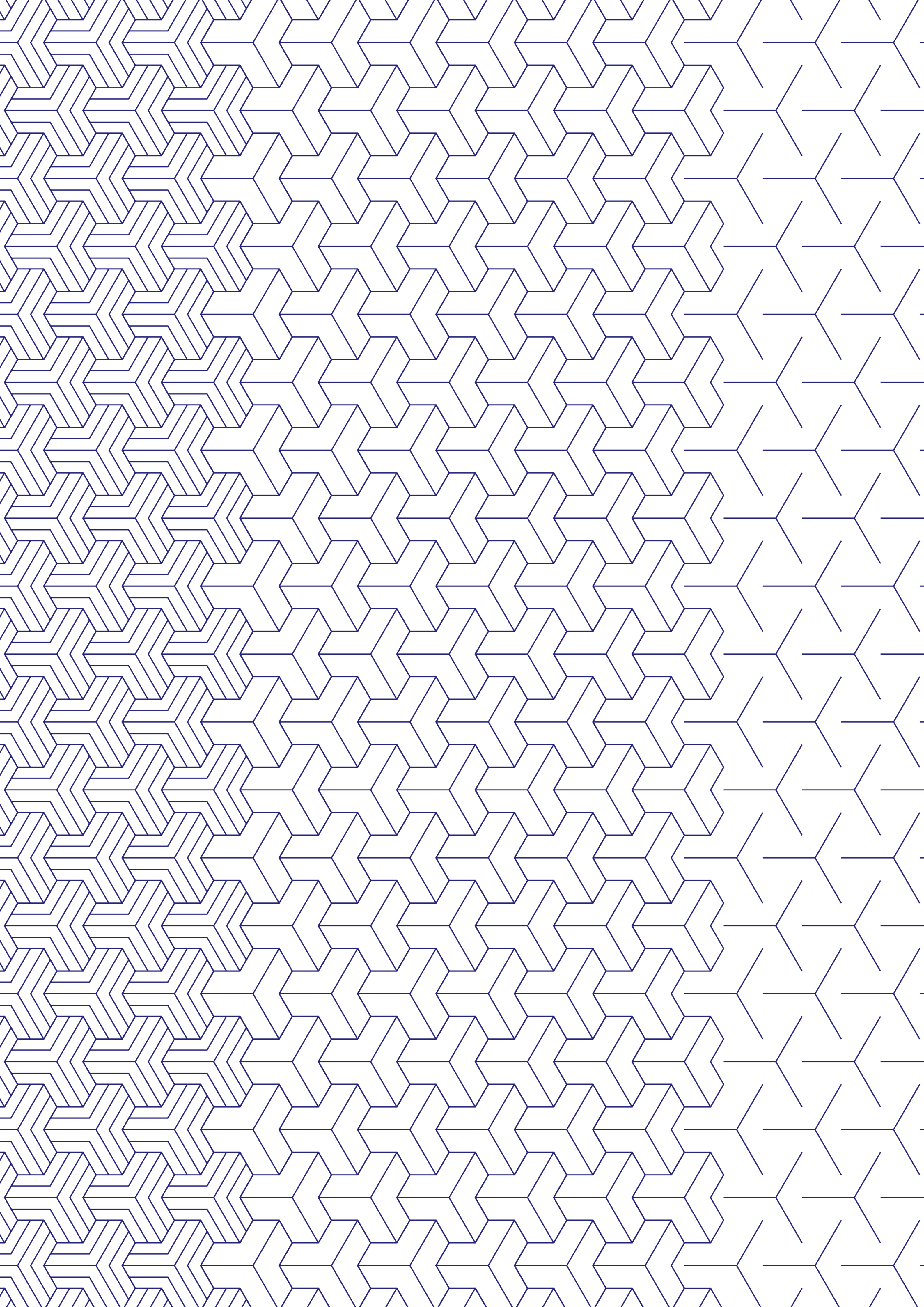
MINISTRY OF INVESTMENT,
TRADE AND INDUSTRY

NEW INDUSTRIAL
MASTER PLAN 2030

WOOD, PAPER AND FURNITURE INDUSTRY



e ISBN No. : 978-967-0020-45-7

PUBLISHED BY:

MINISTRY OF INVESTMENT,
TRADE AND INDUSTRY

Menara MITI, No. 7, Jalan Sultan Haji Ahmad Shah,
50480 Kuala Lumpur, Malaysia.

Tel : 603-8000 8000
Fax : 03-6206 4693
Email : webmiti@miti.gov.my

TABLE OF CONTENTS

PREFACE

Malaysia's strength in the manufacturing sector has been significantly driven by the implementation of robust and forward-thinking Industrial Master Plans, first launched in 1986.

The success of the IMP3 (2006-2020) was anchored on innovation, research and development (R&D) and human capital development to drive high value-added industries to transform Malaysia into a knowledge-based economy.

The journey towards formulating the NIMP 2030 is underscored by the need to build a robust industrial sector as an important prerequisite to achieve socioeconomic prosperity. Three previous iterations of the Industrial Master Plans have driven industrial development in Malaysia, with the Government adopting industrial development strategies relevant to the period to transform the economy. Malaysia flourished from a low-productivity agrarian-based economy and is heading towards achieving developed nation status, underpinned by robust manufacturing and services sectors. The strategy has successfully raised the living standards of the Rakyat and propelled remarkable growth in Gross National Income (GNI) per capita, increasing 34 times between 1967 to 2019, making Malaysia one of the fastest growing economies in modern history.

Industrial policies have since become more diverse and complex, incorporating new imperatives including the integration into the global value chain (GVC), development of indigenous capabilities in a knowledge economy, evolution of environmental, social and governance (ESG) criteria and disruptions from the new industrial revolution. The question is not about the necessity of such policies, but rather what new policies are required and how to proceed.

Given the current challenging environment, benchmarking and learning from other country's experiences are no longer sufficient. Malaysia needs to embark on its own path into unchartered territory, to steer the nation into the challenging future. The combined impact of the new imperatives and the recent pandemic has compelled the Government to rethink Malaysia's industrial strategy.

With the NIMP 2030, Malaysia intends to transform the industry into greater heights, capitalising on emerging global trends, supply chain disruptions, current geopolitical landscape, digitalisation and ESG considerations. These trends are moving at an unprecedented pace and Malaysia has to act fast.

Therefore, the NIMP 2030 is designed to achieve the aspirations in a span of seven years and takes on a Mission-based approach for industrial development. This approach unites Malaysia by encouraging collaboration between the Government and the private sector to rally the industries.

