

## EXECUTIVE SUMMARY

The main objective of the study is to develop an industrial development master plan which consists of strategies, policies and action plans for industrial development for the State of Perak. The study covers the following aspects and analysis: Global and Malaysia scenarios and its impact to Perak regarding investments and economic development; Perak State overall economic development including: growth in GDP, manufacturing, agriculture and related services sectors, resources including major minerals, timber, bio-diversity, population and employment; current infrastructure status including transportation system, telecommunications connection, industrial area, existing industries and supporting industries; current performance of investment, manufacturing sectors; current status of the industrialization, emphasizing on issues, problems and challenges faced and provide suggestions towards enhancing the performance of the industrial development; types of incentives, and other support services offered for the manufacturing service sector; and clusters of industries that are presently developed and that can be developed.

Through implementable vision, strategies, policies and action plans, a competitive and vibrant industrial sector in Perak will be develop consistently and in conjunction with **New Economic Model, Third Industrial Master Plan (IMP<sub>3</sub>), 10<sup>th</sup> Malaysia Plan, Economic Transformation Programmes, Perak Structural Plan, Perak Maju 2015 and Perak Amanjaya.**

The study was mainly based on secondary data and informations already collected from existing study and documents (softcopy and/or hardcopy). Stakeholder consultations and group discussions on various existing issues and problems of industrial development in Perak was held through a “lab” on 13 July 2010 as a means of channelling and providing inputs and suggestions for analysis and recommendations and plan of actions that will be developed. These data and informations form as inputs that was analysed within the policy framework to come out with Vision and Policy Directions and Strategies and Actions Plans for industrial development in Perak.

Within the policy framework, the issues and problems pertaining to industrial development in Perak was discussed in the context of investments inflows, incentives and support, technology development and ICT, availability and quality of infrastructures, facilities and utilities, entrepreneurial development, skilled labour and training, and types of industries. The deliverables will be in the form of visions and policy directions, and also strategies and plan of actions for a vibrant and competitive industrial development in Perak.

The global economy has not recovered since the financial crisis in late 2007. The world economy tumbled at negative 0.6% in 2009 with the advanced economies contracted by 3.2% while the rapid growth of the Chinese economy contributed to the developing economies' growth floating at 2.4%. The UNCTAD World Investment Report 2009 reports that amid the global financial and economic crisis, global foreign direct investment (FDI) inflows fell from a historic high of US\$1,979 billion in 2007 to US\$1,697 billion in 2008, a decline of 14%.

Malaysia's economy that contracted by 1.2% in the third quarter of 2009 has bottomed out since the first quarter of 2009 to a positive territory by the fourth quarter of 2009. The Bank Negara Malaysia projected a 5% growth in 2010. Investment flow into the country has been high but was adversely affected by the 2008-2009 global financial crisis. In 2009 foreign investment inflows fell very sharply from RM44.1 billion in 2008 to RM22.1 billion in 2009, a decline by more than half.

The composition of private and public sector investment shows that in the earlier years of 1996-1998, private sector investment were higher than public sector investments where private sector investment were more than 60% of total investment. However, the financial crisis of 1997-98 seems to dampen private investment until the recession years of 2000-2003. Private investment rose up to 50% of total investment from 2004-2008 but declined to about 45% in 2009. The declining share of private investment is also reflected in the declining ratio of private investment / GDP, with the mean of the ratio declining from 31.3% in 1996 to 10.5% between 1999-2009.

The outlook for the Malaysian economy shows that Malaysia's economic growth slowed despite strong recovery in 2010, with private investment declining to 9.5% of GDP in 2009 from an average of about 30% in the mid-1990s, and outward direct investment currently exceeding inward FDI. The European Services Forum [ESF] (2010) have identified barriers to FDI in Malaysia. They are: limits on acquisitions of local companies; limits on purchase of land, property and real estate; obligation to enter market via joint venture; limits on licenses allotted to foreign companies; limits on branching; lack of national treatment in many services sector; local employment requirements, where when percentage is too large, it can prevent foreign companies that start off as small operations; tedious & burdensome administrative procedures; opaque domestic regulation; public procurement rules give better access to bumiputra, to the detriment of foreign investors; and limits on equity ownership in certain sectors.

