



TRANSPORT EQUIPMENT INDUSTRY



AUTOMOTIVE SUB-SECTOR

STRATEGIES AND POLICIES

NATIONAL AUTOMOTIVE POLICY

1.01 The National Automotive Policy is the foundation, upon which strategic thrusts, strategies and policies for the sub-sector have been formulated and charts the direction for the sub-sector in the IMP3. The Policy is designed to facilitate the required transformation and optimal integration of the sub-sector into regional and global industry networks within the increasingly liberalised and competitive global environment. The development objectives of the Policy are:

- promoting a competitive and viable domestic automotive sub-sector, in particular, the national car manufacturers;
- promoting Malaysia as a regional automotive centre, focusing on niche areas;
- promoting a sustainable level of economic value-added and enhancing domestic capabilities;
- promoting a higher level of exports of vehicles, as well as parts and components, which are competitive, in the global market;
- promoting competitive and broad based Bumiputera participation in the sub-sector; and
- safeguarding the interests of consumers, in terms of value for money, safety and quality of the products and services.

STRATEGIC THRUSTS

1.02 In line with the objectives of the National Automotive Policy, nine strategic thrusts have been set in the IMP3 for the further development of the sub-sector:

- (1) providing Government support, based on sustainable economic contribution;
- (2) increasing the scale of operations through rationalisation to enhance the competitiveness of the sub-sector;
- (3) promoting strategic linkages with international partners;

- (4) developing Malaysia as a regional hub, focusing on niche areas and complementary activities;
- (5) promoting investments in the growth areas;
- (6) intensifying skills upgrading;
- (7) strengthening the institutional support for the sub-sector;
- (8) encouraging and promoting the participation of the sub-sector in regional and global supply chains; and
- (9) enhancing the competitiveness of manufacturers of parts and components.

(1) PROVIDING GOVERNMENT SUPPORT, BASED ON SUSTAINABLE ECONOMIC CONTRIBUTION

- 1.03 The Government will continue to nurture and support the development of the sub-sector, aimed at optimising the sustainable economic contribution of the sub-sector. A sustainable level of economic contribution relates to the type and level of value-added activities, which will be competitive for the domestic market and for exports in a fully liberalised environment. The level of support will also be correlated to the level of economic contribution and value-added. In this context, a large scale manufacturing concern, with exports and high industry linkage, will be favoured, relative to a mere assembly operation, with little value-added activities. Similarly, greater emphasis will be given to sales, distribution and after sales activities, compared with mere importation of vehicles.
- 1.04 The areas of support are in the scale of operations, industry linkages and the development of local, including Bumiputera, capabilities. Support will be in the form of access to the Industrial Adjustment Fund and R&D grants. The provision of these grants and incentives will be based on pre-agreed conditions and timely achievement of key performance indicators.

(2) INCREASING THE SCALE OF OPERATIONS THROUGH RATIONALISATION TO ENHANCE COMPETITIVENESS

- 1.05 For the sub-sector in general, all firms across the value chain will be encouraged to focus on achieving a scale of operations which will contribute towards their long term competitive viability. The Government will encourage initiatives on rationalisation in the sub-sector, to create a leaner and more sustainable industry structure. In this respect, the Government will promote the rationalisation of the sub-sector through the two national manufacturers in the high-volume car segment. The rationalisation will involve the manufacturers achieving sufficient scale by rationalising their models and platforms portfolio, and industry linkages. The rationalisation at the level of the vehicle manufacturers will consequently enable rationalisation at the level of the producers of parts and components, which will lead to greater scale, skills and improved quality.

(3) PROMOTING STRATEGIC LINKAGES WITH INTERNATIONAL PARTNERS

1.06 The Government will continue to encourage firms in the sub-sector to collaborate with major foreign companies to establish strategic partnerships. Apart from sharing scale of operations and resources, such strategic alliances will create opportunities and provide access for domestic firms to enter the global automotive supply chains. It will assist manufacturers to adopt best management practices, processes and procedures to deliver products with higher quality standards, which are necessary in gaining access to international markets.

(4) DEVELOPING MALAYSIA AS A REGIONAL HUB, FOCUSING ON NICHE AREAS AND COMPLEMENTARY ACTIVITIES

1.07 The Government aims to position Malaysia as a regional centre for manufacturing and assembly, by encouraging existing firms to strengthen their commitment in Malaysia. The Government will encourage existing vehicle manufacturers to rationalise the models assembled in Malaysia, scale up focused production and deepen industry linkages, to export competitively. The expansion of these firms and the deepening of industry linkages will also lead to a greater scale of operations and improved quality of the parts and components, thereby improving the overall viability of the sub-sector.

