

# **WOOD-BASED INDUSTRY**



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#### STRATEGIES AND POLICIES

#### **TARGETS**

1.01 During the IMP3 period, 2006-2020, the wood-based industry is expected to continue to contribute substantively to the production of timber products, made from raw materials sourced from Malaysia's sustainable forests. The industry will be more resilient by reinforcing its strengths and competencies, through product differentiation, branding and market expansion and diversification. The total investments in the industry for the IMP3 period are targeted at RM25.4 billion or RM1.7 billion per annum. Exports are targeted to grow at an annual rate of 6.4 per cent to reach RM53 billion by 2020 (Table 1.1).

TABLE 1.1

PROJECTIONS FOR THE WOOD-BASED INDUSTRY

	2006-2010	2011-2015	2016-2020	2006-2020	2006-2020
		Average Annual Growth (%)			
Investments	6.9	8.5	10.0	25.4	4.8
Investments per year	1.4	1.7	2.0	1.7	n.a.¹
Exports (end period)	29.5	40.1	53.0	53.0	6.4

Note: 1 Not applicable

Source: Ministry of International Trade and Industry

#### STRATEGIC THRUSTS

- 1.02 To achieve the targets for the industry, eight strategic thrusts have been set:
  - (1) developing regional production and supply chains;
  - (2) promoting the efficient and effective management of forest resources and forest plantations;
  - (3) expanding market access through intensified marketing and the promotion of Malaysia's 'green' image;

- (4) developing and promoting the growth potential in:
  - utilisation of lesser promoted species, non-wood fibres and wood waste materials; and
  - production of higher value-added wood products;
- (5) expanding the production of own design and brand furniture;
- (6) enhancing R&D and technology development;
- (7) increasing the supply of highly skilled workforce; and
- (8) strengthening the institutional support and improving the delivery system related to the industry.

#### (1) DEVELOPING REGIONAL PRODUCTION AND SUPPLY CHAINS

1.03 To supplement the supply of logs and other raw materials for the industry, domestic manufacturers will be encouraged to outsource logs and other semi-finished components through outward investments in resource rich countries. A database on investment and trade opportunities in the wood-based industry in ASEAN and other resource rich countries will be developed to disseminate information and facilitate business decisions. Efforts will be undertaken to develop Malaysia into a regional centre on design, distribution and marketing for the furniture industry.

#### (2) EFFICIENT AND EFFECTIVE MANAGEMENT OF TIMBER RESOURCES

1.04 Efforts will be undertaken to promote the efficient and effective management of timber resources. The use of non-conventional raw materials will be intensified, including agricultural wastes, bamboo, rattan and kenaf. Specific material requirements will be ascertained for various manufacturing processes and products. In addition, agro-forestry activities will be encouraged to provide intermediate returns to sustain the viability of forest plantation projects. Programmes will also be undertaken to continue to make available timber from natural forests for the industry. Strategies will focus on adopting good forest practices, through improved silviculture treatment, forest rehabilitation, afforestation and R&D, as well as enhancing efficiencies in the utilisation of forest and mill residues from natural forests.

#### (3) EXPANDING MARKET ACCESS

1.05 With the growing concern on the environment in the developed markets, the 'green' image of the industry will be promoted through sustainable forest management. Companies will be encouraged to obtain certification from the Malaysian Timber Certification Council. Other 'green' initiatives will be undertaken, such as promoting the utilisation of wood waste, non-wood fibres and biocomposites, and encouraging manufacturers to attain international environment standards, for example, ISO 14000.

- 1.06 In terms of market development and promotion, efforts will be intensified to gain access to non-traditional markets, such as India, West Asia and Africa. The adoption of certification of wood products, according to international trading requirements, will be encouraged. The greater utilisation of wood products will be promoted through the introduction of new applications of wood products in the export markets. Activities which will be undertaken include:
  - promoting wood products among Malaysian construction companies operating abroad, which have secured large-scale projects overseas;
  - promoting the use of Malaysian wood products among project developers, consultants and architects in the overseas markets; and
  - encouraging the greater participation by the industry in specialised exhibitions on building materials, and architectural and design fairs to promote the usage of Malaysian wooden products.
- 1.07 With increased competition in the global market for furniture, Malaysian furniture manufacturers will be encouraged to shift their strategy and diversify into the contract furniture market, by supplying customised and specialised furniture products to hotels, residential buildings and large international events.