Greater competition for FDI and exports faced by Malaysia were due to slower growth in demand from industrial economies, an economic signal of the needs for strong revamp by putting greater emphasis on innovation, creativity, and high-valued-added industries. Structural transformation stated in the 10th Malaysia Plan and the introduction of Economic Transformation Program (ETP) in achieving high-income

nation by 2020 focuses on: improvement in the environment for private sector-led growth; moving toward inclusive socioeconomic development; developing and retaining a skills base as key to promoting productivity and innovation-led growth; and transforming the role of the government to become an effective facilitator in the transformation of the economy and to provide quality services.

In terms of ease of doing business, World Bank (2010), ranks Malaysia in 21 out of 183 economies in terms of ease of doing business. Malaysia could improve on some of the related performance, eg reducing the number of procedures for starting business (currently 9), reducing the time (days) of starting business from 17, reducing procedures when dealing with construction permits (from 25), reducing the time(days) taken to register property from 56 days, etc.

In terms of investment, Perak currently lags behind neighbouring states of Penang and Selangor in several aspects, Perak is endowed with natural resources, creating a comparative advantage for resource-based industries. On average, manufacturing industries in Perak still lag behind and have a small base. The MIER/UPEN Perak (2009) study suggest priorities for moving forward to ensure success of the manufacturing sector in Perak. These include the need for i) developing and expanding the industrial sector, ii) review policy and regulatory framework, iii) assess the need for further infrastructure, iv) focus on human resource development, v) provide increased government support in consultation with industry associations, vi) persuade banks and financial institutions to increase capital and funds for industrial development, and vii) provide technology support.

In the short term, the proposed action plan calls for development and expansion based on comparative advantages, use of lean manufacturing techniques, developing capacity for grants uptake and viable alternatives in resource-based manufacturing. In the medium to long terms, the proposed development and expansion strategies call for focus on beneficiation of natural resources, foundry and engineering and biotech-related manufacturing.

The strategic thrusts for the future industrial development in Perak, include the following industries – resource-based industries (minerals, wood-based) ; new industries (biotechnology and automotive industry) ; marine-based industries; agro-industries related to oil palm, rubber, aquaculture, coconut, livestock; ICT related industries; Foundry and engineering industries; SMEs in related/supporting industries and services; Tourism industry and services (nature and health tourism); Educational hub and services.

The role of SMEs in industrial development is crucial. Potential for SMEs development will be in resource-based industries such as rubber products, non-metallic mineral products, agro-based food processing and wood-based products.

Private sectors participation will be facilitated through ongoing dialogue with SMEs due to unprecedented challenges during the economic turmoil. The tourism industry has great potential as a service sector related to industrial development. However, currently it is not well developed due to: Lack of promotion on tourism products and destinations; Lack of maintenance and cleanliness of tourism sites; Lack of coordination between airlines, hotel, private hospital in the promotion of health tourism.

Additionally, the Proceedings of PIMC summarized “Strategies for further development and attracting quality investment in the manufacturing and services sectors to the state of Perak”. The proceedings stress the need for a plan that is focused with specific deliverables and non-rhetoric to fulfill the needs of domestic and foreign investors, consisting of: a) A new effective strategy to drive the inflow of investments from both domestic and foreign reenergize the manufacturing industry and related services sector that will contribute to the realization of vision and aspiration as guided by Perak AmanJaya, b) to reduce the gap between Government and Private sectors through private and public partnership and consultation, c) need more attractive incentives and planned industrial estates of world standards; d) Empower InvestPerak to enable it to provide better service to investors; e) the development of new industrial estates, facilitated with world class facilities and infrastructures need to be developed in suitable areas; d) Role of IPMC (Industrial Park Management Committee) – need to be strengthened with support from State and local authorities , to ensure proper management of industrial estates, to entice new investors and also to encourage reinvestments by existing investors; f) Need to streamline procedures in conducting uniform approval matter for more efficient delivery system ; g) need to cater for experience and expertise in industries , for example by retraining programmes to current workforce; h) industries that depend on foreign labour should be discouraged; i) Provide incentives to government officials with ‘multi-skills’, knowledge and can communicate efficiently with investors; j) State should encourage the development of international school for all level as an attraction to investors; k) ICT-Fastforward project in providing broadband internet access, particularly in industrial estates; l) Need for Perak State Socioeconomic Action Plan with clear, detailed, achievable targets – with clear deliverables and roadmaps , including programmes related to natural resources, renewable energy and green technology; m) regarding transportation, propose new transportation terminal in Meru Raya; n) regarding lack of accommodation, encourage businessmen’s hotel.