Purpose of the NIMP 2030

The NIMP 2030 sets forth Malaysia's future direction in industrial transformation. It provides a national integrated plan for resilient industrial development until 2030 – setting the fundamentals for future policy development and enabling the industry at all levels. It articulates Malaysia's position and participation in the global economic environment.
The NIMP 2030 serves to:

- Provide national strategic direction to lead the industrial development policies;
- Be a conversation piece for investors and other economies on Malaysia's position and direction; and
- Feature the role of the Malaysian Government in shaping the economy.

INTRODUCTION

New Industrial Master Plan 2030

The Missions and Enablers identified will be executed through 21 Strategies and 62 Actions Plans to unlock the needed enabling ecosystems. Several catalytic Mission-based Projects (MBPs) have been identified to catapult the mission-based implementation. The NIMP 2030 strategic framework is illustrated below:

VISION

Our vision for Malaysia is to have:

- Competitive industry with high economic complexity
- High income and skilled workforce
- Strong domestic linkages

GOALS

- **Increase economic complexity**
- **Create high-value job opportunities**
- **Extend domestic linkages**

MISSIONS

MISSION 1
Advance economic complexity

MISSION 2
Tech up for a digitally vibrant nation

STRATEGIES AND ACTION PLANS

21 Strategies
62 Action Plans

Mission 1

1.1 Expand to high value-added activities of the value chain
1.1.1 Create global IC design champions from Malaysia
1.1.2 Attract global leader to establish wafer fabrication in Malaysia
1.1.3 Shift from basic to specialty chemical
1.1.4 Build Malaysian champions for game changing advanced materials
1.1.5 Identify high value-added opportunities in the aerospace, pharmaceutical and medical devices sectors

1.2 Develop entire ecosystem to support the high value-added activities
1.2.1 Build strong local SMEs in manufacturing and related services to support the industry champions
1.2.2 Integrate value chains between:
- M&E and Medical Devices
- Semiconductor and EV
- Chemical and Pharmaceutical

1.3 Establish cooperative 'vertical integration' for global value chain
1.3.1 Leverage alliance with ASEAN countries to integrate the semiconductor, advanced materials and clean energy value chain
1.3.2 Develop vertical integration programmes through IndustryConnect conferences

1.4 Foster Research, Development, Commercialisation and Innovation (RDCI) ecosystem
1.4.1 Assign specific topics and KPIs to universities for industrial-linked R&D
1.4.2 Digitalise IP application and launch enhanced National IP Policy

1.5 Increase manufacturing exports
1.5.1 Implement national trade advocacy campaign to increase industry utilisation of FTAs
1.5.2 Rejuvenate "Made in Malaysia" branding
1.5.3 Address trade restrictive non-tariff measures (NTMs) and compliance of standards
1.5.4 Update FTA based on geopolitical conditions

5 Strategies, 15 Action Plans

Mission-based Projects:

MBP 1.1 Create global IC design champions in EV, RE and AI
MBP 1.2 Attract new advanced wafer fabrication in Malaysia
MBP 1.3 Deepen to specialty chemical vertical
MBP 1.4 Groom champions in 4 game changing advanced materials

Mission 2

2.1 Accelerate technology adoption
2.1.1 Enhance Industry4WRD programmes to increase technology adoption
2.1.2 Accelerate digital infrastructure rollout (JENDELA)

2.2 Shift away from low-skilled labour model
2.2.1 Introduce multi-tiered levy mechanism for low-skilled labour to accelerate automation
2.2.2 Introduce automation condition in new Manufacturing Licence

2.3 Spur technology innovation
2.3.1 Nurture local technology solution providers to support Technology Adoption Programme
2.3.2 Develop generative and industrial AI solution leaders and system integrators
2.3.3 Drive data analytics through a national digital platform for manufacturing

2.4 Accelerate government digitalisation and integration
2.4.1 Digitalise end-to-end government touch points across business life cycle

4 Strategies, 8 Action Plans

Mission-based Projects:

MBP 2.1 Transform 3,000 smart factories
MBP 2.2 Establish Malaysia as Generative AI Hub

- New and existing industry clusters
- Balanced and inclusive participation
- Sustainable development

Develop new & existing clusters | **Improve inclusivity** | **Enhance ESG practices**

MISSION 3
Push for Net Zero

3.1 Accelerate transition towards sustainable practices
3.1.1 Develop sectoral decarbonisation pathways to guide transition
3.1.2 Decarbonise "hard-to-abate" sectors
3.1.3 Introduce carbon policy, accounting and tax
3.1.4 Launch iESG framework and transition programmes

3.2 Transition to renewable and clean energy
3.2.1 Enhance adoption scheme for energy efficiency or renewable energy
3.2.2 Accelerate availability and accessibility of renewable energy source for the industry

3.3 Catalyse new green growth areas
3.3.1 Catalyse EV as a key growth driver
3.3.2 Grow carbon capture, utilisation and storage (CCUS) as a new sector
3.3.3 Develop circular economy framework for the industry

3.4 Shift towards green infrastructure
3.4.1 Accelerate transformation of industrial estates into eco-industrial parks

4 Strategies, 10 Action Plans

Mission-based Projects:

MBP 3.1 Create decarbonisation pathway role models
MBP 3.2 Launch locally-manufactured EV
MBP 3.3 Deploy large-scale CCUS solutions

MISSION 4
Safeguard economic security and inclusivity

4.1 Develop resilient supply chain
4.1.1 Identify specific supply chain resilience strategies for critical sectors
4.1.2 Establish supply chain cooperation and collaboration through G2G and G2B programme
4.1.3 Introduce National Mineral Policy for downstream processing of critical minerals

4.2 Foster climate resilient development
4.2.1 Develop sectoral adaptation pathways
4.2.2 Foster an adaptation industry to provide adaptation products and services (including exports)
4.2.3 Instil climate resilience measures for critical economic infrastructure

4.3 Strengthen industrial clusters for regional development
4.3.1 Expand clusters for spillover regional impact
4.3.2 Align industrial development plan between Federal and States

4.4 Empower *Bumiputera* participation and create inclusive workforce
4.4.1 Uplift capabilities of *Bumiputera* companies in manufacturing via *Tindakan Pembangunan Bumiputera 2030*
4.4.2 Develop programme to increase women participation in high-skilled manufacturing employment

