- Obtaining desired properties for geotextiles suitable to the application requirements of prefabricated vertical geodrains.

#### Shade Cloth

In an effort to diversify its business to incorporate other sectors, the EKIB Group is currently undertaking R&D in the manufacture of shade cloth. Shade cloth is made of polypropylene monofilament tape yarn and is weaved to form a fabric. Applications of shade cloth include the following:

- in agriculture where shade cloth is used to control the amount of sunlight getting through to the plants below it; and
- in household where shade cloth is used in outdoor settings to provide some shade to a defined

Areas of R&D for producing shade cloth include the following:

- creating strong but lightweight fabric to provide ease of installation;
- creating high resistance to environmental degradation particularly to ultraviolet rays and effects of acid rain; and
- determining the optimum amount of light transmission for maximum vegetation growth for different types of plants.

This on-going R&D is conducted to provide a wide range of applications including floriculture, agriculture, industrial and household uses.

### 5.4.9.3 Proposed Future R&D

EKIB Group proposes to undertake R&D to extend its current range of products by developing the following new products such as electrical vertical geodrains, concrete geomattresses and air filters.

## Electrical vertical geodrains

EKIB is currently working in technical collaboration with RasWILL Representative Pte Ltd ("RasWILL") in the manufacturing of Electrical Vertical Geodrains ("EVDs"). EVDs shorten the soil consolidation period compared to using the normal vertical geodrains. Electrical vertical geodrains rely on electro-osmosis using direct current instead of compressive load to remove the soil water. EVDs are similar to the normal vertical geodrains with the exception that it has a full width copper foil in the middle of the polymer core. The function of the copper foil is for conducting the direct current to the entire strip of polymer core. The EKIB Group's role is focused on the R&D for mass manufacturing to facilitate commercialisation of the EVDs. Areas of R&D include the following:

- optimum thickness of the polymer core for effective electrical conductivity;
- manufacturing process to encapsulate the copper foil into centre of the polymer core;
- establishing the required tensile strength of the product to ensure the copper coil is intact once it is installed; and
- extensive field trials to ensure effectiveness of the product and to collect empirical data to substantiate benefits of EVD over normal vertical geodrains.

Although the EKIB Group is a collaborator in the R&D process of EVDs, it does not share any intellectual rights. Instead it is given the exclusive rights to produce and distribute EVDs in Malaysia for two (2) years starting from 12 May 2003, which is renewable subject to agreement by both parties.

Pursuant to a collaboration agreement dated 12 May 2003 between RasWILL\* and EKIB. RasWILL is to provide all technical knowledge on the type, specifications of suitable materials, drawings of the EVDs and geotechnical monitoring of field trials at its own costs. EKIB shall bear all costs to manufacturer the first 10,000m of EVDs and to solicit for a field trial of the product within Malaysia. After which EKIB shall have exclusive production and distribution rights of EVDs within Malaysia for a period of two years from the date of the agreement. The agreement can be extended subject to mutual agreement.

EKIB shall pay RasWILL royalty amounting to 5% of the sales of EVDs in Malaysia and RasWILL has the right to commission EKIB to manufacture EVDs, at an ex-factory price to be mutually agreed, for sale outside Malaysia.

\*RasWILL is a company incorporated in Singapore founded by Mr Sandanasamy Richard Douglas (Executive Director of KEX) in 1981. RasWILL's core business is research and development and trading of geosynthetics. Mr Sandanasamy Richard Douglas is the inventor of the EVD while RasWILL is the patent holder for EVD in the United States of America, Singapore and Vietnam. It also has patents pending in several other countries including Malaysia.

EKIB intends to commence R&D on EVDs in 2004.

#### Concrete Geomattresses

Concrete geomattresses comprises two (2) layers of polyester woven geotextiles joined in a mat configuration with multiple panels. The fabric is woven from high strength multifilament polyester yarn. The two (2) planes are then stitched together such that the two (2) layers of fabric are joined edge to edge to create a continuous gap. Grout, consisting of a mixture of portland cement, fine aggregate and water, is then pumped into the geomattress gap and allowed to set. Concrete geomattresses are used for erosion control particularly for river embankments.

Some of the areas of R&D to achieve the required specifications and properties are as follows:

- seam strength for the two (2) layers for geomattress;
- positioning of filter points at regular spacing of the geomattress to facilitate optimum permittivity;
- warp and weft tensile strength;
- weight of the geomattress;
- grab width tensile strength;
- elongation at ultimate;
- tear strength;
- burst strength;
- puncture resistance;
- mass per square metres; and
- content of grout.

R&D also involves prototyping. The EKIB Group intends to commence R&D on concrete geomattresses in 2005.

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#### Air Filters

Currently, the EKIB Group is manufacturing liquid filters using non-woven geotextiles. To further extend its range of filters as well as to increase its diversification into industrial applications, the EKIB Group plans to manufacture air filters. The main function of air filters is to clean the air from dust and particulates. Air filters are used in the following industries, among many others:

- cement manufacturing;
- timber-based manufacturing;
- paper-based manufacturing;
- food manufacturing; and
- electronics.

Some of the areas of R&D to achieve the required specifications and properties are as follows:

- level of thickness;
- permittivity; and
- pore size.

The EKIB Group intends to produce air filters in 2005.

## 5.4.10 Interruption in Business

The EKIB Group did not experience any interruption in business having significant effect on its operations for the 12 months prior to the date of this Prospectus.

### 5.4.11 Information on Employees

As at 20 February 2004 (being the latest practicable date prior to the registration of this Prospectus), the EKIB Group has a total of 257 employees, none of whom belongs to any union and they enjoy a good relationship with the management. In addition, there has been no industrial dispute arising between the employees and the EKIB Group since the EKIB Group commenced operations.

The employee structure of the EKIB Group as at 20 February 2004 is set out below:

Category	Bumiputera	Chinese	Indian	Foreigner	Total
Manager	5	23	1	3	32
Executive	5	23	2	2	32
Technician/Supervisor	14	2	2	2	20
Clerical	7	4	4	-	15
Factory/General Worker	129	-	11	18	158
Total	160	52	20	25	257

The number of years of service of the EKIB Group's full-time employees is categorised as follows:

Category	>10 years service	5 to 10 years of service	< 5 years of service	Total
Manager	3	5	24	32
Executive	1	7	24	32
Clerical	-	6	30	36
Factory/General Worker	6	17	134	157
Total	10	35	212	257

The training and development programmes undertaken and planned for the directors and employees of the EKIB Group since 2002 are as follows:

	<> No. of programmes>			
Type of programme	Undertaken	Planned		
Production Management	3	1		
Directors' Training	3	-		
Management Training	10	-		
Technical Training	6	1		
Quality Management	2	-		
Regulatory and Compliance	2	1		
Human Resources Management	1	1		
Safety, Health and Industrial	2	-		

Save for the service contract dated 30 December 2002 between EKSB and Mr Goh Ching Min, none of the employees of the EKIB Group is under any service contract.