#### (4) PROMOTING THE GROWTH POTENTIAL

- (i) Utilisation of Lesser Promoted Species and Non-Wood Fibres
- 1.08 Lesser promoted species, such as lithocarpus (mempening), lauraceae (medang), azadirachta excelsa (sentang), elateriospermum tapos (perah), castanopsis (berangan) and paraserianthes falcataria (batai), will be promoted. Research undertaken by the Forest Research Institute of Malaysia on some of these wood species will be disseminated to the private sector for commercialisation.
- 1.09 To supplement the wood supply, the industry will be encouraged to utilise natural fibres, such as kenaf and palm biomass:
  - kenaf, a fast growing specie, is being promoted as an alternative to wood, due to its versatility. It is suitable for different applications, such as composites for building materials, pulp and paper, and panel products; and
  - about 30 million tonnes of oil palm biomass, in the forms of empty fruit bunches, oil palm trunks and oil palm fronds, are available presently for processing into blockboards, moulded particle boards, medium density fibreboards and plywood.

#### (ii) Utilisation of Wood Waste Materials

1.10 Measures will be undertaken to establish a comprehensive inventory of all the potential supply of wood wastes in the country. In addition, a more systematic collection and distribution of these wastes to the industry will be organised. Conversion of timber wastes into solid and engineered products for construction and household applications will be promoted. Such applications include deckings, windows, door profiles, fences, benches, floor panels and furniture.

#### (iii) Production of Higher Value-Added Products

1.11 Manufacturers will be encouraged to further expand into specialised, biocomposites and other high value-added products, to cater for niche markets. R&D activities will be intensified in wood engineering, finishing technology and designs to produce products which are in greater demand in various aspects, such as quality, design, finishing, product services and delivery. Innovative products using new technologies to improve recovery will be promoted. Such products include laminated scantlings (lamscants) for the production of windows and doors, and oriented strand boards, utilising woodchips suitable for the production of panel products.

#### (5) PRODUCTION OF OWN DESIGN AND BRAND FURNITURE

1.12 Measures will be introduced to encourage the industry to shift from the production of OEM furniture products to ODM and OBM furniture products. Strategic alliances, through collaborations or joint ventures between local furniture manufacturers with established manufacturers or international design houses in developed markets, will be promoted to enhance the design and branding capabilities of the local manufacturers, and market access. In developing component manufacturers, large furniture companies will be encouraged to outsource the production of components to SMEs. Efforts will also be undertaken to turn Malaysia into a regional centre for furniture, such as organising large scale, international furniture fairs and promoting Malaysia as 'The High Point of the East', which will attract major international companies, marketers and other participants in all activities related to the furniture trade.

#### (6) RESEARCH AND DEVELOPMENT

- 1.13 R&D will continue to be undertaken for the further development of the industry. Areas include:
  - forest plantation management, including felling and harvesting techniques;
  - downstream applications, focusing on selected fast growing and high value species;
  - new applications to diversify the use of panel products, such as composite boards or glued beams, in collaboration with industry;
  - production technology to minimise wood waste; and

- potential of new resources, such as oil palm fibre and kenaf, for the production of composites and bio-composites. Appropriate process technology and equipment will be adopted to support these new materials.
- 1.14 To enhance R&D activities related to wood based development, the Bio-Composite Development Centre has been established under the Malaysian Timber Industry Board. The centre will promote and coordinate the commercialisation of potential R&D findings on bio-composite products. Collaboration between the industry and local research institutes will be encouraged in the areas of engineering and designs to upgrade and promote the use of suitable technologies and production processes. The acquisition of appropriate technologies will also be encouraged.