4 Strategies, 10 Action Plans

ENABLERS

E.1 Mobilise financing ecosystem
E.1.1 Introduce NIMP Industrial Development Fund and NIMP Strategic Co-Investment Fund
E.1.2 Boost financing for digitalisation and decarbonisation transition
E.1.3 Establish green *sukuk* to facilitate transition
E.1.4 Establish supply chain financing for SMEs
E.1.5 Increase utilisation of the capital market
E.1.6 Expand the imSME platform to show all available funding options including government funding and capital market
E.1.7 Review government funding for consolidation

E.2 Foster talent development and attraction
E.2.1 Leverage mynext and MYFutureJobs for strategic workforce planning to address long-term demand-supply requirement
E.2.2 Introduce progressive wage system policy
E.2.3 Improve policy to enable fast and hassle-free access to high-skilled foreign talents
E.2.4 Expand TVET programmes for high-skilled jobs in critical sectors
E.2.5 Raise profile of high-tech manufacturing career to attract interest in STEM subjects

E.3 Establish best-in-class investor journey for ease of doing business
E.3.1 Establish a unified investment strategy and align investment evaluation to new parameters under NIA
E.3.2 Harmonise and streamline functions and KPIs across IPA landscape
E.3.3 Review and design competitive, agile and relevant incentives
E.3.4 Improve One-Stop Portal for seamless investor experience

E.4 Introduce whole-of-nation governance framework
E.4.1 Establish public-private collaborative councils
E.4.2 Set up NIMP 2030 Delivery Management Unit
E.4.3 Develop NIMP 2030 dashboard system

4 Strategies, 19 Action Plans

NIMP 2030 SECTORAL PLAN

There are individual enclosures of 21 sectors included as a supplementary reference to the main NIMP 2030 document.

They provide a view of the respective sectoral perspective in the context of the main NIMP 2030 document, and were developed with reference to individual sectoral roadmaps, where applicable.

The 21 sectors are:

Category	Industry
Priority Sectors	1. Aerospace 2. Chemical 3. Electrical and Electronics (E&E) 4. Pharmaceutical 5. Medical Devices
Sectors	6. Digital and Information and Communication Technology (ICT) 7. Automotive 8. Food Processing 9. Global Services and Professional Services 10. *Halal* 11. Machinery and Equipment (M&E) 12. Manufacturing-Related Services (MRS) 13. Metal 14. Mineral 15. Palm Oil-based Products 16. Petroleum Products and Petrochemicals 17. Rail 18. Rubber-based Products 19. Shipbuilding and Ship Repair (SBSR) 20. Textile, Apparel and Footwear 21. Wood, Paper and Furniture

This document is the **NIMP 2030 Sectoral Plan – Wood, Paper and Furniture Industry.**

OVERVIEW OF THE DOCUMENT

This NIMP 2030 Sectoral Plan – Wood, Paper and Furniture Industry (Document) provides insights into the sector and its prospects during the NIMP 2030 period.

This Document offers a comprehensive understanding of the industry's direction during the NIMP 2030 period based on its historical performance, opportunities and strategies to overcome existing challenges and achieve its targets.

The Document is presented in five sections:

1. Background

- This section sets the foundation to help readers understand the industry.
- It delves into the industry's focus area, encompassing its sub-sectors, for a comprehension of the industry's breadth.[1]
- Readers will find details about the industry's value chain and its key players, including the relevant industry associations, in this section.
- The section lists the policies that are related to the industry.

2. Performance

- This section reports the industry's performance during specific periods.
- There are two notable periods for the review of the industry's historical performance:
  - the IMP3 period (2006 to 2020); and
  - from 2021 to 2022.
- The performance review of the industry's development includes its investment trends, export and import dynamics, employment figures, value-added and productivity measures.

3. Trends and Opportunities

- This section highlights the opportunities and potential avenues for growth that the industry can leverage during the NIMP 2030 period.

4. Challenges

- This section provides insights into potential obstacles that could impact the industry's growth and development.

5. Strategies and Action Plans

- The final section of the document outlines the future trajectory for the industry.
- This section provides the Strategies and Action Plans that are intended to catalyse the industry during the NIMP 2030 period.
- The Strategies and Action Plans set in this Document have been aligned to the Missions set in the main NIMP 2030 document.

[1] *Incentives available for this industry as of time of writing can be found in Appendix 1*

SECTION 1 BACKGROUND

Areas Covered

1. There are four sub-sectors in the wood, paper and furniture industry (Table 21.1).

Table 21.1: Sub-sectors of Wood, Paper and Furniture Industry

Sub-sectors	Sub-sectors Breakdown
i. Primary wood products	• Sawn timber • Veneer • Panel products (including plywood and other reconstituted panel products)
ii. Secondary wood products	• Mouldings • Builders' joinery and carpentry (BJC)
iii. Furniture	• Finished wood products for consumers such as office and home furniture sets
iv. Pulp and paper products	• Pulp • Paper and paper products • Printing and publishing

Source: Malaysian Investment Development Authority (MIDA)

Value Chain

2. The industry's overall value chain can be divided into two main categories:
   i. development of wood and furniture products; and
   ii. development of paper products.

3. The development process of wood products can be categorised into upstream, midstream and downstream segments (Figure 21.1).

Figure 21.1: Value Chain for Development of Wood and Furniture Products

Source: Ministry of Investment, Trade and Industry (MITI)

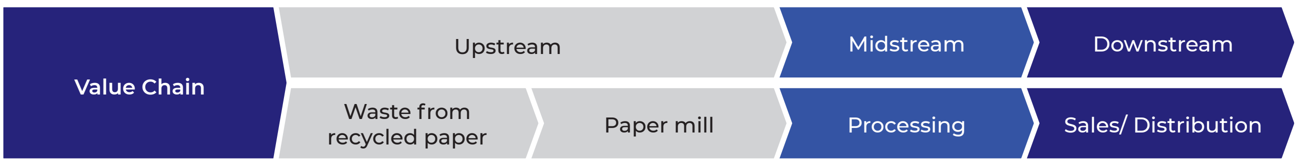
4. The upstream segment consists of activities in the log yard and sawmill.

5. Midstream segment involves processing of logs.

6. Downstream segment is the final stage in the value chain, involving sales and distribution of finished wood products.

7. In terms of paper products, the value chain can be divided into three key segments (Figure 21.2).

Figure 21.2: Value Chain for Development of Paper Products



Source: MITI

8. Upstream segment – raw materials, such as imported pulp and recycled paper waste, are transported to the paper mill.

9. Midstream segment – involves the processing of pulp and paper products.

10. Downstream segment – involves the sales and distribution of finished pulp and paper products.

Market Players

11. The stakeholders in Malaysia's wood, paper and furniture industry can be divided into three categories:
    i. industry players;
    ii. industry associations; and
    iii. Ministries and Government Agencies.