This study recognizes that despite Perak’s economic growth, problems of a strategic nature remain. Perak has not been able to attract or retain high impact investments, and experience stable growth in the output of competitive products. In Perak, FDI remains a relatively marginal phenomenon. The level of FDI in Perak is low relative to its neighbouring states, namely Selangor and Penang. Attracting and

retaining foreign direct investment (FDI) should be an integral part of Perak's economic development strategy. The following strategic thrust are recommended:

**ST 1: Shifting Development Paradigm, with the following actions:** a) come up with new economic growth strategies, especially making an effort to transform itself into a high-value added and environmentally-friendly industrial development state, b) convert itself from being a “feeder” state to Selangor and Penang of the past, into a “central” player in its own right. It needs to shift its development paradigm from the ‘catch-up model’ of the past into the ‘trend-setter model’, c) needs to adopt Green Growth paradigm and pursue green growth (low-carbon and sustainable) strategies of utilizing the solutions of environmental and energy problems as new growth opportunities.

**ST 2: Make Knowledge and Science and Technology the Basis of Perak's Development, with the following actions:** a) Actively implementing the ICT Strategic Blueprint in the State, through capability building; developing the necessary regulatory and legal framework; ensuring information safety and security; and focusing on information technology in the areas of education, health, government, and business, b) Mobilise Science and Technology to drive Perak's green growth development policy, c) Draw up *Perak's Strategic Roadmap of Technology and Industry* under Green Growth Paradigm to *attract investments*, d) Provide incentives to universities and colleges to set up new branches or building additional campuses in Perak.

**ST 3: Enhance Perak's participation in global supply networks,** with the following actions: a) Continuing the adoption of international best practices and standards in production and distribution, b) Upgrading its industrial capability and productivity to enhance their participation in regional and global integration initiatives.

**ST 4: Resource endowment mapping, with the following actions:** a) Carry out resource surveys to document the quantities and quality of available resources statewide; b) Identify potential investment opportunities; c) Map the resource endowments and investment opportunities; d) Hold regional investment fora on investment opportunities.

**ST 5: High-Impact Investment Promotion Activity, with the following actions:** a) InvestPerak as a one-stop centre will function as one of the Investment Promotion Agencies (IPAs) which should be empowered through necessary legislation, b) Empower and support InvestPerak through necessary legislation to undertake joint-initiatives with other states in promoting Perak. Provide it with sufficient resources (human resource, financial) to enable it to develop a high-impact investment promotion activities to high growth countries. Huge amount of resources are needed

to attract and retain the best investments to Perak, c) Invest heavily on image building activities. This image building activities include focused and intensive advertising in both the international electronic and print media, public relations events and the generation of favourable news stories by cultivating journalists, d) Conduct investment-generating activities through direct targeting of firms by promotion of specific sectors and industries, with the aim of creating investment leads, identification of potential sectors and investors, direct mailing, telephone campaigns, investor forums and seminars and individual presentations to targeted investors, e) Encourage personal selling and establishing direct contacts with prospective investors; f) Provide investment-service activities tailored to prospective and current investors' needs, g) Launch a comprehensive communications plan to explain to the government officials, key stakeholders and the general public the objectives, benefits and challenges of attracting and retaining investment in Perak.

**ST 6: Develop Core Partners in Investment Promotion, with the following :** a) Successful investors (both local and foreign) in Perak who will act as champions for purposes of confidence building among the potential investors. They would be approached to give unbiased testimonies about doing business in the region at specially organized investment forums; b) Investment Officers hired by the State to be attached to Malaysian embassies/High Commissions abroad. These officers will provide the first link for the State with potential foreign investors. They will be facilitated with promotional materials for dissemination and would be used as economic ambassadors for the Community; c) Explore and develop cooperation projects with regional and international organisations such as ASEAN, OIC to promote Perak as an investment destination.

