and development partners, including the Food and Agriculture Organization (FAO), ASEAN Member States, GIZ the Lancang-Mekong Cooperation Framework, China, Japan, the Republic of Korea,

⁹ Ministry of Planning and Finance, Myanmar Sustainable Development Plan (2018-2030), August 2018

¹⁰ The core self-defined climate action plans created under the Paris Agreement to reduce greenhouse gas emissions and build climate resilience.

Thailand, and India, to Strengthen technical capacity, research, technology transfer, and institutional development. These partnerships support climate-smart agriculture, renewable energy, sustainable resource management, and regional knowledge sharing.

One notable initiative is the improved Cookstove Project, implemented jointly by Myanmar's Dry Zone Greening Department and the Climate Change Center of the Republic of Korea since 2018. The project addresses Myanmar's heavy dependence on biomass fuel, as around 70% of the population lives in rural areas and relies on firewood and charcoal for household energy. Annual firewood consumption is estimated at approximately 17 million cubic tones, placing considerable pressure on natural forests and contributing to carbon emissions and land degradation.

Building on the Dry Zone Greening Department's long-standing efforts to reduce firewood use since 1997, the six-year project aims to distribute 500,000 improved cookstoves to more than 218,000 households across 1,109 villages in Sagaing, Madalay, and Magway Regions. To date, over 438,000 stoves have been distributed, reducing fuelwood consumption by about 40% and avoiding more than 485,000 tons of carbon emissions. In parallel, cooperation with GIZ supports Crop Burning Reduction initiatives, while Japan has contributed to climate-resilient water management and sustainable agricultural production systems. Together, these partnerships strengthen Myanmar's climate resilience while advancing low-carbon and sustainable development. (The Global New Light of Myanmar, 2024)

Despite ongoing progress, Myanmar continues to face major implementation challenges. Limited transport energy, irrigation, and climate-resilient infrastructure constrain adaptation efforts, while access to modern technologies remains limited in many rural areas. Financing is another significant barrier, as climate adaption and mitigation require substantial investment, yet long-term climate finance remains insufficient, particularly for small-scale producers and MSMEs.

Institutional coordination also requires strengthening to ensure effective policy implementation. Meanwhile, climate-related trade measures are becoming increasingly influential. For example, Thailand's burn-free or haze-free certification requirements for maize imports demonstrate how environmental standards increasingly shape market access and export competitiveness.

Looking ahead, Myanmar's climate strategy should focus on strengthening resilience, expanding renewable energy, improving carbon management, mobilizing climate finance, and enhancing regional cooperation. Continued investment in sustainable infrastructure, research, technology, capacity building, and climate-smart production systems will be essential for supporting green industrial transformation while protecting natural resources and improving long-term economic competitiveness. A coordinated approach combining domestic reforms with international partnerships will enable Myanmar to build a more resilient, low-carbon, and sustainable economy.

6. Thailand-Myanmar Bilateral Cooperation for Green Industrial Transition

Myanmar Thailand Border & Check Points



Source: UNHCR, 2002

Thailand and Myanmar are strengthening bilateral cooperation to support green industrial

transition through trade, investment, sustainable development, and regional integration. Recent high-level discussions reaffirmed commitments to enhance collaboration in environmental conservation, border stability, renewable energy, and investment, while reactivating bilateral mechanisms such as the Joint Commission (JC) and Joint Trade Commission (JTC). Thailand also expressed its readiness to support Myanmar's agriculture, health, education, and SME sectors.

As Myanmar's important ASEAN trading partner, Thailand plays a vital role in cross-border trade, agro-processing, logistics, and energy cooperation. Existing transport corridors, including the Mae Sot-Myawaddy border crossing the Ranong-Yangon coastal route, provide opportunities to strengthen regional green value chains. Bilateral cooperation in climate-smart agriculture, food safety, post-harvest management, renewable energy, and green logistics can enhance productivity, increase value addition, and improve export competitiveness.

Beyond trade, Thailand's experience in renewable energy, sustainable manufacturing, and environmental management offers valuable opportunities for technology transfer and green investment. Consistent with ASEAN's approach to regional industrial cooperation, stronger Thailand-Myanmar collaboration can promote industrial upgrading, low-carbon production, and resilient regional supply chains. Expanding cooperation in sustainable infrastructure, digital trade facilitation, and green technologies will help Myanmar accelerate its green industrial transition while contributing to sustainable and inclusive regional economic development.