(5) PROMOTING INVESTMENTS IN THE GROWTH AREAS

1.08 There is potential to promote investments in the new growth areas, including:

- fuel efficient engines and alternative fuel engines;
- transmission systems;
- automotive electronics components; and
- special purpose vehicles.

Incentives will be considered for new investments in the growth areas and companies locating at designated production centres.

(6) INTENSIFYING SKILLS UPGRADING

1.09 Training and skills upgrading will contribute in enhancing the productivity and product quality of the sub-sector. Measures in training and skills upgrading include:

- formulating a dedicated training programme in automotive technologies, such as 3-dimensional CAD and CAE systems for design simulation and analysis, programming of robots, factory automation and other embedded controllers, and mechanical and electronics systems integration;
- increasing the number of courses in automotive engineering and design at diploma and degree levels. Students will be required to undergo practical training in the industry, as part of the course curricula; and

- collaborating with the bilateral and regional FTA partners in providing training for skills upgrading, improvement of local training curricula and the establishment of advanced training centres for the sub-sector in Malaysia.

(7) STRENGTHENING THE INSTITUTIONAL SUPPORT

1.10 Existing institutions will be strengthened to provide the necessary support in further developing the sub-sector. The measures are:

(i) Establishment of an Automotive Institute

1.11 In most developed countries, an automotive institute provides the necessary leadership in developing their automotive sub-sector. Similarly, Malaysia will establish such an institute to undertake the lead role in the further development of the sub-sector. The institute will undertake technical and economic research necessary for the formulation of policies for the sub-sector. In addition, the institute will be the reference point for information and database on the sub-sector, including new technological developments.

(ii) Upgrading of the Facilities for Testing

1.12 The testing facilities for parts and components at SIRIM Berhad will be upgraded into a national testing centre for automotive parts and components. The centre will provide comprehensive facilities, such as impact, crash and road simulation; light distribution and other technical tests.

(iii) Strengthening the Role of Trade and Industry Associations

1.13 The relevant trade and industry associations will be encouraged to strengthen their organisational structure, including a dedicated secretariat and facilities, to undertake their functions more effectively, among others, in providing regular and timely feedback to the Government.

(8) PROMOTING THE PARTICIPATION OF THE SUB-SECTOR IN THE REGIONAL AND GLOBAL SUPPLY CHAINS

1.14 As the size of the domestic market is limited, automotive manufacturers, especially the high volume national manufacturers and assemblers, and manufacturers of parts and components will be encouraged to increase their exports. Measures to increase exports include:

- establishing offshore production facilities in the importing countries for the assembly of vehicles;
- encouraging Malaysian vehicle manufacturers to include their vendors in their operations abroad;

- encouraging brand promotion by the domestic manufacturers to strengthen the global image, increase market acceptance and nurture brand loyalty in the export markets;
- establishing Malaysia as a base for operational headquarters (OHQs) of major automotive manufacturers in the distribution of motor vehicles and parts and components for the region;
- optimising the opportunities under the ASEAN integration initiatives through the adoption of various measures, such as undertaking mutual recognition arrangements (MRAs) and simplifying customs regulations to facilitate regional trade in automotive products; and
- promoting Malaysia as a competitive outsourcing centre for automotive parts and components.

1.15 The sub-sector has the potential to participate in the regional and global supply chains through:

- strengthening the existing production centres with greater linkages between manufacturers and assemblers, vendors, research institutes and the academia;
- enhancing the distribution of automotive vehicles and parts and components, domestically and internationally, through strengthening the support services, such as logistics, warehousing and distribution networks;
- enhancing inter-sectoral linkages with other manufacturing industries, such as steel, plastics, rubber, chemicals, glass and manufacturing related services;
- enhancing Malaysia's image as a competitive and reliable producer of parts and components by capitalising on the presence of major Tier-1 vendors operating in the country; and
- encouraging Malaysian production centres to collaborate and complement their activities with those of other automotive clusters at the bilateral and regional levels.

(9) ENHANCING THE COMPETITIVENESS OF THE MANUFACTURERS OF PARTS AND COMPONENTS

1.16 The presence of competitive manufacturers of parts and components will provide support to the sub-sector. Measures in enhancing the competitiveness of the manufacturers of parts and components include:

- promoting the development and manufacture of common parts and components to avoid duplication and achieve economies of scale;

- rationalising the operations of the manufacturers of parts and components through mergers and acquisitions (M&As);
- upgrading the capital equipment to produce parts and components of the required quality;
- promoting and facilitating the establishment of more joint ventures in the manufacture of parts and components; and
- encouraging the manufacturers of parts and components to comply with international requirements, including the adoption of international automotive standards for biodegradable and recyclable parts and components.

