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Exploring the Structural Relationships Between Legal Awareness, Compliance, and Supply Chain Efficiency in the Context of Thailand's 2025 Plastic Waste Ban

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Abstract
This study explores the structural relationships among legal awareness, compliance behavior, and supply chain efficiency in the context of Thailand's upcoming 2025 plastic waste import ban. Employing a quantitative approach and Partial Least Squares Structural Equation Modeling (PLS-SEM), data were collected from 200 industry professionals across key industrial zones in Thailand. The findings reveal that environmental legal awareness alone does not significantly influence compliance behavior; however, organizational readiness to comply strongly impacts legal adherence. Furthermore, compliance behavior significantly enhances the efficiency of the recycled plastic supply chain amidst evolving regulatory conditions. These insights underscore the importance of institutional preparedness, capacity building, and strategic policy formulation to facilitate industry adaptation and promote sustainable development in Thailand's plastic recycling sector. The study offers policy recommendations to strengthen legal enforcement, industry support, and collaborative efforts for a seamless transition towards sustainable plastic waste management.
Keywords : *plastic waste ban, legal awareness, compliance behavior,* supply chain efficiency, *PLS-SEM, organizational readiness, environmental regulation*

1.INTRODUCTION

Over the past decade, the global environmental crisis has intensified, with plastic waste becoming one of the most pressing challenges facing many nations. Developing countries with weak waste management systems have been disproportionately burdened by the improper disposal and increasing volume of imported plastic waste. Industrialized countries, seeking cost-effective methods for waste disposal, have often resorted to exporting contaminated plastic waste to Southeast Asian countries, including Thailand. This practice has resulted in significant environmental degradation, toxic contamination, and adverse health impacts on local populations (UNEP, 2018)

A major shift in global plastic waste flows occurred in 2018 when China implemented the "National Sword" policy, which banned the import of contaminated recyclable plastics. This policy forced exporting countries to redirect their waste shipments, and Southeast Asia quickly became a new destination for plastic waste, with Thailand witnessing a surge in the growth of its recycling industry (Brooks, Wang, & Jambeck, 2018). However, despite having regulatory mechanisms in place, Thailand's legal and institutional frameworks remain insufficient. Issues such as illegal smuggling, false declarations, and improper handling of imported plastic waste have persisted, posing environmental and public health risks (Pollution Control Department, 2021).

Thailand, as a party to the Basel Convention since 1998, is obligated to control the transboundary movement of hazardous waste, including plastic waste that may threaten the environment. With the Basel Ban Amendment coming into effect for Thailand on June 7, 2023, the government has been under increasing pressure to align its domestic regulations with international commitments (Secretariat of the Basel Convention, 2023). In response, the Thai Cabinet passed a resolution on February 21, 2023, to prohibit the import of all plastic scrap under customs code 3915 starting January 1, 2025, regardless of the level of cleanliness. This policy aims to mitigate environmental risks and promote domestic recycling. Despite these efforts, concerns remain regarding the policy's impact on the industrial sector, particularly factories located in free trade zones that rely heavily on imported plastic waste as raw materials. Without

adequate preparation, these industries may face supply shortages, rising production costs, or regulatory ambiguity, thereby weakening Thailand's global industrial competitiveness. The Department of Industrial Works (2022) reported that several factories have already experienced disruptions due to restricted access to high-quality imported plastic waste.

Therefore, there is an urgent need for Thailand to develop clear and comprehensive legal measures to balance international environmental obligations with the practical needs of its domestic industries. This includes addressing illicit imports, strengthening enforcement mechanisms, and enhancing national capacity for plastic waste management. This study aims to fill the existing knowledge gap by providing policy-relevant research that supports the formulation of effective secondary legislation and facilitates a smooth transition for the recycling industry. Ultimately, this research seeks to contribute to the sustainable development of Thailand's economy, society, and environment in alignment with global trends.