6.1 Bilateral Trade and Investment Profile

Thailand is one of Myanmar's most important economic partners, ranking as the country's second-largest trading partner and third-largest foreign investor. According to Myanmar's Ministry of Commerce, bilateral trade reached US\$3.36 billion in FY2020-2021, increasing by

US\$33 million compared with the previous fiscal year. Myanmar's exports to Thailand amounted to US\$3.2 billion, while imports totaled US\$2.1 billion, reflecting strong economic complementarity between the two countries.

Border trade remains the backbone of bilateral commerce and is conducted through seven official border checkpoints; Myawaddy, Tachileik, Kawthoung, Myeik, Hteekhee, Mawtaung, and Meisei. The Myawaddy-Mae Sot corridor accounts for approximately 70% of total border trade, with trade through Myawaddy was led by Mae Sot, recording THB45.5 billion, followed by Kanchanaburi (THB32.4 billion) and Ranong (THB18.2 billion). However, bilateral trade in the first half of 2025 declined to THB105.1 billion, representing a 24.9% decrease compared with the same period in 2024. Thailand's exports fell by 16.3% to THB63.5 billion, while imports from Myanmar declined by 35.0% to THB41.5 billion, largely reflecting border disruptions and tighter trade controls.

Myanmar exports mainly agricultural products, livestock, fisheries, natural gas, and other primary commodities, while importing machinery, industrial raw materials, construction materials, fabrics, yarn, motorcycles, and consumer goods from Thailand. Recent bilateral discussions have emphasized improving border logistics, diversifying transport routes through the Ranong-Kawthoung maritime corridor and Mae Sai-Tachileik crossing, easing trade procedures, and strengthening investment cooperation. These measures are expected to enhance regional value chains, improve trade resilience, and support sustainable industrial and green economic development between the two countries. (Ministry of Commerce, 2025)

6.2 Regional Cooperation Frameworks and Emerging Megatrends

Regional cooperation has become a major driver of Thailand-Myanmar economic relations amid global megatrends such as climate change, digital transformation, supply chain restructuring, and the green transition. Both countries participate in regional and subregional frameworks that promote trade, investment, connectivity, technology transfer, and sustainable development. As summarized in Table 6.1, each framework contributes to different aspects of green industrial development.

ASEAN and the ASEAN Economic Community (AEC) facilitate trade liberalization, investment, customs modernization, and sustainable investment. The Greater Mekong Subregion (GMS) and East-West Economic Corridor (EWEC) strengthen transport connectivity and logistics, while ACMECS promotes border development and agricultural cooperation. BIMSTEC enhances energy and Bay of Bengal connectivity, the Lancang-Mekong Cooperation (LMC) supports renewable energy and environmental cooperation, and RCEP expands regional value chains through trade and investment integration.

Connectivity is further reinforced by the Myawaddy-Mae Sot border crossing, the Ranong-Kawthoung-Yangon maritime corridor, three international air routes linking Yangon, Nay Pyi Taw, and Mandalay with Thailand, and the future India-Myanmar-Thailand Trilateral Highway. These frameworks provide a platform for bilateral cooperation in agriculture, renewable energy, manufacturing, fisheries, and logistics. As shown in the Table 6.2, Thailand

contributes advanced technology, industrial capability, and transport systems, while Myanmar offers abundant natural resources, raw materials, a competitive labor force, and a strategic geographic location. By leveraging these complementary strengths, both countries can promote climate-smart agriculture, renewable energy, green manufacturing, value-added fisheries, and multimodal logistics, accelerating Myanmar's green industrial transition and strengthening resilient regional value chains.

Table 6.1 Major Cooperation Frameworks

Framework	Objective	Green Cooperation Area
ASEAN	Regional integration	Sustainable investment
GMS	Connectivity	Logistics
ACMECS	Border development	Agriculture
BIMSTEC	Bay of Bengal cooperation	Energy
LMC	Mekong cooperation	Renewable energy
RCEP	Trade liberalization	Regional value chains

Table 6.2 Thailand-Myanmar Green Industrial Cooperation Matrix

Sector	Thailand Strength	Myanmar Strength	Future Cooperation
Agriculture	Technology	Raw materials	Climate-smart agriculture
Fisheries	Processing	Marine resources	Value addition
Renewable Energy	Solar, biomass	Natural resources	Clean energy
Manufacturing	Industrial base	Labor force	Green manufacturing
Logistics	Transport systems	Strategic location	Multimodal corridors

7. Key Constraints to Green Industrial Transition

Despite growing policy support for sustainable development, Myanmar continues to face structural constraints that slow its green industrial transition. Addressing these challenges is essential to accelerate industrial upgrading, attract sustainable investment, and strengthen participation in regional green value chains.

