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12. **INDEPENDENT MARKET RESEARCH REPORT**

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*(Prepared for inclusion in the Prospectus)*



Date:- 23<sup>rd</sup> June 2003

This Executive Summary Report has been prepared for inclusion in the Prospectus dated 30<sup>th</sup> June 2003 pursuant to the listing of PEMBINAAN JAYABUMI (SARAWAK) BERHAD ("**PJSB**") on the Second Board of the Kuala Lumpur Stock Exchange ("**KLSE**").

This report has been prepared with the intention to provide an overview of the industry as well as the operations of the company within the industry. **ACNielsen** had conducted the research as an independent third party, basing its report on publicly available information and economic trends to indicate the future direction of the industry.

A handwritten signature in cursive script that reads "Alison Harvey".

Alison Harvey

**ACNielsen (Malaysia) Sdn Bhd**

Director

Customised Research

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## **1. Executive Summary**

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**Pembinaan Jayabumi (Sarawak) Berhad (“PJSB”)** was incorporated on 2 July 1985 as a private company and was later converted to a public company on 15 January 1997. PJSB Group’s principal activity is to undertake all business relating to the designing, manufacturing, trading, installation, construction and maintenance of all kinds of Fibre Reinforced Plastic (“FRP”) sewerage treatment systems, Reinforced Concrete (“RC”) sewage treatment plants (“STP”), Underground Storage Tanks (“UST”) for petroleum, cleansing and environmental services and trading of Mechanical and Engineering (“M&E”) equipment.

The principal products of PJSB Group comprise a range of STP which are produced and supplied by the Group. These include the *SUPER-SEPT*, *SATS*, *HI-KLEEN*, *HI-KLEEN* Petrotanks i.e. UST and RC systems.

The *SUPER-SEPT* system consists of factory-moulded septic tanks that have a built-in anaerobic up-flow filter system. The tanks require minimum space and can be easily installed by any building contractor. This system mainly caters for individual residential units with population not more than 18 Population Equivalent (“PE”).

The *SATS* system comprises aeration and separation tank meant for a PE from 13 to 70, thus it is normally installed in small and medium sized industrial developments. It can also be used in the extension / upgrading of school projects, petrol kiosks, highway lay-bys and rest areas (“R&R”).

The *HI-KLEEN* FRP system is specially designed as STP by PJSB for the treatment of domestic wastewater. The capacity of the system is suitable for population from 50 to 5,000 PE. Thus, *HI-KLEEN* can be installed in large-scale residential and industrial developments, hotels, office / commercial complexes, mosques, schools / universities, army camps, hospitals, airport / bus terminals, resorts and other developments which are meant to accommodate large numbers of people.

Unlike the other systems, the RC plant is constructed on site and requires extensive site preparation normally utilizing concrete, reinforced with steel bars. The RC system is usually designed and built for centralised sewerage treatment of large scale property and industrial developments and is applicable for a population of 5,000 PE or more.

The *HI-KLEEN* Petrotank is an UST used for the storage of petroleum. This product has unique fibreglass design and construction. The adoption of computerised filament winding technology in its production leads to a significant improvement in its

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structural strength and stability. The tanks are made of 100% resin and fibreglass reinforcement with no filler materials. Its lightness reduces the need for heavy equipment during field installation.

PJSB, through its subsidiary, AJSB, has been involved in Solid Waste Management (Solid Waste Collection and Area Cleansing) since 1995, based on the decision by the Government to privatise the National Solid Waste Management. Due to AJSB's active participation in the privatisation programme, the Company was awarded a job in Kuala Lumpur by Alam Flora Sdn Bhd. Under its scope of works, AJSB is allocated solid waste collection and area cleansing in Zone 2-1 & Zone 2-2 in Kuala Lumpur. The award, which began in June 2001, can contribute positively to the Group's turnover from 2002 until 2007.

The Malaysian Government is one of the major end-users for the products and services of PJSB, through the Central Contract Agreement held since 1993 and currently extended for 2-years from Dec 2002 to Dec 2004. The Government's Water Privatisation Policy and Sewerage Privatisation Policy introduced in 1983 and 1993, is specifically aimed at upgrading and improving the existing treatment plants, construction of new treatment facilities utilising advanced technologies with compact designs and establishing a proper network of sewerage system<sup>1</sup>.