**ST 7: Utilization of the intellectual property system, with the following actions:** a) Promote creativity and innovativeness; b) Facilitate the protection of Intellectual Property Rights, c) Create public awareness on IPRs and promote use of the IP system locally, d) Develop a good communications program to create greater awareness of IPR among the stakeholders.

**ST 8: Find New Investment Avenues, with the following actions:** a) Attract investment in the environment-related sectors as they offer strong growth potential, b) Perak should focus on renewable energy, such as solar and bio-fuel, and green technology. These ventures are very capital intensive and Perak has ample raw material supply, low energy cost and land availability for such investments, c) Draw up a Technology Roadmap to make Perak a state of state of green technology and attract foreign investments.

**\*\*Comparative advantage is needed to attract investors to Perak. Several strategies may be considered to strengthen Perak's comparative advantage. These include:**

**Strategy 1: FOCUSED AND CLUSTER-BASED STRATEGY IN ACCORDANCE TO PERAK'S COMPARATIVE ADVANTAGE**, with the following actions: i)Resource-based + Advanced Materials: Transforming limestone, marble, kaolin, ball clay into high value added products rather exporting them raw, ii) Agro-based + Halal Hub: Processing and packaging fruits into fresh juice and frozen concentrated fresh juice; iii)Fishery-based + Halal Hub: Supplying fresh sea-food for up-market as well as processing frozen patties; iv) Biotech + Halal Hub: Producing high value added herba-nutri-ceutical /pharmaceutical / cosmetic ingredients based on rich bio-diversity assets in the Royal Belum Forest; v)Marine-based and engineering services: Taking advantage of the existing industries and skills related to Lumut Port; vi)Wood-based: Taking advantage of the rich timber resources including developing high-value added construction materials, high-value added furniture and/or furniture materials, and paper and paper-based products; vii)Foundry and engineering services: Developing further the tool and dies industries, skills and capabilities; viii)Automotive: To develop further the existing automotive cluster taking advantage of Proton's Tanjung Malim Plant; ix) Rubber-based products: Taking advantage of the existing rubber-based industries (gloves, etc) and developing the tyre industry to serve the automotive cluster; x)High Value Added Electronics: Graduating Perak from labour-intensive manufacturing of electronics to R&D and manufacturing of + services for high-tech electronics products (read together with S4 that follows).

**Strategy 2:POSITIONING AND VISIONING THE FUTURE OF PERAK'S PROSPERITY IN HIGH VALUE ADDED INDUSTRIES + SERVICES BASED ON SELECTED CLUSTERS THE STATE CURRENTLY POSSESSES COMPARATIVE ADVANTAGE**, with the following actions: From the availability of skills in crafts, Perak can build upon the tool and dies industries derived from its long tradition in the foundry industry, to include the following industries: (1) precision tools engineering and services; (2) precision materials and components (intermediate goods); (3) precision products such as scientific / engineering / health-related testing equipments; (4) precision (high-end market segment) consumer goods such as clock and watches

**Strategy 3: STRENGTHENING THE CONNECTIVITY TO GLOBAL, REGIONAL AND LOCAL MARKETS BY FOCUSING ON IMPROVING TRANSPORTATION AND COMMUNICATION NETWORKS, LOGISTICS AND RELATED FACILITIES OF THE STATE.** This strategy is crucial for Perak's competitive advantage – including the cost of doing business and the ease of procuring materials and other inputs – that will determine the attractiveness of Perak to investment from both foreign and domestic investors.

In this regards, Perak can leverage upon the newly launched Kuala Lumpur – Ipoh Electric Train Services that cuts down the KL-Ipoh distance to only 2 hours to market / promote the State as part of the Greater KL Area

**Strategy 4: SELECTIVE INVESTMENT PROMOTION / APPROVALS IN FAVOUR OF THOSE INDUSTRIES THAT HELP THE STATE TO GRADUATE FROM CONCENTRATION IN LABOUR-INTENSIVE INDUSTRIES THUS MOVING UP THE VALUE CHAIN TO INNOVATION-DRIVEN, HIGH VALUE ADDED INDUSTRIES.** This strategy requires the promotion / approval agency to install an institutional practice of: i) Research and prospecting activities on potential investors that will bring in innovation-driven, high value added industries; ii) Due diligence to identify genuine investors including identifying investors who have already had markets to serve and effectively provide special invitation to these investors; iii) Putting in place a number of firm-friendly and yet effective regulations to safeguard the interest of the State such as requiring investors to start operation within a stipulated period.