2.MATERIALS

Legal Environmental Awareness

Legal environmental awareness encompasses understanding international treaties such as the Basel Convention and its amendments, as well as comprehending national laws and policies related to waste management in Thailand (Secretariat of the Basel Convention, 2023). It reflects the level of knowledge industry stakeholders possess about legal frameworks that regulate environmental conservation and waste import/export activities. This awareness is crucial for fostering compliance and promoting sustainable practices within industrial operations (Pires et al., 2021). Recognizing the provisions, obligations, and penalties associated with these laws enables firms to proactively adapt to regulatory changes and avoid legal sanctions. Furthermore, awareness extends beyond mere knowledge; it involves an active perception of the importance of environmental stewardship and the implications of non-compliance, such as environmental degradation and health hazards (Kaza et al., 2018). This understanding can influence organizational attitudes, encourage the development of internal policies, and motivate employees to adhere to legal standards consistently. Building comprehensive environmental legal awareness through education and training is vital for industry sectors heavily reliant on plastic waste imports, especially amidst evolving international and national regulations (OECD, 2022). Overall, fostering a deep understanding of environmental laws is fundamental to ensuring industry compliance, promoting environmental sustainability, and supporting Thailand's global commitments to waste management and ecological preservation.

Readiness for Legal Compliance

Organizational readiness for legal compliance refers to the capacity and preparedness of industrial firms to meet legislative requirements and navigate regulatory landscapes effectively (Zhu & Sarkis, 2006). This includes the ability to source alternative raw materials should imports be restricted, ensuring supply chain resilience in the face of policy changes (UNEP, 2020). Technological capability plays an essential role, particularly in implementing advanced recycling techniques, treatment processes, and environmentally friendly production methods (Chardwiriyapreecha et al., 2022). Firms with robust technological infrastructure are better equipped to process waste efficiently, reduce environmental impact, and meet the standards stipulated by the law. Additionally, organizational readiness involves proactive adaptation through system upgrades, process improvements, and workforce training to incorporate sustainable practices (Lu et al., 2021). For industries reliant on imported plastic waste, such adaptation reduces disruptions, minimizes compliance costs, and enhances competitive advantage. Building organizational capacity often requires strategic planning, investments in innovation, and cultivating a compliance-oriented culture. As regulations become stricter, especially under international commitments like the Basel Ban Amendment, organizations that demonstrate high levels of readiness will better withstand regulatory shocks, maintain operational continuity, and contribute positively to environmental goals (Secretariat of the Basel Convention, 2023). This proactive approach is essential for aligning industrial practices with evolving legal standards and sustainable development objectives.

Legal Compliance Behavior

Legal compliance behavior refers to the tangible actions and operational practices that organizations undertake to adhere to established laws and regulations (Hoogendoorn et al., 2015). In the context of Thailand's plastic waste import restrictions, this involves collaborative efforts such as refraining from illegal importation, adjusting production processes to meet import ban requirements, and maintaining transparency through comprehensive environmental reporting (Pollution Control Department, 2024). Firms demonstrating high compliance behavior actively enforce internal controls, conduct regular audits, and ensure accurate documentation in accordance with legal standards. These practices are crucial for reducing legal risks, avoiding penalties, and fostering trust among regulators and stakeholders (OECD, 2022). Moreover, compliance behavior reflects the organization's commitment to environmental responsibility and corporate integrity. It involves not only meeting minimum legal requirements but also adopting proactive measures to implement environmentally sustainable practices, such as waste traceability, pollution control, and employee training (Zhang et al., 2020). Such behaviors are instrumental in enhancing overall industry standards and supporting government efforts to combat illegal waste handling. The degree of compliance and the consistency of enforcement significantly influence environmental outcomes, corporate reputation, and operational efficiency, making it a cornerstone for sustainable industrial growth.