# 5.4.12 Key Achievements

The EKIB Group has built a strong market reputation associated with the ability to manufacture geosynthetic products that is able to meet desired specifications and properties. Its success can be exemplified by, among others, the following awards and achievements:

- Enterprise 50 Award Programmes 2001 by Small and Medium Industries Development Corporation and Accenture;
- Selangor Product Innovation Excellence Award (Small and Medium Sized Industry) 2002 by the Selangor State Investment Centre; and
- 7<sup>th</sup> placing, Golden Bull Award 2003 (Small and Medium Sized Industry) by Nanyang Siang Pau.

## 5.4.13 Modes of Marketing/Distribution

The sales and marketing team of the EKIB Group utilises the following marketing strategies to sustain and expand its business:

- positioned itself as a total provider and manufacturer of geosynthetic products and materials with full
  in-house facilities including design, manufacturing, research and development, and testing;
- continually providing excellence in customer service with the aim of developing long term business relationships;
- continually providing the highest quality of products and services to establish its reliability as a supplier, thus creating long-term customer loyalty and dependency;
- expand its market presence overseas and develop new business opportunities by working in close partnership with existing customers; and
- expand its network of customer base through trade shows, trade referrals and exhibitions.

As part of its strategy to promote its products and services to potential customers locally and overseas, the EKIB Group also actively participated in the following exhibitions, conferences and seminars:

#### **Overseas**

- 6<sup>th</sup> International Geosynthetics Conference 1998, Atlanta, US;
- 7th International Geosynthetics Conference 2002, Nice, France; and
- Geosynthetics 2002, Shanghai, China.

#### Malaysia

- Geosynthetics Asia 2000, Kuala Lumpur;
- Heads of Road Authorities of Asia & Australasia Inaugural Meeting 2002, Kuala Lumpur;
- 5<sup>th</sup> Malaysian Road Conference 2002, Kuala Lumpur;
- International Conference on Urban Hydrology for the 21<sup>st</sup> Century 2002, Kuala Lumpur;
- The Second IKRAM International Conference 2002, Putrajaya; and
- Water and Drainage 2003, Kuala Lumpur.

As at 20 February 2004 (being the latest practicable date prior to the registration of this Prospectus), the EKIB Group had approximately 20 personnel in its sales and marketing division to focus on developing new business.

The distribution strategy of the EKIB Group is based on direct and indirect distribution. However, currently the EKIB Group undertakes most of its local sales and marketing activities directly. This is due to the following factors:

- most of the products require some form of customisation in terms of technical properties and specifications. This requires some technical knowledge in being able to market the benefits of the EKIB Group's products and services effectively; and
- due to the differences in specifications, it will be difficult for a third party to market the EKIB Group's products and services effectively.

In addition, the direct sales approach enables the Group to work closely with its customers to evaluate and attain a better understanding of their requirements to serve as a feedback mechanism for continuous product and service improvement.

In some situations, especially for East Malaysia and overseas countries, EKIB has found it to be effective to use indirect distribution by selling through third parties, such as agents and distributors.

The EKIB Group has appointed agents in the following countries and locations:

## East Malaysia

Sealguard Systems Sdn Bhd, Sarawak

### **Overseas Countries**

- GSX SRL, Italy;
- KK Enterprise, India;
- Environmental Supplies Pvt Ltd, Sri Lanka;
- More Enterprise Ltd, Bangladesh;
- PT Surya Kemuliaan Abadi, Indonesia;
- Vigor Merger Co Ltd, Thailand;
- N & N Construction Corporation, Philippines;
- Geotech Pty Ltd, New Zealand;
- Polyfabrics Australia Pty Ltd, Australia;
- Jack & Vicky Co Ltd, Taiwan;
- G and E Company Ltd, Hong Kong;
- Matic Co Ltd, Vietnam;

- Bian Hoe Sdn Bhd, Brunei; and
- RasWILL Representative Pte Ltd, Singapore.

Where it is more effective, the EKIB Group will continue to extend its distribution channel and seek specialist distributors that can focus on different market segments for maximum impact and success.

#### 5.4.14 Location

The manufacturing of geosynthetic products and materials are undertaken by the following companies within the EKIB Group, and at the following locations:

Subsidiary companies	Approximate Built- up Area (square feet)	Location of Production Facility
EKSB	50,542	Lot 13A, Rawang Industrial Estate, 48000 Rawang, Selangor
KESB	35,153	Lot 32, Rawang Industrial Estate, 48000 Rawang, Selangor
FIT*	23,435	Lot 33, Rawang Industrial Estate, 48000 Rawang, Selangor

The rented factory premises of ATF which manufacture industrial bulk bags is located at No. 2006, Jalan Jelawat, Bandar Seberang Jaya, Seberang Perai.

The operating office of the EKIB Group is located at Suite E-16-D1 Wisma Sunrise, Plaza Mont' Kiara, No 2, Jalan Kiara, Mont' Kiara, 50480 Kuala Lumpur.

#### Note:

Only for the manufacturing of polypropylene fibres.

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### 5.5 SUBSIDIARY COMPANIES

Details of EKIB's subsidiary companies are as follows:

Name	Date & place of incorporation	Issued and paid- up share capital in RM (unless otherwise stated)	% interest held	Principal activities
EKSB	18 July 1991 Malaysia	4,500,000	100.00	Manufacturing and trading of geosynthetic products and technical fabric for engineering and industrial applications
KESB	11 November 1982 Malaysia	6,000,000	100.00	Manufacturing and trading of geosynthetic products for construction and engineering use and industrial fabric
EKM	11 October 1991 Malaysia	1,500,000	100.00	Marketing, trading and installation services of geosynthetic products and materials and provision of geoservices
ATF	29 September 1977 Malaysia	1,000,000	60.00	Manufacturing and marketing of industrial fabric
FIT	03 August 1991 Malaysia	10,000,000	60.00	Manufacturing and trading of industrial fibres
KEX	16 January 1998 Singapore	SD100	100.00	Sales and marketing of geosynthetic products and materials to international market

#### 5.5.1 Information on EKSB

# (a) History and business

EKSB was incorporated on 18 July 1991 as a private limited company in Malaysia under the Act. The present authorised share capital is RM5,000,000 comprising 5,000,000 ordinary shares of RM1.00 each, while its issued and paid-up share capital is RM4,500,000 comprising 4,500,000 ordinary shares of RM1.00 each. EKSB is a wholly-owned subsidiary company of EKIB.

The company was initially involved in the trading of imported geotextiles and specialised turnkey contracting for infrastructure projects. The company began providing turnkey solutions for geosynthetic engineering services in January 1994. However, in 1997 the company expanded its activities into the manufacturing and trading of geosynthetic products including woven geotextiles and geocomposites.