MARINE TRANSPORT SUB-SECTOR

STRATEGIES AND POLICIES

STRATEGIC THRUSTS

- 1.17 Five strategic thrusts have been set for the long term viability of the marine transport sub-sector:
- (1) enhancing domestic capabilities in the building of smaller vessels, ship repairing and maintenance activities;
 - (2) intensifying the upgrading of skills and engineering capabilities;
 - (3) strengthening infrastructure and support facilities;
 - (4) strengthening the institutional support; and
 - (5) expanding activities in the fabrication of offshore structures.

(1) ENHANCING DOMESTIC CAPABILITIES IN THE BUILDING OF SMALLER VESSELS, SHIP REPAIRING AND MAINTENANCE ACTIVITIES

- 1.18 The shipbuilding segment will focus on the building of smaller vessels of 30,000 DWT or below. This will build upon the capabilities, expertise and facilities which have already been developed. For the ship repairing segment, existing facilities for ship repairing and maintenance activities will be encouraged to be upgraded through the installation of equipment with advanced technologies and the enhancement of the competency of existing skilled personnel.

1.19 For defence related marine transport products and services, the Government implements the offset policy, which involves the training and transfer of technology to Malaysian personnel, on the operation and maintenance of the marine transport products, from foreign manufacturers. The policy enables companies to acquire defence related technologies on shipbuilding and ship repairing from abroad, which otherwise will be both expensive and difficult to source.

(2) INTENSIFYING THE UPGRADING OF SKILLS AND ENGINEERING CAPABILITIES

1.20 Measures to strengthen the upgrading of skills and engineering capabilities include:

- providing more technical programmes to upgrade the technical skills of the local shipyards;
- encouraging the upgrading of the skills in ship designing and engineering, metallurgy and corrosion control;
- promoting the attachment of experts in existing training institutes; and
- collaborating with major shipbuilding countries in the upgrading of skills in marine transport.

(3) STRENGTHENING THE INFRASTRUCTURE AND SUPPORT FACILITIES

1.21 Support services which will be strengthened include related support activities, such as the supply of special grades and specifications of steel plates, manufacture of tools and dies, and machining and casting, as well as other services. Measures which will be undertaken include:

- developing the skills and capabilities in marine designing and architecture, R&D and marketing;
- encouraging the upgrading of the machinery and equipment to produce parts and components of the required standards and quality; and
- identifying common parts and components which can be developed or multi-sourced to reduce the costs of production.

(4) STRENGTHENING THE INSTITUTIONAL SUPPORT

1.22 Initiatives to enhance domestic designing capabilities will be pursued through the offset programmes and cooperation projects under the various FTAs. Sufficient funds will be made available to finance projects undertaken by domestic shipyards. Other assistance will be considered to minimise the financial burden faced by the sub-sector.

(5) EXPANDING THE ACTIVITIES IN THE FABRICATION OF OFFSHORE STRUCTURES

1.23 Measures to be implemented include:

- promoting the development of skills in the design and fabrication of offshore production platforms for use in coastal and international waters; and
- encouraging domestic fabricators of offshore structures to participate in international projects.

AEROSPACE SUB-SECTOR

STRATEGIES AND POLICIES

STRATEGIC THRUSTS

1.24 The aerospace sub-sector has been identified as one of the new sources of growth in the Ninth Malaysia Plan (RMK-9), 2006-2010. The Government will continue to provide support to the sub-sector. Measures to further develop and promote the sub-sector under the IMP3 period include:

- (1) developing and promoting potential growth areas in the sub-sector;
- (2) strengthening domestic capabilities;
- (3) promoting support services; and
- (4) developing Malaysia as an outsourcing centre for aerospace products and support activities.

(1) DEVELOPING AND PROMOTING POTENTIAL GROWTH AREAS

1.25 Measures will be undertaken to develop and promote potential growth areas which have competitive strength. The areas of focus include:

- nurturing domestic manufacturers of parts and components to support the production of small aircraft;
- continuing to focus on the manufacture of light aircraft, such as recreational and military trainer aircraft, while promoting the manufacture of small commercial and military aircraft;
- strengthening the maintenance, repair and overhaul activities through equipping the service providers with advanced technologies and upgrading the skills to undertake the activities;

- capitalising on the development of the space segment, such as the astronaut programme and building of satellites, which is expected to provide spin-off effects on scientific research and the development of the telecommunications industry; and
- promoting domestic and foreign investments in the potential growth areas.