**Strategy 5: INSTITUTIONALIZING AND OPERATIONALIZING A SET OF DYNAMIC AND FLEXIBLE STATE INCENTIVES ALONG WITH ACCULTURATION OF PROACTIVE PRACTICES WITHIN THE ONE-STOP-CENTRE IN ORDER TO ATTRACT NEW INVESTMENTS AND TO ENCOURAGE EXISTING INDUSTRIES TO REMAIN AND EXPAND IN THE STATE.** This strategy calls for flexibility on incentives under the ambit of the State based on the dynamics (performance) of the firms and the proactive practices of the one-stop-centre in attracting new investments, assessing the needs and providing assistance to existing industries to remain and expand in the state. This strategy and practices include among others: i) Prospecting and ii) Proactive market research conducted / commissioned by the one-stop-centre to identify new investors; and practice of reaching out to existing firms identify and assess their needs for new or further State incentives in order to encourage the firms to remain and expand in the state.

The “lab” deliberated on several issues pertinent to the development of the industrial and manufacturing sector in Perak, and came out with recommendations. The issues discussed, and the recommendations/actions are summarized below:

**1. Investments and Incentives : a) for starting up business/enterprise, b) reinvestment.**

The recommendations are: i) Review the effectiveness of past and current investment promotions; ii) Formulating new strategies to promote investment in Perak; iii) Employing new strategies to aggressively promote Perak as an attractive place to invest Effective use of various media to promote investment coming into Perak;

iv) Type up (link) Invest Perak website to relevant Federal Government website; v) Establish a database using GIS system that can be shared across related agencies; v) Re-invent Invest Perak to become a truly OSC / Invest Perak to become the focal point for all information on investment in Perak; vi) Empower Invest Perak to carry out duties as attractor, facilitator and even “runner” on behalf of investors to expedite investment approval; vii) Revamp the website (Invest Perak). Provide direct links to detailed information on incentives; viii) Establish a unit under Perak Invest to shorten approval time, ix) Improve communications among government agencies leveraging on technology; x) Ensure meetings to vet investment proposals are attended by people who can make decisions; xii) Effective use of various media to publicize the incentives for investing in Perak; xiii) Road shows at all levels (international, national, state and districts) on Perak incentives

**1b). Regarding reinvestments,** the following actions/recommendations are proposed: i) review and evaluate the performance of the particular investment in the 3<sup>rd</sup> year of operation, in terms of a number of indicators (such as number of locals employed, exports, use of local materials, potential for re-investment) to consider for extension or reduced tax rates; ii) Empower Invest Perak to make decision on re-investment; iii) Configure a holistic approach and long term incentives programme and have to be selective to industries keen on reinvestments.

**2. Financing,** the following actions are recommended: i) Banks and financial institutions need to work with state government to promote domestic investment; ii) Easy access to microcredit by AIM, TEKUN, Agro bank, BSN, etc to finance investments by SMEs.

**3. To encourage Competitive Investment Environment,** the following actions are recommended: i) Move away from labour-intensive industries to focus on capital and high value added industries and services; ii) Increase the supply of local / domestic labour; iii) Establish a team to study potential of selected industries and markets (Invest Perak); iv) Intensify the relocation of scattered industries into planned industrial estates; v) Development of industrial estates based on needs (demand-driven); vi) improvements in ease of doing business.