## (b) Share capital

The details of the changes in the issued and paid-up share capital of EKSB since its incorporation are as follows:

Date of allotment	No. of shares	Par value RM	Type of Issue	Total RM
18.07.1991	2	1.00	Subscribers' Shares	2
17.08.1991	279,998	1.00	Cash	280,000
03.05.1996	1,720,000	1.00	Cash	2,000,000
28.01.2000	300,000	1.00	Cash	2,300,000
01.06.2001	1,200,000	1.00	Capitalisation of amount owing to shareholders	3,500,000
04.01.2002	1,000,000	1.00	Cash	4,500,000

## (c) Subsidiary and Associated Companies

EKSB does not have any subsidiary or associated companies.

### 5.5.2 Information on KESB

### (a) History and business

KESB was incorporated on 11 November 1982 as a private limited company in Malaysia under the Act. The present authorised share capital is RM10,000,000 comprising 10,000,000 ordinary shares of RM1.00 each, while its issued and paid-up share capital is RM6,000,000 comprising 6,000,000 ordinary shares of RM1.00 each. KESB is a wholly-owned subsidiary company of EKIB.

The principal activity of the company is the manufacturing and trading of geosynthetic products including non-woven geotextiles and geocomposites for construction and engineering use. KESB commenced the business of manufacturing of non-woven geosynthetic products from February 1998.

## (b) Share capital

The details of the changes in the issued and paid-up share capital of KESB since its incorporation are as follows:

Date of allotment	No. of shares	Par value RM	Type of Issue	Total RM
11.11.1982	4	1.00	Subscribers' Shares	4
28.02.1983	150,000	1.00	Cash	150,004
15.10.1983	30,000	1.00	Cash	180,004
03.01.1984	50,000	1.00	Cash	230,004
23.02.1984	120,000	1.00	Cash	350,004
03.01.1985	10,000	1.00	Cash	360,004
01.11.1985	129,497	1.00	Cash	489,501
23.06.1986	4,499	1.00	Cash	494,000
10.06.1987	6,000	1.00	Cash	500,000
10.11.1992	100,000	1.00	Cash	600,000

Date of allotment	No. of shares	Par value RM	Type of Issue	Total RM
16.03.1994	300,000	1.00	Cash	900,000
03.03.1997	1,100,000	1.00	Cash	2,000,000
29,10,1997	1,000,000	1.00	Cash	3,000,000
28.01.2000	1,575,000	1.00	Cash	4,575,000
31.12.2001	1,425,000	1.00	Cash	6,000,000

# (c) Subsidiary and Associated Companies

KESB does not have any subsidiary or associated companies.

### 5.5.3 Information on EKM

### (a) History and business

EKM was incorporated on 11 October 1991 as a private limited company in Malaysia under the name of Villemark Sdn Bhd under the Act. The company assumed its present name on 8 January 1997. The present authorised capital is RM5,000,000 comprising 5,000,000 ordinary shares of RM1.00 each, while its issued and paid-up share capital is RM1,500,000 comprising 1,500,000 ordinary shares of RM1.00 each. EKM is a wholly-owned subsidiary company of EKIB.

The principal activities of the company are marketing, trading, installation services of geosynthetic products and materials and provision of geoservices in Malaysia. EKM has been involved in this business in January 1997.

### (b) Share capital

The details of the changes in the issued and paid-up share capital of EKM since its incorporation are as follows:

Date of allotment	No. of shares	Par value RM	Type of Issue	Total RM
11.10.1991	2	1.00	Subscribers' Shares	2
14.11.1991	1	1.00	Cash	3
08.09.1992	2,997	1.00	Cash	3,000
16.08.1997	152,000	1.00	Cash	155,000
08.09.1997	345,000	1.00	Cash	500,000
02.08.2001	500,000	1.00	Capitalisation of amount owing to shareholders	1,000,000
04.01.2002	500,000	1.00	Cash	1,500,000

## (c) Subsidiary and Associated Companies

EKM does not have any subsidiary or associated companies.

## 5.5.4 Information on ATF

### (a) History and business

ATF was incorporated on 29 September 1977 as a private limited company in Malaysia under the Act under the name of Plastplant Industries Sdn Bhd. It assumed its present name on 10 May 1999. The present authorised share capital is RM1,000,000 comprising 1,000,000 ordinary shares of RM1.00 each all of which have been issued and fully paid-up. ATF is a 60%-owned subsidiary company of EKIB. The remaining 40% is held by Kudus Bin Shoib, the Operations Director of ATF.

The principal activities of the company are the manufacturing, trading and marketing of industrial fabrics. ATF has been involved in this business from February 1998.

## (b) Share capital

The details of the changes in the issued and paid-up share capital of ATF since its incorporation are as follows:

Date of allotment	No. of shares	Par value RM	Type of Issue	Total RM
29.09.1977	3	1.00	Subscribers' Shares	3
10.10.1977	99,997	1.00	Cash	100,000
05.05.1978	75,000	1.00	Cash	175,000
01.07.1978	25,000	1.00	Cash	200,000
02.01.1981	25,000	1.00	Cash	225,000
01.07.1982	140,000	1.00	Cash	365,000
06.12.1982	35,000	1.00	Cash	400,000
17.07.1985	100,000	1.00	Cash	500,000
12.09.2003	500,000	1.00	Cash	1,000,000

### (c) Subsidiary and Associated Companies

ATF does not have any subsidiary or associated companies.

#### 5.5.5 Information on FIT

# (a) History and business

FIT was incorporated on 3 August 1991 as a private limited company in Malaysia under the name of Tasik Lintang Sdn Bhd under the Act. It assumed its present name on 23 January 2001. The present authorised share capital is RM10,000,000 comprising 10,000,000 ordinary shares of RM1.00 each all of which have been issued and fully paid-up. FIT is a 60%-owned subsidiary company of EKIB. The remaining 40% is held by Kwun Young Hwan (33%) and Sun Chong Jo (7%).

The company is primarily involved in the manufacturing and trading of industrial fibres. FIT has been involved in this business from January 2002.

# (b) Share capital

The details of the changes in the issued and paid-up share capital of FIT since its incorporation are as follows:

Date of allotment	No. of shares	Par value RM	Type of Issue	Total RM
03.08.1991	2	1.00	Subscribers' Shares	2
25.11.1991	1	1.00	Cash	3
25.01.1996	299,997	1.00	Cash	300,000
02.08.2001	1,260,000	1.00	Cash	1,560,000
02.08.2001	6,440,000	1.00	Capitalisation of amount owing to shareholders	8,000,000
10.08.2001	500,000	1.00	Cash	8,500,000
10.08.2001	1,500,000	1.00	Capitalisation of amount owing to shareholders	10,000,000

## (c) Subsidiary and Associated Companies

FIT does not have any subsidiary or associated companies.