Previously, the domestic sewerage treatment in Malaysia was dependent upon Federal Government grants and loans for Government projects. However various STP are being implemented by the private sector as part of urban development. This posed problems such as lack of proper maintenance resulting in rapid deterioration of the treatment and disposal systems. This prompted the Government to sign a Concession Agreement with Indah Water Konsortium Sdn Bhd ("IWK") in December 1993 to plan, construct, operate and maintain sewage facilities in 143 local authority areas of every state in Malaysia. This marked the beginning of an era of privatisation in domestic sewage treatment. PJSB has been appointed to maintain facilities such as Putrajaya Phase I and Pantai Plant as subcontractor to IWK.

In addition to the privatisation programme, the growth of the sewerage treatment systems industry was also attributable to the rising demand from private housing developers, as it is mandatory for all new housing estates to have wastewater treatment plants. As a preview to the potential demand with regards to this requirement, in the year 2000, there were 214,290 housing approvals. This increased

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<sup>1</sup> Seventh Malaysia Plan (1996-2000)

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to 227,260 in 2001. For 2002, the number is 198,970.<sup>2</sup> For the years 2001 – 2005, the demand for housing is forecasted to be 782,300 units<sup>3</sup>.

**The growth of the sewage and wastewater treatment industry is still at its early stage. Rapid development has been seen following the privatisation programme. As such, there are yet ample business opportunities for environmental services and products which will grow in tandem with the population and the advancement of the nation.**

The sewerage and wastewater treatment industry is closely linked to the construction and property development sectors of the country as housing development and infrastructure projects will require sewage tanks to be installed as part and parcel of domestic waste treatment systems. As such, during the Asian economic crisis, sewerage treatment systems industry players' performances were adversely affected by the slowdown in the construction sector. However, following the implementation of the Government's fiscal stimulus policy, the construction sector is already on its path to recovery.

For 2003, a sum of RM1,426 million for construction of living quarters for armed forces and police personnel as well as other civil servants. In addition, RM993 million is allocated for low cost public housing projects. Also in 2003, the Government initiated the Home Ownership for the People (HOPE) project, providing new buyers and first-time home owners with subsidy for housing loans and tax relief on interest payments. In addition, Syarikat Perumahan Negara Berhad (SPNB) plans to build at least 150,000 units of medium-cost houses within the next 5-years.

PJSB's direct competitors are the producers and suppliers of both pre-fabricated and RC domestic wastewater treatment system. Currently, it is estimated that there are less than 20 players registered with Jabatan Perkhidmatan Pembetulan ("JPP") for the production and supply of both types of products. Products offered to the industry players normally vary in terms of design parameters, distribution channels, market focus, pricing and credit policies.

The Group is well positioned to maintain its market position based on the following competitive advantage:

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<sup>2</sup> Bank Negara Report 2002

<sup>3</sup> Eighth Malaysia Plan

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- Ability to provide a complete spectrum of services ranging from design, technical support, production, sales and marketing, delivery, installation, testing, commissioning to after sales service, i.e. a total solutions package
- Established reputation for technical prowess and high quality products
- Excellent customer service and after-sales service creating good rapport with customers
- In-house capability in technical design and quality assurance
- Aggressive efforts in the training and development of human resources
- Continuous upgrading of production and process technology
- Presence of wide clientele base
- Price competitive in terms of offering a total comprehensive solution package of sewerage treatment systems to clients
- Branches to serve customers nationwide

As the Group provides a comprehensive and fully integrated range of products and services, it has been able to achieve an enviable track record<sup>4</sup> in the industry due to its dedication and commitment towards its long term business objective and future growth which are in line with the country's economic aspirations.

### **1.1 Economic Outlook**

Since late 2001, a global recovery has been under way, with trade and industrial production picking up across the globe. However, after a strong first quarter, concerns about the pace and sustainability of the recovery has risen significantly<sup>5</sup>. Financial markets have weakened markedly, with equity markets falling rapidly accompanied by a depreciation of the US dollar.

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<sup>4</sup> The Group's turnover has increased from RM58 million in 1997 to RM80 million in 2002. Furthermore, Group has remained profitable despite the Asian economic crisis.