#### (7) SUPPLY OF HIGHLY SKILLED WORKFORCE

- 1.15 To enable the industry to move up the value chain, the development and expansion of the required skills will be emphasised. Among the skills to be developed and expanded are production management, maintenance, draughtsmanship and designing, machine operation and finishing techniques. Hands-on training will be provided in specialised areas, such as forest plantation management, advanced wood processing and manufacturing, manufacture of bio-composites and furniture designs. The development of expertise in marketing and market intelligence will be given priority. The industry will be encouraged to take advantage of joint training and workshops, under the ASEAN integration initiatives, to develop and upgrade the skills in the industry.
- 1.16 Productivity in the industry will be further enhanced through strategies on total factor productivity (TFP). In its efforts to move up to higher value chain and improve productivity and quality, the industry will be encouraged to increase the utilisation of automated equipment and machinery, including high speed moulders, to attain higher mill efficiency and productivity, as well as upgrade the quality of the human capital. Collaboration with wood-based training centres and institutions of higher learning will facilitate the supply of highly skilled workforce.
- 1.17 Other initiatives to address the skills requirement include:
  - further collaborations among wood-based training centres, for example, the Wood Industry Skills Development Centre, with relevant agencies, institutions of higher learning and the industry, through on-the-job training and upgrading of training syllabi to match the needs of the industry;
  - collaborations among standards development organisations overseas with those in Malaysia, namely, the Department of Standards Malaysia and SIRIM Berhad, in the development of relevant standards. Areas of collaboration include training in conformity assessment and enforcement; and

 intensification in the application of the Industrial Building Systems to improve manufacturing techniques, reduce dependency on labour and enhance production capacity.

## (8) STRENGTHENING THE INSTITUTIONAL SUPPORT AND IMPROVING THE DELIVERY SYSTEM

#### (i) Assistance Programmes

- 1.18 Efforts will continue to be undertaken to promote the growth areas in the industry, especially the production of environment-friendly products acceptable in the developed markets. The present assistance programmes will be reviewed to encourage companies to shift towards higher value-added innovative wood products, as well as promote:
  - automation and use of advanced manufacturing processes and ICT to support the integration of the industry into the global supply chains;
  - designs and branding of furniture;
  - investments in improving the work environment in wood processing plants; and
  - outsourcing and outward investments.

#### (ii) Establishment of Timber Procurement Centre and Database

1.19 To facilitate trade activities and enhance the competitiveness of companies in the industry, especially those in furniture, the Government will consider the establishment of the Material City, to be located within the major wood-based industrial area. The project will be a joint-venture between the Government and the industry. It will make available all timber raw materials, accessories and timber products to the industry at competitive prices. The aim is to facilitate the growth of the industry by reducing the cost of transportation and other related costs borne by the industry. To facilitate manufacturers to comply with specific standards enforced by importing countries, the Malaysian Timber Industry Board will develop a database on standards, including product safety and liabilities, for reference by the industry.

#### (iii) Role of Timber Associations

1.20 The role of timber associations at Federal, regional and State levels will be strengthened through consolidation. This is to enable their members to reap optimum benefits from the facilities and other programmes provided by the Government.

#### (iv) Linkages

1.21 Efforts will be continued in developing and strengthening sectoral linkages between the upstream and downstream activities to match the needs of those activities. Collaborative efforts in research and technology development, and adaptation will be strengthened, in consultation with the local machinery associations and manufacturers, to facilitate the production of appropriate locally assembled machinery.

#### (v) Support Services

1.22 Wood-based companies will be encouraged to utilise the services and technologies developed by the Malaysian Energy Centre, under the Ministry of Energy, Water and Communications, to reduce the energy cost and increase efficiency. Present rules and regulations, including the annual renewal of licences, will be reviewed to reduce bureaucratic burden and business costs. The duration of the validity of the licences will be extended between three to five years. Rules and regulations imposed by the various state authorities will also be standardised.