### 5.5.6 Information on KEX

## (a) History and business

KEX was incorporated on 16 January 1998 in Singapore as a private limited company under the Singapore Companies Act, Cap. 50. The present authorised share capital is SD100,000 comprising 100,000 ordinary shares of SD1.00 each, while its issued and paid-up share capital is SD100 comprising 100 ordinary shares of SD1.00 each. KEX is a wholly-owned subsidiary company of EKIB.

The company is primarily involved in sales and marketing of geosynthetic products and materials to international markets.

# (b) Share capital

The details of the changes in the issued and paid-up share capital of KEX since its incorporation are as follows:

Date of allotment	No. of shares	Par value SD	Type of Issue	Total SD
16.01.1998	2	1.00	Subscribers' Shares	2
15.02.2001	98	1.00	Cash	100

## (c) Subsidiary and Associated Companies

KEX does not have any subsidiary or associated companies.

#### 5.6 INDUSTRY OVERVIEW

#### Overview of the Malaysian Economy

The Malaysian economy recorded growth of 4.1% in 2002 which bolstered optimism for a stronger economic performance in 2003 in anticipation of an improved world economic outlook. The prospect for a global economic recovery was, however, affected by recent geopolitical developments, in particular the war in Iraq, sporadic incidences of military and outbreak of the Severe Acute Respiratory Syndrome (SARS).

Against this adverse global environment and concerns of further weakening of the already sluggish global economy, the Government has put in place a package of broad-based pro-growth measures in May 2003. The Package of New Strategies, was to address structural and organizational issues towards sustaining economic growth in the medium and longer term. The strategic measures introduced boosted confidence necessary to stimulate domestic consumption and investment.

Malaysia's sound economic fundamentals and expansionary fiscal and accommodative monetary policies, supplemented by the Government's proactive stimulus package, have helped to sustain high growth in the real gross domestic product (GDP). After expanding 4.5% in the first half of 2003 and with prospects of sustained growth in the second half of 2003, the economy is set to achieve its targeted growth of 4.5% in 2003, higher than the 4.1% achieved in 2002.

The underlying strategic thrusts of macroeconomic management for 2004 are premised on a more dynamic and vibrant private sector supported by the enabling and conducive environment put in place through various measures over the years. The Government will continue to play the facilitative role in enhancing the effectiveness of the delivery system. To enable the private sector to lead the economy, concerted efforts will be made to encourage private initiatives in new sources of growth, particularly in value-creating activities in services and agriculture.

Growth is expected to be broad-based with all sectors in the economy registering higher output with services and manufacturing continuing to spearhead growth. Growth is also expected to emanate from the domestic sector as well as pick-up in the external sector, following improved world prospects.

The strengthened macroeconomics fundamentals and a more broadly balanced economic structure with emerging new sources of growth will provide the foundation for sustained higher growth. Alongside pragmatic macroeconomic management and the pro-growth measures in place to support private sector initiatives, Budget 2004 will further enhance competitiveness and reinforce the resilience of the economy against likely destablising external factors and garner higher economic growth for the country. The Malaysian economy is, therefore, targeted to achieve a stronger GDP growth of 5.5%-6% for 2004.

(Source: Economic Report 2003/2004, Ministry of Finance)

# Overview of the Regional Economies

The EKIB Group exports its products, amongst others, to Vietnam, Thailand and Bangladesh. Therefore, the regional economic outlook will be an important element in the EKIB Group's plans.

On the regional front, with the containment of SARS and the positive impact following the implementation of various economic relief packages introduced by SARS-affected countries, regional growth is envisaged to further accelerate in 2004. China is expected to continue on its strong growth track to register 7.5% GDP growth in the coming year. Together with most of the ASEAN economies gaining strength and with intra-regional trade expanding, the Malaysian economy is forecast to register a faster growth in 2004. (Source: Economic Report 2003/2004, Ministry of Finance)

## Infrastructure Sector

Under the Eighth Malaysia Plan, several infrastructure projects are to be implemented which is expected to boost the demand for the EKIB Group's products. These projects include the road link from Kampung Pandan Roundabout to Sultan Ismail Road in Kuala Lumpur; Butterworth Outer Ring Road, Penang; Muar Bypass Road, Johor and several roads in Kota Kinabalu and Kuching. In addition, several other roads will be upgraded including Jalan Klang Lama, Kuala Lumpur; Kuantan Bypass Road, Pahang and the Karamunsing Interchange, Kota Kinabalu (Source: Eighth Malaysia Plan 2001-2005).

As part of capacity expansion and development of riverine transportation, a number of port-related projects in Sarawak and Sabah will be implemented. These include the dredging of the Kuala Baram and Sarawak river mouths to deepen the channel access to Miri and Kuching ports and the construction of a container terminal and oil jetty at Sapangar Bay in Sabah. Inland water transport as an alternative mode will be upgraded to cater for the increased demand from locals and tourists in the states of Sarawak and Sabah. Towards this end, projects will be undertaken to improve and upgrade passenger and cargo facilities such as the construction of passenger terminals and dredging for navigation. In addition, the construction of ferries with low-wash-type technology will be encouraged to minimize the impact of river bank erosion (Source: Eighth Malaysia Plan 2001-2005).

The implementation of water supply projects will be further accelerated, such as the construction of the Chereh Dam and the Greater Kuantan Water Supply and the Tanjung Malim Water Supply Scheme. The construction of two (2) major source works, the Sungai Selangor Phase III project ("SSP3") and the Pahang-Selangor Raw Water Transfer scheme, will commence during the Plan period to cater for the increase in water demand in the Klang Valley. Besides the Sungai Selangor Dam, the SSP3 includes Stage 1 of the Bukit Badong Water Treatment Plant with a capacity of 400 million litres per day which is expected to be completed by 2002 and Stage 2 with a capacity of 400 million litres per day by 2004. The Pahang-Selangor Raw Water Transfer project is designed to transfer a maximum capacity of 2,400 mid of raw water by means of pipelines and a tunnel from Pahang to Selangor as well as the Federal Territory of Kuala Lumpur and subsequently to Negeri Sembilan (Source: Eighth Malaysia Plan 2001-2005).

During the Eighth Plan period, the Government will embark on an extensive sewerage capital development programme with the implementation of 13 sewerage work projects. These include the upgrading of 10 sewerage treatment plants and sewer networks and the provision of three new central sludge facilities to ensure the delivery of better service. The completion of these projects will provide sewerage services to an additional 1.8 million population (Source: Eighth Malaysia Plan 2001-2005).