<sup>5</sup> IMF World Economic Outlook, September 2002

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The latest World Output projections from IMF are as follows:

**Table 1 World Economic Outlook –Real GDP Annual Percent Change**

(%)	1997	1998	1999	2000	2001	2002 <sup>6</sup>	2003 <sup>7</sup>	2004 <sup>8</sup>
World	4.2	2.8	3.6	4.7	2.3	3.0	3.2	4.1

Source: IMF

There were increasing signs that the global slowdown had bottomed out. While global recovery is expected to continue, it will be weaker than earlier expected. Global growth is projected at 3.2 % in 2003, rising to 4.1 % in 2004.

This global recovery is led by the United States and underpinned by improvements in global industrial production and trade<sup>9</sup>. The global slowdown in 2000-01 has proved to be more moderate than most previous downturns. This owed much to an aggressive policy response, particularly following the events of September 11, in turn made possible by the improvement in economic fundamentals in the 1990s.

Other positive support activities<sup>10</sup> that have and will continue to aid the global economy towards a speedier recovery include:

- ◆ Continued accommodative policies such as the easing of the monetary policies of major countries,
- ◆ The resilience of the global financial infrastructure to a variety of substantial shocks; and
- ◆ Strengthening economic fundamentals in many countries, especially in Asia.

In the longer term, aggressive monetary and fiscal policy responses by major advanced economies and developing countries should bring world growth back on track. The Malaysian economy expanded by 4.2% in 2002 (2001: 0.4%)<sup>11</sup>. This recovery was mainly driven by strong consumption spending and supported by the external demand following the general overall recovery in the global economy.

<sup>6</sup> IMF World Economic Outlook, April 2003

<sup>7</sup> IMF World Economic Outlook, April 2003.

<sup>8</sup> IMF World Economic Outlook, April 2003.

<sup>9</sup> IMF World Economic Outlook, September 2002 and April 2003

<sup>10</sup> IMF, Global Outlook after September 11, 2001 (18 December 2001). IMF World Economic Outlook, April and September 2002, April 2003

<sup>11</sup> Bank Negara Report 2002.

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## **1.2 Malaysian Economy**

The Malaysian economy rebounded in 2000 after recovering from the sharp output decline in 1998 and early 1999 following the financial crisis. During the Seventh Malaysian Plan (“7MP”), the Malaysian Economy recorded an average growth of 4.7% per annum, which was 1.7% above the target of 3% projected from 1996 – 2000. In 2001, the Government announced an additional RM4.3 billion (USD1.1 billion) stimulus package to boost the economy. This stimulus package serves as a measure used to prop up the economy, following the RM3 billion supplementary budget in March 2001 and the RM28 billion spending package from the 2001 budget.

The Malaysian economy registered stronger growth in 2002, following better export performance and continued pick-up in domestic demand. The GDP grew by 4.2% in 2002 (2001: 0.4%). Exports have somewhat broadened beyond the electronics sector, aided by the softening of the US dollar against regional currencies to which the Ringgit is pegged.

Inflation remained low and stable in 2002 with Consumer Price Index (“CPI”) at 1.8% (2001: 1.4%). Price pressures were seen mainly in transport and communication following the upward tariff re-balancing for domestic phone calls in March 2002 and marginal price increases in diesel, petrol and liquefied petroleum gas (“LPG”) in May 2002. The Producer Price Index (“PPI”) that has increased by 4.4% in 2002, mainly on account of higher prices of crude palm oil, crude petroleum and rubber<sup>12</sup>. The subdued inflationary outlook provided flexibility in the conduct of fiscal and monetary policies to support the momentum of growth in domestic investment and consumption.

Economic conditions improved further in 2002. This recovery was mainly driven by strong consumption spending and supported by the external demand following the general overall recovery in the global economy. The construction industry recorded a growth of 2.3%, supported by the fiscal stimulus programme and the low interest rate environment.

The Malaysian economy, with stronger macroeconomic fundamentals already in place and complemented by the more resilient corporate and financial sectors, is poised to benefit from the improving global economic environment projected for 2003. Output expansion is anticipated in all sectors of the economy, with GDP growth anticipated at 4.5% for 2003, arising from a broader based economy with growth emanating from a more pronounced role of a revitalised and dynamic private sector.