**4. Upgrading Infrastructures and facilities,** the following actions are recommended: i) To upgrade existing airport for international flights; ii) To upgrade port facilities and increase efficiency of Lumut Port; iii) To develop Transportation Master Plan (requires numerous improvements to transportation infrastructure, services and programs over the planning horizon); iv) Improve asset management by relevant authority ; v) Local authorities and/or operators of the industrial estates to conduct regular maintenance; vi) To establish railway connection between Ipoh and Lumut ; vii) To leverage on double tracking initiative; viii) Aggressive promotion and marketing of Lumut port to inform private sectors how can they use the facilities; ix) To establish Trade /

Convention / Exhibition Centre as a platform; x) Increase usage of hardline (fibre-optic) as well as wireless including cellular networks; xi) Made available not less than 5MBPs broadband facilities to all industrial estates; xii) Modernise the sewerage system, hiring companies that offer services like sewage treatment, grease management, rainwater harvesting and maintenance of drainage systems; xiii) Availability/Extending of Gas Malaysia service throughout industrial sites; xiv) improve waste management, Separation of waste streams by waste generators, Composting of perishable organic waste, Creation of recovery & recycling economic activities and Resource recovery and waste-to-energy; xv) Upgraded water treatment plant Construction of a new raw water intake and ancillary works; xv) Construction of a new treated water pump house, clear water tank, TNB switch room and lime house ; xvi) Refurbishment of existing chemical building and plant; xvii) Upgrading and refurbishment of existing instrumentation, telemetry and SCADA system.

**5. Upgrade ICT and MIS for Perak Invest**, with the following action plans: i) Establish a database in terms of GIS system that can be shared across related agencies; ii) Share through hyperactive web and made available to Invest Perak; iii) Collaboration with private sectors in ICT upgrading; iv) Enhance the availability of trained pool of ICT workers: to make available a critical pool of trained and educated manpower; v) Encourage the formation of more companies to achieve target (250 companies by 2010: to facilitate the growth of more ICT companies through incentives and advisory ; vi) Analyze the location dynamics: improve the planning for ICT development and prevent unnecessary competition.

MIS for Perak Invest, with the following action plans: i) Develop MIS Invest Perak to be used by various stakeholders; ii) Gather business requirement for the system (requirement analysis) – system requirement specification (SRS); iii) Build technical architecture, database and programs – system design Prototype Development including development and programming.

**6. Improve Transportation**, with the following action plans: i) Cooperation between private and government transport facilities owner ; ii) Expand and modernize the transportation network , including by railway, highways, roads, air and sea; iii) Design and planning of infrastructure of transportation

**7. Improve Manpower and training**, with the following actions: i) Introducing new incentives to attract the best talents to the state: a) The State Government introduces the “Skills and Expertise” residence permit for 10 years (or more) for exceptional economic contribution, b) Introducing the temporary “Student” Residence permit to enable highly qualified and skilled foreign students to work in Perak for a certain period immediately after their graduation. No additional work permit is required; ii) Develop a long-term strategy that focuses on “**Attracting Talents and Looking after Perakians**”

- (a) Introduce innovative measures to improve the welcome afforded to foreign talent and to ensure that they enjoy the best possible living and working conditions; as such, foreign nationals working in Perak benefit from a very attractive regime. Perak must work hard to attract the best and the brightest. The objective is to complement local talent with overseas.
- (b) Excellent welcome and working conditions afforded to talented immigrants.
- (c) Giving preferential treatment to families accompanying managers and executives. For example, incentives to ease their entry to Malaysia (Perak), to seek work (without having to apply for a work permit) or to create a business with minimum formalities.

iii) The State Government establishes an on-line database of talented Perakians within and outside Perak: a) Retaining and attracting talented Perakians in Perak to serve and/or contribute to the development of the State without leaving their current home (in/out of Perak) as: Investors, Opening up business, Advisory/community work; b) Provide **incentives** to the Perakians who are willing to serve and/or contribute to the development of Perak. c) Maximising the talents of all Perakian as well as to develop a **deep-seated sense of belonging** - or rootedness - to Perak: Establish and sustain link with alumnus of state co-ed schools, Perak student associations through on-line registration, Organise annual events attended by HRH Sultan of Perak, as the Patron; iv) Establish Perak Industrial Skills Training Centre – to cater for specialized skills demanded by industries: a) Increase wage rate to attract semi- and skilled workers and reduce dependence on foreign labour, b) Increase the number of knowledge workers in the State, c) Provide incentives to attract capital- and knowledge-intensive industries (discourage labour-intensive industries), d) Promote Perak as a state for knowledge-intensive industries; v) Strengthen and target schemes to recruit foreign high-skilled workers, and facilitate certification of foreign credentials

Measures to increase skill training to locals that can fulfill the needs of industry include: i) Measures to increase state worker mobility; ii) Increase women labour force participation: a) Provide conducive and flexible work environment to increase women participation in the labour force (employers provide facilities such as creches); b) Create family-friendly policies and initiatives to promote more gender equality and gender mainstreaming

Measures to develop human resources in science and technology, include: i) Introduce steps to promote public/private research collaboration and to improve job structure and conditions for researchers.