Furthermore, individual sewerage systems will be implemented in locations such as hilly and isolated areas where connections to the centralized system are costly or have an adverse impact on the environment (Source: Eighth Malaysia Plan 2001-2005).

#### **Construction Sector**

Construction sector activity in the first quarter of 2003 expanded by 1.2%, supported by public sector projects and continued demand for housing, amidst an improving labour situation. The return of foreign workers enhanced expansion in construction activity (Source: Economic and Financial Developments in the Malaysian Economy in the First Quarter of 2003, 28 May 2003. www.bnm.gov.my).

The Government had on 21 May 2003 announced a package for the construction sector that is intended to stimulate domestic economic activities and in enhancing growth. The sector has greater linkages, particularly with construction-related industries. Further, it is also the Government's objective to provide affordable low and medium-cost houses for the lower income group (Source: New Strategies Towards Stimulating The Nation's Economic Growth, 21 May 2003. www.treasury.gov.my).

The brief overview on the geosynthetics industry is disclosed in the Independent Assessment of the Geosynthetics Industry set out in Section 14.0 of this Prospectus.

### 5.7 MAJOR CUSTOMERS

For the ten (10) month financial period ended 31 October 2003, the top ten (10) customers of the EKIB Group represented 49.0% of the EKIB Group's turnover. The remaining 51.0% of the revenue was spread across 380 customers. The top three (3) customers of the EKIB Group accounted for approximately 26.8% of the total turnover of the EKIB Group for the ten (10) month financial period ended 31 October 2003.

In addition, the EKIB Group has enjoyed long term business relationships with its customers. Approximately, 80% of its top ten (10) customers have been dealing with the EKIB Group for three (3) or more years. Its long-standing customer relationships serve as an endorsement of the quality of its products and services, and more importantly, a stable customer base.

The top ten (10) customers of the EKIB Group as at 31 October 2003 are as follows:

No	Customer	% of total Group Revenue	Length of Relationship (Years)
1	Protasco Trading Sdn Bhd	13.9%	7
2	Uritec Team (M) Sdn Bhd	6.8%	2
3	Rekavista Sdn Bhd	6.1%	3
4	Bumi Hiway (M) Sdn Bhd	4.4%	7
5	Industrial Instrument & Equipment Ent.	4.2%	6
6	Panji Bersatu Sdn Bhd	3.8%	7
7	RB Trading Sdn Bhd	3.1%	3
8	NGL Builders Sdn Bhd	2.3%	3
9	Sigma Consortium	2.2%	2
10	Cergas Murni Sdn Bhd	2.2%	7
	TOTAL	49.00%	

The EKIB Group has a wide customer base and is not overly dependent on any one of its customers for business.

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#### 5.8 MAJOR SUPPLIERS

The EKIB Group's top ten (10) suppliers represented 89.2% of the total purchase for the ten (10) month financial period ended 31 October 2003. The EKIB Group's top supplier, Honeywell Sysko Co., Inc accounted for 29.5% of the total purchases of the EKIB Group for the ten (10) month financial period ended 31 October 2003. This was mainly for the purchase of polyester yarn. The next largest (non labour) supplier is Han Kook Fibre Co Ltd, Korea, which accounted for 14.4% of the EKIB Group's total purchases for the ten (10) month financial period ended 31 October 2003. This was mainly for the purchase of polypropylene and polyester fibres. The EKIB Group's top three (3) suppliers represented 59.4% of the total EKIB Group's purchases for the ten (10) month financial period ended 31 October 2003.

Sub-contracted labour accounted for approximately 17.8% of the total purchase of the EKIB Group for the ten (10) month financial period ended 31 October 2003. There is one (1) supplier of sub-contracted labour in the EKIB Group's top ten (10) supplier list. The use of sub-contracted labour is in line with the EKIB Group's overall strategy to provide a one-stop solution centre incorporating manufactured products and installation services. In addition, the use of sub-contract labour is also in line with the EKIB Group's strategy to outsource non-core labour to enable it to focus on its core competency in manufacturing of geosynthetic products and materials. Additionally, the use of sub-contract labour enables the EKIB Group to minimise its staffing overheads, and at the same time have a flexible workforce to meet project requirements for all types of value-added services.

The top ten (10) suppliers of the EKIB Group as at 31 October 2003 are as follows:

No	Supplier	% of total Group Purchases	Length of Relationship (Years)
1	Honeywell Sysko Co Ltd 1	29.5%	8
2	Gateway Structure Sdn Bhd *	15.5%	9
3	Han Kook Fiber Co Ltd <sup>2</sup>	14.4%	6
4	Sam Heung Co. Ltd <sup>2</sup>	10.4%	7
5	Titan PP Polymers (M) Sdn Bhd	6.2%	3
6	Kiaratex Sdn Bhd	4.7%	3
7	GRP Sdn Bhd	3.3%	4
8	Synthetic Thread Sdn Bhd	2.1%	6
9	Pau Mah Plastic Industries Sdn Bhd	1.6%	6
10	Sulzer Ruti Limited <sup>3</sup>	1.5%	8
	TOTAL	89.2%	

#### Notes:

1 Operating in Korea/China

Operating in Korea

3 Operating in Switzerland

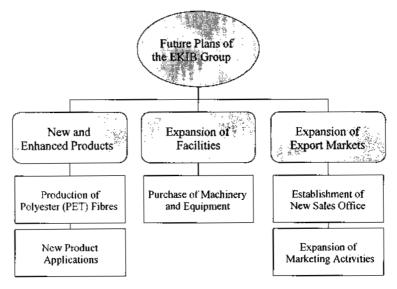
Supplier of lahour

The top five (5) suppliers to the EKIB Group together supply 76% of the Group's total purchases. The EKIB Group believes that the risk of over-dependency on the said five (5) suppliers are mitigated by the long-term relationship that EKIB has had with the suppliers which range from three (3) to eight (8) years.

## 5.9 FUTURE PLANS, STRATEGIES AND PROSPECTS OF THE EKIB GROUP

## 5.9.1 Future Plans and Strategies

The future plans and strategies of EKIB Group are focused in three (3) key areas as depicted in the figure below:



#### 5.9.1.1 New and Enhanced Products

## Production of Polyester Fibres

One of the EKIB Group's plans involves the set-up of new product line for the manufacture of polyester fibres. To provide business diversification as well as to increase profit margin, the EKIB Group intends to manufacture its own polyester fibres. This would be used as raw material for the manufacture of geosynthetic products such as non-woven geotextiles and geocomposites, and also for external sales. The EKIB Group intends to set-up this new production line in 2006.

## New Product Applications

The EKIB Group plans to extend its range of products to include new applications. Geosynthetic products have diverse applications. Some of the new areas of opportunities that the EKIB Group is going to address include the following:

- Industrial bulk bags;
- Liquid filters;
- Air filters;
- Car mats;
- Carpet backing;
- Shade cloths;
- Corrugated profile vertical geodrains; and
- Electric vertical geodrains.