12. As of the end of 2022, there are 3,115 wood factories in the industry across:
    i. Peninsula Malaysia – 2,526 factories;
    ii. Sabah – 297 factories; and
    iii. Sarawak – 292 factories.

13. Industry associations play important role in representing different sub-sectors of the industry and promoting the manufacturing and usage of specific products, including:
    i. Malaysian Wood Industries Association (MWIA);
    ii. Malaysian Wood Moulding & Joinery Council (MWMJC);
    iii. The Malaysian Panel-Products Manufactures' Association (MPMA);
    iv. Malaysia Furniture Council (MFC);
    v. The Timber Exporters' Associations of Malaysia (TEAM);
    vi. Association of Malaysian Bumiputra Timber and Furniture (PEKA);
    vii. Timber Association of Sabah (TAS);
    viii. Sabah Timber Industries Association (STIA); and
    ix. Sarawak Timber Association (STA).

14. Several Ministries and Government Agencies have prominent role in Malaysia's wood, paper and furniture industry, including:
    i. Ministry of Natural Resources, Environment and Climate Change Ministry (NRECC);
    ii. Ministry of Investment, Trade and Industry (MITI);
    iii. Ministry of Agriculture and Food Security (MAFS);
    iv. Ministry of Plantation and Commodities (KPK);
    v. Forestry Department of Peninsular Malaysia (FDPM);
    vi. Malaysia External Trade Development Corporation (MATRADE);
    vii. Malaysian Investment Development Authority (MIDA);
    viii. Malaysian Timber Industry Board (MTIB);
    ix. Forest Research Institute of Malaysia (FRIM);
    x. Malaysian Timber Certificate Council (MTCC);
    xi. Malaysian Timber Council (MTC);
    xii. Sabah Forestry Department (SFD);
    xiii. Forest Department Sarawak (FDS); and
    xiv. Sarawak Timber Industry Development Corporation (STIDC).

Policies, Laws and Regulations

15. The industry's development is guided by the following:
    i. National Timber Industry Strategic Plan 2021-2025; and
    ii. National Agricommodity Policy 2021-2030 (DAKN2030).

16. Laws related to the wood, paper and furniture industry are:
    i. National Forestry Act 1984; and
    ii. Malaysian Timber Industry Board (Incorporation) Act 1973.

SECTION 2 PERFORMANCE

IMP3 Focus and Performance

17. During the period of the IMP3 (2006 to 2020), the industry was focused on four key areas:
    i. improvement of timber production;
    ii. expansion in specialised bio-composites and high value-added products;
    iii. innovation of product quality and waste reduction; and
    iv. promotion on sustainable development.

Investments

18. The investment performance (2006 to 2022) of the wood, paper and furniture industry is classified into three categories:
    i. wood and wood products;
    ii. furniture and fixtures; and
    iii. paper, printing and publishing.

19. The investment performance of the wood and wood products category is recorded as follows (Table 21.2).

Table 21.2: Approved Investments of Wood and Wood Products

Items	Units	IMP3			2021	2022	2021-2022
		2006	2020	2006-2020			
Total Investment	RM million	1,101.1	759.0	9,230.4	358.5	229.8	588.3
Domestic Investment	RM million	807.7	267.3	6,159.1	180.4	155.5	335.9
Foreign Investment	RM million	293.3	491.7	3,071.3	178.2	74.3	252.4
Number of projects	#	46	29	565	20	22	42
Employment	persons	6,523	2,092	41,463	950	791	1,741

Source: Malaysian Investment Development Authority (MIDA)

20. During the IMP3 period, a total of 565 projects were approved in the wood and wood products category with a total investment of RM9.2 billion. These investments committed a total of 41,463 job opportunities.

21. In 2021 and 2022, a total of 42 projects were approved with a total investment of RM588.3 million. These investments committed a total of 1,741 job opportunities.

22. The decline of investment was attributed to the COVID-19 pandemic which had caused a decline in wood products and disruptions to the supply chains.

23. From 2006 to 2022, 451 (74.3 per cent) of the 607 approved projects in the wood and wood products category were implemented.

24. Investment performance of furniture and fixture category is depicted in Table 21.3.

Table 21.3: Approved Investments of Furniture and Fixtures

Items	Units	IMP3			2021	2022	2021-2022
		2006	2020	2006-2020			
Total Investment	RM million	407.3	719.2	5,018.5	244.6	501.7	746.3
Domestic Investment	RM million	352.2	365.5	3,036.0	203.4	327.0	530.4
Foreign Investment	RM million	55.0	353.7	1,982.5	41.2	174.7	215.9
Number of projects	#	61	47	555	30	34	64
Employment	persons	6,894	2,679	51,622	1,033	1,484	2,517

Source: MIDA

25. During the IMP3 period, a total of 555 projects were approved in the furniture and fixture category with total investment of RM5.0 billion. These investments committed a total of 51,622 job opportunities.

26. In 2021 and 2022, a total of 64 projects were approved with a total investment of RM746.3 million. These investments committed a total of 2,517 job opportunities.

27. The decline of investments in 2021 was attributed to declined global demand and disrupted cross-border logistics caused by the COVID-19 pandemic.

28. During the period of 2006 to 2022, 505 (81.6 per cent) of the 619 approved projects in the furniture and fixture category were implemented.

29. The investment performance in the paper, printing and publishing category from 2006 to 2022 is tabulated as follows (Table 21.4).

Table 21.4: Approved Investments of Paper, Printing and Publishing

Items	Units	IMP3			2021	2022	2021-2022
		2006	2020	2006-2020			
Total Investment	RM million	713.2	7,837.6	34,026.2	549.4	1,092.5	1,641.9
Domestic Investment	RM million	616.1	918.9	6,568.3	392.8	486.6	879.4
Foreign Investment	RM million	97.2	6,918.7	27,457.8	156.6	605.9	762.5
Number of projects	#	30	70	423	34	42	76
Employment	persons	6,894	6,038	36,157	1,413	2,400	3,813

Source: MIDA

30. During the IMP3 period, a total of 423 projects were approved in the paper, printing and publishing with a total investment of RM34.0 billion. These investments committed a total of 36,157 job opportunities.