Efficiency of Recycled Plastic Supply Chain

The efficiency of the recycled plastic supply chain is integral to achieving sustainable waste management and circular economy objectives (Ellen MacArthur Foundation, 2020). A highly efficient supply chain minimizes costs, reduces lead times, and enhances responsiveness to market demands, all while maintaining quality standards. It involves optimizing procurement processes, logistics, and inventory management to ensure a steady flow of recycled plastics from collection to manufacturing (Chertow, 2007). Such efficiency is critical in times of regulatory shifts, like Thailand's impending import ban, as it enables industries to adapt swiftly and maintain production continuity despite potential supply disruptions (World Bank, 2023). Additionally, an effective supply chain promotes transparency, traceability, and accountability, which are vital for compliance with legal regulations and international standards (Zhu & Geng, 2013). The integration of advanced technologies such as digital tracking systems, automation, and data analytics can significantly bolster supply chain responsiveness and operational performance. Furthermore, fostering collaboration among stakeholders—including waste collectors, recycling facilities, and manufacturers—can enhance resource utilization and reduce environmental impact (Lu et al., 2021). Ultimately, a resilient, agile, and well-managed recycled plastic supply chain supports economic sustainability, environmental integrity, and Thailand's broader commitment to sustainable development goals amid evolving regulatory landscapes.

4.METHODS

This study employs a quantitative research design to assess the impact of environmental legal awareness, industrial adaptability, and legal compliance behaviors on the efficiency of the recycled plastic supply chain under Thailand's upcoming ban on plastic scrap imports, which will take full effect on January 1, 2025. The research was conducted over a six-month period in 2025, and it has received approval from the Human Research Ethics Committee of the University of the Thai Chamber of Commerce.

Study Area and Population

The research focused on 14 industrial zones in Thailand that were granted temporary permission to import plastic scraps during the transition period as per the Cabinet Resolution dated February 21, 2023. These zones are considered strategically significant due to their integration into international supply chains and reliance on recycled plastics. The target population included mid- to senior-level personnel in manufacturing plants, specifically compliance managers, logistics coordinators, and operations executives in the automotive, electronics, and consumer packaging sectors—industries heavily dependent on recycled plastic feedstock.

Sampling Method

A multi-stage purposive sampling strategy was employed. In the first stage, the 14 special industrial zones were purposively selected. In the second stage, 200 participants were selected using quota sampling to

ensure proportional representation across the three targeted industrial sectors. Each selected participant had to be directly involved in environmental compliance or supply chain decision-making.

Research Instrument

The primary data collection tool was a structured questionnaire developed based on a thorough literature review and expert validation. The questionnaire comprised five main sections, Demographic and Firm Characteristics – Information on respondent role, company size, sector, and years in operation.

Environmental Legal Awareness – Items adapted and modified from Bostan et al. (2021), focusing on familiarity with international conventions (e.g., Basel Convention), national policies, and compliance obligations.

Factory Adaptability – Constructed from indicators of organizational resilience and supply chain flexibility, based on Ivanov and Dolgui (2021).

Legal Compliance Behaviors – Assessment of practical compliance actions such as accurate customs declarations, waste traceability, and proper material labeling.

Supply Chain Efficiency – Metrics including cost reduction, delivery time reliability, responsiveness, and quality control, measured based on the model proposed by Chopra and Meindl (2022).

All items used a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire was validated by a panel of three experts in environmental law and supply chain management. A pilot test was conducted with 30 respondents, yielding Cronbach's alpha values above 0.80 for all constructs. The overall internal consistency of the instrument was excellent, with a total Cronbach's alpha of 0.98, confirming the reliability of the measurement model.

Data Collection and Analysis

Data collection took place between March and May 2025 through both online and on-site distribution, depending on each firm's preference. Participation was voluntary and anonymous. After screening for completeness and eligibility, 200 valid responses were used for analysis.