7.1 Infrastructure and Logistics

Inadequate transport infrastructure, high logistics costs, limited cold-chain facilities, and unreliable electricity remain major barriers to industrial development. Many enterprises continue to rely on diesel generators because of frequent power shortages, increasing production costs and greenhouse gas emissions. Expanding renewable energy, modern logistics, and green infrastructure will be essential to improve competitiveness and attract quality investment.

7.2 Technology and Innovation

Limited access to modern technology constrains productivity and value addition across agriculture and manufacturing. Adoption of renewable energy, digital agricultural, agro-processing, laboratory testing, quality assurance, and sustainable production technologies remains low. Stronger research, technology transfer, technical training, and collaboration between industry and research institutions are needed to support innovation and industrial upgrading.

7.3 Finance and Investment

High investment costs and limited access to long-term finance discourage enterprises, particularly MSMEs, from adopting green technologies. Although the Myanmar Investment Law provides incentives for responsible investment, further development of green finance, blended financing, climate funds, and sustainable banking mechanisms is required to mobilize private investment in renewable energy, sustainable manufacturing, and climate-resilient infrastructure.

7.4 Market Competitiveness

Myanmar faces increasing pressure to comply with international food safety, traceability, carbon reporting, and ESG standards. Exchange-rate volatility also raises production costs and investment risks. Strengthening certification systems, laboratory capacity, digital traceability, and sustainable production practices will improve export competitiveness and help Myanmar meet evolving environmental requirements in regional and global markets.

7.5 Assessment of Myanmar's National Response to Green Industrial Transition

Myanmar has established important policy frameworks to support green industrial transition, including the Myanmar Sustainable Development Plan (MSDP) 2018-2030, Nationally Determined Contributions (NDCs), the Myanmar Investment Law, and sectoral programs promoting climate-smart agriculture, renewable energy, and sustainable investment. Institutions such as DICA, MIC, MOALI, and MONREC play key roles in implementing these initiatives.

In spite of this progress, challenges remain, including inadequate infrastructure, limited technology, insufficient green finance, weak institutional coordination, and increasing international sustainability requirements. Addressing these constraints through stronger policy coordination, greater investment, technology transfer, and regional cooperation will be essential to accelerate industrial upgrading and improve competitiveness. Table 7.1 summarizes Myanmar's policy strengths, current implementation gaps, and priority actions needed to support a more resilient, competitive, and sustainable green industrial transition.

Table 7.1 Assessment of Myanmar's National Response to Green Industrial Transition

Policy Area	Key Strengths	Current Limitations	Future Priorities
National Framework	MSDP integrates economic, social, and environmental goals.	Limited inter-agency coordination.	Strengthen implementation and monitoring.
Climate Policy	NDCs guide mitigation and adaptation.	Limited climate finance and technical capacity.	Expand MRV and climate finance.
Investment	Myanmar Investment Law and MIC incentives support green investment.	Limited incentives for wider green industries.	Develop ESG and green investment frameworks.
Agriculture	GAP, climate-smart agriculture, and integrated farming promoted.	Low adoption among smallholders.	Improve training and technology transfer.
Renewable Energy	Solar and rural electrification expanding.	Weak grid reliability and limited private investment.	Promote off-grid solar and micro-grids.
Circular Economy	Biomass utilization and recycling initiatives.	Limited commercial-scale facilities.	Expand circular manufacturing.
Natural Resources	Forestry, mangrove restoration, and biodiversity programs.	Illegal logging and weak enforcement.	Strengthen sustainable forest management.
Regional Cooperation	Active cooperation with ASEAN and development partners.	Limited technology transfer and investment.	Deepen green value chains and research collaboration.
Institutional Capacity	DICA, MIC, MOALI, and MONREC provide policy support.	Uneven implementation capacity.	Improve policy coordination and institutional effectiveness.

8. Policy Directions and Strategic Recommendations

8.1 National Policy Directions

Myanmar should accelerate green industrial transition by integrating sustainable industrial development, climate resilience, and regional economic integration. Priorities include developing green industrial zones, renewable energy, eco-industrial parks, agro-processing clusters, and circular economy practices. Expanding climate-smart agriculture, Good Agricultural Practices (GAP), renewable energy, green finance, digital infrastructure, and ESG based investment will improve productivity, value addition, and competitiveness while supporting implementation of the MSDP, NDCs, and Myanmar Investment Law.