31. In 2021 and 2022, a total of 76 projects were approved with a total investment of RM1.6 billion. These investments committed a total of 3,813 job opportunities.

32. Overall, the industry's investment trend was attributed to the establishment of factories from China for their overseas operations.

33. 385 (77.2 per cent) of the 499 approved projects in the paper, printing and publishing category were implemented.

Exports

34. Export performance (2006 to 2022) of the wood, paper and furniture industry is depicted in Table 21.5 below.

Table 21.5: Exports of Wood, Paper and Furniture Industry

Items	IMP3			2021	2022	2006-2020	2020-2021	2021-2022
	2006	2020	2006-2020			CAGR[2]	Annual Growth	
Total Exports (RM billion)	25.2	28.5	401.0	31.2	35.1	0.9%	9.5%	12.5%
Wood and Wood Products[3] (RM billion)	23.0	22.1	342.5	22.7	25.2	-0.3%	2.7%	11.0%
Pulp and Paper Product (RM billion)	2.2	6.4	58.5	8.5	9.9	7.9%	32.8%	16.5%

Source: MATRADE

35. During the IMP3 period (2006 to 2020), the exports of the industry grew by a CAGR of 0.9 per cent, from RM25.2 billion (2006) to RM28.5 billion (2020), driven by pulp and paper product export growth at 7.9 per cent.

36. In 2021 and 2022, the exports of the industry grew by 9.5 per cent (RM31.2 billion) and 12.5 per cent (RM35.1 billion). The trend was driven by growth of pulp and paper products, attributed to:
   i. shift in consumer behaviour towards environmentally friendly options; and
   ii. China's implementation of the recovered paper (RCP) policy which led to increased demand for Malaysian paper products as paper mills in China switched to virgin pulp.

37. In 2020, major export destinations in the wood and wood products category were:
   i. United States (US) (RM7.5 billion, 33.9 per cent);
   ii. Japan (RM2.7 billion, 12.2 per cent);
   iii. China (RM2.3 billion, 10.4 per cent);
   iv. Australia (RM0.9 billion, 4.1 per cent); and
   v. Singapore (RM0.8 billion, 3.6 per cent).

38. In 2020, top exported products in the wood and wood products category were:
   i. wooden furniture (RM10.6 billion, 48.0 per cent);
   ii. plywood (RM2.8 billion, 12.7 per cent);
   iii. sawn timber (RM2.4 billion, 10.9 per cent);
   iv. BJC (RM0.1 billion, 4.5 per cent); and
   v. fibreboard (RM0.7 billion, 3.2 per cent).

[2] *Compound annual growth rate*
[3] *Inclusive of saw logs, sawn timber and moulding export data*

Imports

39. Table 21.6 presents the import performance of the wood, paper and furniture industry (2006 to 2022).

Table 21.6: Imports of Wood, Paper and Furniture Industry

Items	IMP3			2021	2022	2006-2020	2020-2021	2021-2022
	2006	2020	2006-2020			CAGR	Annual Growth	
Total Imports (RM billion)	8.4	16.5	165.5	20.4	21.1	4.9%	23.6%	3.4%
Wood and Wood Products[4] (RM billion)	2.7	6.8	55.0	8.3	8.8	6.8%	22.1%	6.0%
Pulp and Paper Product (RM billion)	5.7	9.7	110.5	12.1	12.3	3.8%	24.7%	10.0%

Source: MATRADE, FDPM, SFD, STIDC

40. During the IMP3 period, the industry's total imports grew by a CAGR of 4.9 per cent from RM8.4 billion (2006) to RM16.5 billion (2020).

41. In 2021 and 2022, the industry's total imports increased further by 23.6 per cent and 3.4 per cent, totalling to RM20.4 billion and RM21.1 billion respectively.

42. The increasing import trend was attributed to the shortage of raw materials in the local timber segment.

43. In 2020, major import sources in the wood and wood products category were:
    i. China (RM2.76 billion, 40.6 per cent);
    ii. Indonesia (RM1.6 billion, 23.5 per cent);
    iii. Thailand (RM0.5 billion, 7.4 per cent);
    iv. Viet Nam (RM0.4 billion, 5.9 per cent); and
    v. US (RM0.3 billion, 4.4 per cent).

44. In 2020, major imported products in the wood and wood products category were:
    i. wooden furniture (RM1.9 billion, 27.9 per cent);
    ii. plywood (RM1.1 billion, 16.2 per cent);
    iii. sawn timber (RM0.6 billion, 8.8 per cent);
    iv. veneer (RM0.4 billion, 5.9 per cent); and
    v. fibreboard (RM0.2 billion, 2.9 per cent).

[4] *Inclusive of saw logs, sawn timber and moulding import data*

Value-added

45. The industry's value-added (Gross Domestic Product (GDP)) during 2006 to 2022 is recorded in Table 21.7.

Table 21.7: Value-added of Wood, Paper and Furniture Industry

Item	IMP3		2021	2022	2006-2020	2020-2021	2021-2022
	2006	2020			CAGR	Annual Growth	
Value-added[5] (RM billion)	11.4	20.1	21.4	23.1	4.2%	6.8%	7.6%

Source: Department of Statistics Malaysia (DOSM)

46. During the IMP3 period, the industry's GDP contribution has grown by a CAGR of 4.2 per cent from RM11.4 billion (2006) to RM20.1 billion (2020).

47. In 2021 and 2022, the industry's value-added by grew by 6.8 per cent and 7.6 per cent to RM21.4 billion and RM23.1 billion respectively.

48. Increased paper production was a key contributor to the industry's GDP growth.

Employment

49. The wood, paper and furniture industry's employment (2019 to 2022) is tabulated in Table 21.8.

Table 21.8: Employment in Wood, Paper and Furniture Industry

Item	IMP3		2021	2022	2019-2022
	2019	2020			CAGR
Employment[6] (persons)	298,131	219,297	183,545	186,068	-9.7%

Source: DOSM

50. During the IMP3 period, industry employment declined by a CAGR of 9.7 per cent, from 298,131 (2019) to 186,068 persons (2022).

51. The overall decline in employment in the industry was due to the COVID-19 pandemic which caused disruption in supply chains and closure of factories and businesses.