Data analysis was performed using Partial Least Squares Structural Equation Modeling (PLS-SEM) via SmartPLS 4.0. The measurement model was evaluated for construct reliability, convergent validity (via Average Variance Extracted or AVE), and discriminant validity (using the Fornell-Larcker criterion). The structural model was assessed through path coefficients, R^2 values, and effect sizes (f^2) to test the strength of relationships among constructs. This quantitative approach ensures robust statistical analysis and enables the identification of significant predictors influencing the performance of Thailand's recycled plastic supply chain under evolving regulatory conditions.

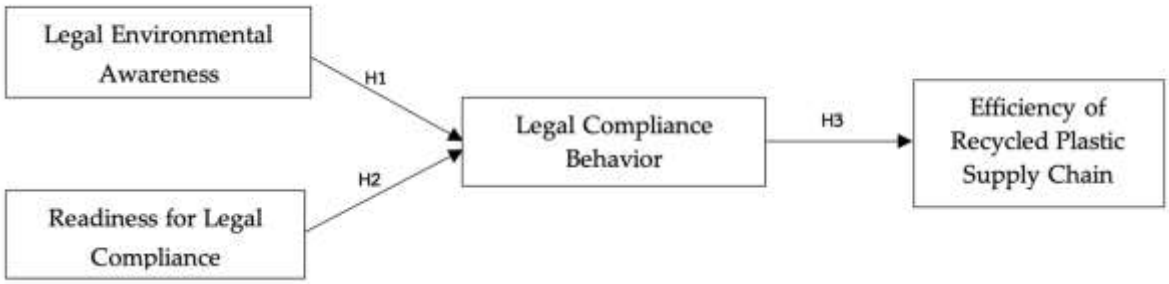

Figure 1: Research Conceptual Framework

Hypotheses and Development

Drawing on the conceptual framework and prior empirical studies, this study proposed and tested the following hypotheses, as presented in Figure 1.

H1: *Environmental legal awareness positively influences compliance with state laws and measures.*

Rationale: Previous studies suggest that heightened awareness of environmental regulations increases the likelihood of proactive compliance behaviors. Organizations that are well-informed tend to adjust operational processes to meet legal standards (Bostan et al., 2021).

H2: *Factory adaptability positively influences compliance with state laws and measures.*

Rationale: Firms that demonstrate flexibility and agility in adjusting processes, technologies, and supply chains are more capable of adhering to new legal mandates. Adaptability reduces implementation friction (Ivanov & Dolgui, 2021).

H3: *Compliance with state laws and measures positively influences the efficiency of the recycled plastic supply chain.*

Rationale: Compliance often leads to improved transparency, lower risk of penalties, and better coordination with stakeholders. This, in turn, enhances overall supply chain performance in terms of cost, speed, and quality (Chopra & Meindl, 2022).

Each hypothesis was tested using the PLS-SEM framework, allowing for both direct and indirect relationship analysis among constructs.

5. RESULTS

Based on data collected from 200 respondents, the findings elucidate key consumer behaviors and demographic characteristics pertinent to the plastic manufacturing sector in Thailand. Regarding occupational roles, most respondents occupied senior management positions, such as factory executives, departmental heads, or managerial staff. This indicates a high level of responsibility and decision-making authority within this cohort. Consequently, this group plays a pivotal role in shaping perspectives and expectations concerning the impact of legal measures aimed at regulating the importation of plastic waste from abroad, which subsequently influence the supply chain dynamics of Thailand's plastic recycling industry.

The primary demographic profile comprised predominantly males, accounting for 68.0%, with females representing 32.0%. The most represented age group was 40–49 years, constituting 67.8% of respondents, followed by the 30–39-year-old cohort at 12.4%. The majority reported a monthly income ranging between 65,001 and 85,000 Baht (54.3%), while the smallest group earned less than 25,000 Baht per month (9%). Most respondents were married, reflecting a workforce characterized by stability and experience.