**8. Improve Delivery mechanism**, with the following actions: i) One stop centre (OSC) where all the agencies siting in close proximity to ensure integrated coordination among them is effective; ii) Up to date information and recent update of

rules and regulations must be easily and quickly accessible to the industrialist communities; iii) Strengthen the agency by giving authoritative power in making quick decision with the capabilities of inviting industrialist in the process of decision making that is pertinent to them; iv) Perak-Invest has to be the authority dealing with approval requesting from the industrialist and any request of approval has to be treated promptly by Perak-Invest in order to speed up the business in developing industry in Perak; v) Online up to date system needed to be established in order to cater for the guideline quick and prompt disbursement of industrial development in Perak; vi) Online up to date system needed to be established in order to cater for the guideline on incentives- quick and prompt disbursement of industrial development in Perak; vi) Online service – State and federal government Web site will have many online services available for easy use and online services in delivering information; vii) Rules, regulation and information regarding the development of industry in Perak should be realised immediately to the public; viii) Check list of quality improvement is needed in delivering any kind of information to the citizen or industrialists pertaining to the development of industry in the state of Perak

**9. Improve Industrial estates**, with the following actions: i) Review the current selling procedure and requirement regarding industrial estates; ii) Give notice to land owners that STILL had not start their projects; iii) Proper town and zone planning between residential and industrial zones; iv) Zoning of industrial estates areas based on business activities and based on value chain and resources; v) Local authorities and/or operators of the industrial estates to conduct regular maintenance; vi) Yearly budget allocation for maintained of industrial estates; vii) Review the existing supporting industries facilities in the existing industrial estates; viii) Upgrading the existing industrial estates with supporting industrial facilities; ix) Establish a database in terms of GIS system that can be shared across related agencies (with the appropriate level of authority and access)

**10. Expand Industrial development**, with the following actions: i) Identification of industrial niches based on availability of natural resources, human resources and economic activities; ii) Conduct R&D on the viability, development and downstream of limestone, marble and granite industries products; iii) Development of SMEs master plan; iv) Identify and promote priority sectors for SMEs development ; iv) Vendor schemes for SMEs in priority sectors ; v) Provide attractive incentives for SMEs to promote vendors to support companies

**11. Invigorate Supporting industries**, with the following actions: i) Upgrading the existing industrial estates with facilities for supporting industries; ii) New industrial estates should be provided with facilities for supporting industries; iii) Enhance linkages between supporting industries with MNCs; iv) Match-making unit be developed to enhance linkages between supporting industries and MNCs; v) Zoning

of industrial estates should be based on supplies chain of business activities and provide the necessary facilities for supporting industries

**12. Develop Resource based (Raw materials) industries**, with the following actions: i) Proper planning for usage and mining of lime stones, marble and granites; ii) Development of data base of natural resources in Perak; iii) Disseminate information on policies through portal and dialogs between industries players and agencies; iv) Licensing should priorities companies that use local raw material.

Based on projections, the results shows that Perak needs to gear for 5 percent growth in GDP to achieved expected GDP of RM50.88 billion by year 2020. The contribution of manufacturing sector to GDP is targeted at 25 percent in 2020 valued at RM12.73 billion. The annual growth rate of manufacturing sector needed in order to achieve this target is 7.1%. The investment needed in year 2015 and in year 2020 are RM4.78 billion and RM6.75 billion respectively.

The strategies and recommendations are to be implemented by appropriate federal and state agencies with a given timeline and scope of implementation, monitoring and evaluation. The list of agencies and items to be monitored and evaluated are given in the table of plan of actions. The timeline are categorised into short term/immediately, medium term (up to 2015) and long term (up to 2020). Effective monitoring and evaluations are essential for the smooth execution of the action plans.