Filters are commonly used to hold back or remove impurities or solid particles from a liquid or gas when passing through it. The EKIB Group plans to penetrate the market by manufacturing filters for industrial filtration purposes, such as for latex manufacturers. Such filters would commonly use non-woven geotextiles. The EKIB Group also intends to manufacture car mats for the automotive industry. Car mats can also be made from geosynthetic materials, particularly using the non-woven process

As for carpet backing and industrial bulk bags, they are manufactured using the woven process. Carpet backing is mainly used as a base for carpet floor covering, whilst industrial bulk bags are commonly used for packaging purposes.

Shade cloth is made of polypropylene monofilament tape yarn and is weaved to form a fabric. Applications of shade cloth includes the following:

- in agriculture, where shade cloth is used to control the amount of sunlight getting through to the plants below it; and
- in households, where shade cloth is used in outdoor settings to provide some shade to defined areas.

With the EKIB Group's current capabilities in manufacturing various types of geotextiles, expansion into the manufacture of filters, car mats, carpet backing and industrial bulk bags would be a natural extension of its current product range.

The EKIB Group plans to extend its range of vertical geodrains by manufacturing corrugated profile vertical geodrains. This new product is more cost effective compared to stud profile vertical geodrains and will enable the EKIB Group to provide a wider cost spectrum of geodrains to meet the different budgetary needs of the customers.

Electrical vertical geodrains are similar to normal vertical geodrains with the exception that it has a full width copper foil in the middle of the polymer core. The function of the copper foil is to conduct the direct current to the entire strip of polymer core.

Electrical vertical geodrains shorten the soil consolidation period compared to normal vertical geodrains. Electrical vertical geodrains rely on electro-osmosis using direct current instead of compressive load to remove soil water.

The timing of production of the new products is as follows:

-	Industrial bulk bags	;	2004;
-	Corrugated profile vertical		
	geodrains	:	2004;
-	Liquid filters	:	2004;
-	Shade cloth	:	2004.
-	Air filters	:	2005;
-	Car mats	:	2005;
-	Carpet backing	:	2006;
-	Electric vertical geodrains	:	2006;

One of the EKIB Group's reasons for expanding its existing product range and applications is to reduce dependency on infrastructure and construction industries.

## 5.9.1.2 Expansion of Facilities

### Purchase of Machinery and Equipment

Part of the EKIB Group's plans also involves the purchase of new machinery and equipment mainly for the manufacture of geosynthetic products for the new product applications.

The EKIB Group plans to purchase the following machinery and equipment by December 2004:

- Weaving machines;
- Extrusion machines;
- Laminating machines;
- Circular loom machines;
- Calendering machine; and
- Testing equipment.

In addition, the EKIB Group intends to purchase the following testing equipment to further enhance and strengthen its research and development activities:

- Fibres testing equipment;
- Ultraviolet accelerated weathering box;
- Water permeability tester;
- Mullen bursting strength tester;
- Air permeability tester;
- Compressor with filter; and
- Viscosity meter.

### 5.9.1.3 Expansion of Export Markets

## Establishment of Sales Office

In line with the EKIB Group's intention to expand on its export markets, the EKIB Group aims to establish a new sales office in India to increase its penetration into existing and potential export markets in Middle East and North Asia. India is a strategic export market in view of its proximity to Malaysia as well as the large potential for civil engineering works in infrastructure, building and construction.

It is expected that the new sales office in India will be established by 2006.

# **Expansion of Marketing Activities**

To-date, the EKIB Group's focus is on the local market. However, as part of its business expansion and diversification plans, it aims to increase its export earnings.

Currently, the EKIB Group has appointed agents in the following countries and locations:

Italy
 Sri Lanka
 Bangladesh
 Indonesia
 Philippines
 Australia
 Hong Kong
 Brunei
 India
 New Zealand
 Taiwan
 Vietnam
 Singapore

The EKIB Group intends to continuously expand its existing export markets by introducing and educating potential distributors and end-users of its wide range of products, their applications and their benefits compared to other alternatives. This introduction and education process would include holding seminars, road shows and exhibitions.

The EKIB Group intends to carry out some of these marketing activities by 2005.

### 5.9.2 Prospects of the EKIB Group

## 5.9.2.1 Sectoral Outlook of the Geosynthetics Industry

The outlook of the geosynthetics industry is highly dependent on the user industries, particularly building and construction and infrastructure.

The following factors and observations in imports, exports, end-user industries and government allocations provide support for the growth forecast:

#### **Imports**

As there are no local production figures to show trend, imports are used instead to provide some indication of historical growth demand for geosynthetics. Imports are relatively good indicators of the performance of the local geosynthetics industry as local production is relatively low due to the fact that there are only three (3) major producers and three (3) very small players within the geosynthetics industry.

Between 1999 and 2003, the import value of other woven fabrics obtained from strip or the like (also sometimes referred to as polypropylene woven fabrics and geotextile cloths) declined at an average annual rate of 13.3%. In 2003, the import value grew by 37.0% to RM25.1 million over the previous year.

The import value of other sacks and bags of polyethelene or poly propylene strips or the like, used for the packing of goods (also sometimes referred to as polypropylene woven laminated fabrics grew at an average annual rate of 23.5% between 1999 and 2003. In 2003, the import value grew by 80.7% amounting to RM6.3 million.

The import value of needledoom fel and stitch bonded fibre fabrics, whether or not impregnated, coated, covered or laminated (also sometimes referred to as non-woven geotextiles) declined at an average annual rate of 14.9% between 1999 and 2003. The import value declined by 18.0% to reach RM795,338 in 2003.

Between 1999 and 2003, the import value of other felt, whether or not impregnated, coated, covered or laminated (also sometimes referred to as non-woven composite geotextiles) declined at an average rate of 0.4% per annum. In 2003, the import value decreased by 15.1% to RM355,821.

The import value of unbleached or bleached woven fabrics of synthetic staple fibres, containing 85% or more by weight of polyester staple fibres (also sometimes referred to as high strength woven geotextiles) declined at an average annual rate of 14.7% between 1999 and 2003. In 2003, import value decreased by 8.6% amounting to RM1.7 million.

The import value of other textile fabrics, felt and felt-lined woven fabrics, coated, covered or laminated with rubber, leather or other material, of a kind used for card clothing, and similar fabrics of a kind used for other technical purposes (also sometimes referred to as geomattresses) grew at an average annual rate of 2.6% between 1999 and 2003. In 2003, the import value declined by 37.8% to reach RM28.1 million.

The import value of articles of yarn, strip or the like, twine, cordage, rope or cables, not elsewhere specified or included (also referred to as high strength knitted geotextiles) grew at an average annual rate of 19.3% between 1999 and 2003. In 2003, the import value declined by 52.7% to reach RM2.3 million.