This respondent profile provides vital strategic insights for planning and evaluating the impacts of legal regulations, particularly concerning the efficient management of raw materials, adaptation of manufacturing processes, and resource management within factories. Additionally, it highlights opportunities to develop recycling systems capable of accommodating regulatory changes, thereby enhancing operational efficiency and sustainability in the long term. These considerations are essential for ensuring the sustained development and resilience of Thailand's plastic recycling industry.

Table 1. Summarizes the fit statistics of the measurement model

Saturated model Value		Estimated model Value
SRMR	0.094	0.103
dULS	1.146	1.449
dG	0.582	0.596

Note: RMSEA = Root means square error approximation

Table 1 presents the model fit indices used to evaluate the measurement model for tourists' environmental perceptions, motivations, and behavioral intentions related to the Green Marathon. The model fit was assessed using SRMR, dULS, and dG values for both the saturated and estimated models. The SRMR value for the estimated model was 0.103, slightly exceeding the commonly accepted threshold of 0.08, while the saturated model showed a better fit with an SRMR of 0.094. Similarly, the dULS and dG values for the estimated model (1.449 and 0.596, respectively) were higher than those of the saturated model (1.146 and 0.582), suggesting some room for improvement in model-data correspondence.

Despite these deviations, the model was considered to have an acceptable fit, in line with the recommendations for evaluating PLS-SEM models. The measurement model assessment followed the procedures outlined by Hair et al. (2017), emphasizing reliability, convergent validity, and discriminant validity of the key constructs. All measurement items underwent a rigorous validation process, and the results presented in Table 2 confirm the robustness of the scales used in this study. Model has excellent

reliability and validity. All factor loadings exceed 0.70, with values from 0.720 to 0.866 and t-values well above 4.446, indicating strong item reliability. Composite reliability (CR) is above 0.90 for most constructs (e.g., "Product" CR = 0.980, "Distribution and Transportation" CR = 0.920), and Cronbach's alpha also exceeds 0.70, confirming internal consistency. The AVE scores, ranging from 0.667 to 0.678, demonstrate good convergent validity. VIF values between 1.000 and 1.098 are below the threshold of 5.0, indicating no multicollinearity issues. Overall, these results affirm that the measurement scales are both reliable and valid for analyzing Legal Measures for Controlling the Importation of Plastic Waste in 2025

Table 3 displays the results of the discriminant validity assessment using the Fornell–Larcker criterion. According to established guidelines, discriminant validity is established when the square root of the average variance extracted (AVE) for each construct exceeds its highest correlation with any other construct in the model (Fornell & Larcker, 1981). The results show that the square root of the AVE for each construct Legal Environmental Awareness (0.817), Readiness for Legal Compliance (0.784), Legal Compliance Behavior (0.823), Efficiency of Recycled Plastic Supply Chain (0.792) are all higher than their highest correlations with other constructs. This indicates good discriminant validity, confirming that each construct is distinct and measures a unique aspect of the studied concepts.

Table 2: Measurement model results.

Constructs	**Measurement Label**	**Loading**	**t-value**
1. Legal Environmental Awareness (LEA) VIF =1.098; CR= .894; α = .877; AVE = .667	LEA1. The respondent clearly understands the policies and environmental laws related to the importation of plastic waste from abroad.	0.770	8.118
	LEA.2 The factory places significant emphasis on strictly complying with environmental laws to prevent legal penalties.	0.851	11.567
	LEA3. The factory personnel possess comprehensive knowledge and understanding of the Paris Agreement and the relevant provisions concerning plastic pollution reduction.	0.758	11.746
2. Readiness for Legal Compliance (RLC) VIF =1.098; CR= .737; α = .704; AVE = .614	RLC1. The factory has a plan to respond to and adapt to the new laws concerning the import and export of plastic scraps in the year 2025	0.735	8.521
	RLC2. The organization has a dedicated team or specialized personnel in environmental law to support operational compliance.	0.807	25.266
	RLC. The factory has a systematic and efficient monitoring and tracking system to ensure adherence to legal regulations.	0.807	12.730
3. Legal Compliance Behavior (LCB) VIF =1.000; CR= .867; α = .881; AVE = .678	LCB1. The factory accurately and comprehensively reports and notifies government agencies regarding the importation of plastic waste.	0.833	31.015
	LCB2. The factory maintains documentation to demonstrate compliance with environmental legal requirements throughout the production process.	0.808	20.023
	LCB3. Regular training programs are conducted to ensure employees understand and consistently adhere to environmental legal regulations.	0.778	20.991
	ERP1. Effective and accessible publicity campaign	0.866	13.910