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<sup>12</sup> Bank Negara Report 2002

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For 2003, the manufacturing sector is expected to continue its expansion to record 5.0% increase in output while the services sector, with a projected increase of 4.4%. The construction sector is forecasted to expand by 1.9% while the agriculture and mining sectors are envisaged to improve by 1.5% and 4.5% respectively.

One of the Development Thrusts outlined in the Eighth Malaysia Plan (“8MP”) is to enhance the quality of life of Malaysians. During the 8MP period, focus will be given to the provision of adequate and affordable housing for the lower- and middle-income groups. In addition, housing and infrastructure facilities aimed at improving the quality of life of the rural population will continue to be emphasized. **Efforts will be undertaken to provide a wider coverage of utilities such as water, electricity and sewerage. Priority will be given to expand the coverage of water supply in rural areas from alternative sources such as groundwater, rivers and streams.**<sup>13</sup>

The Government will continue to provide a substantial allocation for infrastructure and utilities development. For 2001 – 2005, the government will allocate a total of RM27 billion for infrastructure and utilities, whereby RM5.6 billion will be allocated for utilities. Out of this amount, RM4.0 billion will be allocated for water supply and the remaining RM1.6 billion will be for sewerage. Compared to the Seventh Malaysia Plan period (1996-2000) (“7MP”), in which RM2.8 billion and RM0.7 billion were allocated for water supply and sewerage respectively, there are substantial increases in Government allocation for both utilities during the 8MP period.

### **1.3 The Industry**

The Government’s Water Privatisation Policy and Sewerage Privatisation Policy introduced in 1983 and 1993 respectively are in line with the overall objectives of the Malaysian Government which are as follows:

- ◆ To relieve the financial and administrative burden of the Government;
- ◆ To facilitate economic growth;
- ◆ To promote the achievement of the National Economic Policy targets;
- ◆ To improve the efficiency and productivity level of the country; and

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<sup>13</sup> Eighth Malaysia Plan, 2001 - 2005



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- ◆ To reduce the role and presence of the public sector in the economy.

The privatisation of sewerage systems is aimed at upgrading and improving the existing treatment plants, construction of new treatment facilities utilising advanced technologies with compact designs and establishing a proper network of sewerage system<sup>14</sup>.

The sewerage systems have been managed by the local authorities and constructed by the state governments through JPP and Jabatan Kerja Raya (“JKR”). However, due to capital and human resource constraints faced by most local authorities, only nine out of a total of nineteen planned feasibility studies on centralised sewerage systems for state capitals and major towns were completed during the period under the Fifth Malaysia Plan (1986-1990).

The inadequate provision for centralised and decentralised sewerage systems and the increasing threat of water pollution finally led the Government to embark on a national privatisation programme for the country’s sewerage system in 1993. The privatisation programme, expected to cost RM6.27 billion over a period of 18 years, has been awarded to IWK. From 1994, IWK was established to develop and maintain a modern and efficient sewerage system for the country. Subsequently, in June 2000, as a proof of the Government’s commitment to ensuring a proper and efficient sewerage system, the Ministry of Finance Incorporated (“MOF”) took over the entire equity in IWK from its previous private owners<sup>15</sup>.

In addition to the privatisation programme, the growth of the sewerage treatment systems industry was also attributable to the rising demand from private housing developers, as it is mandatory for all new housing estates to have wastewater treatment plants. As a preview to the potential demand with regards to this requirement, in the year 2000, there were 214,290 housing approvals. This increased to 227,260 in 2001. For 2002, the number is 198,970.<sup>16</sup> For the years 2001 – 2005, the forecasted demand for housing is forecasted to be 782,300 units<sup>17</sup>.

Malaysia is projecting to grow at an average of 7.5% per annum during the 8MP period (2001 – 2005) with low inflation and price stability. The private sector is envisaged to lead this growth with the public sector continuing its role in stimulating the economy. The economy will become less reliant on labour, in the country’s efforts

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<sup>14</sup> Seventh Malaysia Plan

<sup>15</sup> Indah Water Konsortium Malaysia, corporate profile.