8.2 Strategic Recommendations for Myanmar

The Government should strengthen green industrial policies by promoting renewable energy, sustainable manufacturing, and value-added agro-processing. Priority actions include

expanding solar and biomass energy, improving logistics, cold-chain systems, laboratories, and digital trade infrastructure while supporting MSMEs through technology transfer and green finance. Stronger institutional coordination, sustainable banking, and responsible investment incentives will accelerate industrial upgrading.

8.3 Thailand-Myanmar Cooperation Priorities

Thailand remains Myanmar's key partner for investment, technology transfer, and regional value-chain development. Bilateral cooperation should prioritize renewable energy, climate-smart agriculture, agro-processing, fisheries, green manufacturing, and sustainable logistics. Upgrading the Mae Sot-Myawaddy and Mae Sai-Tachileik corridors, expanding the Ranong-Yangon maritime corridor, promoting digital customs systems, and strengthening local currency settlement mechanisms will improve trade efficiency and regional connectivity. Joint research, technical training, and business partnerships can further support green industrial development.

8.4 ASEAN and Future Outlook

ASEAN and development partners including FAO, ADB, GIZ, IFAD, and UNDP can support Myanmar through climate finance, technology transfer, capacity building, and regional value-chain development. Looking toward 2030, Myanmar's competitiveness will depend on low-carbon production, digital transformation, renewable energy, and sustainable supply chains. Combined with stronger cooperation with Thailand and ASEAN, these reforms can strengthen industrial resilience, attract responsible investment, and promote inclusive and sustainable green economic growth.

9. Conclusion

This paper has examined Myanmar's green industrial transition within the broader context of structural transformation, climate resilience, sustainable development, and regional value chain integration. The analysis shows that Myanmar's economy remains highly dependent on agriculture, natural resources, and low value-added activities, while facing persistent challenges such as weak infrastructure, limited technological capacity, financial constraints, climate vulnerability, and weak linkages between production, processing, and markets.

Despite these constraints, Myanmar has made notable progress toward a greener development pathway. Key efforts include climate-smart agriculture, integrated farming systems, renewable energy adoption, sustainable livestock and fisheries management, forest conservation, mangrove restoration, carbon reduction initiatives, and circular economy practices. These initiatives are supported by national frameworks such as the Myanmar Sustainable Development Plan, Nationally Determined Contributions, Investment Promotion Policies, and emerging ESG related reforms.

The study emphasizes that green industrial transition is not only an environmental agenda but also a strategic economic transformation. It can enhance productivity, promote value addition, diversify exports, attract quality investment, create employment, and strengthen Myanmar's integration into regional and global value chains.

However, achieving these goals requires addressing structural barriers, including weak infrastructure, unreliable energy supply, limited access to green finance, technological gaps, and institutional coordination challenges. Stronger policy coherence, improved investment facilitation, and enhanced public-private partnerships will be essential.

Regional cooperation will continue to play a central role, particularly with Thailand, China, India, and ASEAN partners. Collaboration in trade facilitation, logistics connectivity, renewable energy, technology transfer, and local currency settlement systems can strengthen regional resilience and support sustainable growth.

Looking forward, Myanmar's development will depend on balancing economic growth with environmental sustainability and social inclusion. By advancing green industrial policies, strengthening ESG frameworks, expanding renewable energy, and improving climate resilience, Myanmar can move toward a more diversified, low-carbon, and inclusive economy. Ultimately, the green industrial transition represents both a development necessity and a strategic opportunity for long-term national prosperity.

Executive Summary

Myanmar is undergoing a gradual transition toward a greener and more sustainable model of economic development. As a developing economy, it remains heavily dependent on agriculture, natural resources, and low value-added industries while facing increasing challenges from climate change, environmental degradation, infrastructure constraints, and limited technological capacity. At the same time, global megatrends including climate change, decarbonization, ESG standards, digital transformation, and the restructuring of global value chains (GVCs) are reshaping international trade and investment. These changes create both challenges and opportunities, making green industrial transition an urgent priority for improving economic resilience, competitiveness, and sustainable growth.