4. Efficiency of Recycled Plastic Supply Chain (ERP) CR= .867; α = .736; AVE = .627	ERP2. Regular promotional activities offering discounts and special privileges	0.720	4.446
	ERP3. Ability to change travel dates and times with minimal cost	0.782	6.592

Table 3. Discriminant validity using the Fornell–Larcker criterion

Construct	Mean	S.D.	LEA	RLC	LCB	ERP
Legal Environmental Awareness (LEA)	4.4370	.62126	**0.817**			
Readiness for Legal Compliance (RLC)	4.4440	.51281	0.299	**0.784**		
Legal Compliance Behavior (LCB)	4.4700	.50085	0.284	0.683	**0.823**	
Efficiency of Recycled Plastic Supply Chain (ERP)	4.4935	.49103	0.326	0.239	0.361	**0.792**

Notes: the values of the square root of AVE are presented through the italicized diagonal elements. the other elements present the mutual correlations among the constructs.

Table 4. Path analyses (direct effects).

Direct Effect	Path	t-Value	P-Values	Results
H1	LEA→LCB	1.150	0.250	Rejected
H2	RLC→LCB	13.000	0.000	Accepted
H3	LCB→ERP	4.372	0.000	Accepted

Note: Legal Environmental Awareness (LEA), Readiness for Legal Compliance (RLC)
Legal Compliance Behavior (LCB), Efficiency of Recycled Plastic Supply Chain (ERP)

Table 4 presents the results of the path analyses examining the direct effects among key constructs. The relationship between Legal Environmental Awareness (LEA) and Legal Compliance Behavior (LCB) (H1) was not statistically significant ($t = 1.150$, $p = 0.250$), leading to the rejection of H1. This suggests that awareness alone does not significantly influence compliance behavior in this context. In contrast, the path from Readiness for Legal Compliance (RLC) to Legal Compliance Behavior (LCB) (H2) was highly significant ($t = 13.000$, $p < 0.001$), indicating that individuals or organizations with a higher readiness to comply are more likely to exhibit legal compliance behavior.
Additionally, Legal Compliance Behavior (LCB) demonstrated a strong and statistically significant influence on the Efficiency of the Recycled Plastic Supply Chain (ERP) (H3), with a path coefficient of 4.372 ($p < 0.001$), supporting H3. This result emphasizes the pivotal role of legal compliance behavior in enhancing operational efficiency within the recycled plastics sector.

6.DISCUSSION

The findings of this study provide critical insights into the factors influencing legal compliance and supply chain efficiency within Thailand's recycled plastic industry as the nation prepares to implement a total ban on imported plastic scrap by January 1, 2025.
Firstly, the lack of a statistically significant relationship between Legal Environmental Awareness (LEA) and Legal Compliance Behavior (LCB) (H1) challenges the conventional assumption that awareness alone drives compliance. While earlier studies (e.g., Bostan et al., 2021) emphasized the importance of awareness, the present findings suggest that knowledge of legal obligations may not be sufficient to induce behavioral change in industrial settings. This could be attributed to other contextual factors such as cost pressures, limited enforcement, or ambiguous regulations, which diminish the influence of awareness on actual behavior.
In contrast, Readiness for Legal Compliance (RLC) showed a strong and significant effect on Legal Compliance Behavior (H2). This underscores the crucial role of organizational preparedness—such as having compliance plans, dedicated legal teams, and monitoring systems—in promoting lawful practices. Factories that are operationally ready and strategically aligned with upcoming legal mandates are more

likely to implement compliant behavior. These findings are consistent with Ivanov and Dolgui (2021), who argue that organizational adaptability enhances resilience and legal responsiveness under regulatory uncertainty.