<sup>16</sup> Bank Negara Report 2002

<sup>17</sup> Eighth Malaysia Plan

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to develop a knowledge-based economy. Private investments are forecasted to grow at 19% annually and public investments at 1.1% (8MP). Supported by strong domestic demand and strong recovery in private investments, private consumption is expected to grow at 7.4% while public consumption is expected to grow at 7.7% per annum (8MP). It is expected that the per capita income will increase from RM13,411 in 2000<sup>18</sup> to RM17,779 in 2005, increasing private consumption per capita from RM6,198 in 2000 to RM9,073 in 2005.

The Malaysian Government's basis for growth in the 8MP period takes into account the challenges arising from a more liberal global economy and the impact of technological advancements. As such, greater efforts will be made to ensure the sustainability and resilience of the economy in the long term to achieve the country's Vision 2020 target.

Already, steps are in place to transition the country from a production-based economy to a technology and knowledge-based economy to ensure that Malaysia remains competitive in the global economy.

### **1.3.1 Competitiveness of the industry**

The sewerage systems market in Malaysia can be broadly categorised into two segments, namely the pre-fabricated systems and the RC systems. The Group is involved in both segments.

There are various types of companies operating in the industry offering a spectrum of products and services. PJSB falls into the category of integrated service providers that offer a broad range of services. PJSB offers complete services to the customer, from design, production, and installation up till after sales service. Having a total staff force of 504 people located throughout Malaysia, with 90 in Operations & Maintenance, PJSB aims to be a market leader in this sector.

As there are various wastewater treatment technologies available in the market catering to various types of industries and customers, no single company can lay claim to a monopoly. Instead, the market condition is rather competitive with the presence of many players. This is especially so in the individual septic tank (such as *SUPER-SEPT*) segment which are produced through hand-laying process. This has enabled more players to enter the market due to the comparatively low capital outlay required.

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<sup>18</sup> For 2001, per capita income was recorded at RM12,867 and 2002 projections are RM13,716, which is a 6.6% increase from 2001.

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A high level of capital outlay is required in the manufacture of products such as the *HI-KLEEN* and UST tanks. Investing in equipment and technical staff with proper engineering background are also needed in the design stage and in technical support. For new players, the high investment cost in setting up a proper facility with the relevant equipment is a major factor that hinders participation in bigger capacity projects. PJSB appears to be the only company that uses the filament winding technology to produce the main body of the FRP tank. Over RM2 million has been invested by PJSB for the purchase of this equipment and the purchase of this filament winding technology, which allows PJSB to produce higher quality tanks with a larger storage capacity. The filament winding technology uses computer-controlled equipment, which provides a higher degree of, accuracy and quality compared to the manual hand lay-up process used by PJSB's competitors.

### **1.4 Industry Linkages**

The sewerage and wastewater treatment industry is closely linked to the construction and property development sectors of the country as housing development and infrastructure projects will require sewage tanks to be installed as part and parcel of domestic waste treatment systems. Furthermore, as the nation progresses, the population will expect a higher standard of living, which includes better sanitation and enhanced environmental management.

#### **1.4.1 An overall review of Malaysian property market**

In 2001, the Government undertook various measures and initiatives to support economic growth and to increase the disposable income led to a positive growth in the property market, especially the residential sub-sector. Strong demand for affordable and conventional residential units in choice locations led the growth, coupled with supportive measures such as low interest rate environment, Employee Provident Fund ("EPF") fund withdrawals for second home purchases, stamp duty exemptions and the Foreign Investment Committee ("FIC") guidelines liberalisation on foreigners' purchases of commercial properties.

In 2002, the Government undertook a major revamp to the legislation relating to housing development to protect the interest of house buyers.