This paper examines Myanmar's green industrial transition through the perspectives of structural transformation, value chain development, climate resilience, sustainable investment, and regional economic cooperation. It analyzes the country's economic structure and explores how Myanmar can gradually shift from a resource-based, low value-added economy toward a more diversified, productive, and environmentally sustainable industrial system. Particular attention is given to agriculture, livestock, fisheries, manufacturing, renewable energy, natural resource management, and regional value-chain integration.

Agriculture continues to play a dominant role in employment, food security, and export earnings. Major commodities such as rice, pulses, maize, sesame, fisheries products, and livestock remain important sources of rural income. However, many products are exported in raw or minimally processed form, limiting domestic value addition and industrial development. Manufacturing remains concentrated in labor-intensive industries, particularly garment production under the Cutting-Making-Packaging (CMP) model, while technological capability and industrial diversification remain limited.

To address these challenges, Myanmar has introduced various green development initiatives, including climate-smart agriculture, Good Agricultural Practices (GAP), integrated farming systems, circular economy practices, renewable energy development, sustainable forestry, mangrove restoration, and environmentally responsible investment. Renewable energy, particularly solar power, biomass utilization, and off-grid systems, offers opportunities to improve energy security while reducing greenhouse gas emissions. The paper also highlights the importance of expanding agro-processing, fisheries processing, livestock modernization, and MSME participation to strengthen domestic value addition and improve competitiveness.

Regional integration is identified as a key driver of green industrial transition. Myanmar's strategic location between South Asia, Southeast Asia, and China provides significant opportunities to strengthen regional production networks. Economic cooperation with Thailand, China, and India supports trade, technology transfer, investment, logistics development, and value-chain integration. The expansion of local currency settlement mechanisms, including Baht-Kyat, Yuan-Kyat, and Rupee-Kyat systems, further enhances trade efficiency, reduces foreign exchange risks, and strengthens regional financial cooperation.

The paper gives particular attention to Thailand-Myanmar economic cooperation. Thailand remains one of Myanmar's largest trading partners and investors, with collaboration extending beyond trade to logistics, renewable energy, agro-processing, industrial development, and sustainable investment. Multimodal transport connectivity through the MaeSot-Myawaddy and MaeSai-Tachileik border crossings, the Ranong-Yangon maritime shipping service, and direct air connections strengthens supply chain resilience and regional integration while supporting ASEAN connectivity objectives.

Myanmar has established an increasingly comprehensive policy framework to support green industrial transition through the Myanmar Sustainable Development Plan (MSDP) 2018-2030, Nationally Determined Contributions (NDCs), the Myanmar Investment Law, Myanmar Investment Commission (MIC) incentives for electric vehicle industries, and sustainable investment promotion policies. Institutions including DICA, MIC, MOALI, and MONREC play important roles in promoting investment, environmental governance, agricultural modernization, and climate action.

Despite these positive developments, several structural constraints continue to hinder progress. Major challenges include inadequate transport and energy infrastructure, limited access to green finance, technological gaps, weak institutional coordination, and increasing international requirements for sustainability, traceability, and ESG compliance. These constraints reduce productivity, increase production costs, and limit Myanmar's ability to participate in higher-value regional and global supply chains.

The paper concludes that green industrial transition is both an environmental necessity and a strategic pathway for economic transformation. Continued investment in renewable energy, sustainable agriculture, green manufacturing, logistics modernization, digital trade facilitation, and climate-resilient infrastructure will be essential for achieving long-term competitiveness. Stronger public-private partnerships, expanded green finance, technology transfer, and deeper cooperation with Thailand, ASEAN, and other development partners will further accelerate this transition. By strengthening value addition, promoting sustainable investment, and enhancing regional integration, Myanmar can gradually build a more diversified, resilient, low-carbon, and inclusive economy while contributing to ASEAN's broader goals of sustainable and green development.