(2) STRENGTHENING DOMESTIC CAPABILITIES

1.26 Measures to enhance the domestic capabilities of the sub-sector include:

- encouraging M&As among the service providers in maintenance, repair and overhaul activities to provide a wider range of services;
- promoting the development of softwares by utilising digital technology in aerospace;
- providing more technical training programmes and specific advanced courses relevant to the sub-sector to upgrade the skills and knowledge of the workforce; and
- strengthening collaborations with foreign manufacturers and service providers. As an example, offset programmes will be leveraged upon to enable effective transfer of technologies. In addition, strategic collaborations with foreign aerospace companies will be promoted to acquire advanced technologies.

(3) PROMOTING SUPPORT SERVICES

1.27 Measures to promote the development of support services include:

- providing ground and support services at the airports to light aircraft users, in both business and leisure activities;
- encouraging local companies to upgrade their capabilities and venture into the production of support equipment and toolings; and
- promoting greater collaborations with major companies in support services, for example, in the area of certification, through licensing and joint ventures.

(4) DEVELOPING MALAYSIA AS AN OUTSOURCING CENTRE

1.28 Measures to develop Malaysia as an outsourcing centre for aerospace products and support services include:

- promoting and facilitating the establishment of more joint venture companies in Malaysia, especially in parts and components; and

- encouraging more passenger and cargo carriers to have their regional base in Malaysia, which will provide more opportunities to domestic service providers to undertake maintenance, repair and overhaul activities on their aircraft.

DEFENCE RELATED ACTIVITIES

STRATEGIES AND POLICIES

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DEFENCE INDUSTRY BLUEPRINT

1.29 The Defence Industry Blueprint will guide the development of the Malaysian defence industry. The primary focus of the Blueprint is to achieve a certain degree of self reliance and ability to provide strategic support in sustaining the defence capabilities of the nation.

1.30 Major thrusts and action plans in the Blueprint are:

- **Human Resource and Competency Development**

A comprehensive and cohesive human resource development plan will be formulated to develop critical competencies, to enable the industry to undertake its role in the nation's defence.

- **Technology Development**

The industry will be encouraged to continue to upgrade technologies, either through R&D or technology acquisitions or transfers. To enable the Malaysian defence industry to have continuous access to advanced technologies for use by the Malaysian Armed Forces, a comprehensive programme will be formulated and undertaken to acquire technological capabilities, either through indigenous development or technology transfers from foreign partners, including international collaborations.

- **Industry Development**

Focus will be given on developing the competency, technology and competitiveness of the defence industry. The requirement of the Malaysian Armed Forces on transportation equipment products will be capitalised in the development of the transport equipment industry.

- **Domestic Defence Requirement**

The Policy on National Defence Procurement will be applied to provide greater opportunities to qualified domestic defence contractors in obtaining projects and being involved in determining major defence requirements.

This measure will make it obligatory for OEMs to transfer related technologies and capabilities to local companies. The domestic defence procurement process will be leveraged upon as a tool in acquiring strategic technologies, as well as in the development of the Malaysian defence industry.

- **International Marketing**

Greater efforts will be undertaken to take advantage of the global defence spending. Such efforts will create opportunities for companies involved in defence related activities to develop their technological and business capabilities to enable them to compete globally. These capabilities include internationally recognised standards and qualifications.

TARGETS FOR THE TRANSPORT EQUIPMENT INDUSTRY

1.31 Targets for investments and exports have been set for the transport equipment industry, covering the three sub-sectors, namely, automotive, marine transport and aerospace, during the IMP3 period, 2006-2020:

- investments totalling RM42.3 billion for the entire period, or RM2.8 billion per annum; and
- exports reaching RM22.7 billion by the end of 2020 (Table 1.1).

TABLE 1.1

PROJECTIONS FOR THE TRANSPORT EQUIPMENT INDUSTRY

	2006-2010	2011-2015	2016-2020	2006-2020	2006-2020
	<i>(RM billion)</i>				<i>Average Annual Growth (%)</i>
Investments	10.3	14.1	18.0	42.3	7.0
Investments per year	2.1	2.8	3.6	2.8	n.a. ¹
Exports (end period)	12.7	17.2	22.7	22.7	6.8

Note: ¹ Not applicable

Source: Ministry of International Trade and Industry