A total of 86,000 units of properties valued at RM14 billion were exempted from stamp duties. Besides stimulating demand, the waiver on the stamp duties also

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contributed to the increase in supply of houses. However the demand was not adequate to absorb in the increase in supply. The property overhang situation as end-June 2002, data compiled by the National Property Information Centre ("NAPIC"), showed the overhang situation in residential properties segment increased by 27.9%, with value increasing 27.8%. The units however, account for only 1.8% of total national stock of completed houses. The Malaysian House Price Index weakened by 0.6% in 2001. Nevertheless, given all the positive measures undertaken by the Government, 54,642 properties were sold in the first half of 2002 (second half 2001: 40,925).<sup>19</sup>

In 2003, the Government initiated the Home Ownership for the People (HOPE) project, providing new buyers and first-time home owners with subsidy for housing loans and tax relief on interest payments. In addition, Syarikat Perumahan Negara Berhad (SPNB) plans to build at least 150,000 units of medium-cost houses within the next 5-years. These measures augurs well for the property market.

#### **1.4.2 The Manufacturing Industry<sup>20</sup>**

The manufacturing industry would continue to be the key factor in sustaining Malaysia's economic recovery and future growth. Based on the 8MP, Malaysia's manufacturing output grew at an average rate of 9.1% between 1996 and 2000, which is higher than the 7MP revised target of 3.9%.

Moving into year 2001, the manufacturing sector has experienced sharp deterioration. The decline is largely attributable to the slowdown in major industrial countries and a depressed global market for electronic products. While the export-oriented industries have been adversely affected by weak external demand, the domestic-oriented industries have shown greater resilience. The growth in these industries has provided the support to growth and somewhat cushioned the contraction in the manufacturing sector.

In 2002, manufacturing production expanded by 4.1%, due to the stronger performance of export-oriented industries. Overall, the stronger performance of the manufacturing sector reflected mainly higher volume, while export prices continued to decline.

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<sup>19</sup> Bank Negara Report 2002

<sup>20</sup> Economic Report 2000/2001

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In the longer term, the outlook for the overall manufacturing industry continues to remain positive albeit the global economic slowdown due to the increasing opportunities in China and other Asian countries. The government's efforts to sustain growth, via the Third Outline Perspective ("OPP3"), 8MP, the new supplementary budget and other fiscal stimulus packages, coupled with higher per capita income and increased private consumption, will help sustain demand in this sector.

### **1.4.3 Construction Industry**

The construction sector recorded a 2.3% growth rate in 2001 and 2002. For 2003, the growth rate is expected to be 1.9%<sup>21</sup>. This is due to increase in public sector projects in the form of privatised infrastructure projects, schools and low-cost housing and the revival of deferred 7MP infrastructure projects; and the stimulus packages announced by the Government. As mentioned earlier, the implementation of the infrastructure, education and rural development projects from the RM3 billion March 2001 stimulus package (under OPP3) and the RM4.3 billion September 2001 stimulus package (supplementary budget post September 11<sup>th</sup> 2001) will also help in sustaining activity within this sector.

The construction sector will act as a stimulus to the economy in its role as an employment provider and a business catalyst by virtue of its strong linkages to the building materials, property and small/medium industries ("SMT") manufacturing sectors.

## **1.5 Water and Wastewater Industry**

The overall water and wastewater industry is fragmented and complex. The industry is fragmented because of the different services and products available in the market: systems and equipment (design / install / commissioning), formulated chemical products, analytical testing and environmental monitoring services, after sales service etc. Malaysia's total environmental market in 1997, which has been growing at an average rate of 15% to 20% annually, is estimated at between RM2.66 billion (USD700 million) and RM2.85 billion (USD750 million), with water and wastewater treatment market accounts for two-thirds of it.<sup>22</sup> Hence, based on an average growth

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<sup>21</sup> Bank Negara Report 2002

<sup>22</sup> Environmental Technologies Industries, US Department of Commerce's websites

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rate of 15% annually, the water and wastewater treatment industry in Malaysia is estimated at about RM3.21 billion in 2001<sup>23</sup>.

In 2001, an allocation of RM85 million has been provided to the Department of Environment (“DOE”) to continue its enforcement, controlling and monitoring efforts as well as the completion of the Environmental Skills and Training Institute.<sup>24</sup> Various incentives for companies have also been approved by the Government as a means to promote better environment management. On top of that, based on the progress made in the 7MP and prospects of 8MP, the underlying Government’s initiatives pertaining to the sewerage industry are in line with the objective of providing accessibility, adequacy and quality supply of infrastructure and utilities in order to promote *a better quality of life for Malaysians*.<sup>25</sup>

As mentioned earlier, the Government has allocated a total of RM1.6 billion for sewerage under the 8MP (7MP : RM0.7 billion).