Labour Productivity

52. The industry's labour productivity (2019 to 2022) is tabulated as follows (Table 21.9).

Table 21.9: Labour Productivity of Wood, Paper and Furniture Industry

Item	IMP3		2021	2022	2019-2022
	2019	2020			CAGR
Labour Productivity[7] (RM)	68,703	69,427	71,974	75,046	3.0%

Source: DOSM

[5] *Value-added is measured by the GDP of the industry; 2006 GDP data is based on constant 2005 prices, while 2020 to 2022 data are based on constant 2015 prices*
[6] *This employment data is based on Monthly Manufacturing Statistics December 2022. Due to the change in methodology for employment statistics tabulation in 2019, industry's employment breakdown from 2006 to 2018 is not available*
[7] *Annual labour productivity is derived from value added per employment*

53. The industry's labour productivity grew by a CAGR of 1.8 per cent from RM72,736 (2019) to RM76,820 (2022).

54. Overall, the growth was contributed by the increasing demand of timber, wood-based and paper products in emerging markets.

Production

55. Table 21.10 presents the production of timber products (2018 to 2022).

Table 21.10: Production of Timber Products

Items (million cubic metre)	IMP3		2021	2022	2018-2022
	2018	2020			CAGR
Logs	12.1	7.0	7.0	7.1	-12.5%
Sawn Timber	3.4	2.3	1.9	2.3	-9.3%
Plywood	2.5	1.7	1.7	1.5	-12.0%
Veneer	0.6	0.3	0.3	0.3	-15.9%
Mouldings	0.1	0.2	0.2	0.2	18.9%

Source: Malaysian Timber Industry Board (MTIB)

56. The production of timber products in Malaysia has declined from 18.7 million cubic metres (2018) to 11.4 million cubic metres (2022).
    i. production of logs declined by a CAGR of 12.5 per cent from 12.1 million cubic metres to 7.1 million cubic metres;
    ii. production of sawn timber declined by a CAGR of 9.3 per cent from 3.4 million cubic metres to 2.3 million cubic metres;
    iii. production of plywood declined by a CAGR of 12.0 per cent from 2.5 million cubic metres to 1.5 million cubic metres;
    iv. production of veneers declined by a CAGR of 15.9 per cent from 0.6 million cubic metres to 0.3 million cubic metres; and
    v. production of mouldings grew by a CAGR of 18.9 per cent, from 0.1 million cubic metres to 0.2 million cubic metres.

57. The decline in production was due to restricted forestry activities resulting from Malaysia's Movement Control Order (MCO) during the COVID-19 pandemic.

Institutional Support

58. Malaysia has demonstrated resolute commitment to foster growth of the wood, paper and furniture industry through the introduction of various supportive initiatives:

    i. Malaysian Timber Certification Scheme (MTCS) by MTCC – promote the implementation of Sustainable Forest Management (SFM) and the Chain of Custody (CoC) practices. MTCS provides independent assessment and certification for sustainable forest management practices and ascertains that timber products manufactured or exported are sourced from sustainably managed forests.

    ii. Programme for the Endorsement of Forest Certification (PEFC) and Forest Stewardship Council (FSC) – ensure endorsement and compliance with international standards to enhance credibility and acceptance.

    iii. Forest Plantation Development Programme (FPDP) by KPK and MTIB – ensure continuous availability of raw materials for Malaysia's timber industry, reducing the pressure on the production of timber products from natural forests. At the point of writing, 144,235.6 hectares of land have been approved for the development of forest plantations under this program.

    iv. Industrial Tree Plantation (ITP) programme – led by forestry departments (e.g. FDPM, SFD and FDS) and industry players to reduce dependency on the natural forests and supply the timber demand from sustainable ITP.

    v. Community Farming led by MTIB – additional source of raw materials for the timber industry. Examples of species include rubberwood, bamboo, batai wood and eucalyptus.

    vi. Third-party monitoring and audit systems – ensuring transparency, governance and legality in the timber industry through:

        a. Malaysia Timber Legality Assurance System (MyTLAS);

        b. Sabah Timber Legality Assurance System (Sabah TLAS); and

        c. Sarawak Timber Legality Verification System (STLVS).

SECTION 3 TRENDS AND OPPORTUNITIES

59. The global wood, paper and furniture industry market size is expected to reach RM2.8 trillion[8] by 2027.[9] Factors contributing to this growth include:
    i. rising demand for sustainable wood products;
    ii. growth in the renewable energy sector;
    iii. technological advancements in making wood products affordable; and
    iv. growth of e-commerce driving the demand for packaging of parcels.

60. This prospective growth is expected to create opportunities for Malaysia to expand and strengthen the local industry, enabling it to remain competitive globally.

61. These opportunities include advanced packaging technology, biomass energy, global furniture supply and value chain network and digital transformation.

62. There is growing demand for sustainable packaging solutions and eco-friendly alternatives due to the global focus on plastic waste reduction.

63. Malaysia's rich forest resources and expertise in wood processing provide a solid foundation to meet this demand.
    i. Malaysia's wood-based products offer recyclable and biodegradable packaging materials to support the push for sustainability.
    ii. Regulations restricting single-use plastics and increased R&D supporting the development of innovative packaging technologies signify a promising future for the global demand.

64. Leveraging on the country's advantage in wood-based products, Malaysia is well-positioned to cater to the increasing need for sustainable packaging solutions.

65. Focusing on research, development, commercialisation and innovation (RDCI) of eco-friendly sustainable packaging is crucial for the industry to enhance its competitive edge in the global market.

66. Refer to Action Plan 1 (AP1), Action Plan 4 (AP4) and Action Plan 5 (AP5) in Section 5 for strategies and action plans related to high value-added activities and RDCI.

Biomass Energy

67. There is a growing demand for renewable energy, driven by concerns about the climate and a shift away from limited fossil fuels. Wood-based biomass emerges as a solution that is aligned with Malaysia's National Renewable Energy Policy (NREP) to achieve 20.0 per cent renewable energy by 2025. By turning wood waste into energy, Malaysia can reduce its carbon footprint, ensuring cleaner energy for the growing population.

68. The wood industry generates a substantial amount of wood waste as a by-product of the timber-related activities. From sawmills to furniture manufacturing, this industry produces a significant volume of wood waste (e.g. wood chips, sawdust and bark) providing the necessary raw material for a thriving biomass energy sector.

69. The wood industry is an important enabler towards achieving this vision, with the growing demand for renewable energy. The abundance of wood waste in Malaysia positions wood-based biomass as a key prospect for the country.

70. By capitalising on this opportunity, Malaysia's wood industry can contribute to the nation's renewable energy targets and pave the way for a greener and more prosperous future.