REFERENCES

- ADB. (2016). *Myanmar Transport Sector Policy Note: Summary for decision makers*. Asia Development Bank Institute.
- Amanda, L. (2026). Thailand tightens animal feed imports with ‘burn free’ maize regulations. *AgNavigator*. <https://www.agnavigator.com/Article/2026/01/16/thailand-tightens-animal-feed-imports-with-burn-free-maize-regulations>
- Asian Development Bank. (2021). *Greater Mekong Subregion economic cooperation program strategic framework 2030*. Manila, Philippines.
- Association of Southeast Asian Nations. (2020). *Master Plan on ASEAN Connectivity 2025*, Jakarta, Indonesia. ASEAN Secretariat.
- International Air Transport Association. (2024). *World Air Transport Statistics 2024*. Montreal, Canada: International Air Transport Association. IATA.
- ASEAN-India Connectivity Report. (2011). *Research and Information System for Developing Countries*. https://aseanindiacentre.org.in/sites/default/files/Publication/Executive_summary_ASEAN_India.
- ASEAN-India Development and Cooperation Report. (2021). *ASEAN-India Center*. <https://aseanindiacentre.org.in>
- Baptiste, A. Amir, L. Tham, S.Y. (2025, September). *Regional Coordination of Green Industrial Policies: What can we learn from the ASEAN Experience?* Technology, Industrialization and Development (TIDE) Center.
- Central Statistical Organization. *Myanmar Statistical Yearbook 2024*. <https://www.csostat.gov.mm/PublicationAndRelease/StatisticalYearbook>
- Cherif, R. & Hasanow, F. (2019). *Principles of industrial policy*. International Monetary Fund.
- Eleven Media Group. (2024, July 12). *Newly launched Yangon-Ranong container ship sets sail with cargo for Myanmar*. Elevenmyanmar.com,
- Global Value Chains and Industrial Development; *Lessons from China, South-East and South Asia. Inclusive and Sustainable Industrial Development 2018* https://www.unido.org/sites/default/files/files/2018-06/EBOOK_GVC
- Hector, F. & Maria, I C. (2014). *Myanmar: The Key Link between South Asia and Southeast Asia*. ADBI Working Paper Series No.506 December 2014. Asia Development Bank Institute. <https://www.adb.org/sites/default/files/publication/156361/adbi-wp506>
- Kiran, S. (2020). *India Myanmar Thailand highway extension*.
- Lebdioui, A (2022). *The political economy of moving up global value chains: How Malaysia added value to its natural resources*. Cambridge University Press.

- Ministry of commerce. Ministry of Commerce. Republic of the Union of Myanmar.
 (2024). *Export/Import Bulletin No. 1/2024: Container shipping system for Yangon-Kawthaung-Ranong border trade*, Nay Pyi Taw, Myanmar.
 (2021). *Myanmar-Thailand bilateral trade statistics for FY 2020-2021*.
- Ministry of Foreign Affairs. Ministry of Foreign Affairs. Republic of the Union of Myanmar.
 (2025, August 29). *Myanmar Ambassador receives Director General of the Department of Foreign Trade of Thailand to discuss cross-border trade cooperation*.
 (2026, April 22). *Joint press release on the bilateral meeting between the Union Minister for Foreign Affairs of Myanmar and the Deputy Prime Minister and Minister of Foreign Affairs of Thailand*.
- Ministry of Information. Republic of the Union of Myanmar. <https://www.moi.gov.mm>
Yangon-Kawthoung-Ranong container shipping starts 28 June
Container vessels boost Myanmar-Thai border trade, Jul 16, 2024
- Myanmar Companies Online (MyCO). Directorate of Investment and Company Administration. Republic of the Union of Myanmar.
- Myanmar Digital News. <https://www.mdn.gov.mm>
 (2024). *Country's export exceeds imports, creatin trade surplus*.
 (2024, April 19). *Trade Department approves container shipping for Myanmar-Thailand border trade*.
 (2024, March 5). *Yangon Port Thrives: Export figures and shipping methods*
 (2025). *Yangon Port handles 633 container vessels in 2024 Jan 1*
- Myanmar National Trade Portal. (2024, April 11). *Export/Import Bulletin (1/2024) concerning a new border trade method – Legal Documents*. Republic of the Union of Myanmar.
- Myanmar Port Authority. (2025). *Annual Port statistics 2024*. Ministry of Transport and Communications. Republic of the Union of Myanmar.
- Stiglitz, J.E. (2016). *The new regionalism should be about shared prosperity, not just free trade*. Project Syndicate.
- The Global New Light of Myanmar. Ministry of Information. Republic of the Union of Myanmar. <https://www.moi.gov.mm>
 (2024, May 11). *Enquiry available for container shipping process via Myanmar-Thailand border*.
 (2021, July 31). *Myanmar-Thailand trade volume reaches US\$3.36 billion in FY202-21*.
 (2024, June 27). *Yangon-Kawtharung-Ranong container shipping starts 28 June*.
- The Myanmar Times. (2025, September 10). *New route to boost Myanmar-Thailand border trade*.
- Win, S. (2016). *Analysis of Trade Corportation Between Thailand and Myanmar*. Graduate School of Business Siam University.