Between 1999 and 2003, the import value of other woven fabrics from high tenacity yarn of nylon or other polyamides or of polyester (also sometimes known as woven agriculture geotextiles) declined at an average annual rate of 13.7%. In 2003, the import value decreased by 32.6% to reach RM40.7 million.

(Note: Full year 2003 figures are preliminary only)

(Source: Independent Assessment of the Geosynthetics Industry prepared by Vital Factor).

#### Exports

The export value of needledoom felt and stitch-bonded fibre fabrics, whether or not impregnated, coated, covered or laminated (also sometimes referred to as non-woven geotextiles) grew at an average annual rate of 49.4% between 1999 and 2003;

The export value of other sacks and bags of polyethylene or polypropylene strips or the like, used for the packing of goods (also sometimes referred to as polypropylene woven laminated fabrics) declined at an average annual rate of 12.2% between 1999 and 2003.

The export value of other felt, whether or not impregnated, coated, covered or laminated (also sometimes referred to as non-woven composite geotextiles) increased at an average annual rate of 5.7% between 1998 and 2002.

The export value of other woven fabrics obtained from strip or the like (also sometimes referred to as polypropylene woven fabrics and geotextile cloths) declined at an average annual rate of 69.4% between 1998 and 2002.

The export value of unbleached or bleached woven fabrics of synthetic staple fibres, containing 85% or more by weight of polyester staple fibres (also sometimes referred to as high strength woven geotextiles) decreased at an average annual rate of 52.7% between 1999 and 2003.

Between 1999 and 2003, the export value of other textile fabrics, felt and felt-lined woven fabrics, coated, covered or laminated with rubber, leather or other material, of a kind used for card clothing, and similar fabrics of a kind used for other technical purposes (also sometimes referred to as geomattresses) declined by an average annual rate of 1.8%.

The export value of articles of yarn, strip or the like, twine, cordage, rope or cables, not elsewhere specified or included (also referred to as high strength knitted geotextiles) grew at an average annual rate of 50.7% between 1999 and 2003.

The export value of other woven fabrics from high tenacity yarn of nylon or other polyamides or of polyester (also sometimes known as woven agriculture geotextiles) grew at an average annual rate of 18.9% between 1999 and 2003.

Export performances over the last five (5) years indicates mixed results. However, with the relatively few local manufacturers and the relatively higher imports, any decline in exports could be due to a drop in re-exports.

(Note: Full year 2003 figures are preliminary only)

(Source: Independent Assessment of the Geosynthetics Industry prepared by Vital Factor).

#### End-User Industries

The construction industry grew at an average annual rate of 0.3% between 1998 and 2002.

Between 1994 and 1998, the civil engineering construction sector experienced an average growth rate of 8.6% per annum.

Between 1996 and 2000, solid waste generation, as one of the user-industries, grew at an average rate of 20.1% per annum (Note: 2000 figures are estimates only).

The continuing growth of the construction industry in general and civil engineering works in particular would provide growth opportunities to the geosynthetics industry.

(Source: Independent Assessment of the Geosynthetics Industry prepared by Vital Factor).

## **Government Allocations**

The outlook for the geosynthetics industry is also dependent on Government allocations.

As such, the outlook of the industry is encapsulated within the Eighth Malaysia Plan based on allocation of government funds and investments by the private sector as follows:

- RM5.1 billion will be allocated for the development of new roads;
- RM8.9 billion will be allocated for the improvement and upgrading of existing roads; and
- RM3.5 billion will be invested on roads by the private sector.

Growth within the Eighth Malaysia Plan for road development will amount to 2.6% per annum based on the difference between the allocation of RM14.0 billion for the Eighth Malaysia Plan and the RM12.3 billion being the amount spent during the Seventh Malaysia Plan by the Government.

On 21 May 2003, the Government announced a RM7.3 billion Stimulus Package aimed at mitigating some of the adverse impact brought about by external factors including the Iraq war and the outbreak of Severe Acute Respiratory Syndrome (SARS). The Package, which focuses on four main strategies comprising 90 measures, aims at stimulating economic activities by mobilising domestic sources of growth and, at the same time, reducing dependency on the external sector. This will help ensure Malaysia's economic fundamentals remain strong in the medium and long term.

One of the 90 measures is the Government allocation of RM300 million to improve the infrastructure and delivery system in rural areas aimed at stimulating rural economic activities.

Another measure is that the Government will continue to undertake development projects where prioritises will be given to infrastructure and construction related projects, which have multiplier effect on the economy.

(Source: Independent Assessment of the Geosynthetics Industry prepared by Vital Factor).

## 5.9.2.2 Diversity

The business of the EKIB Group is diverse from the following perspectives:

- diversity in products;
- diversity in product functions; and
- diversity in end-user industries.

#### Diversity in Products

The EKIB Group provides a wide range of products to its customers. Its own in-house manufactured products and materials are as follows:

- Geotextiles
  - . Woven
  - . Non-Woven
  - Knitted
- Geocomposites
  - Vertical Geodrains
  - Geomattress
  - Other Customised Geocomposites
- Geogrids
- Polypropylene Fibres

In addition, the EKIB Group also undertakes customised geosynthetic products based on customers' specifications. Each of these customised products would either differ slightly, for example in terms of strengths and thickness, to totally different products for special applications. Customisation is relatively common as geosynthetic products and materials have a diverse range of applications.

To complement its in-house manufactured products, the EKIB Group also sourced products externally to provide a one-stop geo product centre to customers. Some of these externally sourced products include the following:

- Biodegradable erosion control products; and
- Geocells.

### Diversity in Product Functions

In general, geosynthetic products and materials are used to separate, filter, facilitate planar flow, form barrier to fluid, provide protection, and provide reinforcement of soil masses.

Some of the functions of the products of the EKIB Group include the following:

Functions	Description
Separation	While being subjected to dynamic loading, geosynthetic products can prevent the downward movement of road base stone into the sub-grade, and conversely the upward pumping of weak sub-grade materials into the clean stone. This is to prevent mutual mixing between two layers of soils having different particle sizes or different properties and thereby resulting in the deformation of the road surface.
Filtration	This is to permit the free flow of water across and through the plane of geosynthetic products while restricting the passage of solid soil particles.
Planar Flow	The ability to conduct water or gases within the plane of the geosynthetic products. As such, this will reduce the build up of pore water pressure and gases. In addition, this function is also used to gather water that is not required functionally by the structure, such as rainwater or surplus water in the soil, and are discharged
Reinforcement	A specific geosynthetic product can act as a tensile member in a structural system that is weak in tensile strength and strong in compressive strength. Due to their soil fabric friction coefficient and high tensile strength, heavy grades of fabrics are used to reinforce earth structure allowing the use of local fill materials.
Protection	Erosion of earth embankment by wave action, current and repeated drawdowns is a constant problem which requires protection in the form of rock beaching or mattress structures.