[8] *USD844.3 trillion, converted based on exchange rate USD1.0 to RM4.48*
[9] *Source: Business Wire*

71. Malaysia can develop and encourage adoption of cutting-edge processes and technologies that optimises energy extraction to support sustainable energy production from wood waste.

72. Refer to Action Plan 1 (AP1), Action Plan 4 (AP4) and Action Plan 5 (AP5) in Section 5 for strategies and action plans related to high value-added activities and RDCI.

Global Furniture Supply and Value Chain Network

73. The global furniture market is estimated to be worth RM3.5 trillion[10] by 2030.[11] Malaysia's robust supply and value chain network is well-positioned to capitalise on this growth as local products are exported to over 170 countries.

74. Continuous efforts in promoting local companies in the international market is crucial, such as:
    i. fostering industry players in moving up the value chain by promoting the establishment of design centres and business development programmes to aid in the development of local brands as an original design manufacturing (ODM) or original brand manufacturing (OBM); and
    ii. increasing participation of Bumiputera companies and micro, small and medium enterprises (MSME) in the industry by providing assistance for upskilling and reskilling to improve capabilities.

75. This approach encourages local development and supports the expansion of the furniture sector.

76. Refer to Action Plan 2 (AP2), Action Plan 3 (AP3) and Action Plan 8 (AP8) in Section 5 for strategies and action plans related to local brand development.

Digital Transformation

77. The wood, paper and furniture industry is at a significant turning point as the traditional manufacturing model is no longer sustainable. Embracing the digital transformation is important to retain its position in the global industry.

78. Industry 4.0 presents numerous opportunities for the industry such as:
    i. automation;
    ii. Internet of Things (IoT); and
    iii. Big Data Analytics (BDA).

79. By adopting these technologies, the industry can enhance productivity, efficiency and global competitiveness.

80. The Government has taken preliminary measures in preparation for Industry 4.0 such as:
    i. Timber Legality Assurance System (i.e. MyTLAS, Sabah TLAS and STLVS) – verifies the legality of timber products, while exploring traceability and blockchain technology for traceable wood sourcing; and
    ii. Initiatives by FDPM – digitalisation of the removal pass issuance and geolocation capabilities to enhance source traceability.

81. With commitment for digital transformation, the industry can emerge as a global leader in producing high-quality, sustainable wood products.

82. Refer to Action Plan 6 (AP6) in Section 5 for strategies and action plans related to digitalisation.

[10] *USD780.4 billion, converted based on exchange rate USD1.0 to RM4.48*
[11] *Source: Fortune Business Insights*

SECTION 4 CHALLENGES

Labour Supply and Dependency on Unskilled Labour

83. There is a shortage of local skilled labour due to 3D (dirty, difficult and dangerous) perception. This impacts the growth and competitiveness of the industry as the industry is labour intensive and relies heavily on semi-skilled and unskilled labour.

84. To address this challenge, there are several initiatives to improve the perception of employment in the industry:
    i. adoption of automation and mechanisation in the industry to enhance work environment safety; and
    ii. upskilling opportunities to promote the industry as a viable career option to the younger generation.

85. By ensuring adequate supply of skilled manpower, the industry can achieve sustainable growth and competitiveness.

86. Refer to Action Plan 6 (AP6) and Action Plan 9 (AP9) in Section 5 for strategies and action plans related to talent development and technology adoption.

Raw Material Sources

87. Malaysia faces a critical issue regarding the sustainable supply of raw materials, particularly rubberwood timber, in order to meet the escalating demands of the industry.

88. Over the past decade, Malaysia experienced a decline of 46.0 per cent in the production of sawlogs and sawn timber which has resulted to dependency on imported raw materials. China, Indonesia, Viet Nam and Thailand have emerged as major source countries to fulfil this demand.

89. Without a sustainable and consistent supply of raw materials, industry players may be discouraged from investing in new machinery and automation even with Government incentives in place. This constraint could further impede endeavours to develop high value innovative timber products.

90. Forest plantation development such as ITPs and Community Farming initiated by the Government need to be supported in order to ensure ITP products are fully utilised for the continuous supply of raw materials.

91. To address this issue, ensuring sustainable supply of raw materials while exploring alternative innovative solutions is crucial for the development of the industry.

92. Refer to Action Plan 5 (AP5) and Action Plan 7 (AP7) in Section 5 for strategies and action plans related to sustainability and RDCI.

Countervailing and Anti-Dumping Legislation

93. The establishment of countervailing and anti-dumping legislation poses a challenge to the industry. This legislation aims to address unfair trading practices by foreign manufacturers and exporters by providing a framework for investigating allegations of dumped or subsidised imports.

94. Companies operating in the industry need to be transparent about their export trends and profit levels, as well as those of their competitors, to effectively navigate potential allegations of anti-dumping and countervailing duties.

95. Specifically in the timber industry, the imposition of anti-dumping duties by countries such as India and South Korea on the imports of fibreboard and plywood has impacted market access, thus increased production costs for Malaysian producers.

96. Proactive steps in prioritising key areas and adapting to changing dynamics should be taken to overcome this challenge. This involves diversifying into new markets to stay at the forefront of developments, ensuring Malaysia remains a prominent player in the global market

97. Refer to Action Plan 1 (AP1) in Section 5 for strategies and action plans related to high value-added activities.

Sustainable Environment Control

98. The Malaysian wood, paper and furniture industry is facing several sustainability challenges, such as deforestation, illegal logging and climate change. This poses as a major challenge as it affects the long-term availability of raw materials to meet the demand of the industry.

99. Measures need to be implemented to cater this issue as to sustain development of the industry, especially the downstream segment. There is a need for sustainable environment control, particularly on:
    i. sourcing virgin pulp and wood from Malaysia's forests; and
    ii. management of waste by downstream industries in terms of disposing liquid discharges, air pollution and natural river water.

100. Overall, sustainable environmental control can help the industry to be more environmentally friendly and responsible. This can benefit the industry in a number of ways, including protecting forests, reducing pollution and minimising waste. The future of the industry will depend on its ability to address these challenges.

101. Refer to AP7 in Section 5 for strategies and action plans related to sustainability.

SECTION 5 STRATEGIES AND ACTION PLANS

NIMP 2030 Focus

102. During the period of the NIMP 2030, the industry will continue to:
   - i. promote high-value activities with local resources;
   - ii. support local players and MSME through business development programs;
   - iii. enhance human capital for industry resilience; and
   - iv. strengthen the RDCI ecosystem with a skilled talent supply

Action Plans

103. Strategies and Action Plans relating to the NIMP 2030's Missions and Enablers are applicable to this industry (Figure 21.3).