The above clearly reflects high growth potential for companies such as PJSB which provides products and services relating to wastewater management and treatment for a cleaner environment.

## **1.6 Future Outlook**

Strong future growth is expected for the industry due to the increasing volume of new housing, industrial and infrastructure developments. In view of the country’s rising population and water pollution threat in its progress towards developed nation status, an efficient and reliable sewerage system for the nation is bound to gain more importance in the eyes of the Government. This is clearly reflected in the objective of 8MP which is to provide accessibility, adequacy and quality supply of infrastructure and utilities in order to promote *a better quality of life for Malaysians*.<sup>26</sup>

The industry anticipates stronger presence of big players in the pre-fabricated systems market segment which are already repositioning themselves to erode the market share of smaller players, especially in the light of the impending AFTA and WTO trade liberalization. For example, PJSB’s *SATS* and *HI-KLEEN* systems (5,000 population

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<sup>23</sup> Assumption of annual growth rate of 15% for Malaysia’s total environment market, with water and waste water treatment industry accounts for 2/3 of it is made for this estimation.

<sup>24</sup> Budget 2001 Speech

<sup>25</sup> Eighth Malaysia Plan 2001 – 2005

<sup>26</sup> Eighth Malaysia Plan 2001 – 2005

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equivalent ("PE") and below) are currently facing intense competition from major producers. To mitigate competitive risks, PJSB produces these products from raw materials to finished goods, enabling them to better control the production costs and be more competitive in terms of pricing.

In order to counter the threat of these producers, the Group has begun to explore market segment of 5,000 PE and above, i.e. the RC systems segment. A large percentage of the cost of producing these RC treatment systems come from the purchase of the M&E equipment, therefore, PJSB has signed some Memorandum of Understandings ("MOUs") with M&E manufacturers to purchase these equipment directly from manufacturers. Examples of close involvement from M&E manufacturers are direct contact by Datuk Yuji Kawata, who is a director of PJS Industries Sdn Bhd ("PJSI") (PJSB's holding company) with Japanese manufacturers and the MOU with Aqua-Aerobics System Inc, a US wastewater treatment system manufacturer and supplier, and Environ Holdings Sdn Bhd, an environmental engineering company, to work in the RC sector. A MOU has also been signed between PJSB and Perunding Hashim & Neh Sdn Bhd as well as Hyder Consulting Sdn Bhd to undertake design and consultancy work. Its first major RC job, which was completed on time and within budget, was Phase I of the STP for Putrajaya Holdings Berhad. This was followed by several projects in Kulim and other residential estates. The extension into RC system construction is seen as a move to increase the Group's revenue stream. As such, the Group will continue to expand its business in this area and has been bidding for more projects.

Generally speaking, as the industry is at a relatively young stage, there still exists ample business opportunities in the field of sewerage and wastewater treatment in line with the country's advancement into industrialisation and urbanisation.

In the Budget 2001 speech, the Finance Minister assured the nation that efforts to supply low-cost housing will be continued. The Government will also continue to place importance in the development of infrastructure. Following the announced RM3 billion fiscal stimulus by the Government, financial analysts in the country expect the construction sector to benefit from the budget. Those supplying pre-fabricated building materials for fast-track construction are also expected to benefit.

Among the new projects for immediate implementation are 200 single session schools costing RM2 billion, 193 community colleges (RM0.9 billion) and 6,600 housing quarters for the armed forces amounting to RM1.5 billion. In addition, under Budget 2002, a sum of RM1.08 billion will be allocated for the construction of quarters, including RM170 million for the armed forces, RM179 million for the police and

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RM173 million for civil servants. A sum of RM943 million has also been allocated under Budget 2002 to be allocated for several low cost housing projects, including RM143 million in loans for state governments to implement 124 public low cost housing projects. For 2003, a sum of RM1,426 million for construction of living quarters for armed forces and police personnel as well as other civil servants. In addition, RM993 million is allocated for low cost public housing projects.

Having recovered from the Asian economic crisis of 1997/98, the current favourable outlook for the construction industry augurs well for the sewerage treatment systems industry.