Furthermore, the study confirms that Legal Compliance Behavior (LCB) has a direct and positive influence on the Efficiency of the Recycled Plastic Supply Chain (ERP) (H3). Compliance practices, such as proper reporting, documentation, and employee training, not only reduce legal risks but also contribute to better coordination, quality assurance, and cost-effectiveness—elements that are key to sustainable industrial operations (Chopra & Meindl, 2022). This relationship is particularly relevant given the impending regulatory changes that may disrupt supply flows and sourcing strategies for many firms.

The measurement model demonstrated high reliability and validity, with factor loadings above 0.70, Cronbach's alpha values exceeding 0.80, and acceptable AVE scores. The Fornell–Larcker criterion confirmed discriminant validity among constructs, indicating that the variables examined in this study are conceptually distinct and statistically sound. Although the SRMR value of the estimated model (0.103) slightly exceeded the threshold of 0.08, the overall model fit was deemed acceptable, and the results remain robust.

Collectively, these findings highlight the multifaceted nature of legal compliance in the industrial sector, where institutional readiness and implementation capacity outweigh mere legal knowledge. The research also emphasizes the strategic importance of compliance as a lever for operational excellence in a resource-constrained regulatory environment.

7. **CONCLUSION**

This study investigated the legal and organizational determinants of compliance behaviors and supply chain efficiency in the context of Thailand's upcoming ban on plastic scrap imports. Utilizing PLS-SEM, the study revealed that while environmental legal awareness does not significantly predict compliance behavior, organizational readiness to comply with legal mandates plays a crucial role in driving compliance. In turn, legal compliance behavior significantly enhances the efficiency of recycled plastic supply chains.

These insights are timely and policy relevant. As Thailand moves to enforce stricter controls under the Basel Ban Amendment, stakeholders must recognize that legislative clarity must be accompanied by institutional support, capacity building, and targeted incentives for compliance. Factories operating in free trade zones and special industrial areas will particularly benefit from guidance tools and phased implementation strategies that reduce the shock of legal transitions.

Policymakers are advised to focus not only on legal enforcement but also on building structural adaptability within the industry. Practical measures such as establishing centralized compliance platforms, offering training on legal reforms, and promoting public–private partnerships for waste management can facilitate smoother transitions.

Ultimately, the study contributes to the national discourse on balancing environmental responsibility with industrial sustainability, supporting Thailand's broader goals of circular economy development and global competitiveness in the post-2025 regulatory landscape.

8. POLICY RECOMMENDATIONS

Development of informational and tool support systems for compliance: The government should establish a centralized information hub and support platforms to facilitate industry access to legal information, best practices, and guidelines for adapting quickly and effectively to new legal regulations. **Capacity building and training in legal compliance:** Policies should promote training programs for industry personnel to ensure accurate understanding of environmental laws and best practices in plastic waste management. Additionally, mechanisms for verifying and certifying factories' compliance readiness should be developed. **Creating economic incentives and motivators:** Economic incentives, such as tax reductions, grants, or fee discounts, should be provided to factories demonstrating high levels of compliance readiness and effective plastic waste control measures. **Promoting collaboration between government and private sector:** Strengthening cooperation among government agencies, NGOs, and industry stakeholders is essential in developing innovations and technologies that mitigate the impacts of

new policies. Transparent and fair mechanisms for monitoring and supervising plastic waste importation should also be established. **Implementing continuous and integrated policy approaches:** A systematic approach involving planning, monitoring, evaluation, and policy adjustments according to environmental changes and industry needs should be adopted. This will ensure a smooth transition under new legal regulations and promote sustainable development in the long term.

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