104. Further action plans specific to this industry shall be guided by the National Timber Industry Strategic Plan 2021-2025.

Figure 21.3: Strategies and Action Plans for Wood, Paper and Furniture Industry

The following action plans are guided by the National Timber Industry Strategic Plan 2021-2025:

AP1

Encourage industries to **hollow up complexity activities and focus more on high value-added activities** utilising local resources for greater competitive edge

AP2

Facilitate **Business Development Programme** with personalised diagnostic and development support to strategically promote the growth of local players especially MSME for **local brand recognition**

AP3

Strengthening the transformation from OEM to ODM/OBM

AP4

Strengthen RDCI ecosystem via **streamlined hub with continuous supply of skilled talents**

AP5

Enhance collaboration in RDCI among industry players, research institutions, and higher education institutions

AP6

Increase adoption to **mechanisation and automation** in technology and innovation towards Industry 4.0

AP7

Enhancing the sustainable supply of raw materials in line with the needs of the wood-based industry

AP8

Increasing the participation of Bumiputera companies in the wood industry

AP9

Strengthen human capital for industry resiliency including **promoting the industry as a potential career path** and **local talent prioritisation**

Alignment to NIMP 2030 Missions

MISSION 1:
Advance economic complexity

1.1 Expand to high value-added activities of the value chain

1.2 Develop entire ecosystem to support the high value-added activities

1.4 Foster Research, Development, Commercialisation and Innovation (RDCI) ecosystem

MISSION 2:
Tech up for a digitally vibrant nation

2.1 Accelerate technology adoption

MISSION 3:
Push for Net Zero

3.1 Accelerate transition towards sustainable practices

MISSION 4:
Safeguard economic security and inclusivity

4.4 Empower *Bumiputera* participation and create inclusive workforce

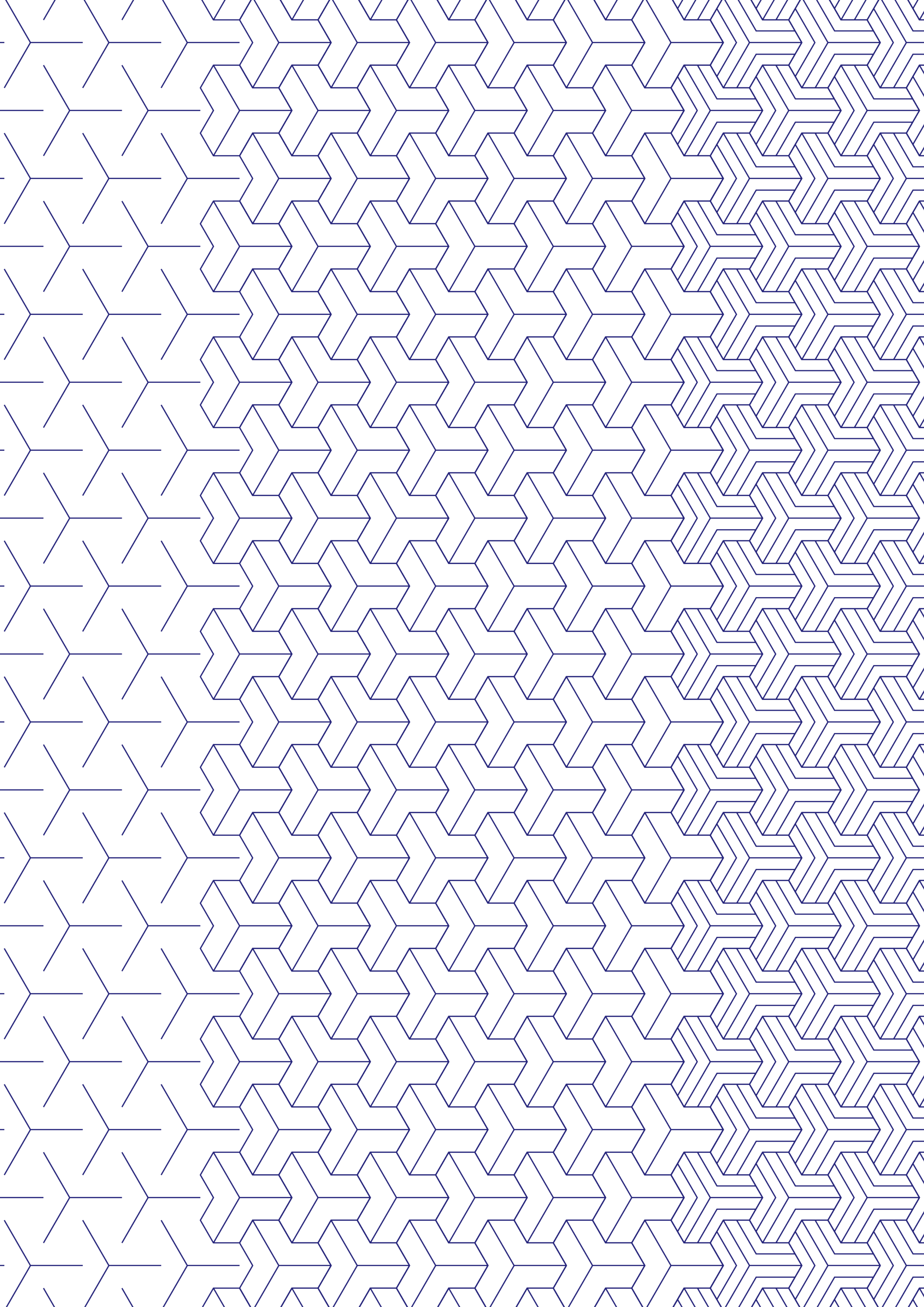
ENABLERS

E2 Foster talent development and attraction

APPENDIX 1 INCENTIVES

There is an array of incentives offered for key players of wood, paper and furniture industry, these include the following:

Incentives	Agency
Pioneer Status (PS)	Malaysian Investment Development Authority (MIDA)
Investment Tax Allowance (ITA)	
Incentive for Automation Capital Allowance (Automation CA)	
Import Duty and/or Sales Tax Exemption on Machinery/ Equipment/ Raw Materials/ Components	
MTC Financial Incentive for Product Testing and Quality Certification 2023 (FIPT 2023)	Malaysian Timber Council (MTC)



e ISBN 978-967-0020-45-7

9 789670 020457