## Functions Description

Fluid/Liquid Barrier This is to restrict the migration of fluids though geosynthetic products. In general, geotextiles are normally very permeable and must be made impermeable by filling its voids with impermeable materials such as asphalt. Alternatively, geosynthetics for this function can be manufactured through extrusion of suitable polymers to obtain impervious polymer sheets.

Different functions of geosynthetic products and materials have different specifications and properties for example:

thickness - texture

tensile strength
 puncture resistance
 apparent opening size
 elongation
 permittivity
 tear resistance
 DV resistance
 pore size
 seam strength
 transmissivity

mass per unit area

The diverse functionality of the EKIB Group's products means that they can be used in a wide spectrum of application to minimise over dependency on any one area.

### Diversity in End-user Industry Sectors

Similarly, the EKIB Group's end-user industry sectors also provide the company with some form of diversity. Although most of the end-users fall within the infrastructure and construction sectors, each of these sectors on its own represents significant markets. The Group's products are used in a diverse range of end-user industries including:

- Infrastructure development
- building and construction
- general civil engineering construction
- bridge construction
- road and pavement construction
- irrigation and flood control system
- railway track construction
- slope and coastal protection system
- soil stabilisation
- landscaping
- underwater construction work
- reclamation work
- airport construction
- waste containment system
- industrial applications (examples, industrial bulk bags, liquid filters and shoe lining).

Unlike many companies that commonly serve one or a small number of end-user industries, the EKIB Group service a wide group of end-user industries.

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### 5.9.3 Elasticity of Demand

The elasticity of demand for geosynthetic products and materials is moderate. This is substantiated by the following factors:

## Factors for Increasing Elasticity

#### - Substitute Products from other Materials

Geosynthetic products and materials compete with other non-polymer based products including soils and aggregates. All these provide choices to consumers and have their relative market positioning that ultimately dictate the upper limit for prices.

## Competition from Imports

Geosynthetic products and materials face significant competition from imports that place price pressure on locally produced geosynthetic products. Some of these imports include the following:

- . In 2003, the import value of other woven fabrics from high tenacity yarn of nylon or other polyamides or of polyester (also sometimes referred to as woven agriculture geotextiles) decreased by 32.6%, amounting to RM40.7 million
- . In 2003, the import value of other woven fabrics obtained from strip or the like (also sometimes referred to as polypropylene woven fabrics and geotextile cloths) grew by 37.0% to RM325.1 million over the previous year.
- . In 2003, the import value of unbleached or bleached woven fabrics of synthetic staple fibres, containing 85% or more by weight of polyester staple fibres (also sometimes referred to as high strength woven geotextiles) decreased by 8.6% amounting to RM1.7 million.
- In 2003, the import value of needleloom felt and stitch-bonded fibre fabrics, whether or not impregnated, coated, covered or laminated (including non-woven geotextiles) declined by 18.0% amounting to RM795,338.
- In 2003, the import value of articles of yarn, strip or the like, twine, cordage, rope or cables, not elsewhere specified or included (also referred to as high strength knitted geotextiles) grew by 52.7% to reach RM2.3 million
- In 2003, the import value other textile fabrics, felt and felt-lined woven fabrics, coated, covered or laminated with rubber, leather or other material, of a kind used for card clothing, and similar fabrics of a kind used for other technical purposes (sometimes referred to as geomattresses) grew by 37.8% to reach RM28.1 million.

(Note: Full year 2003 figures are preliminary only) (Source: Independent Assessment of the Geosynthetics Industry prepared by Vital Factor).

### Factors for Moderating Elasticity

## Specialised Applications

Many of the geosynthetic products are customised to meet customers' requirements. In many situations, there are specific processes utilised to create specialised products. As such, under such situations, price is secondary to the quality, specifications and properties required of the final products.

#### Relatively Few Local Manufacturers

In 2003, Malaysia has an estimated six (6) geosynthetic product manufacturers. The relatively few number of manufacturers reduces significantly the competitive intensity that moderates pricing.

## - Differentiation through Properties

Geosynthetic products have significant value-adding in the form of different properties. Manufacturers that are able to achieve specialised requirement can command premium pricing as these are proprietary methodologies and knowledge.

## New Materials and Applications

Geosynthetic products manufacturers that undertake research and development to produce new materials or applications would be in a better position to command its own pricing.

(Source: Independent Assessment of the Geosynthetics Industry prepared by Vital Factor).

### 5.9.4 Competitive Advantages

The EKIB Group has distinct advantages over its competitors in the following areas:

- Large and diverse customer base;
- Market reputation and established track record;
- Product quality; and
- In-roads into export markets.

## Large and Diverse Customer Base

For the ten (10)-month financial period ended 31 October 2003 the EKIB Group has a large and diverse customer base comprising approximately 390 customers. This customer database also covers diverse enduser segments.

This extensive database of customers provides the EKIB Group with the following competitive advantages:

- basis for increased business growth;
- reduce over-dependency on any one customer or small group of customers; and
- ability to on-sell its other existing and newly developed products.

#### Market Reputation and Established Track Record

EKIB started business in 1993. The initial business activity was mainly in providing turnkey solutions for geosynthetic engineering services. Over the years, the EKIB Group has developed a reputation as an established supplier of geosynthetic products and materials. This reputation is further reinforced when the EKIB Group moved into the manufacturing of in-house geosynthetic products including geotextiles, geogrids and geocomposites.

The EKIB Group's established market reputation is reflected by the fact that approximately 50% of its top 20 customers have been with the EKIB Group for three (3) or more years.

This customer loyalty is a competitive advantage to help EKIB maintain as well as serving the basis to increase its market share.

## **Product Quality**

The EKIB Group can attest to the quality of its products in the following manner:

- The standard of quality of its finished product including geotextiles, geocomposites and geogrids can meet the requirements of export markets.
- The internal quality checks on raw materials through every stage of its manufacturing process reaffirms the EKIB Group's internal quality assurances. This is supported by the accreditation of ISO 9001:2000 for both EKSB and KESB.

Consistent high product quality is a significant competitive advantage that will create high customer satisfaction to ensure continuing business patronage.

## In-roads into Export Markets

The EKIB Group has successfully gained in-roads into export markets. This is reflected by the fact that for the ten (10)-month financial period ended 31 October 2003, the EKIB Group has already sold its products to customers in four (4) main export markets namely, Vietnam, Thailand, Bangladesh, and Singapore.

Exports may have only contributed 5.8% of the EKIB Group's total revenue for the ten (10)-month financial period ended 31 October 2003, however this established base of export customers would provide the platform for the EKIB Group to further expand its export activities and successes.

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